31st

EECERA ANNUAL CONFERENCE

Children’s Curiosity, Agency and Participation: Challenges for Professional Action and Development

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CONFERENCE PROCEEDINGS:

Book of Abstracts
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These Abstracts have been formally assessed and approved by the Conference Scientific Committee against EECERA’s published acceptance criteria. CONDITION OF PARTICIPATION: Some abstracts submitted by delegates for participation in EECERA 2023 have been revised and edited in good faith by the Scientific Committee. The organisers cannot be held responsible for the contents of the abstracts published in this book.
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KEYNOTE I

Thursday 31st August 2023, 9:00 – 10:00

CATHERINE L’ECUYER
Researcher in children’s curiosity, creativity and imagination; author of the ‘The Wonder Approach’

The Wonder Approach

Children of the last twenty years have grown up in an increasingly frenzied and demanding environment, so that on one hand education has been rendered more complicated and on the other, the essentials have been lost to view. In order to ensure their future success, we feel that we must fill our children’s schedules with endless activities that cause leisure, spontaneous activity, and the experience of nature, beauty and silence, to fade out of their lives. Childhood has often become a veritable race toward adulthood, which distances children more and more from the natural laws of childhood.

A constant stream of loud and flashy stimuli disturbs the only true and sustainable learning that exists in them: that of calmly and quietly discovering the world for themselves and at their own pace, with a sense of wonder that goes beyond mere curiosity for the unknown or interest in novelty.

According to the Wonder Approach, learning is a wondrous journey guided by a deep reflection on what the natural laws of childhood require: respect for children’s innocence, their pace and rhythms, their sense of mystery, and their thirst for beauty.
No teacher left behind: Pursuing a utopia in the professional development of kindergarten teachers

As the President of the Association of Early Childhood Professionals (APEI), I have an important role of developing and furthering the organisation’s aim of professional development of early years professionals.

One of the difficulties experienced by both researchers and early childhood educators is around the question of the dialogue between research and practice, that is, between researchers and practitioners.

The history of Early Childhood Education shows that research outcomes are usually discussed within the network of researchers at national and international levels, but rarely reach and influence the practices of early childhood teachers. On the other hand, early childhood educators tend to look with distrust at the work of researchers, either because of the difficulty in interpreting research processes and outcomes or because of the difficulty in considering them into their educational practice. While it is generally agreed that a professional practice should be theoretically grounded, it is very common to hear that theory is one thing and practice is another.

In APEI developmental approach to teachers’ development, we start from the premise that professional development is essentially based on formative processes and lifelong learning which can mobilise a very significant number of researchers and early childhood educators with referenced practices, creating synergies between research and practice or building a network of trainers and training throughout the national territory.

In that context APEI developed an intensive endeavour of publishing the most significant international literature on early childhood education as a central support for a national dynamic of professional development. The principle of democratic access to information is very important to pursue the dream that no teacher should be left behind.

This keynote will provide a reflexive and critical account of this process that I am highly involved in.
Children’s Belonging in Early Childhood Education

Belonging, identified as a fundamental human need, is considered important for young children’s well-being, learning, agency, identity, and ability to sense their own potential and capacity. It is also seen as an important factor in how young children perceive others and respond to differences.

Belonging has been explored and analysed by several researchers within different fields of study, such as psychology, sociology, anthropology, and education, and thus varied perspectives have been conceptualized.

Despite the importance and centrality of belonging in early education and its visibility in early childhood frameworks throughout the world, not all young children have their need to belong met.

This keynote will discuss possible ways to understand and describe children’s belonging, consider the plausibility of integrating children’s perspectives into research on belonging in early childhood education, and provide examples of how children perceive and experience belonging in early childhood education settings.

The presentation is built on a recent European study on belonging, “Politics of belonging: Promoting children’s inclusion in educational settings across borders”. The project aimed to promote children’s inclusion in early childhood settings. It focussed on every child’s right to a sense of belonging in early childhood educational institutions and being valued equally and with respect. The findings will be reflected on and deconstructed in light of increasing globalisation and diversity in European ECEC institutions.
KEYNOTE IV

Saturday 2\textsuperscript{nd} September 2023, 11:00 – 12:00

FERRE LAEVERS
Director of the Research Centre for Experiential Education based at the University of Leuven, Belgium; Co-founder of the European Early Childhood Education Research Association (EECERA)

Curiosity > Involvement > Deep-level-learning... and how an experiential approach exploits this wonderous chain of events in practice

Curiosity... a phenomenon surprisingly evident at the youngest age! A word that speaks to us, eliciting images of babies up to adults, powered by the drive to explore, the disposition to wonder. Curiosity is the source for involvement, the particular state so well defined by Csikszentmihalyi as ‘flow’, equally captured by the concept of engagement. In an Experiential Education framework, it is promoted to a status equal to wellbeing, as an absolute condition for deep-level-learning, for schemas to deploy, for the golden thread of imagination to be woven in the fabric of cognition. Involvement depends on curiosity. And the only way to safeguard and strengthen curiosity is...keeping levels of involvement high. This is the best guarantee for lifelong learning.

Carried away by this insight, supported by evidence from research, we describe in this contribution, how involvement serves as a key indicator for quality, as a guide for practice, inspiring us to shape a most powerful learning environment built on a rich offer of materials and activities, an open framework, a positive group climate, and the warm and stimulating engagement of the adults, in partnership with children.
A1
WORKING WITH CRITICALLY ILL CHILDREN AND INCLUSIVE PRACTICE
Chair: Veronica Raspa, University of Perugia, Italy

Psychoeducational interventions for children with cancer
Veronica Raspa and Michele Capurso, University of Perugia, Italy

The Learning by Play (LbP) project was promoted by SAMOT, LABOS and Libertas, in Italy, to promote the biopsychosocial well-being of children with cancer, facilitate their participation and inclusion in daily activities. A vital approach to prevent adversities in the life of children with cancer is to work on their sense of belonging, by empowering their ability to engage in social interactions with peers (Tomberli & Ciucci, 2021). School attendance is often compromised and this can affect socialization opportunities (Nap-Van Der Vlist et al., 2020). The social support is considered a crucial construct in families health and illness research (Hung & Chen, 2008). The quality of life of the child and of the family is linked to a variety of mutually interacting factors (Marchetti et al., 1995). The data analysis followed the Consensual Qualitative Research (Hill et al., 1997; 2005). This methodology provides a systematic qualitative research method that aims to investigate the subjective experience of participants in depth. The participants are 50 children involved with their families, for 12 events and organized workshops. The research was conducted according to the Ethics Code AIP (2015); it was founded and approved by the special found for the assistance of children with an oncology disease of the Italian Ministry of work and social policies. The results show 8 domains concerning listening and discussion as fundamental aspects of the project for the psycho-social support path for minors and families. Psycho-educational interventions can improve autonomy, facilitate awareness, improve relationships and developmental continuity.

children, family, psychoeducational, interventions, psyco-social

This application discusses a completed piece of research.

Children learning in hospital settings- a phenomenology of practice
Elizabeth Rouse, Deakin University, Australia

This Australian study sought gain insight into practices adopted by early years educators working hospitals school to engage critically ill children as agents of their own learning. There is minimal research examining the practice of teachers in hospital schools. There is however a small body of research on the impact on schooling and learning for children experiencing extended hospital stays (Boles et al, 2017; Hopkins, 2015; Moss, 2014). suggesting that these children need access to academic continuity and opportunities to learn (Wilke 2012). The study was framed by the notion of ‘pedagogical relation’ (van Manen, 2015), which provides a conceptual lens through which to examine educator practice. Drawing on an interpretivist paradigm, and case study design, four teachers working in a large public paediatric hospital in a major capital city of Australia was undertaken. Semi-structured interviews were employed to enable them to share their personal thoughts and ideas on their teaching. Ethical clearance was sought and approved by the University Ethics committee, and participants provided written consent. Pseudonyms have been used to ensure confidentiality and anonymity of all participants and the case site. The study found teachers were focused on supporting children’s agency, providing opportunities for children to engage in their learning through focusing on individual interests. The teacher’s pedagogy was one of relations they were able to constantly interpret the experiences and situation of the child (van Manen, 2015). The findings provide a framework for reflection to support reframing pedagogy to focus on relations rather than curriculum.

hospital schools, pedagogical relation, teacher practice, learner engagement, critically ill children
This application discusses a completed piece of research.

Care = attachment and participation? Interdisciplinary approaches to inclusion
Kerstin Angelika Zechner and Christian Wiesner, University College of Teacher Education, Austria
The aim of the presentation is to develop a model that looks at care phenomenologically on the basis of attachment theory, which can open up new insights into the phenomenon of care. The presentation is based on the work on the basic phenomena of attachment (Wiesner & Gebauer, 2022, 2023), on the coping forms of inclusion and diversity (Zechner & Wiesner, 2022) and on the theory of diversity (Prengel, 1993; Wiesner & Zechner, 2023). The theoretical framework is based on the attachment theory according to Bowlby (1973, 1980), Crittenden (2006), Wiesner & Gebauer (2022, 2023) and the theory of relationality and diversity according to Prengel (1993), which are linked in relation to the phenomenology according to Cassirer (1923, 1929).

Methodologically, the approach is a structural-phenomenological re- and meta-analysis: existing and published data are used and correlated in order to develop structural, hermeneutic-phenomenological evidence for offering a model. The phenomenological-structural analysis uses findings and results already published in several papers. Phenomenologically, there are different approaches to care that are linked to attachment theory: It can be shown that there is an equity care (social care) that is different from caring as sharing (prosocial care, participation) and caring as sympathize in relation to a form of care as distanced empathy. To strengthen inclusive educational processes, the phenomena of attachment and relationship must be considered in a differentiated way. A well-founded model of a relationship theory is needed to understand the phenomena of diversity and to be able to address them specifically.

attachment, care, diversity, inclusion, participation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

A2
READING ALOUD, CLASS LIBRARY AND TALES TOOLKIT: CATALYSTS FOR LITERACY DEVELOPMENT
Chair: Susan Catapano, University of Central Florida, United States

The classroom library as the catalyst for increased literacy development in early childhood classrooms
Susan Catapano (1) and Lynn Navin (2); (1) University of Central Florida, (2) University of Missouri St. Louis, United States

This two-year inquiry aims to identify strategies and activities classroom teachers used to scaffold young children when developing and securing literacy skills through projects based on the classroom library. Research has shown that an organized, culturally relevant classroom library supports children in developing literacy and reading skills (Bishop, 1990). Children need to see themselves, and their lives depicted in the literature used to support literacy and reading skills (McNair, 2016). The theoretical framework for this study is based on current theories of developing early literacy skills (Lessing & de Witt, 2022; National Early Literacy Panel Report, 2008) in early childhood settings (Bredekamp, 1990) and general theories in early childhood (Khosa, 2021; Marinello, et. al., 2021; Rand & Morrow, 2021). This study was conducted using a qualitative methodology to gather information from 15 practicing teachers in the field and answer the research question by grounding the theory in the work of the teachers (Noble & Mitchell, 2016). A consent form and information sheet were provided to all participants. Pseudonyms have replaced the names of participants. Participants were given the opportunity to withdraw from the study at any time. The findings note there are specific strategies and activities that support children in developing early literacy skills that will lead to securing reading skills as they move into K-3 classrooms. These findings suggest implications for how well-organized and culturally relevant classroom libraries may engage children in projects that will help them develop and secure early literacy skills.

literacy, classroom library, case study, projects, culturally relevant

This application discusses a completed piece of research.

Tales Toolkit: A play-based story-telling programme for language, literacy and socioemotional development.
Alice Jones Bartoli (1), Kate Shelley (2), Zsofia Maurer (1); (1) Goldsmiths/ University of London, (2) Tales Toolkit, United Kingdom

This project aims to evaluate Tales Toolkit, a play-based, story-telling intervention. We report its feasibility and impact on children’s language, literacy and socioemotional development. Story-telling and narrative ability provide a valuable base to early communication and socioemotional skills, sitting alongside phonemic awareness and vocabulary as key predictors of childhood literacy (Suggate et al., 2018). Tales Toolkit encourages children to create narratives around four elements: Character, Setting,
Problem and Solution. This work is rooted in Vygotskian theory, following the premise that the quality of adult-child interaction is fundamental to learning (Hamre & Pianta, 2005). Tales Toolkit holds sustained shared thinking as its core ethos, where adult-child cooperation allows for dynamic learning (Sylva et al., 2011; Brodie, 2014). Using a quasi-experimental intervention v. comparison trial, Quantitative data was collected over three years on over 800 children, analysed using mixed-ANOVA. Practitioner interviews were analysed using thematic analysis. Quantitative analyses used anonymised secondary datasets. Qualitative data was collected from practitioners who provided informed consent. Quotes are provided anonymously, with permission. Findings from an independent evaluation are available in the public domain. Results, controlling for baseline performance, indicate that children learning with Tales Toolkit make greater gains in literacy, language and socio-emotional development than comparison (medium-large effect sizes). Practitioners report increased confidence and knowledge. Case studies demonstrating utility for children with special education needs are reported. Using this child-led storytelling programme can yield important developments in the quality of practitioner interactions with children, and in child development related to language, literacy and socioemotional development.

**play-based learning, language and communication, story-telling, socioemotional development, quality interaction**

This application discusses a completed piece of research.

Reading aloud as a tool to support child development from 0-6 years of age
Clara Silva and Elisa Lencioni, University of Florence, Italy

The contribution presents the first results of a research being carried out in Tuscany (Italy) on the role of reading aloud with children 0-6 in fostering the development of curiosity and in creating a situation of relational well-being, both between children and between children and adults. It is part of the international research framework on reading aloud (Batini, ed by 2021; Balbinot et al., ed by 2019) that in Italy has been developed through various action research programmes including Born to Read (https://www.natiperleggere.it/) and Reading: Loud! Aloud raises intelligence (https://www.regione.toscana.it/-/leggereforte). It refers to both studies and empirical experiences that have shown the positive impact of reading aloud in overall child development (Falco, 2022; Wolf, 2018). The research is conducted through the mapping study approach, which is related to the literature review methodology (Ghirotto, 2020). Starting from the consideration that we read very little and that this is generating a problem of return illiteracy in many countries, including Italy, placing reading at the centre also means promoting the pleasure of reading from an early age. Data will be presented on the number of read aloud projects carried out in Tuscany with children 0-6 together with the first results on educators’ perceptions of the impact of these projects on the development of children’s curiosity and their well-being. The importance of considering reading aloud with young children as a fundamental aspect of the initial and in-service training of educators will be highlighted.

**reading aloud, ECEC, curiosity, wellbeing, intelligence**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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A3

CHILDREN’S PLAY INHIBITED BY RESEARCHERS AND TEACHERS
**Chair:** Mandy Andrews, University of Plymouth, United Kingdom

Pretend act has the potential to inhibit children’s exploration of objects themselves: What happens when children encounter undefined artworks in the playground?
Hiroaki Ishiguro, Rikkyo University, Japan

This study examined how young children encounter undefined materials, and the tension between make-believe play and acts of exploring materials. It has been repeatedly argued that make-believe play offers an opportunity for children to learn, thus promoting cognitive and emotional development (Piaget, 1952; Singer & Singer, 1990; Hirsh-Pasek et al., 2003). However, pretending may weaken the exploration of materials by framing their meaning. Vygotsky (1976) suggests that materials’ original meaning disappears in make-believe play. This formative experiment (Vygotsky, 1997) adopted a post-positivist view to investigate children’s recreating activities when encountering undefined objects. This project focused on the creative play of 5-year-olds when they encounter
undefined object, artworks, make-believe play, exploration, formative experiment

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Overexcitabilities and the bidirectional development in playfulness and creative potential among kindergarten children**

Wing Kai Fung, Liverpool Hope University, United Kingdom

This study examined the bidirectionality of kindergarten children’s playfulness and creative potential with their overexcitabilities as antecedents. Previous research revealed the concurrent and unidirectional relationships among overexcitabilities, playfulness, and creative potential (e.g., Fung & Chung, 2021, 2022). This study extended prior work (e.g., Fung & Chung, 2021, 2022) by investigating the indirect relationship among overexcitabilities, playfulness, and creative potential and the co-development of the latter two using longitudinal data. Participants were teachers and parents of 139 Hong Kong kindergarten children. At Time 1, parents reported children’s overexcitabilities (Overexcitability Questionnaire) whereas teachers reported children’s playfulness (Children’s Playfulness Scale) and creative potential (Common Creative Attribute). Teachers’ ratings were obtained again six months later (Time 2). Ethical approval and informed consents were obtained from the affiliated university and all participants, respectively. Results from the cross-lagged model revealed that the indirect relationship among intellectual overexcitability, playfulness, and creative potential and the reciprocal relationship between playfulness and creative potential were statistically significant. Possibly, children who are fond of manipulating concepts and ideas tend to be more playful in the kindergarten context. These playful children may develop their creative potential through an increased participation in group play activities, while their creative potential might further motivate them to display higher levels of playfulness in future play. The results underscore the utility of promoting kindergarten children’s playfulness by endorsing children’s play choices and ideas, providing unstructured play materials and increased group play opportunities. These approaches may shape children’s playfulness and creative potential in a natural and joyful way.

overexcitabilities, playfulness, creative potential, kindergarten children, co-development

This application discusses a completed piece of research.

**Researching the researcher: How children decolonized a research project in an NGO school in India**

Sinead Matson, Maynooth University, Ireland

The initial aim of the study was to examine the play and early learning of children in India. The project was then ‘productively undone’ (Spivak, 2012) to find more ethical ways to research with children in the Majority world by a Minority World researcher. The research builds on postcolonial scholarship of Viruru (2005; 2009) and Gupta (2004; 2013) and pushes back on the universal application of research applied uncritically to children in the Majority world (Bloch et al, 2006). In order to think with theory (Jackson & Mezzai, 2013) the data was plugged-in to postcolonial, decolonial, and anti-racist theories. Using an interpretivist paradigm, arts-based methodologies were employed with 110 preschool children, during five research trips, over three years. This mosaic approach (Clark and Moss, 2005;2011) was combined with ethnographic methods in one case study school in western India. BERA ethical guidelines were utilised until the school and children wanted their right to identity. The UN Convention on the Rights of the Child (1989) along with utilising an ethical radar (Skanfors, 2009) allowed the researcher to gain approval from Maynooth University Ethics Committee. After the second research trip the children began to research the researcher, turning the cameras back on her. They took ownership of the research project and their position within it. This finding ask us as researchers consider ourselves as colonisers in children’s worlds and how we consider, write up, and allow attempts by children to decolonize our research activities. This has implications for children’s rights within research.
This application discusses a completed piece of research.

**A4**

**PICTURE BOOKS AND STORY TIME POSSIBILITIES**

Chair: Eliza Braden, University of South Carolina, United States

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**A visual ethnography of parent-child interactions during ‘story-time’ in Chinese family settings**

Xinxin Wang, Guangzhou University, China

This study, situated in the context of ‘story-time’, provides rich visual ethnographic insight into how Chinese parents interact with their children. A review of family literacy activity literature reveals a lack of research into the reasons for routine story-time in the context of Chinese families and how they achieve their story-telling goals. Most studies focus on gender or cultural issues (Lau & Chang, 2005; Luo et al., 2014). The theories of sociocultural theory (Wertsch, 1985) and narrative theory (Langellier & Peterson, 2006a) have been engaged. Semi-structured interviews were conducted with eight Chinese parents, who come from Chinese-speaking communities. They were invited to record videos of story-time with their children, aged three to seven years. An interaction analysis approach was used to analyze the video data and thematic analysis was used to analyze the interview data. No researcher was present during story-time, so that the participants felt comfortable and disruption to interactions were minimized. Videos were recorded after the interviews, so parents’ responses were not influenced by videos. The study found that story-time involves a variety of both parent-child interactions and story-telling strategies. The parents in the study use story-time as a highly engaging play-based educational tool that enhances parent-child interactions that support cognitive, emotional, and social development, especially with regard to emergent literacy skills. The study contributes to the literature on family literacy practices by demonstrating why and how Chinese parents organize regular routine story-time at home. Chinese parents acknowledge that story-time promotes child development, and facilitates parent-modeling.

**storytelling, story-time, parent-child interaction, literacy development, visual ethnography**

This application discusses a completed piece of research.

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**Exploring preschool children’s responses to picture books about challenging, unpleasant topics**

Hans Olav Aadland and Kristin Aadland-Atkinson, NLA University College, Norway

In this study we aim to explore how preschool children respond to picture books about challenging and unpleasant topics. Research has shown that these books are rarely read in the kindergarten by preschool teachers, often they are only read if there’s an immediate need for it (Syversen, 2020). The theoretical framework for this study draws upon current theories of picture books about challenging and unpleasant topics (Syversen, 2020; Evans, 2015; Traavik, 2012; Hoel, 2008). The study was conducted as a qualitative phenomenological study, in an interpretive research paradigm. Four reading sessions with a Norwegian preschool group consisting of eight children were observed and video recorded. A preschool teacher read two different picture books, En dag drar mamma [One day mom leaves] (2017) and Roy (2008). The recordings were later transcribed and analysed. A consent form and information sheet were provided to all parents and children, and the preschool teachers involved. The participants were given pseudonyms, and they were repeatedly given the opportunity to withdraw from the study at any given time. Of the two books read, one presents grief more directly than the other. The preliminary findings suggest that the children react differently to the two books, showing more restlessness when grief is more directly presented. The children engage in conversations about both books. Our findings suggest that the children could more often be exposed to picture books with an unpleasant topic. The children show by their verbal or non-verbal responses if they want to read the book or not.

**challenging picture books, unpleasant picture books, preschool children’s literary responses, reader-response, selective reading**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**What is the story: Sparking children’s critical curiosity through picture books featuring Black and Jewish characters**

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Children’s picture books represent a significant form of visual culture that shapes the racial and cultural subjectivities of all children. We wonder what messages and areas of curiosity are being sent to Jewish, Black, and Jewish Black children through picture books which contain characters from each group. Using a critical race lens with children’s books has been researched (Braden & Rodriguez 2016). However, there is no research on books with Jewish and Black characters. The work is undergirded in a social justice framework, which examines how oppression and privilege perpetuate systems of power (Freire 1970). This study also uses Critical Race Theory (Ladson-Billings 1995) and Hebcrit (Rubin 2020) to examine marginalized, students through a humanizing lens. The research includes critical content analysis (Bradford 2007) and critical multicultural analysis (Botelho & Rudman, 2009) allowing the researcher to uncover cultural messages. All guidelines of the University of South Carolina Ethics Committee/Internal Review Board were met. This research led to the most comprehensive list of picture books on this topic (153 titles). The research analysis a subset of these books providing recommendations in selecting classroom books and teaching about race and ethnicity to pique a child’s curiosity in their own and other cultures. The research will assist teachers and policymakers on best practices in selecting books and developing equitable teaching materials for these curriculum lessons.

picture books, equity, Pro-Blackness, Jewish education, literacy

This application discusses a completed piece of research.

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A5
SIGN LANGUAGE, STANDARDISED ASSESSMENT AND LEARNING THE HOST LANGUAGE: ASPECTS OF DIVERSITY
Chair: Annika Andersson, Linnaeus University, Sweden

On motivating children to learn a host language
Annika Andersson, Linnaeus University, Sweden

Children immigrating to Sweden are not motivated to learn the host language Swedish and learn English instead. We gathered information on what positively or negatively affects children’s motivation to learn Swedish to develop a “motivation-intervention” in collaboration with early-childhood teachers. Previous intervention studies of children’s motivation typically focus on learning a foreign language in school (García & Pérez-Llantada, 2015). We need to gain a better understanding of the effects of motivational interventions on particularly immigrant children learning a host language in early childhood. Our interventions are based in the theory of self-determination and included but were not limited to activities such as goal setting, self-reflection, and self-evaluation, that previously showed positive effects on students’ motivation and attitudes towards learning a foreign language (Dörnyei & Csizér, 1998; MacIntyre & Noels, 1994). Early-childhood teachers answered a questionnaire focusing on children’s motivation to learn Swedish and factors affecting this motivation. Development of interventions was based on the results. Participants gave informed consents by answering the questionnaire. All children in the area will access the effective intervention through their teachers who will be invited to a presentation and discussion of results. The main finding was the importance of the caregivers as role models. If they acquired Swedish, and found the language acquisition important for their children, children would be more motivated and would also attend childcare more frequently. Including teachers into the development of interventions led to relevant interventions that easily can be integrated with the regular curriculum in contrast to intense researcher-implemented interventions.

second language acquisition, immigrant children, motivation, intervention, caregivers

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Preschool teacher’s use of sign-supported speech (SSS) to promote multilingual childrens’ development of Swedish as a second language (L2)
Karolina Larsson (1) (2), Polly Björk-Willén (2), Katarina Haraldsson (2) (3), Kristina Hansson (1); (1) Lunds University (2) Halmstad Municipality, (3) University of Gothenburg, Sweden
The aim was to study how teachers use SSS in language teaching activities with multilingual children, and the children’s way of participation in such activities. The study relates to research on language exposure (Hoff, 2013), preschool language teaching (Svinth, 2012) and SSS as a method to enhance multilingual children’s L2 development (Marshall & Hobsbaum, 2015). SSS promotes language development in children with developmental language disorders (van Berkel-van Hoof, Hermans, Knoors & Verhoeven, 2019), but has been applied to typically developing multilingual children without evaluation (Björk-Willén, 2020). The study is part of a larger research project on preschool language environments, and was conducted in three preschools situated in a multilingual area. The design is video-ethnographic. The analyses build on Conversation analysis (Sidnell, 2010). The study was approved by the Swedish Ethical Review Authority. Consent was achieved from teachers and children’s caregivers. All children were asked to participate. Teachers’ focus on supporting speech with signs sometimes leads to limited teacher responsivity and missed opportunities to build on children’s interests, which might lead to children’s reduced participation. Teachers’ use of sign-supported speech needs to be related to fundamental aspects of high quality language interactions and didactical questions of what is to be taught, why and how.

**sign-supported speech, multilingual children, language teaching, preschool, children’s participation**

This application discusses a completed piece of research.

**Enacting agency: A first-grade ESL teacher’s journey using project-based instruction in the USA’s era of standardised testing**

Kiyomi Colegrove (1) and Christian Zuniga (2); (1) Texas State University, (2) University of Texas RGV, United States

This presentation aims to examine how a first-grade English as a Second Language teacher in the U.S. understands teaching and learning as she explores her agency and that of her students in implementing and experimenting with project-based instruction (PBI) (Katz, 1994) in her economically, culturally, and linguistically diverse classroom. In the U.S., standardized assessment is systematic and begins in Pre-K with impact to school funding, student academic trajectories, and teacher morale. Consequently, this has driven teaching toward a test-driven model (Helm, 2008) and pushed aggressively for English acquisition (Menken, 2006). We draw theoretically on teacher agency (Paris & Lung, 2008), pedagogy of hope (Freire, 2015), and identity in discourse (Erickson, 2004), we explore how the process of implementing PBI and opportunities for reflection supported this teacher in examining her teaching approach in a high-stakes testing environment. We conducted interviews and collected observational data using a video-cued ethnography methodology (Tobin et al., 2009). Participants were provided with consent forms, information, and pseudonyms and could withdraw anytime. When teachers have the professional agency to embrace dynamic teaching practices, they discover spaces to enact agency, extend agentic opportunities to students and create classrooms of hope, especially for marginalized communities in the era of standardization. These opportunities help reposition students away from deficit “at-risk” labels. We argue that the teachers’ role is critical for young children’s agency in providing dynamic and enriching learning opportunities (Adair & Colegrove, 2021). Reclaiming teacher agency is critical as the U.S. faces a massive exodus from the profession.

**teacher agency, ESL classrooms, project based learning, standardized assessment, diverse students**

This application discusses a completed piece of research.

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**A6**

**SUPPORTING PROFESSIONALS’ WELLBEING**

**Chair:** Dietlinde Willockx, Karel de Grote University of Applied Sciences and Arts, Belgium

**What research on practitioner’s job experience reveals on the challenges for the early years sector in Flanders, Belgium**

Dietlinde Willockx, Nele Van Gils, Kris De Visscher and Els Biessen, Karel de Grote University College of Applied Sciences and Arts, Belgium

Our research aimed at in-depth understanding of early years practitioners’ job experience in Flanders. Although several reports state that practitioners’ wellbeing improves the general quality of ECEC (OECD, 2021; Cumming et al., 2020), in-depth research on practitioners’ experiences is scarce, which is remarkable in a sector focused on wellbeing. We used an ecological model to look at job’s wellbeing (Fenech et al., 2022) combining job aspects, contextual elements and individual characteristics. We also used Joan
How was your day? Good and bad daily moments narrated by early childhood education professionals

Merja Koivula and Eija Sevón, University of Jyväskylä, Finland

This study explores how early childhood education (ECE) professionals narrate the daily good and bad moments they have experienced during their working day. Understanding diverse factors contributing to the well-being of ECE professionals is crucial, since their well-being is reflected upon their agency, the well-being of children, educational interactions in ECE groups and to professionals’ ability of being sensitive and responsive towards the needs of the children (Buettnner et al., 2016; Jeon et al., 2018; Penttinen et al., 2020). We draw from previous studies exploring professionals’ well-being and work resources (Demerouti et al., 2001; McMullen et al., 2020), suggesting that positive emotions in work support relationships, increase personal resources and enhance well-being and agency (Fredricson, 2013), whereas negative emotions promote conflicts and hamper work performance (Rispens & Demerouti, 2016). The data of this qualitative, constructivist, narrative study were collected from ECE professionals (N=85) on five consecutive days by mobile diary questionnaire. The data were analysed using thematic analysis (Braun & Clarke, 2019). We gained informed consents of all participants and respected their rights to anonymity and confidentiality. Ethical principles were followed carefully during research. The results suggest that good moments in ECE were mostly linked with having pleasurable moments with children or feeling content after succeeding in executing the planned pedagogical practices. However, bad moments in ECE were connected to challenging moments with children, lack of resources and rush. The practical implication of the study is to produce novel knowledge, which enables better supporting the ECE professionals’ well-being and agency.

Different spheres to consider to support the wellbeing at work of educators in early childhood educational childcare settings

Manon Boily, Sara Lachance, Marie-Christine Allaire, Nathalie Goulet and Nawel Hamidi, University of Québec in Montréal, Canada

This communication presents a study carried out in three educational childcare settings where 12 educators exposed their representations of well-being at work. The research aimed to examine how educators represent well-being at work. Educational experiences offered to children are influenced by the well-being of educators (Berger et al., 2022). Thus, a clear understanding of what well-being at work means for educators and what influences it could improve the quality of life in their environment (Royer et al., 2017). The concept that underlies this study is that of representation. This is associated with a knowledge system linked to the individual’s representations regarding a concept to explain its reality (Reuter et al., 2013). The concept of well-being at work is seen in its psychological aspect and refers to a positive subjective emotional experience (Royer et al., 2017). From the interviews followed by inductive thematic qualitative analysis, five spheres of representations of well-being at work were identified. Then, the quantitative analysis using the Q methodology of Stephenson (1953) highlighted three systems of representation. A certificate of ethics from our university was obtained for this study. Participants have signed the consent form and had the opportunity to withdraw at any time. Five spheres of well-being at work on which educators positioned themselves were identified and associated with the three representation systems: organizational, identity, environmental, sense of accomplishment, pleasure at work. The discussion leads to guidelines to support the management of childcare settings to promote the well-being of educators at work.
This application discusses a completed piece of research.

**A7**

**TECHNOLOGY AS A TEACHING TOOL**

Chair: Marijana Županić Benić, University of Zagreb, Croatia

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**Systematic review of the contents of e-books and educational videos for preschool children**

Zeynep Kılıç (1), Şeyma Değirmenci (2), Büşra Çelik, (3) Alper Yorulmaz (4); (1) Maltepe University (2) Muğla Sıtkı Koçman University (3) University of Health Sciences (4) Muğla Sıtkı Koçman University, Turkey

The study aims to achieve two objectives, namely, to identify the key features of e-books and educational videos and to systematically review the literature on the impact of these tools on the movement skills of young children. Preschoolers commonly use tablets to access e-books and video content (Mantilla & Edwards, 2019), but not enough research has been done on the characteristics of this usage. Moreover, there is currently no systematic review of the impact of e-books and videos on the movement skills of preschoolers. Preschool is critical for movement skill development, and e-books have gained popularity among children and adults (Statica, 2021). They are also used in various developmental activities for preschoolers (Kokkalia, Drigas & Economou, 2016), along with educational videos that have similar impacts on children's development (Bourbour, 2020). While some worry about the tools hindering movement (Ponti, 2017), others believe they can support movement skills (Doty, 2015). This study utilized a qualitative research approach, employing both content analysis and systematic literature review to identify the characteristics of e-books and educational videos and assess their effects on children's movement skills. A checklist was developed to guide the descriptive analysis, which was the primary focus of our research. In conducting the systematic review of relevant studies, we followed the PRISMA flow chart (2020). Although not working directly with a human, ethical values regarding the studies examined in the research were taken into consideration. Despite the ongoing analysis, all results pertaining to both aims will be presented at the congress. This study will provide a comprehensive understanding of e-books and educational videos, as well as a systematic analysis of their effects on young children's movement skills, contributing to the literature in this field.

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**Puppets and the technique of stop animation in the function of creative expression of preschool children**

Marijana Županić Benić, University of Zagreb, Croatia

This paper examines new media in the context of encouraging children’s creativity through the creation of a puppet film using the stop animation technique. According to many studies, modern technology and the use of new media can have a significant impact on learning and the development of competencies in early and preschool education (Marsh, 2016; Branco et al., 2014; McPake et al., 2012). Using stop motion techniques for creative expression of preschool children consists of the following steps: leading-to-learn, active learning, opinion sharing, and reflective thinking, as depicted in the Early Childhood Imagineering Model (ECIM) (Jitsupa et al., 2018, 2021, 2022). A study by Gjelaj et al. (2020) reported that the integration of play into digital technology should be useful to preschoolers. This research is the example of a case study. The project was created and observed in two years in a family environment by mother/researcher, participants where twin brothers. International and national guidelines for research ethics were followed (EECERA Ethical Code, 2015; Croatian Science Foundation, 2018). We can conclude that the creative use of new media in the framework of the creation of a joint project, the creation of a stop-motion puppet film with an emphasis on the development of key competencies for lifelong learning, is presented. This case study present the possibilities of implementing such creative activities in a kindergarten setting are considered as an example of good practice that would provide children with the opportunity to express themselves creatively through new media.

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child, film, new media, puppet, stop animation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
An exploration of how multimodal teaching and the creation of digital animations contribute to six-year-olds' meaning-making in chemistry
Emelie Patron (1), Marina Wernholm (1), Kristina Danielsson (1) (2), Hanna Palmér (1), Andreas Ebbelind (1); (1) Linnaeus University (2) Stockholm University

This paper aims to explore how well-designed multimodal teaching affects pupils’ meaning-making and ‘what’s happening’ and ‘what’s possible’ when pupils create multimodal digital animations of water molecules and phase changes of water. Previous research has shown that pupils’ participation in educational activities increases when they are allowed to use several forms of expression (Petersen, 2020). The project is qualitative and draws on the frameworks of social semiotics (e.g., see Kress et al., 2001) and Designs for Learning, DfL (Selander, 2008), where teaching and learning are seen as a multimodal design. The Learning Design Sequence model, developed within DfL is used as an analytical tool. Data has been generated by filming when pupils, in pairs or small groups, create digital animations in Chemistry. Afterwards, the children while showing their digital animations were asked about what they had been doing and what their intentions behind certain actions had been (cf. Wernholm & Reneland-Forsman, 2019). The project adheres to the ethical considerations regarding informed consent, anonymity, and the right to withdraw participation without giving a reason. The researchers were sensitive and paid particular attention to the children’s nonverbal communication to ascertain genuine consent to participation. Preliminary results indicate that well-designed multimodal activities where pupils both create and reflect upon their digital animations appear to contribute to increased meaning-making in Chemistry. Thus, this project contributes with implications for early years of schooling by showing how using digital tools can create conditions for children’s participation and meaning making in Chemistry.

Chemistry education, designs for learning, digital tools, multimodality, pupils’ participation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

A8

PHYSICAL ACTIVITY AND MOTOR SKILLS
Chair: Elin Eriksen Ødegaard, Western Norway University of Applied Sciences, Norway

An investigation of teachers’ and children’s understandings of the relationship between movement, play and exploration using Guided Tours
Elin Eriksen Ødegaard (1), Maria Grindheim (1), Eivind Aadland (1), James Rudd (2) and Jostein Rønning Sanderud (1); (1) Western Norway University of Applied Sciences, (2) Norwegian School of Sport Sciences, Norway

This presentation provides insights into teachers’ and children’s understanding and experiences of the relationship between movement, play and exploration in different ECEC settings in Norway. The study is a part of the multimethodological and interdisciplinary research project Move-play-explore in Early Childhood Education (MoveEarly), which aims at cultivating a deeper understanding of movement, play and exploration through multiple perspectives. In the present study teachers and children are invited to share their situated understanding of these concepts using guided tours methodology. The study is inspired by an ecological perspective, which accounts for reciprocal interactions between individuals and their environment, and the situated environment, through the eyes of teachers and children (Ingold, 2013; Thomson, 2018). Using video recorded guided tours in three Kindergartens, in rural and urban environments, teachers and children will guide the researchers showing where, how and when they move-play-explore. There will be follow-up focus group interviews with the teachers to elaborate on the guided tours. The study will be conducted in line with international ethical and privacy protection guidelines. Child and teacher assent will be confirmed before and during the video recordings. Children’s parents and staff will sign a consent form and may withdraw at any time. Findings from the guided tours and focus group interviews will be shared and discussed during the presentation. The insights and understandings garnered through this study will support the development of an ECEC a move-play-explore pedagogy for Norwegian ECCE contexts. This pedagogy will then be evaluated as part of the wider project MoveEarly.

movement, play, exploration, guided tour, participatory research design

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
The impact of directors’ lived experience on promoting physical activity and motor skill development in early childhood education and care settings

Kelly Tribolet, Charles Sturt University, Australia

Research aim is to understand the factors that influence directors’ provision of physically active play experiences in early years settings during outdoor play. Early childhood education and care (ECEC) services have become important settings for supporting active lifestyles (World Health Organization, 2017). However, research shows a significant difference between early childhood services in the provision of, and children’s participation in, physically active play experiences. Therefore, it is important to consider the influence of the director on promoting physical activity and motor skill development within their ECEC setting. Affordance Theory (Kyttä 2002, 2004) enabled analysis of the types of, and children’s participation in, physically active play experiences in early childhood settings. Bourdieu’s (1980, 1990) theory of practice was applied to clarify the relationship between educators’ practices and the contexts in which these practices occurred. A multiple case study was conducted utilising guided interviews with directors and educators, and observational data of educator interactions and children’s physically active play during outdoor play. Ethical considerations included voluntary participation; informed consent; right to discontinue; and anonymity and confidentiality. The directors’ lived experience had an impact on the philosophical beliefs about the purpose of outdoor play; the resources and experiences provided to promote physical activity; expectations of the role of educators during outdoor play; and children’s engagement in physically active play. The findings highlight that the Director establishes the organisational culture, ethos and environment for promoting physical activity and the need for engaging in reflective practice to review current policies, curriculum provisions and teaching strategies.

director habitus, physical activity, outdoor play, practice theory, Affordance Theory

This application discusses a completed piece of research.

Academic performance in pre-school and scholar ages based on psychomotor profile

Nidia Amorim (1), Sofia Santos (2); (1) Faculty of Human Kinetics, University of Lisbon, (2) Unit for Research and Development in Education Training (UIDEF), University of Lisbon, Portugal

Our goal is to analyze the correlations between psychomotor profile and academic learning. Studies conducted by Fonseca (2021, 2017, 2007) and Vaivre-Douret (2019, 2017, 2016, 2009, 2006) served as a basis for the present study. The present study is conceptually based on neurodevelopment, considering the maturation of the child’s central nervous system as a rigorous guide for a better understanding of the child’s psychomotor and academic development (Vaivre-Douret, 2006). Psychomotor Therapy is one of the main supports to children in schools (Maite et al., 2015), based on learning-by-movement experiences (Fonseca, 2021). Are expected positive relationships between psychomotor abilities and learning outcomes, with implications for an early assessment and intervention with children with learning disabilities. The NPmot.pt, BAPAE and Pre-school were applied to 100 children aged 48-72 months (72.3M±4.52M), 58 males and 42 females, with and without disabilities, attending regular schools/pre-schools. Analysis independent samples t-tests/ANOVA and post-hoc tests are used to analyze differences. Pearson’s correlations and regression analysis will allow the understanding of the construct’ relationships and predictors’ identification. All ethical procedures were assure: Ethics Committee approval; informed consents; participants codification. Child psychomotor development has gained a greater expression, in order to better guide child care professionals in the planning of children-centered psychomotor intervention programs. Psychomotor skills help children to organize the outside world through their bodies, preparing motor needs of the environment and daily life, since early age. A good all-round education should include psychomotor skills stimulation due to its potential link with academic learning across developmental trajectory.

psychomotor profile, academic competences, child-centered interventions, early education, learning

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

A9
CONSIDERING VALUES, PRACTICES AND POLICY IN ECE
Chair: Sigal Achituv, Oranim College of Education, Israel
The effects of cultural contexts on ECEC leadership development in Israel and the US
Lyndall Miller (1) and David Brody (2); (1) Jewish Early Childhood Education Leadership Institute (former), United States, (2) Orot Yisrael Academic College, Israel

The research identifies core leadership capacities of ECEC leaders in Jewish-American and Israeli settings. This study builds on Miller (2021) and Brody (2017) who investigated leadership in Jewish settings in America and Israel. Miller interviewed national ECEC leaders regarding leadership capacities within American programs. Brody reviewed roles and leadership in Israel. This current research compares those findings considering socio-cultural contexts. The theory of core leadership competencies developed by Leadership Education for Administrators and Directors EC Collaborative (2017) provides the basis for the study. The capacities defined are conceptualized paradigms of effective ECEC leadership. This qualitative study relied on grounded theory for data collection and analysis because such an approach enables accessing attitudes and beliefs of ECEC leaders (N=7) using open-ended semi-structured interviews. Interviews were anonymized and identifying features were suppressed because national leaders’ expression about competencies among other professionals could compromise future work with them. Among American leaders, core capacities included self-awareness, an aptitude for relationship management, an inquiry stance, and attention to particular socio-cultural contexts. Israeli leaders also showed a focus on similar capacities; however, an inquiry stance was lacking. Most directors in both countries do not have opportunities for the learning necessary for optimal growth in all capacities. Research-based intensive professional development can advance the knowledge and skills of leaders, and enhance their effectiveness. Bridging gaps between ECEC leadership knowledge and practice promises higher quality programs.

leadership capacities, professional development, collaboration, leadership learning gap, socio-cultural context

This application discusses a completed piece of research.

Holidays ceremonies in Israeli and USA early childhood Jewish education
Shulamit Hoshen (Manzura), Oranim College of Education, Israel

This research examines early childhood educator’s perspectives on Jewish holiday ritual practices in Israel and United States. Research is abundant on kindergarten ceremonies as spaces for interactions between educators, children, and their families and the use of rituals (Scully & Howell 2008; Yaffe & Rapoport 2013). However, looking at perceptions of teachers and children to create pedagogy is unique to this research. The theoretical perspective is the cultural and historical aspects of rituals in different cultural contexts (Hoshen Manzura 2023; Shoham 2014). Along with an understanding of cognitive constructivism (Fosnot 2005) This qualitative study uses observations and semi-structured interviews with kindergarten teachers in 30 educational settings in Israel. Data was also collected from children and teachers in USA settings. Interview transcripts were analyzed thematically using grounded theory Participants’ anonymity was achieved, and participant identity was suppressed. The use of the database for research and writing was done according to the ethical codes of the Research and Evaluation Authority at Oranim College and the University of South Carolina. Through rituals, kindergarten teachers in Israel and the USA facilitate cultural content, values, knowledge, and emotion with the children. Holiday ceremonies are the peak event in preschools’ activities. Beyond the context of location, holiday rituals reflect a variety of worldviews and educational approaches. The implications indicate that observing rituals while listening to the voices of all participants allows for a deeper understanding of the ways in which educators can design developmentally and culturally appropriate rituals.

holidays, rituals, ceremonies, celebrations, ECE educators’ perspectives

This application discusses a completed piece of research.

Children’s rights and participation in Brazilian and Norwegian ECE curriculum and policy documents
Rhaisa Pael (1) and MarianneUndheim (2); (1) Universidade de Brasilia, Brazil, (2) University of Stavanger, Norway

This study explores how children’s rights and participation are conceptualized in Brazilian and Norwegian early childhood education (ECE) curriculum and policy documents. There are some previous ECE cross-cultural comparative studies: Gunnestad et al. (2022) explored values in 13 countries’ policy documents, including Norway and Brazil; Li et al. (2019) investigated sustainability in Norwegian and Chinese curricular documents; and Hedges et al. (2018) examined play in Brazil, New Zealand, and Ontario.
Nevertheless, Correia et al. (2019:84) highlight a need for more studies addressing children’s right to participate, especially involving countries outside Europe. Drawing on the sociology of childhood as the theoretical framework (Prout & James, 2015:7; Mayall, 2000:248-249), we acknowledge children as rights holders in line with the United Nations Convention on the Rights of the Child (1989). Inspired by Braun and Clarke (2022:34-37), we have conducted a cross-cultural qualitative thematic analysis of ECE documents, focusing on differences and similarities. In line with EECERA’s Ethical Code (2015), we respect and acknowledge both countries’ cultural contexts and historical backgrounds. Preliminary findings show that in both countries’ ECE documents, children are conceptualized as citizens with their own rights, and children’s participation is emphasized. However, the Norwegian curriculum has a more specific focus on enabling children’s participation in ways suited to their age, experience, individual circumstances, and needs than the Brazilian curriculum. Drawing on these findings, we will contribute to educational discussions in order to promote equity and quality in ECE by improving children’s participation.

curriculum and policy documents, cross-cultural, participation, children’s rights, Brazil and Norway

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

A10
CASE STUDIES OF SCIENCE EDUCATION IN ECE
Chair: Maria Ampartzaki, University of Crete, Greece

A blended training approach to teaching astronomy to young children: A Greek case study
Maria Ampartzaki, Michail Kalogiannakis, Konstantinos Tassis, Vasiliki Pavlidou, Konstantinos Christidis, Sofia Chatzoglidou, Georgios Eleftherakis, University of Crete, Greece

Our research aimed to assess the impact of blended learning for preschool teachers on the delivery of astronomy topics. Research shows that young children can improve their understanding of astronomy phenomena through curiosity and agency in inquiry-based and art-based learning processes (Güçhan-Özgül, 2021; Raviv & Dadon, 2021; Timur et al., 2020; Dogru & Seker, 2012) Research also shows that teachers encounter difficulties delivering astronomy lessons (Chastenay, 2018; Bektasli, 2014; Turkoglu et al., 2009). In a constructivist approach, participants studied basic astronomical phenomena and inquiry-based and art-based learning methodologies in a blended learning program. Afterwards, participants engaged in the practical implementation of astronomy lessons and self-reflective evaluation processes. Our study adheres to the qualitative paradigm. To assess the program’s impact on participants’ knowledge, skills, emotions, and attitudes, we used: a) questionnaires, b) interviews, and d) case studies drafted by the teachers. Quantitative data were subjected to statistical analysis, and qualitative data underwent thematic analysis. Data protection measures according to the EU GDPR law were applied in our research process. Official research ethics committees approved the research process and tools. The training improved the participants’ knowledge and understanding of astronomy phenomena. Teachers developed positive attitudes and enthusiasm towards the teaching of astronomy. However, participants were inconsistent in implementing inquiry-based and art-based learning in astronomy activities. Policies can use blended learning in teachers’ training, yet more emphasis should be placed on supporting classroom implementations. Teachers need practical guidance to develop open-ended teaching and learning practices based on curiosity and agency.

innovative approaches, astronomy education, science education, inquiry-based learning, art-based learning

This application discusses a completed piece of research.

Transformation of young children’s minds, lives, and society through science, technology, engineering, art, and mathematics (STEAM) play with ‘paper’
Manabu Sumida, Ehime University, Japan

This study aims to develop and implement an online STEAM programme with the theme of ‘paper’ for 5-7 year olds, linked to the UN Sustainable Development Goals (SDGs). Sumida (2023:345-361) showed that young children learn about water pollution and purification and discussed natural disaster prevention through STEAM-oriented activities. Connecting STEAM activities with SDGs can enrich and strengthen children’s playtime and the topic of ‘Paper’ in this study is a good material to achieve a better society. The
paper includes physical and chemical properties, local industry, environmental impact, regeneration, culture and history, and many other playful perspectives. Eight young children aged between 5 and 7 took part in this study. The children spent an hour playing with different sheets of paper, tearing them up, writing on them with different pens, observing their cross sections, experimenting with the amount of water that different papers can absorb and investigating the strength of the paper. They then designed their own original paper. The participating children were given the opportunity to withdraw from the study at any time. The children came up with unique ideas, such as using vegetables and other materials to make edible paper or making paper magnetic by adding iron sand. Although this activity was conducted online, the children who participated achieved the goals well. They enjoyed learning about their local paper culture and history, including science and technological innovation, while thinking about global issues such as deforestation. Integrated STEAM activities have great potential to enrich young children’s learning ‘globally+locally’.

**STEAM play, paper, sustainable development goals (SDGs), online, competencies**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**The importance of field trips for children’s science learning**

Iskender Gelir and Laila Al-Salmi, Sultan Qaboos University, Oman

This research aims to teach young children how dates grow, what climate dates need to grow and why they are important for Oman. Date fruits play an important role in the Oman’s society, culture and economy. It is designed to examine the effects of scientific visits on children’s science process skills such as observation, comparing and inferring. The study contributes to studies such as Samarapungavan et al. (2008) and Gravil’s (2019). Samarapungavan et al. (2008) found that there was a significant relationship between experimental activities and science learning. This research is based on socio-cultural theories (Vygotsky 1978) that argued that children’s science learning is a ‘collective achievement’ and a shared understanding as they learn scientific concepts in interactions with experts (Siry, Ziegler and Max 2012). Having qualitative methodology orientation, this study uses observation, interviews and video recording as data collection methods. It takes an interpretive paradigm to data analysis. BERA’s (2011) ethical guidelines were followed during observation sessions to take children's best interests into account. The primary findings highlight that field trips to the palm tree garden and reading stories support children science learning. It also indicates that field trips help children understand the importance of cultural materials (producing and selling dates) for their society. It suggests that teachers can include field trips in their classroom activities to support children’s understanding of cultural materials.

**science learning, field trips, date palm, cultural materials, qualitative**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**A11**

**CURIOSITY: EXPLORING REAL TOOLS, PRACTITIONER RESPONSES AND COMMUNITIES OF PRACTICE**

Chair: Valerie Sollars, University of Malta, Malta

Encouraging curiosity and agency though professional communities of practice in Chilean ECE field

Daniela Figueroa Moya (1), Ximena Poblete (2), Paula Guerra Silva Henríquez (3), Mery Rodriguez (4); (1) Finis Terrae University, (2) Universidad Alberto Hurtado, (3) Catholic University (4) Universidad de las América, Chile

The research aimed to analyse the tensions in leadership practices and agency in ECE. The study of leadership in ECE is quite recent (Siraj-Blatchford & Hallet, 2014). In Chile, only one study has focused on ECE leadership and gender situating ECE field as an interesting site for leadership studies as particularities of a gendered role has not been a wide matter of analysis (Falabella et al, 2022) The theoretical framework draws upon a critical feminist perspective that challenge regimes of truth (Pierre & Pillow, 2002) focusing on dismantling the binary male/female that privilege masculine, white, and elitist claims of truth (Davies et al., 2001; MacNaughton, 2000). The study was conducted within a qualitative interpretive research paradigm (Denzin & Lincoln, 2018). Interviews and focus groups were conducted with 12 ECE Chilean leaders from a Professional Learning Community (PLC) Data were analyzed using thematic analysis (Braun & Clarke, 2006). A consent form and information sheet were provided to all participants. Pseudonyms are used. Participants were given the opportunity to withdraw from the study at any time. Findings revealed three tensions arising from the leadership practices in ECE: Disputing the professional and the personal; Leadership as motherhood;
Asymmetry or horizontality: distrust and fear of bonding; and Care of others and being cared: towards care’ universalization importance. Participation in PLC promoted agency and curiosity as drivers of professional activity. Implications for professional development in ECE are discussed, including practical guidelines for institutions, and leaders, and policy reforms that consider gender perspective

care, leadership, professional community of practice, professionalism in ece, women leadership

This application discusses a completed piece of research.

**Tools for tots: An observational study exploring Irish children’s use of real tools in the early years sector**

Chloe Keegan, Early Childhood Ireland, Ireland

This research explored the concept of using real tools in Ireland’s early years sector. The research involved observing children and educators using real tools within their play in an observational study. Children are natural explorers seeking to better understand and develop their risk management skills (Christensen and Mikkelsen, 2008). Adults who prevent children’s need for exploration in the learning environment were forced to engage in additional supervision with children who sought out explorations elsewhere (Elliott, 2008). This research is underpinned by Vygotsky’s social constructionism theory where play is supported by planned, purposeful adult and child led play. This applies to tool use as tools have a purpose and are engaged with always by adults and children, but never children alone. Using a constructivist paradigm, an observational study at one onsite visit in a preschool and photography was used where the researcher observed how children actively engaged with real tools to enhance their interests and learning supported by the educator. Fewer ethical issues are raised in observational studies than in experimental studies (Ruiz-Canela et al., 2013). Written adult consent forms were the basis of the research, with children’s consent being gained within the experiences being observed. Participants were anonymised and no faces shown in photography captured. This research found that tool exploration in the early years is an achievable and meaningful element of pedagogy that can be implemented in practice. Tool exploration is encouraged in Ireland's curriculum framework, is implementable safely in practice, but requires clearer guidance in national regulation.

children’s rights, tool exploration, outdoor pedagogy, risky play, play

This application discusses a completed piece of research.

**Curiosity killed the cat...practitioners’ responses to children’s curiosity in kindergarten settings**

Valerie Sollars, University of Malta, Malta

This small scale study sought to identify how practitioners respond to children’s curiosity in kindergarten settings, in light of the introduction of the emergent curriculum. Although closely associated to learning (Shonstrom, 2015) and a necessity for young children’s cognitive development (Jirout & Klahr, 2012), curiosity is not a priority in schools (Engel, 2011). Where children are active constructors of knowledge and researchers (Mercolliott, 2001), curiosity plays a significant role in early years activities. Stifling or promoting curiosity depends on practitioners’ insights about teaching and learning and children’s active engagement. Practitioners need to ‘navigate’ their way when challenged by children’s curiosity (Menning, 2018). The study is based on teaching and learning concepts, investigated through a child-centred, participatory pedagogical approach (Kangas, 2016) and socio-cultural theory (Vygotsky, 1987). Child participation in planning and implementing activities empowers them to learn, express ideas and develop a positive self-image (Sommer, Pramling, Samuelsson & Hundeide, 2013). Individual interviews conducted with kindergarten educators working with three- to five-year-olds yielded data suited to a qualitative interpretive research paradigm (Denzin & Lincoln, 2018). Participants signed a consent form following verbal and written information about the proposed research. Permission for audio-recording the interview was sought. Voluntary and anonymous participation were assured. The University Research Ethics Committee approved the research. Results are expected to reveal how practitioners acknowledge children’s curiosity in their planning of activities in accordance with the emergent curriculum principles. The findings can shed light on the support required by practitioners to positively identify and respond to children’s curiosity.

defining curiosity , kindergarten educators, children’s curiosity, emergent curriculum, inquiry-based learning

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Internationally there is a crisis of labour supply in the early childhood education and care (ECEC) workforce. An increased demand for ECEC, set against inadequate pay and conditions (McDonald et al., 2018; Warin, et al., 2021) and high rates of staff turnover (Thorpe, et al., 2020; Totenhagen et al., 2016) have created this global crisis. Current policy reviews (OECD, 2019; UNICEF, 2019) suggest this problem will endure without intervention and have directed attention to increasing the participation of men in the ECEC workforce. Internationally, the participation of men remains low with an average rate of 2.5% across OECD countries (OECD, 2021; Rohrmann, 2020). Rates of withdrawal from the ECEC workforce are high regardless of gender, reflecting discontent with high work demand and low recognition (Phillips et al., 2016; Thorpe, et al., 2020; Warin, et al., 2021). Yet, for men, additional factors explain low recruitment and retention (Brody, 2015; Kirk, 2020).

Men’s professional agency in the Irish ECEC workforce
Joanne McHale, Technological University Dublin, Ireland

Men are under-represented in the early childhood workforce worldwide and Ireland is no exception with a figure of less than 2% (Pobal, 2022). This research sets out to understand agentic factors in men’s professional practice in a women majority profession (Schaub, 2015) and the structures that influence it. This research builds on previous literature on agency in the male ECEC workforce (Brody and Gor Ziv, 2020; Brody, Andra & Kedar, 2021), analysing the data from the experiences of men in the Irish context. The data will draw on understandings of gender and professional agency in care and education (Murray, 2013; Schoon & Eccles, 2014; Smith, 2011). Taking a social constructivist perspective, this research analyses qualitative interviews with men working in ECEC in Ireland to understand their motivations and experiences as a minority in a field traditionally associated with maternal understandings of care. Data for this research was collected as part of a doctoral thesis on men’s trajectories in the ECEC sector in Ireland. Ethical approval was granted by UCL Institute of Education and standard ethical considerations of confidentiality, anonymity, data storage and right of withdrawal were observed (Bera, 2011). Findings suggest that some men developed a strong sense of their professional agency while others experienced instances of their professional agency being undermined and the influence on these experiences will be discussed. Implications for a diversified workforce and understanding of gender challenges within professional practice will be explored.

agency, professional practice, men in ECEC, gender diversity, pedagogy

This application discusses a completed piece of research.

Touch as pedagogical action: Supporting children’s learning and care and men’s work in ECEC
Ricardo Goncalves, Örebro University, Sweden

This study aims to gain knowledge about how touch can be pedagogical action in the interplay between men and children in ECEC. Research has shown that touch between preschool teachers and children has been subject to surveillance due to a societal concern about children’s sexual abuse (CSA) and by adoption of policies towards protection of children’s body integrity (Pruit, 2015). Men working in ECEC express concern to be suspected of CSA when they are involved in touch situations with children (Hedlin et al., 2019). The study draws upon Dewey’s pragmatism by examining touch as an action in the transaction between preschool teacher, children, and their environment (Dewey, 1934, 1981). A field study within a qualitative research paradigm was conducted (Patton, 2015). Participant observation was carried out with 45 children and 3 male preschool teachers from three Swedish preschools. Fieldnotes and video recordings were used as data that was analyzed through a thematic analysis within an abductive approach (Conaty, 2021). The preschool teachers and children’s guardians received an information sheet and signed a consent form. Children were informed about the study during a circle time. The names of participants were pseudonymized and a negotiated consent was applied during the observations. The findings indicate that touch becomes pedagogical in five different actions: affective, communicative, supporting, playful and guiding. These findings suggest that touch in form of pedagogical actions create conditions for children’s learning and care. Those actions can also support men’s pedagogical work in touch situations with children in ECEC.
This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**The Pride and Prejudice of men’s participation in early childhood education**
Laetitia Coles, Victoria Sullivan and Karen Thorpe, The University of Queensland, Australia

The key aim in undertaking this research was to identify the supports and barriers to male educators’ participation in ECE. OECD (2019) reported one of the nine recommendations to address the current crisis was encouraging the participation of men. While pay presents a major challenge, research identified relationships within the workplace as critical (Bullough, 2015; Gallant & Riley, 2017). Being a gender minority can be isolating; inclusive practices are pivotal in retention (Acker, 2012; Clow, Ricciardelli, & Bartfay, 2015; Sobiraj, et.al., 2011). This small percentage of men in early education (2.5%) is situated in occupational sex-segregation. The theoretical framework was guided by previous research findings and the emerging themes based on the empirical data collected (Alvesson & Sköldberg, 2017). These investigations utilised design contrasts and qualitative methods were used to obtain educator perspectives with application of abductive analytical techniques. The major ethical concerns for this thesis include confidentiality, interviewee emotional wellbeing and informed consent. These were thoroughly considered in the ethics application approved by UQHREC. The findings identify while men may be presented as a source of pride for a centre, they also challenge social norms and disrupt established social order. Prejudices from female educators are pervasive if hidden or presented as the views of parents or broader society. The support and authentic inclusion of female and male colleagues is critical. This demonstrates the need for informed action to remove the structural and attitudinal barriers to men’s participation. Inclusion of men requires change to value work in ECE as professional.

occupational sex segregation, male teachers, early childhood education, wellbeing, gender and education

This application discusses a completed piece of research.

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**A13**

**EMOTIONAL INTELLIGENCE, JOY AND MINDFULNESS**
Chair: Cathryn Lokey, Florida State University, United States

**Doing joy: Performances of joy in children’s relations in early childhood and education settings**
Satu Karjalainen, University of Oulu, Finland

The study focused on the performances of joy in children’s relations in everyday life situations in early childhood education and care settings. The aim was to explore how joy shape children’s relations. In education research positive emotions, such as joy, have been considered as an essential part of learning and overall well-being (Hinton et. al. 2008). The study challenges the traditional individual orientation in emotion research and explore joy from relational perspective (see Kuby, 2014). The study presents novel insights into joy, which is emphasized in educational documents, but often remains unspecified. The theoretical and methodological premises draw from narrative approaches (Smith & Sparkes, 2008) and the dialogical philosophy of Martin Buber (1923/1937). The study was conducted at one ECEC center. The research material consisted of videos, written observations, and field diaries. The study was based on a holistic approach to performativity in which viewpoints were applied from the fields of narrative and emotion research (Ahmed, 2014). The dialogical stance was carried out through the whole research process as an ethical premise and particularly the positioning of the researcher was widely reflected. The findings show that the performances of joy are dynamic and active ways of doing. Joy plays a crucial role in daily life and its relations of ECEC. The joyous performances are entangled with cultural, temporal, spatial and material conditions. The study shows the potential of joy to enhance reciprocal encounters and relational agency in mundane daily life of ECEC.

dialogue, early childhood education, joy, narrative approach, performativity

This application discusses a completed piece of research.
Aggravated emotional behaviors in early childhood: Role of emotional intelligence to build positivity by early childhood educators

Aqsa Ali, The Islamia University of Bahawalpur, Pakistan

The main aim of this study is to control or possibly decrease the aggravated behaviors of children in early years. Examine the role of early childhood educators to build positivity in children while using emotional intelligence. Behavioral problems at a young age are at a greater risk of developing antisocial behavior and other behavioral problems in the long run (Campbell, 2006; Lynam, 1996). Children with higher levels of emotional intelligence are more empathic, more engaged in school and extracurricular activities, and better able to pay attention. (Raver, Garner & Smith Donald, 2007; Eggum, 2011). Higher emotional intelligence is also effective for better relationships, more positive feelings, lower in stress and anxiety (Brackett, Rivers & Salove, 2011). Purposive sampling method was utilized in this research. The population consisted of early childhood educators of preschool and interview guide approach was selected for data collection. The data was analyzed in the light of responses given by the early childhood educators. The researcher analyzed the data by manual coding and labeling and organizing qualitative data into relevant categories in order to gain findings. This research led to the conclusion that Emotional intelligence is important element for early year’s teachers to maintain children’s behavior. This study will be helpful for early childhood educators to respond more effectively to children’s behaviors while using emotional intelligence. It would be helpful to add recommendations for curriculum of teaching development.

aggravated behaviors, emotional intelligence, interventions, early childhood educators, young children

This application discusses a completed piece of research.

Children’s perceptions of mindfulness and how mindfulness practices impact their lives

Cathryn Lokey and Jeannine Turner, Florida State University, United States

This study explores how children conceptualize mindfulness and the impact of mindfulness practices on their lives. Mindfulness practices have a high rate of acceptability (Black & Fernando, 2014; Britton, et al. 2014). Childhood health/wellness experts claim mindfulness practices can enhance children’s well-being (Siegel, 2007; Zelazo & Lyons, 2011, 2012), and research supports these claims (Diamond & Lee, 2011; Huppert & Johnson, 2010). Mindfulness shows effectiveness for improving children’s classroom behavior (Black & Fernando, 2014), self-regulation (Bradley, et al., 2012), attention (Felver, et al., 2017), executive functioning (Flook, et al. 2010), psychological/emotional and behavioral health (Zoogman, et al., 2015). Experts emphasize the importance of including children’s input regarding matters that affect them (Ben-Arieh, 2005; Bevans, et al., 2010) yet little is understood about children’s perceptions of mindfulness and mindfulness practices, despite its increased popularity. Theoretical and conceptual framework revolves around Flavell’s theory of metacognition (1985). In this phenomenological pilot study, I interviewed 6 children, ages 7-11, about their perceptions regarding mindfulness. I used a grounded theory analysis approach (Strauss & Corbin, 1998) for data analysis. I provided informed consent and assent to participants and their guardians. They were given the opportunity to ask questions and to withdraw from the study at any time. Findings suggest a relationship between the complexity of mindfulness exposure (ie. depth and breadth) and children’s conceptualization of mindfulness, specifically leading to a meta-awareness experience of mindfulness. A more complete understanding of how exposure to mindfulness interacts with children’s perceptions could support more impactful mindfulness programs for children.

mindfulness, phenomenological, grounded theory, children’s perceptions, theoretical model

This application discusses a completed piece of research.

A14

TRANSITIONS FROM PRE-SCHOOL TO SCHOOL

Chair: Lucia Balduzzi, University of Bologna, Italy

Children’s perspectives on transition processes: Separation from preschool

Sara Margrét Ólafsdóttir, University of Iceland, Iceland
The aim of the study is to explore children’s experiences of leaving preschool in times of transition to primary school. Research has revealed children’s different experiences of transitions (Lago, 2019; Einarsdottir et al., 2019), focusing more on the children’s adjustment to school rather than their separation from preschool (Ackesjö 2019). The concept of belonging is used to analyse the children’s relations with other people, places, and material in times of transition (Press et al., 2018; Yuval-Davis, 2006). The children are viewed as agents who add knowledge to matters important to them. 16 children, 6-7 years of age, participated in the study. The children chose between different methods, e.g., taking walks with the researcher around the school, discussions and drawing. Ethical matters were considered through the entire research process in regard to the EECERA ethical codes. The children agreed to their participation by giving their written assent after the gate keepers had given their consent. Primary findings indicate that most of the children experienced distress when having to separate from the preschool community where they had experienced a sense of belonging. They were usually excited to start primary school; nevertheless, they experienced anxiety, stress, and longing. In times of transition, educators should support children’s adjustment to their new school community. However, the different emotions that children experience when leaving their preschool community cannot be overlooked. When planning for transition activities, the emphasis should not only be on their adjustment to a new environment, but also on the process of separation.

children's perspectives, transition, belonging, separation, preschool

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

The transition from kindergarten to school: Children's participation as a prerequisite to ensure social cohesion
Lillian Kirkvold, Gro Marte Strand and Tuva Merg, Norwegian University of Science and Technology, Norway

This study aims to investigate what needs children have in experiencing social cohesion during their transition from kindergarten to school. Friends from kindergarten contributes to a feeling of social cohesion during the kindergarten-school transition (Broström, 2003; Stanek, 2019), but there is a need for more knowledge on this transition from the children’s perspective (Hogsnes, 2019; Lillejord, 2015), among others concerning their needs to experience social cohesion. Honneth (1995) views recognition as true participation which depends on credible confirmation of positive characteristics in various social settings. Neal et al. (2014) highlights the importance of establishing stable, mutual and long-term relationships with peers. Children’s friendships are essential for development (Sullivan, 1953), and reduces stress in the transition from kindergarten to school (Moses & Villodas, 2017). The social-constructivist paradigm (Prawat 1996; Guba & Lincoln, 2016) is underpinning this qualitative dominant mixed-methods case study (Creswell & Clark, 2018). As part of the study, children have been interviewed, and transcripts are analysed using reflexive thematic analysis (Braun & Clarke, 2022). Parents gave informed consent for the children to participate. To avoid exposing the children to undue harm, interviews were conducted in their familiar surroundings at school. The findings shows that to experience social cohesion, the children need to participate in compositions of school-classes, get to know new classmates while at kindergarten, be a member of a stable class, extensive time to play with peers, and be surrounded by adults supporting children’s curious encounters with peers. Children’s participation matters when designing activities to ensure social cohesion.

transitions, social cohesion, friendship, children’s perspectives, agency

This application discusses a completed piece of research.

Transition to primary education – The interplay between transition practices and age
Jasemin Can, Niina Rutanen, Mari Vuorisalo and Johanna Kiili, University of Jyväskylä, Finland

This study explores the transition from ECEC to pre-primary education by focusing on age-relations and transition practices. There is various research on transitions, which are based on the idea of seeing transitions as a single event with various changes, when children are moving new settings (McDevitt & Recchia 2022, O’Farrelly and Hennessy 2014). Our study zoom into time before actual transition, exploring transition as a dynamic process in time before children are moving to new settings. Transitions are examined as relational processes, which are institutionally defined and linked to age-structes of ECEC (Fincham & Fellner 2016). Transitions include both formal and informal practices aiming to prepare children for transition (Ackesjö 2013). The concept of resource (Bourdieu) is applied to study the process through transition is negotiated and performed in daily action (Corsaro & Molinari 2000). This qualitative, interpretative study is based on institutional ethnographic approach. The data consist of ethnographic fieldnotes and video material, which is collected before children started pre-primary education. This study is a part of larger research project Trace in ECEC (2019-2023) that follows the ethical guidelines and has evaluated by Ethics committee of University of Jyväskylä. The results showed, that transition practices varied between ECEC centers and were intertwined with age in diverse ways by producing
two sorts of pre-primary schoolers: “leaving big ones” and “staying little ones.” This research speaks to the importance of continuing to study everyday practices to gain knowledge of schoolification and how children both see themselves and are seen during transition.

transitions, resources, relational, practices, pre-primary education

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

A15
INTEGRATING STEAM INTO ECEC PRACTICE
Chair: Todd Milford, University of Victoria, Canada

Opportunities for STEM in an early childhood gardening program: Seeds of STEM
Todd Milford (1) and Christine Tippett (2); (1) University of Victoria, Canada, (2) University of Ottawa, Canada

We explored STEM opportunities afforded by bringing together a horticulturalist and an early childhood educator and identified possibilities arising when content and pedagogical experts collaborate. Questions were: What STEM behaviours are observed during gardening activities? What possibilities emerge during collaborative planning and teaching? Early childhood education should emphasize environmental interactions and encourage hands-on participation (Katz, 2010). Gardens can provide a context for exploring mathematics (Lucero, 2021), mathematics and science (Vandermaas-Peeler & McClain, 2015) and STEM (McClure et al, 2017). We have been exploring STEM in pre-Kindergarten setting (e.g., Authors, 2017 - 2023), including an investigation of STEM in the garden. Our work is grounded in social constructivism (Vygotsky, 1978) and play-based learning (Malaguzzi, 1993). This mixed methods exploratory case study occurred at a Canadian school. Participants included one educator, one horticulturalist, and 14 students. We made more than 20 45-minute classroom visits, recording observations using field notes and photographs, and using an observation protocol (Authors, 2015; 2017) in analysis. We also collected educators’ planning artefacts and written reflections. Ethical approval and participant consent/assent was obtained, adhering to Canada’s Tri-Council requirements. We observed a range of STEM behaviours during gardening activities (e.g., observing, problem solving) implying that gardening activities provided opportunities for early childhood STEM learning. Initial scans of educator reflections also suggest that the experience was a powerful teaching and learning collaboration. These findings may inform future collaborations between content and pedagogical experts and may provide support for a play-based policy reform in the early years.

content specialists, interdisciplinary teaching, mixed methods, science education, STEM education

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

An investigation into the preparedness of early childhood educators in Ireland to Integrate STEAM into curriculum planning and pedagogical practice.
Paula Walsh, Dundalk Institute of Technology, Ireland

This paper reports on doctoral research to establish factors which facilitate and impede the integration of STEAM in early childhood education (ECE) pedagogical practice in Ireland, including educator beliefs regarding the importance of STEAM and knowledge required to facilitate children’s participation in STEAM, in alignment with the national curriculum framework. STEAM concepts are intrinsically linked to children’s lives today and therefore closely aligned with their sense of identity (Hackey, 2020), yet STEAM is not explicitly addressed within the curriculum framework for ECE in Ireland. Research highlights the impact of educator knowledge, skills, and beliefs on their adoption of STEAM (Jamil et al., 2018), and demonstrates the influence of appropriate training on educators' ability to integrate STEAM in pedagogical practice (Cabello et al., 2021; Çiftçi et al., 2022). Therefore, this research will inform the development of interventions to facilitate educators’ integration of STEAM in ECE. This research utilised a mixed method interpretive paradigm (Creswell, 2015). Educators (n=245) were engaged in surveys and focus groups (n=10), data was thematically analysed. Participation voluntary, full information provided, informed consent obtained. Anonymity and confidentiality maintained, responses aggregated and anonymised. Questions constructed to avoid stress/emotional distress. Participants aware of right to withdraw. Although STEAM is increasingly recognised in educational policy, a dearth of effective STEAM interventions exist (Corry et al., 2022). Findings will inform the next stage of the research to develop effective STEAM interventions, linked to the national
curriculum framework, to support ECE educators to meaningfully integrate STEAM into curriculum planning and pedagogical practice.

**STEAM, STEM, Ireland Early Childhood Education Curriculum, CPD, training**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**From land art to robots - exploring STEAM concepts through hands-on artistic activities**
Marja-Leena Rönkkö, University of Turku, Finland

This study aimed to implement an integrative approach to STEAM education that incorporates an outdoor learning environment and an arts-based approach. The emphasis of arts-based education is on the holistic nature of the educational experience, placing equal importance on the process and the outcome (Lim, 2005). The arts can be integrated with other disciplines to address the complexity of interconnected knowledge (Graham, 2021). STEAM education is characterized by an experiential learning approach that blends STEM content with various art forms (Graham, 2021). The effectiveness and comprehensiveness of STEAM education has been questioned by educators, who seek a more inclusive and diverse approach. One possible solution is to integrate the arts with STEM, thereby promoting artistic expression through technology (Peppler & Wohlwend, 2018). This research is characterized as hermeneutic, with a focus on utilizing qualitative research methodology. The data consisted of land artwork, designs, and robots. The data analysis process involves the utilization of multimodal content analysis. A consent form and General Data Protection Regulation (GDPR) sheet were provided to the children and their guardians. The children were informed in advance and they were given the opportunity to withdraw from the study at any time. The study found that incorporating arts-based elements in the robot-making process followed by a storytelling session facilitated the children's ability to connect their personal interests and thoughts with the activities. The results suggest that the integration of art-based education and STEAM education can help develop children's technology literacy skills in pre-primary education.

**STEAM education, arts-based education, outdoor education, technology education, pre-primary education**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**A17**

**EXPLORING INFANT AND TODDLER CURiosity, AGENCY AND PARTICIPATION THROUGH AN ETHNOMETHODOLOGICAL CONVERSATION ANALYSIS APPROACH**

Self-organised Symposium

**Chair:** Amanda Bateman, Swansea University, United Kingdom

In an era where the image of the child embraces infants, toddlers and young children as capable and competent members of society, researchers are finding innovative methodologies that afford authentic exploration of children's agency and participation in their everyday worlds. One research approach receiving international interest in early childhood education for affording such insights is ethnomethodology and conversation analysis (EMCA). Our panel consists of three presentations that each use an EMCA approach to study infant and toddler interactions in early childhood education settings. We will showcase how an EMCA approach reveals 1) how toddlers in an Icelandic context manage the co-construct of humorous interactions with their peers, 2) insights into nappy changing routines in Germany, and 3) co-construct feeding interactions with early childhood teacher/practitioners. Together, our findings demonstrate the usefulness of an EMCA approach for revealing the social competencies of infants and toddlers.

**Distributed agency: Sounding out infant’s sensations in routines of infant care**
Iris Nomikou, University of Portsmouth, United Kingdom

This study aims to explore the overlooked social nature of nappy changing as a context which scaffolds infants' participation and agency. Recent work positions the origins of the self in infants’ early social interactions and proposes (e.g. Reddy et al., 2013) that by being engaged in routine interactions, infants are treated as participants (De Leon, 1998; Raczaszek et al., 2013) and experience themselves as an agent from early on. A Child-focussed Conversation Analysis approach (Forrester, 2014) was used to analyse the
active role of caregiver and infant in navigating care routines. The analysis draws from a video corpus of 17 German caregiver-infant dyads, filmed during nappy changing between three and eight months of age. Multimodal interaction analysis (Goodwin, 2000) (Mondada, 2019) was used to transcribe and analyse these interactions. Ethical approval was given by the Muenster Ethics Committee, Germany and consent was sought for data to be used for dissemination. Only anonymised data in the form of drawings and transcripts are used for dissemination. Caregiver-infant routines go beyond the care of infant physical needs and are rich contexts for observing infant development. The analysis suggests that nappy changing instils cultural values that are crucial for human interactions, such as collaboration, respect, and mutual agency. The approach used provides a paradigm for practitioners, as it positions the onsets of participation in the ways in which caregivers and infants collaboratively manage the earliest interactions. Understanding how this is achieved can lead to the development of principles for supporting early infant development.

caregiver-infant interactions, conversation analysis, multimodality, nappy changing, infant agency

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Infant agency in feeding interactions: Exploring positive eating strategies in ECEC settings
Amanda Bateman, Swansea University, United Kingdom

This research aimed to explore how positive eating experiences can be supported in ECEC for infants in order to create early healthy relationships with food, preventing later problematic eating issues in adulthood. The importance of infant-led feeding (Brown & Arnott, 2014) and infant development of taste, including acknowledging their communication of pleasurable eating experiences (Wiggins & Keesavik, 2020) have been explored, with the latter using an ethnomethodological conversation analysis (EMCA) research approach. An ethnomethodological framing (Goffman, 1981) was used to explore the everyday co-construction of interactions around teacher and infant food and feeding activities. Shaped by an ethnomethodological paradigm, video data of teacher-infant feeding interactions were collected and transcribed and analysed using a conversation analysis approach (Sacks, Schegloff & Jefferson, 1973). Ethical approval was gained through the Swansea University Ethics Committee, including infant assent and dissent participation processes. The findings are twofold: 1) in practical terms, real-life examples of teacher strategies for facilitating positive eating experiences are discussed and 2) the usefulness of an EMCA approach for revealing infant agency and participation in the feeding activity is shown. The findings have implications for ECE practice as the EMCA approach offers insight into specific strategies for early childhood teacher/practitioners to respond to infants in ways that support positive interactions with food and feeding.

infant feeding interactions, conversation analysis, ethnomethodology, infant agency, positive eating strategies

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

The humorous toddler: Acts of playful embodied interactions
Bryndis Gunnarsdottir, University of Iceland, Iceland

This research aims to examine the embodied strategies toddlers use to co-construct playful and humorous interactions with their peers in order to showcase toddlers’ agency, competence and curiosity as they navigate complicated ECEC social worlds. Humour has been found to be one of the cornerstones of toddler peer interactions (Løkken, 2010) and they try hard to connect and find togetherness with their peers (Engdahl, 2021; Pálmadóttir & Johansson, 2015; van Oers & Hännikäinen, 2001). This study is an ethnomethodological (EM) (Garfinkel, 1967) study using conversation analysis (CA) (Sacks et al., 1974) to examine interactions in the toddler peer group. Through an inductive EM paradigm, video data was collected over a nine-month period in an ECEC setting in Iceland, transcribed and analysed using a CA approach. Ethical approval was gained through the University of Waikato, New Zealand and the University of Iceland, including informed consent from relevant gatekeepers and assent/dissent from participating toddlers. The preliminary findings suggest that toddlers are competent in managing the organisation of their social worlds through embodied playful strategies as they co-produce togetherness with their peers. The EMCA approach reveals that humour plays a significant part in the co-production of these relationships. The findings have important implications for ECEC practice as it offers knowledge about what is happening in the toddler peer group and stresses the importance of teachers who understand when and how to intervene and assist toddlers as they co-construct their peer culture within the settings.

toddlers, embodied interactions, humour, togetherness, conversation analysis
This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**A18**  
**UPDATING THE EARLY YEARS LEARNING FRAMEWORK FOR AUSTRALIA TO DRIVE PROFESSIONAL ACTION**  
Self-organised Symposium  
**Chair:** Fay Hadley, Macquarie University, Australia

This presentation is based on a tri-partite University partnership, engaged by and in collaboration with the Australian Children’s Early Childhood Quality Authority (ACECQA), to update the national Early Years Learning Framework (EYLF) for Australian children from birth to five. This presentation explores the design and findings from the three stages of the project. The Terms of Reference set by all governments emphasised children’s rights, embedding Aboriginal and Torres Strait Islander perspectives and consideration of diversity and inclusion. Central to the design was bringing together a transdisciplinary consortium, and a detailed stakeholder communication and engagement strategy that facilitated broad, meaningful participation by educators, children and all Australian governments to garner professional action and engagement.

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**Updating a national children’s learning framework**  
Fay Hadley, Rhonda Livingstone (2) and Craig Bennett (2); (1) Macquarie University, (2) The Australian Children’s Education & Care Quality Authority (ACECQA), Australia

This study aimed to update the Australian Early Years Learning Framework through engagement for professional action. Learning frameworks for young children guide educators’ practice to situate children as agents who are curious, make choices and decisions to influence their world (Barblett et al, 2021; UN, 2005). A participatory framework where knowledge is co-constructed through the interactions with the phenomenon and participants (Schwandt, 2000). A constructivist paradigm using mixed methods involved three phases over 15 months. Stage 1 used a national online survey including Likert response questions, literature review and focus groups. Participants were given a consent form and information letter. Informed assent negotiated with children, pseudonyms used, and all given opportunity to withdraw at any time. All Australian governments came together under the stewardship of ACECQA to successfully update the EYLF. This study found a well-developed stakeholder communication and engagement strategy including engagement of all levels of government was critical to garnering professional action. We describe the engagement and communication strategy, the findings of an extensive literature review as well as the findings of the first stage survey showing overwhelming support for the current EYLF, but after being in place for more than ten years a refresh was required. Australia’s recent experience of refreshing the EYLF emphasises the importance of sector and community engagement to consolidate a sense of ownership of the EYLF. That professional action includes children’s voices in reviewing ECEC curricula. Governments have an important stewardship role in facilitating how high-quality practice is embedded within national ECEC architecture.

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This application discusses a completed piece of research.

**What to change? Amplifying voices for professional action**  
Lennie Barblett (1) and Fay Hadley (2); (1) Edith Cowan University, (2) Macquarie University, Australia

This study aimed to update the Australian Early Years Learning Framework. A focus of this project were updates and research on early learning frameworks that situate children as citizens with agency who are curious, make choices and decisions to influence their world (Barblett et al, 2021; Te Whariki, 2017). A participatory framework where knowledge is co-constructed through the interactions with the phenomenon and participants (Schwandt, 2000) was used. A constructivist paradigm using mixed methods involved three phases over 15 months. Stage 2 saw the development of a discussion paper with 20 recommendations open to comment by: national survey, written submissions and children’s drawing. Findings were interrogated by Delphi panels leading to the development of a draft framework. University ethics was granted and adult participants signed consent with informed assent negotiated with children. Pseudonyms were used in analysis and reporting. In the project, Stage 2 used online surveys (n=3,496), written submissions (n= 65), children and young peoples’ voices (drawn and written n=159) and Delphi panels (n= 146). The study
found stakeholders including children agreed overwhelmingly that the recommendations including children’s agency and curiosity in learning were important considerations to update. This study showed the importance of using multiple methods so professional action can inform policy change. Professional voices were clear in the practices to be addressed including First nations perspectives, sustainability, diversity, inclusion, children’s mental health and a positive self-identity. Project practices also showed educators how they could support children to comment on policy matters, which will be described.

**national curricula, policy and research, sector engagement, child and educator curiosity and agency, professional action**

This application discusses a completed piece of research.

**Driving professional action through participatory action research**

Susan Irvine (1), Jennifer Cartmel (2), Linda Harrison (3) and Francis Bobongie-Harris (4); (1) Queensland University of Technology, (2) Griffith University, (3) Macquarie University, (4) Queensland University of Technology, Australia

This study aimed to update the Australian Early Years Learning Framework through engagement for professional action. Learning frameworks for young children guide educators’ professional practice to situate children as agents who are curious, make choices and decisions to influence their world (Barblett et al, 2021; UN, 2005). A participatory framework was used where knowledge is co-constructed through interactions between the phenomenon and participants (Schwandt, 2000). The overarching study applied a constructivist paradigm, using mixed methods. In Stage 3, the draft Framework was piloted in 13 diverse ECEC settings across Australia to establish clarity, accessibility, useability and efficacy in practice. Data was gathered through document analysis, educator video diaries, children and young people’s voices and focus groups. Ethical approval was gained through three universities. Participants were given a consent form and information letter. Informed consent was negotiated with children and assent given. Pseudonyms replaced names of participants, and all were given opportunity to withdraw at any time. The pilot demonstrated the efficacy of the updates. Providing a model of participatory action research, it demonstrated the benefits of a multi-modal approach to data collection grounded in everyday practice. Enabling professional autonomy, the pilot offered insights on leadership strategies to drive professional learning and action. The participatory nature of the project was a critical enabler. Emphasis was placed on joint inquiry and learning, supported by individual and collective action. This was evident across the project, including the whole-of-government approach, resulting in Ministerial endorsement of the Framework in December 2022.

**national curriculum, policy research, sector engagement, child curiosity and agency, educator curiosity and agency**

This application discusses a completed piece of research.

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**A19**

**DIGITAL RESEARCH**

**Chair:** Sara Lenninger, Kristianstad University, Sweden

**With sensitive eyes: ECEC teachers’ reflections about their visual gaze in toddler groups using eye-tracking glasses**

Tuulikki Ukkonen-Mikkola, Susanna Isotalo, Saswati Chaudhuri, Jenni Salminen, Olli Merjovaara and Carita Lindén, University of Jyväskylä, Finland

This study explored early childhood education and care (ECEC) teachers’ visual gaze and behavior during teacher–child interactions in groups of children under three years of age in Finland. Previous eye-tracking studies have been conducted in real-world classroom settings mainly in secondary and primary schools (Dessus et al., 2016; Goldberg et al., 2021). We concentrated on teachers’ visual gaze during play and guided activities in ECEC. The verbal and non-verbal interaction is a key element in the pedagogy of ECEC (Ukkonen-Mikkola & Fonsén, 2018). Nonverbal communication as body language, gestures, and visual gaze influence teacher–child interactions in classrooms (Bae, 2009; Jamison, 2014). The study was conducted as a mixed method research. The data were collected from play and teacher-guided activities using mobile eye-tracking glasses, the retrospective thinking aloud (RTA) method, and semi-structured interviews. This project followed the ethical guidelines of the National Advisory Board on Research (2012). The research proposal received approval from the ethics committee of the University of Jyväskylä, Participation was voluntary, permission was sought from the municipality, the participating teachers and the guardians gave their written informed consent to
participate in the study. Both during play and guided activities, children seeking a gaze and the position of children in the classroom influenced the number of teachers' gazes. In the teachers' explanations five categories were identified: protection; physical and emotional availability; teaching and learning; facilitation; and initiatives. Findings suggest that through eye-tracking we can reflect teacher-child interaction. Findings can be utilized in ECEC practices and teacher training.

toddlers, teachers' gaze, eye-tracking glasses, visual gaze metrics, knowledge-based reasoning

This application discusses a completed piece of research.

**Intentions to create a coding toy - the designers' perspective**

Maria Ploog, University of Stavanger, Norway

The research aims to understand the intentions of coding toys designers: to find out if they target educational goals and if so, which ones. Prior research regarding designers’ choices focused mainly on setup of design processes or design principles (Chiasson and Gutwin, 2005). Reported aspects of designers’ intentions are mismatches of intentions and perception (Pender and Lamas, 2014; Lindstroem et al. 2011) and the bridging to outcomes with constructivism (Muise and Wakkary, 2010). Research on designers’ intention regarding digital educational tools is rare, but necessary to avoid misconceptions when it comes to use in ECEC. Activity theory (Jonassen, Ronrer-Murphy, 1999) is used as an underlying framework to describe the relation between robot designers, their intentions, and the object. This is in line with the socio-constructivist approach to learning when examining the role of the educational tool in ECEC context. The study follows constructivist paradigm. Designed as a qualitative study, two semi-structured group interviews with the designers of two feature-complete, commercially available robots were conducted. The transcripts were analyzed with thematic analysis following Braun and Clarke (2006). The research follows ethical guidelines confirmed by Norwegian Centre for research data with attention to voluntary and anonymous evaluation of the data. First results show that the designers have different levels of intention and different approaches towards the creation of the coding toys. The results are of high interest when it comes to developing resources for ECEC teachers to support computational thinking and coding in playing activities.

**educational robots, coding, designer, intention, play**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Digital Bildung in early childhood education and primary school in Norway and Denmark: A scoping review**

Grete Skjeggestad Meyer and Beate E.Gjesdal, NLA University College, Norway

The aim is to provide an overview of research regarding digital Bildung. The research question is: Which research literature has been published on digital Bildung related to Early Childhood Education and Primary School in Norway and Denmark? To the best of our knowledge, only few research-reviews were found; PhD-theses by Sando (2014) and Gran (2020). The scoping review revealed only eight research articles and three doctoral theses (Denmark and Norway) dealing with digital bildung. The theoretical framework draws upon current theories of literature-reviews (Colquhoun et al., 2014; Prøitz, 2023), as well as theories on Bildung (Biasta, 2020; Sjöström et al., 2017). The study is within the interpretive paradigm, using the methodology and stages of Arksey & O’Malley (2005). It presents peer reviewed papers and PhD-thesis’ in Norway and Denmark, 2012-2022. Titles and abstracts were screened to be connected to ECE and Primary school. Other publications and other countries’ research were excluded. The method for analysing the findings is thematic analyses (Braun & Clark, 2021). The literature review is based on secondary data. Ethical consideration has been given to ensure fair representation of research-literature, with clear identification of the researchers. The review included eleven studies and the analysis revealed three main themes: 1) Definitions on digital Bildung, finding digital identity and digital ethical Bildung, 2) Teacher-, student- and parent-perspectives on digital Bildung and 3) Digital behaviour, as netiquette. An implication is to expand further the TPACK-model or the Norwegian PfDK (Teachers digital competence) with a focus on digital Bildung.

**scoping review, digital bildung, digital ethical bildung, early childhood education, primary school**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
EXPERIENCES OF HOME-BASED ECEC

Chair: Anna Chinazzi, University of Milano-Bicocca, Italy

Children’s education through the lens of home-educating parents. Insights from an ethnographic study in Italy
Anna Chinazzi and Chiara Bove, University of Milano-Bicocca, Italy

This study aims to provide a thick description of home education in Italy, combining emic and etic perspectives. It investigates home-educating parents’ beliefs on early childhood education, e.g., children’s agency, individualised and child-centered practice. A growing number of parents are choosing to homeschool their children (Gaither, 2017), especially after the pandemic (Heuer & Donovan, 2021). Parenting choices are shaped by cultural beliefs about education (Harkness & Super, 1992) which are constantly changing in societies. Parental narratives are analysed through a socio-cultural perspective (Rogoff, 2003) which allows moving beyond the explicit level to investigate implicit ‘folk pedagogies’ (Bruner, 1996) and ‘parental ethnotheories’ (Harkness & Super, 1992). An ethnographic mixed-methods study was carried out within an interpretive paradigm (Creswell et al., 2006) and an ecological approach (LeCompte & Schensul, 2010). Participant observations, interviews and survey data were the main inquiry methods. Reflexive-themed and descriptive statistical analysis were combined. The project was approved by the University of Milano-Bicocca ethics committee. Informed consent was obtained from all participants. Findings show the first parental motivation to home educate is to provide “tailor-made” and “child-centred” education. Home-educating parents seem to embrace an agentic pedagogy, involving children as protagonists of their learning process. However, the potential lack of peer group socialization emerges as a key concern in their narratives. The study sheds light on a controversial phenomenon in need of further research, also involving children’s voices. It contributes to the “regulation question” of home schooling in Italy, where the legal framework of the practice is still evolving.

parenting, children’s agency, home education, sociocultural perspective, child-centred practice

This application discusses a completed piece of research.

The sense and ingenuity of home-based-childcare providers in Tokyo: Addressing the ECEC challenges of children with migrant backgrounds
Mikiko Tabu and Masayo Yabunaka, Seiitoku University, Japan

Home-based-childcare in Japan is a state funded ECEC provision for children under three. This study aims to identify the challenges faced by providers in multicultural and multilingual contexts and to uncover the underlying beliefs by investigating the sense and ingenuity of their day-to-day practice. The questionnaire survey of home-based-childcare providers conducted in Tokyo in 2021 revealed that many of them were entrusted with foreign-roots children. However, research is scarce and little mention is made of home-based-childcare’s unique role in supporting such children. Developmental research shows that for infants and toddlers growing up in minority cultural and language environments, the mastery of mainstream language CALP (Cognitive Academic Language Proficiency), along with the acquisition of their mother tongue, is key to success in school. In this presentation, text mining using the KH Coder was carried out on the free-text statements in the questionnaire to highlight the landscape of respondents' thinking on ECEC for children with migrant backgrounds and their families. Approved by the Ethics Committee of Seiitoku University, the survey was conducted anonymously by postal method. home-based-childcare providers recognised the importance of gaining the trust of parents and said that they must do everything in their power to communicate. They cited ways such as learning about parents’ culture and incorporating it into daily activities, and writing illustrated notes in simple Japanese as effective. By using the sense and ingenuity of home-based-childcare providers as a toolkit, the ECEC of foreign-roots children can be tailored to meet their cultural and linguistic needs.

home-based-childcare, Japan, state system, children with migrant backgrounds, additional language acquisition

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

‘Similar, but different!’ - Cross-cultural analysis of the application of the CLASS Toddler in Quebec’s home-based childcares
Lise Lemay, Julie Lemire, Joanne Lehrer, Nathalie Bigras and Audrey Lespérance, University of Québec in Montréal, Canada

Analyse with a critical cross-cultural approach the application of the Classroom Assessment Scoring System, Toddler (CLASS-T) in Quebec’s home-based childcares (HBC). In ECEC, the quality of educator-child interactions has been identified as determining factor for children’s development and learning. Quality rating and improvement systems are increasingly assessing quality of interactions in HBC. Options are even outlined to do so with the CLASS – a standard-based tool to evaluate educator-child interactions in U.S. childcare center classrooms. However, using a standard-based tool out of its original context raises questions concerning its validity. The topic of applying the CLASS in HBC (especially outside the U.S.) has received marginal attention. Building upon Pastori and Pagani’s (2017) study on the application of the CLASS in Italy, this study extend the critical cross-cultural approach to Quebec's HBC.

Two focus groups of 2h, each including 10 HBC providers from Montreal (Quebec, Canada), were realized. Comparing interactions important for children in center-based and home-based childcares, they were questioned about elements of continuity, differences and disagreements and key-features of the educator-child interactions not captured by the CLASS-T tool. All providers were informed about the study and signed a consent form before the focus groups. At first, all providers agreed that the CLASS-T dimensions applied in HBC. Then, they talked about multiage group, organizational tasks, relationships with families. Such results bring some methodological and theoretical reflections to better capture the socio-educational reality of HBC. The results have implications for the assessment and improvement of quality of interactions offered in HBC.

early childhood education, home-based childcare, quality of interactions, classroom assessment scoring system, meaning-making

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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A21
GROUPINGS, SOCIABILITY AND SOCIAL INTERACTION
Chair: Matthew Stapleton, Centre Support, Australia

The teachers in teaching for social skills in school-age educare
Charlotte Tullgren (1), Madeleine Arenhill Beckman (1), Maria Rubin (2); (1) Kristianstad University, Sweden, (2) Malmö University, Sweden

The aim of the study is to explore the impact of teachers planned and acted teaching, concerning children’s experience of concepts that regulate social interactions in school-age educare Teaching in fritidshem are studied in informal learning settings where play and social relations has been in focus (Pálsdóttir, 2012 ; Dahl, 2014; Lager, 2018) Also teachers teaching actions in structured and unstructured teaching has been studied and teachers ability to capture situations that arise and adapt the teaching is pointed out (Hippen Ahlgren, 2021). Following the concept of learning (Marton & Lo, 2017) study variation theory is used to analyze teaching actions. This study is of qualitative character whit an hermeneutic interpretative approach. The study has been carried out in school-age educare settings among two teachers and children in age six to eight years. Interviews with children, interactions and recorded conversations constitute the empirical data. The study has followed ethical guidelines. Prior to interviews and interactions teachers and parents of participating children has been asked to fill out consent forms. Findings from the study has shown the importance of how the teacher plan teaching on complex social concepts, and also listen to and follow up children’s expressed understanding. The study discusses how the professional work of teachers in school-age educare setting could contribute to the development of children's social skills.

school-age educare, teaching , teacher, social interaction, variation theory

This application discusses a completed piece of research.

Age-heterogenic and -homogenic groups in Kindergarten: ECEC professionals’ motives and reflections
Lisa Annika Brandt, University of Agder, Norway

This study aims to gain insight in ECEC professionals’ arguments for organizing kindergarten children in age-homogenic (1-6 years) or age-heterogenic (birthyear) groups. These groups differ from most Scandinavian kindergartens, where children are divided into
broader groups (1-3 & 3-6 years). Nordic research on this topic seems to have had a peak before the turn of the millennium (e.g., FAUD, 1985; Lagrell, 1990; Sundell, 1995), only recently being reexplored by Magnusson and Bäckman (2022), stressing the need for more research in this area. This paper focuses on how the professionals perceive their group-form to influence kindergarten life regarding three aspects. First, everyday life – analyzed through a Bildung-oriented perspective (Klakfi, 2001). Secondly, structured pedagogical activities - here understandings of development are explored (Piaget, 1996; Vygotsky, 2011). At last, children’s relationships with each other (Corsaro, 2007; Singer et al., 2011). Drawing on hermeneutic phenomenology as both paradigm and methodology (Gadamer, 1960), the study explores the experiences of 8 ECEC professionals through qualitative, semi-structured research interviews (Kvale & Brinkmann, 2015). Prior to the interview, the informants were provided with both a consent form and information sheet about the project. The informants understanding of this was ensured before the interview was conducted. They were anonymized through pseudonyms, offered to review transcripts and able to withdraw at any given time. The ECEC professionals’ reflections shed light on originally taken for granted organization-practices in the ECEC-field, as well as suggest alternative approaches. The study may inspire to reflect upon how age-based organization in kindergartens influences childhood.

**agebased organization, Scandinavian kindergartens, peer relationships, practitioner inquiry, bildung**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Adopting a group-based approach to illustrate infant’s sociability, and ways they use curiosity and creativity to work together**  
Matthew Stapleton (1), Ben Bradley (2) and Jane Selby (2); (1) Centre Support (2) Charles Sturt University, Australia

This paper documents what happens when a high-quality early childhood service adopts a group-based approach to infants’ education and care. The study challenges attachment approaches and draws on research showing how a group-focus reimagines infants’ development and creativity (Bradley et al., 2023). This work results from road-testing Darwin’s theory that humans are fundamentally group animals (Bradley, 2020), exploiting findings that babies engage in supra-dyadic group interaction long before they form one-to-one attachments. The study uses ethnographic case-studies supported by GoPro films to generate rich descriptions of infant sociability. Our study adheres to international ethical guidelines. Informed consent was obtained from children’s guardians and educators. Pseudonyms are used and participants could withdraw anytime. We show how mealtimes are transformed when educators swap adult-infant spoon-feeding routines for a relaxed and naturally enjoyed time when infant highchairs are placed in circles of four or five, allowing for social time, for learning from and teaching each other. We document curiosity about each other in infant groups, which exploit and subvert routines established at the service. We further describe vignettes illustrating group complexity, how infants creatively work together, plus illustrating new group-facilitative roles for educators and alternative ways of managing infant distress. The study has significant implications for practice by highlighting the importance of adopting a group-based approach when working with infants.

**group-based approach, ECEC, infants, social interaction, creativity**

This application discusses a completed piece of research.

**A22**

**Sustainability in Early Childhood Education SIG Self-organised Symposium**

**INTERNATIONALLY BUILDING MOMENTUM IN ECEFS: RESEARCH, POLICY AND PRACTICE**

**Chair:** Sue Elliott, University of New England, Australia

Internationally, early childhood education for sustainability (ECEfs) research, policy and practice has significantly progressed over recent decades, alongside the climate change crises rapidly eroding children’s sustainable futures. At this intersection in time, we argue there is an imperative for strongly building momentum across all borders internationally. In this symposium, we share international perspectives from the Asia-Pacific Region to highlight ways forward through research, policy and practice endeavours. In Australia, the Sustainable Development Goals offer a policy framework for addressing social-political-economic issues and promoting children’s agency, Asian case studies from India, Japan, China, and Singapore promote alternative non-Western insights about sustainability in early childhood settings, and lastly, Australian case studies highlight a deepening of ECEfs approaches with children participating at the forefront of change in their services and local communities. We anticipate the range of international perspectives shared will both inform and inspire symposium participants to build momentum locally and nationally.
Differing versions of ECEfS: Insights from India, Japan, China and Singapore
Sylvia Christine Almeida (1), Kaveri G (2), Midori Mitsuhashi (3), Minyi Li (4); (1) Monash University, Australia, (2) Singapore University of Social Sciences, Singapore, (3) Ochanomizu University, Japan, (4) Beijing Normal University, China

This paper responds to calls for deeper insights into ecologically-responsible and culturally-responsive ECEfS pedagogies by presenting Asian exemplars of practice from India, Japan, China, and Singapore. The overarching aim is to understand how early childhood educators across varied non-Western cultural contexts respond, negotiate and implement Environmental and Sustainability Education (ESE) practices, promoting child agency and participation amidst challenges and barriers. This paper is part of the growing international momentum for ECEfS in recent years in response to rising environmental concerns and also the Covid-19 pandemic (Elliott et al., 2020; World Organization for Early Childhood Education, 2017). It also offers a differing version of ECEfS in a world where Western constructs of sustainability dominate. This paper is guided by the interpretivist social-constructivist theories (Crotty, 1998) Qualitative methodology overarched by interpretivist paradigms. Methods include empirical data such as personal narratives and video interviews Researchers obtained institutional ethics approval which was carefully devised to eliminate any issues of power. Participants were provided opportunity for informed consent. We showcase that children are not single agents of change, but rather co-shapers of learnings and actions for sustainable lifestyles, with significant adults contributing towards intergenerational diffusion of local wisdom to address glocal environmental concerns. The stories from the four Asian cultures showcase how globally-valued ESE concepts relate to differing local experiences, place and communities. These Asian exemplars provide differing non-Western versions of ECEfS along with rich insights and professional learning experiences for ECEfS researchers and educators in any global setting.

early childhood education for sustainability, environmental education, agency, child-centred pedagogy, glocal connections

This application discusses a completed piece of research.

Australian case studies: Stories of children at the forefront of ECEfS change
Sue Elliott, University of New England, Australia

The aim in documenting case studies with leading early childhood education for sustainability (ECEfS) educators was to examine how they were implementing ECEfS and reveal any commonalities. This paper draws on previous ECEfS studies demonstrating that research momentum is building (Ardoin & Bowers, 2020; Elliott et al., 2020). A challenge raised is educator’s limited understandings of sustainability as multi-dimensional and their readiness to prioritise the environmental dimension and pragmatics. Also, ECEfS promotes children’s participation and agency (Davis, 2014), prescient as climate change is now eroding children’s rights (UNICEF, 2021). A social constructionist theoretical framing guided this research (Crotty, 1998). Five educator participants were invited to draft qualitative auto-ethnographic case studies about their ECEfS implementation with guidance to write about a self-selected illustrative sustainability project. The collated case studies were analysed for any commonalities. Educators consented to document their case studies with mutually respectful iterative review. Illustrative non-identifiable images with formal permission to publish were shared and ethical institutional principles applied throughout. The educator theoretical and pedagogical knowledge demonstrated deep exploration of ‘big picture’ sustainability issues with children, beyond everyday pragmatics and children were demonstrably agentic and actively leading change in their centres and community. Sustainability practices extended beyond the centres and were integral to wider community engagement and collaborative partnerships, plus advocacy and activism were evident. These case studies highlight a deepening of ECEfS approaches and are illustrative for educators, policy makers and researchers about the multi-dimensional implementation of sustainability in meaningful ways with children at the forefront of change.

advocacy, activism, community engagement, sustainability, children’s agency

This application discusses a completed piece of research.

Exploring the Sustainable Development Goals: Beyond the environmental dimension
Lisa Sonter (1), Sharon Kemp (2), Cherie Lamb (3), Stephanie Willey (4); (1) Queensland Early Childhood Sustainability Network, (2) Banks St Kindergarten, (3) University of New England, (4) Yarralea Children’s Centre, Australia
When early childhood educators think beyond the environmental dimension of sustainability, they may begin to identify and connect early childhood education for sustainability (ECEfS) with broader early childhood practices, such as promoting social inclusion and participation. We aim to demonstrate how the Sustainable Development Goals (SDGs)(UNESCO, 2015) offer a framework to support educators to amplify children’s agency and build collective participation in and advocacy for social-political-economic issues. This paper draws on Lamb’s (2019) doctoral research exploring barriers and enablers for refugee families and Sonter and Kemp’s (2021) exploration of the SDGs and Australian ECEfS practices. This paper sits within a constructivist framework. Qualitative methods including grounded theory, document analysis, and case studies are drawn on. The University of New England’s Human Research Ethics Committee approved Dr Lamb’s study; the practice case studies were ethically collected in situ with consent to publish. Of particular significance to sustainable futures is children’s capacity to engage and participate as citizens. Transformative pedagogies promote children’s meaningful and authentic participation and decision-making in events that affect them and the world around them. The practice case studies showcase Australian early childhood educators working with children as social agents to foster change and envision equitable and hopeful futures. Alignments between practice and the SDGs are mapped to illustrate transformative pedagogies.

This paper will assist educators to realise the connections between children’s curiosity, agency and participation and transformative ECEfS pedagogies aligned with the SDGs.

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A23

UNDERSTANDING THE PARTICIPATIVE RIGHTS OF CHILDREN

Chair: Ingrid Trætteberg, NLA University College, Norway

Children’s ‘doing space’ of participation in peer-relations in early childhood education

Enni-Mari Ylikörkkö (1), Anette Emilson (2) and Outi Ylitapio-Mäntylä (1); (1) University of Oulu, Finland, (2) Kristianstad University, Sweden

This study aims to contribute knowledge about child participation in early childhood education (ECE) with the focus on peer-relations. Although, child participation has been topical for decades, several studies show there are tensions between the ideal of child participation and practices (eg. Emilson & Johansson, 2018). Children’s perspective has been scarce (Roos, 2015); instead the research focuses on educator’s perspective or interaction between educator and a child. The theoretical framework draws on a relational approach (Löw, 2008; Massey, 2005); child participation is a space that children do by combining social, material, and cultural dimensions and its elements in/through everyday relations and action. Methodologically the study follows a narrative approach; children are making sense of the world in a continuous narrative process (Bruner, 1990). The research material consists of video recordings (total 60 hours) produced in one Finnish ECE centre. The material was analysed through dialogical analysis (Riessman, 2008). One small story is used as an evocative anecdote to demonstrate the findings. All participants were asked for consent and were given the opportunity to withdraw from the study at any time. Preliminary findings show that children employ both social, material and cultural dimensions when doing space of participation. Teacher’s role occurs as crucial for child participation in peer-relations. Although, children follow ECE norms, they have potential for challenge ECE practices. The findings provide meaningful perspectives for the child participation in their everyday life, and by utilizing them, child participation in the ECE develops both at the level of practice and curricula.

This application discusses a completed piece of research.

A23

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This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Does the promotion of participation rights in ECE benefit children’s development? Positive associations between participation practices, children’s perceived participation and self-concept
This study investigated children’s participation rights in early childhood education (ECE) settings in Lisbon, Portugal. The promotion of participation is considered a key investment in children’s development, besides crucial to high-quality ECE (Moser et al., 2017). Participation, described as children’s right to express their views and to have them considered, was driven by the Convention on the Rights of the Child (United Nations, 1989). ECE settings are fundamental microsystems in young children’s lives (Melhuish, 2014), and ECE teachers instrumental to promote participation (Lundy, 2007). However, few research explored links between participation, ECE quality, and children’s sociocognitive development. Relying on multiple informants and mixed methods, associations between teachers’ practices (self-reported and observed), ECE quality (i.e., observed teacher-child interactions), children’s perceived participation (self-reported), and children’s self-concept (self-reported) and social competences (reported by teachers) were investigated. The project was approved by the Institutional Review Board. Participants were randomly selected, provided written consent/assent, and information was anonymized. Overall, the findings support claims that participation benefits children’s self-concept. Specifically, a positive association between observed teachers’ participation practices (i.e., referring to observed children’s choice and observed conditions for participation) and children’s self-concept (i.e., encompassing acceptance and competence), mediated by children’s perceived participation. This study provides unique evidence on the associations between participation practices, children’s perceived participation, and their development. Importantly, it reinforces the relevance of both objective (e.g., observed practices) and subjective properties (e.g., perceived participation) of ECE settings for promoting participation. It has the potential of informing practice and policymaking.

This application discusses a completed piece of research.

Teachers and parents understanding of children’s participation: A case study of a kindergarten in Askøy, Norway
Ingrid Trætteberg, NLA University college, Norway

This study seeks to explore the understanding of children’s participation as experienced by ECEC teachers and how they implement their common understanding in their pedagogical practice. It’s a case study of a kindergarten in Askøy, Bergen based on a one-year action research project from 2019-2020. The staff primarily focused on children’s participation in gathering time and free play in the different age groups (1-6 years old). The theoretical framework for this project draws on studies with new perspectives on children’s participation in kindergarten (Wolf and Svenning, 2018) and the Framework plan for kindergartens in Norway (Kunnskapsdepartementet 2006, 2017). This case study was conducted within a qualitative interpretive action research paradigm (Bøe and Sørensen, 2017). 12 teachers kept journals and filled out online evaluation forms while 7 teachers were engaged in a focus group interview. The parents’ surveys from 2019-2022 also formed part of our data. The participants in this study gave verbal consent to participate, and we used anonymous online forms, journal notes, and note-taking during the interview to ensure privacy and confidentiality. Preliminary findings show that the teachers are more self-aware about children’s participation, the parents are more informed and engaged about pedagogical practice and the parent-survey scores have improved over these years. The findings also reveal a need for constant dialog with new parents and colleagues to uphold the common understanding of children’s participation.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Supporting participation of disadvantaged children and their families: Analyses of the concepts and experiences of health, education and social workers in a professional development program

This application discusses a completed piece of research.

A24
INTEGRATED ECEC SYSTEMS
Chair: Lesley Wood, North-West University, South Africa

Supporting participation of disadvantaged children and their families: Analyses of the concepts and experiences of health, education and social workers in a professional development program
Helena Luis (1), Gracinda Hamido (1), Sonia Seixas (1), Isabel Piscalho (1), Isabel Tomázio Correia (2); (1) IPsantarem, (2) Ministry of Education, Portugal

Research aims to analyze concepts and experiences of health, education and social workers involved in a professional development program promoting participation of children and families in disadvantage.

In Portugal a National System of Early Childhood Intervention (SNIPi) was established (Decree-Law 281/2009) to ensure early childhood intervention and develop “preventive and rehabilitative actions, in the field of education, health and social systems”. A qualification program was developed (POISE-FSE) to enhance human resources that integrate “local intervention teams” ensuring greater social inclusion, participation and better quality of responses to the specific needs of eligible children and their families. This program involved 253 professionals from all the country. It was intended to articulate a common conceptual and praxical basis as well as scientific-professional collaboration. Focus was on analytical reflection on the practice itself, aiming children and families’ participation and assuming this professional practice as an epistemic axis regulating the production of knowledge (Canário, 2000; Nóvoa, 1999; Schön, 1987; Zeichner, 1993). In this qualitative research, we underline the instruments and object of the evaluation of the program (reflective documents, case studies, portfolios) which articulated the contribution of the several modules of the program. The content of these reflective materials will be analyzed as well as the responses to questionnaire surveys. Informed consent was provided by participants and pseudonyms replace the names of participants. Preliminary results suggest that more qualification is needed in order to promote transdisciplinary practice and children and families agency. Qualification programs content and format will be recommended.

early childhood intervention, professional development, reflective practice, transdisciplinary, participation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Working on the integrated system: Supporting children and families agency from the early years
Chiara Dalledonne Vandini, Emanuela Pettinari, Arianna Lazzari and Lucia Balduzzi, University of Bologna, Italy

Children’s participation and agency often appears interconnected with contextual factors related to quality education. Our presentation aims to report the first results of a national project, developed in Italian areas at high-risk of social exclusion in collaboration with Save the Children (Dalledonne Vandini, Lazzari, Cosatti, 2022) for implementing territorial support networks addressed to 0-6 children and their family. The health emergency caused by the pandemic has exacerbated situations at risk of social exclusion and children seem to be the first who could see their right to participate in quality education curtailed (Save the Children 2020; 2021; Unicef, 2020). Starting form the importance to integrate the educational, social and health dimensions (PANGI, 2021; Education at Glace, 2022) our framework is the systemic approach (Bronfenbrenner, 1979; Pedagogical guidelines for integrated System 0-6, 2020) oriented to promote children inclusion, participation and wellbeing. Within the phenomenological paradigm, we decided to adopt a qualitative methodology such as the training-research with operators of 0-6 hubs through different methods like focus groups, participant observation, and interviews. Since this is a project targeting children and families data collection has been done according to ECEERA ethical code (point 1 and 2, 2015). The preliminary results emphasize how the integration of educational, social and health spheres is a fundamental pillar to offer an effective possibility of agency and participation of children and families. In order to achieve an integrated and sustainable system, is essential to support and implement the promotion of local governance starting with the services already present.

integrated approach, children and families participation, social inclusion, early years, qualitative research

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

A collaborative, integrated and local model for ECD service-delivery in South Africa
Lesley Wood and Rosemary Wildsmith-Cromarty, North-West University, South Africa

This paper suggests an integrated, collaborative and localised approach to ECD in South Africa where access and quality is of concern. The informal and thus economically vulnerable ECD sector provides income to almost 200 000 mostly African, poor women thereby freeing up thousands more to enter the labour market. Findings have shown, however, that these women are child-minders rather than child stimulators (Wildsmith-Cromarty 2019). Recent research (Department of Basic Education, 2022) revealed a critical shortage of qualified practitioners as 48% are not adequately trained. We adopted a participatory paradigm (Wood, 2020) and asset-based theoretical framework (Missingham, 2017) since we understand intra/inter-sectoral collaboration to be key to improving
quality in ECD. Qualitative and quantitative data collected over seven years, using a multi-method approach (desk top surveys, face to face and virtual interviews, focus groups, open ended online questionnaires, Think Tanks) were analysed to identify critical gaps in service and resource provision in the ECD sector. Ethical clearance was granted by the relevant university committee, attesting to the study's adherence to strict ethical protocol to ensure beneficence, justice and respect for persons. The main finding points to the need for collaboration between stakeholders for optimal training, support and co-ordination of ECD at local level. We suggest a working model. Localised ECD hubs will increase community participation in ECD provision and greater access to quality ECD. This is necessary both for development of healthy, curious children and for the future economic and social wellbeing of the nation.

practitioner training, skills gaps, ECD hub, cognitive stimulation, qualifications

This application discusses a completed piece of research.

A25

OBSERVATION AND ASSESSMENT IN ECE
Chair: Magdalena Hartmann, The University of Osnabrück, Germany

An observational study of object-oriented play
Elizabeth Wynberg (1), Chiel van der Veen (1), Annerieke Boland (2), Femke van der Wilt (1), Maartje Raijmakers (1); (1) Vrije Universiteit (VU) Amsterdam, (2) University Of Applied Sciences Ipabo, Netherlands

This observational study aims to give more insight in object-oriented play by assessing the following questions: 1) What actions do children engage in during object-oriented play? 2) What are fundamental characteristics of object-oriented play? 3) How does object-oriented play develop? Piaget (1970) referred to this behavior as practice play and linked it to children’s (sensory) motor development. Vygotsky (1978) viewed this behavior as the driving force of (social) development and focused on its role in mediating a child’s relationship to their surroundings. Object-oriented play has also been the focus of several more recent studies that investigated how it supports children’s development (Fanning et al., 2021; Kubicek et al., 2017; Orr, 2020). When children are highly involved, have some degrees of freedom, and are discovering/following rules whilst they are engaged in the exploration and physical and mental manipulation of objects and/or materials, we call this object-oriented play (van Oers, 2013; Authors, 2021). This study has a cohort sequential design. The data will be analyzed both qualitatively: qualitative analysis through event sampling and quantitatively: cohort-sequential latent growth modeling. No risks to the participant were expected during the play-session but the comfort of the children was monitored. Parental informed-consent was obtained. One of the main characteristics of object-oriented play repetition which comes in many forms, from simple to complex, each type serving its own purpose. This study can help gain more insight into how object-oriented play develops over time, how it relates to children’s development and, subsequently, how caregivers and educators can support this.

observations, object-oriented play, Sequential Cohort Design, repetition, early child development

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Stimulating agency in preschool children using feedback (in formative assessment): An exploratory research
Emilia Restiglian (1), Silvia Azzolin (1), Claudia Boldrin (2), Maria Mori (3), Francesca Scaramuzza (2), Paola Zoroaster (4); (1) University of Padova, (2) Istituto Comprensivo Favaro Veneto (VE), (3) University of Verona, (4) Cooperativa sociale Cosep, Italy

The research aims to analyse what feedback can promote agency in preschool children, whether given by educators or peers themselves, also assuming that giving (good) feedback to peers improves agentivity. Some authors focused on university, primary, and secondary school contexts about the effectiveness of feedback in teaching processes (Hattie, 2012), and the role of peer feedback (Nicol, 2018; Grion & Restiglian, 2019). This study aims to observe which feedback (received/given) improves the sense of agency in preschool children. Activating peer feedback practices has positive effects on learning and represents a valid alternative to the feedback given by the teacher (Tseng & Tsai, 2007). Also, for the agency, there is a considerable amount of research about teacher agency (Cong-Lem, 2021) but very little research about children's agency in the curriculum, even if the students’ role as active agents in learning is strategic (Ebrahim, 2011). Starting from an educational theory of progressivism focused on improving
exploratory qualitative research was conducted through a three-month video observation in a preschool (5-year-old children). The videos were analysed using an observation protocol supported by a research team blind review. Data were collected according to GDPR, and research intents were explained to children's families and preschool management. The research led to the definition of a framework including the main characteristics of effective feedback. Some insights into the child's self-regulation also emerged. According to the idea of educational continuity formative assessment in school, the results will support other research about children's feedback for assessment.

feedback, video observation, children's development, agency, preschool

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Preschool teachers' reasoning about assessment, attentiveness and about supporting each child's learning processes
Monica Ehrström, Malardalen University, Sweden

This study aims to investigate the tension between preschool teachers' mission to teach and support children's learning and the mission to assess children's learning processes, in relation to equality in education. Previous research (Johansson, 2016:296; Insulander & Svärdem, 2014:13) indicate that preschool teachers experience the requirements for assessment as contradictory. Meaning, they must evaluate the education to ensure that it is of good quality, while research indicate ethical risks with assessment for children's identity creation (Alasuutari, Markström & Vallberg Roth, 2014:119). The study draws on a socio-cultural perspective (Vygotsky, 1978) to analyse preschool teachers’ reasoning about assessment in relation to each child’s possibilities for being supported in their proximal development zone. In accordance with the Education Act (SFS, 2010:800), Swedish preschool education must be equal, and all children must have the opportunity to learn and develop as far as possible based on their potential. Stimulated-recall interviews were conducted with seven preschool teachers in Sweden. Content analysis was used to reveal the descriptions that emerged concerning assessment and attentiveness in preschool teachers’ reasoning. According to the ethical considerations, all participants in the study were given information about the aim of the research and what the study involves. Video-recordings and photos used during the interviews, only served as stimulus for the preschool teachers' descriptions, thus were deleted immediately after the interviews. Findings illuminate risks when preschool teachers’ lack competence regarding assessment for equality in education. This can lead to only particular children being noticed and thus receiving support in their learning processes.

preschool teachers, assessment, attentiveness, agency, equality in education

This application discusses a completed piece of research.

A26

PRESCHOOL TEACHERS DISCUSSIONS ABOUT THEMATIC SCIENCE TEACHING INVOLVING PLAY, DIGITAL TOOLS, AND CHILDREN'S PERSPECTIVES

Self-organised Symposium
Chair: Marie Fridberg, Kristianstad University, Sweden

Educational systems are in need of reform (Fullan 2007; Tytler 2007). One problem is the artificial distinction between learning in school and real-life learning, which often creates unwanted obstacles for re-instituting learning as a powerful motivator of innovation and problem-solving capacity. Many preschool teachers describe an uncertainty concerning science content (Kallery, 2004; Greenfield et al., 2009). Fleer et al. (2014) argue for a ‘sciencing attitude’, and teachers who embrace both children’s perspectives and links to content enact fruitful science activities (Areljung, et al., 2017; Convertini, 2021). In this symposium, innovative approaches to science activities in preschool are presented and discussed: play-responsive teaching scaffolded by digitals tools, augmented reality boosting of ESD-teaching, and thematic teaching approaches to science encompassing other contents in the national curriculum accentuating transdisciplinary learning in preschool.

Science and thematic teaching in preschool – Pre- and in-service teachers’ expressed curriculum emphases during joint planning sessions
The focus of this study is pre- and in-service preschool teachers’ expressions of curriculum emphases during planning sessions for thematic teaching in exam-projects. Research shows how preschool teachers’ science knowledge is linked to their competence to teach science (Fleer, 2009) and a report points to science in preschool being treated as single ‘happenings’, not part of thematic teaching (Swedish Schools Inspectorate, 2018). Research highlights student teachers questioning the weak connection between exam theses and teacher profession (Arneback et al., 2016; Erixon Arreman & Erixon, 2015). The theoretical framework is constituted by developmental pedagogy (Pramling Samuelsson & Asplund Carlsson, 2008), children as human beings perspective (Qvortrup et al., 1994; Halldén, 2003), and curriculum emphases (Roberts, 1982). Pre- and in-service preschool teachers’ views have been collected through recorded planning meetings and questionnaires during a design-based research project in cooperation. A qualitative analysis of curriculum emphases, and didactical grounding of thematic teaching has been performed. We adhere to ethical guidelines of the Swedish Research Council (2017) concerning conduct and data handling. Specific attention was given to informed consent, voluntary participation, and anonymity. The curriculum emphasis ‘Everyday applications’ stands out, strongly related to a ‘being-perspective’ of the children. The analysed planning sessions indicate the value of pre- and in-service preschool teachers working jointly with thematic science teaching during exam work. Studies of pre- and in-service preschool teachers’ science teaching are still lacking (Redfors et al., 2022). This is addressed here through design-based research on exam-work in preschool teacher education including thematic teaching informing future practice.

Science, thematic teaching, preschool teacher education, pre- and in-service teachers, exam work

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Play-responsive teaching with a science content supported by digital tools in preschool
Kristina Lund, Andreas Redfors and Agneta Jonsson, Kristianstad University, Sweden

The aim is to contribute with new knowledge from a continuous professional development (CPD) study of preschool teachers’ discussions about play-responsive teaching of science supported by digital tools. There are opportunities for children together with preschool teachers to explore science in everyday situations and play (Fleer, 2009). Siry and Max (2013) emphasize the critical role of the teacher being present and attuned to children’s questions and exploration. In play-responsive teaching preschool teachers and children are supposed to mutually engaged in a shared content with the preschool teacher qualitatively responsive to the children’s perspectives (Pramling et al., 2019). The Play-Responsive Early Childhood Education and Care framework (PRECEC) (Pramling et al., 2019) is used to thematically analyze teacher discussions about play-responsive teaching of a science content supported by digital tools. The study is conducted as a CPD project consisting of focus group discussions with eleven preschool teachers based on interventions. Stimulated recall by video documentation from the preschool teachers’ practice is used. All participants have been informed and agreed to voluntary and anonymous participation with the right to cancel their participation at any time (Swedish Research Council, 2017). The preliminary results show how opportunities and challenges in creating play-responsive teaching emerge when preschool teachers together with children engage in play with a science content supported by digital tools. Analysis of preschool teachers trying to utilize newly acquired knowledge about play-responsive teaching are expected to enlighten future development of play-responsive teaching of science supported by digital tools.

play-responsive teaching, science, digital tools, preschool teachers, continuous professional development

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Preschool teachers’ experiences of augmented reality in place-based education for sustainable development
Marie Fridberg and Andreas Redfors, Kristianstad University, Sweden

This study aims at exploring preschool teacher’s experiences of thematic teaching including augmented reality tools, education for sustainable development (ESD), and science. There is an increasing use of augmented reality in educational contexts but few studies focus on a preschool setting (Masmuzidin & Aziz, 2018). Also, Swedish Schools Inspectorate (2018) points to the need of science being put in context in preschool. Places have been identified as deeply pedagogical centers of experience and meaning making (Gruenewald, 2003). Theories of multimodality (Kress, 2010) and place (Gruenewald, 2003) constitute conceptual frameworks in this study. A qualitative approach has been used, and empirical data generated from planning documents and a recorded interview with two preschool teachers. A thematic analysis (Braun & Clarke, 2021) has been performed. The study adheres to ethical guidelines of
the Swedish Research Council (2017). Participants were informed and have agreed to voluntary and anonymous participation with a right to abandon participation. According to the preschool teachers, uses of augmented reality tools in combination with visits to local places has supported children’s learning about sustainability. The intersection of augmented reality and ESD, and the complexity of simultaneously addressing more than one content area in thematic teaching, are seen to raise interesting dilemmas and instigate fruitful didactic decisions. To our knowledge, this is the first study to target preschool teachers experiences of thematic teaching with augmented reality tools, science, and ESD, as combined content. Results will inform future practice for both pre- and in-service preschool teacher education.

thematic teaching, augmented reality, education for sustainable development, science, preschool teachers

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

A27
Digital Childhoods SIG Self Organised Symposium

THE INTEGRATION OF INTERNET OF TOYS IN EARLY CHILDHOOD EDUCATION
Chair: Ioanna Palaiologou, University of Bristol, United Kingdom

Children playing with digital technologies, such as the Internet of Toys (IoToys), have become an important concern for early childhood education (ECE) (Danby et al., 2018; Stephen & Edwards, 2018). Teaching children ethical and safe use of technologies, including artificial intelligence (AI) tech toys, should become an area of scrutiny for educational policy, curriculum and practice. Thus, building on our research (Kewalramani, Palaiologou & Dardanou, 2023) we discuss the integration of technology in ECE and how they can become complimentary resources rather than competing artefacts. In this symposium we focus on: 1. The changing playscapes and “new” learningscapes making the case for reconceptualising them as children’s transplayscapes; 2. Technology and social-emotional literacies; 3. Children’s agency. We conclude that we need to be alert to the changing playscapes, challenge a “static” approach to pedagogy and examine the why, what and for whom pedagogy for the transplayscapes in the 21st century.

Children’s agency: Mentally linked and digitally connected, but are they heard?
Maria Dardanou, UiT - The Arctic University of Norway, Norway

This presentation investigates the child’s agency, voice/s and perceptions of IoToys, the choices children make and the roles they adopt while playing and interact with IoToys at homes and ECE settings. We build upon studies that explored how young children perceive their use of IoToys and interact with them (McReynolds et al., 2017; Ihamäki & Heljakka, 2021). Based on the different curriculum and policies across the three countries, as well as on sociocultural perspectives that impact the choices children might make during IoToys play, our focus is on children’s playful learning and affective engagement (Marsh et al., 2019; Kewalramani, Kidman, & Palaiologou, 2021). The project was guided by principles of participatory research. A qualitative multi-method approach was employed such as observations, videos and photographs in ECE and homes across the three countries. We complied with EECERA and BERA ethical codes. Ethical procedures were ensured to seek parents’ and children’s consent, being mindful that the consultation questions suited the child’s opinions. The findings provide a robust foundation for how IoToys and the play interactions occur in ECE classrooms/home settings in Australia, England and Norway. The interpretation of children’s stories is done both explicitly and implicitly, to make meaning from not only what was spoken or from the child’s actions/body gestures, but also the meaning behind their words or what remained unspoken. Our findings implicate that play activities with IoToys create a culture for children to become multiple digital experts to guide and support the future design of technologies.

play, children’s voices, Internet of Toys (IoToys), children’s agency, early childhood education

This application discusses a completed piece of research.

IoToys and Social-emotional Literacies
Ioanna Palaiologou (1) and Sarika Kewalramani (2); (1) University of Bristol, United Kingdom, (2) Swinburne University of Technology, Australia
This international study examined how children are using AI robotic toys to socially-emotionally engage via play and communicate their meaning. The problem we are addressing in this study are how technologies can be used for children who learn and think differently (neurodiverse children), may not be able to express their emotions or are unable to make social connections with peers at an early age (Kirk et al., 2019). We conceptualise that for a child, expressing emotions as facial gestures is a cognitive domain-specific adaptation to their environmental conditions, which needs to be modelled in multimodal ways and scaffolded by the adult (Ziegler et al., 2013). Employing a qualitative research approach, parents during the COVID-19 lockdown periods in 2020 intentionally used AI robotic toys to engage their children (including those with diverse needs) in home-based play experiences. The research team considered ethical procedures, including: 1. The children’s own perceptions of the uses of data from this project, the permanency of data collected and their associated consent. 2. The role of Internet safety in children’s play. The data from both parents’ and children’s (N = 5) zoom interviews, digital observations and children’s drawings demonstrated how children creatively conversed with their AI robots in innovative and empathy-based dialogues that generated happy feelings and a sense of ‘imaginary’ togetherness while playing with their robot. Implications lie in further research to understand the use of robotic toys together with physical and artificial environments as a transfunctional approach and offers a case to build on children’s social-emotional literacies.

Al technologies and robotics play, digital childhoods, neurodiverse children, social emotional learning, child agency

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Beyond multimodal learningscapes: The case for transplay learningscapes
Ioanna Palaiologou, University of Bristol, United Kingdom

Research from Australia, England and Norway aimed to examine how children use IoToys at home and in ECE. Building upon the view of child’s and practitioner’s agency, differentiating the notion of play as child-centered-initiated pedagogy and children’s engagement of digital interactions (Edwards & Bird, 2017; Trueltzsch-Wijn & Aliagas, 2017) we conceptualise how technology can be integrated in pedagogy. Examining the role of hybrid learning spaces, we believe IoToys play fits in well with such fast-paced technology use in children’s playroom ecologies. We redefine IoToys as a polypronged and their use as a pedagogical tool for transplayful learning. A qualitative multimethod approach was employed such as observations and videos in ECE and homes across the three countries. EECERA and BERA ethical codes were followed. Reflective considerations were given to the potential intrusive nature of the researcher being present in the private lives of the families and the routines of the ECE. Both were given the flexibility on choosing the time, space and duration of the researchers’ visits. All data were shared with the participants who gave permission on which ones to be used. We found that children’s digital lives can be seen as a realised, situated and altered capacity, which can be accomplished through the combination of various interconnected “persons” and “things”, processes and actions that aims at transformation of their play and learning. ECE should seek to create scapes where the digital lives of children are transcended to transform children’s experiences, play and learning.

early childhood education, internet of toys (IoToys), playscapes, learningscapes, transformation of play

This application discusses a completed piece of research.

A28
THE STRUGGLE ABOUT AGENCY AND CHILDREN’S PERSPECTIVES
Self-organised Symposium
Chair: Christina Haandbæk Schmidt, UCL Business Academy/ University of Applied Sciences, University College, Denmark

Since the UN Convention on the Rights of the Child was introduced in 1989, there has been a growing interest in Denmark as well as internationally to include the child’s perspective in both childhood research and pedagogical practice. This symposium aims to investigate how children’s possibilities of being listened to depend on adults’ interpretation of what is essential and relevant. We focus on how agency comes into being in interactions with the adults and the context of which the child is a part. The three papers in this symposium discuss, respectively, how children’s voices are interpreted and acted upon by pedagogues and parents in the process of ‘settling-in’ in ECEC, how children are expected to show specific sets of sociality in transitions to school, and how manual-based program limit the children’s curiosity, agency, and participation.
**Manual-based programmes and children’s agency, curiosity, and participation in Danish ECEC-centers**

Oline Pedersen, UCL Business Academy/University of Applied Sciences, University College, Denmark

This study explores the shaping of available positions for children being part of the practice of manual-based-programs, especially concerning the children’s curiosity, agency and participation. It takes place in Danish ECEC-centers. Manual-based-programmes uses prescribed manuals in planned activities with the children, often at child-meetings. The study draws on Aabro (2016) and Østrem/Pettervold (2019) concerning the distribution and use of manual-based-programmes in ECEC-centers in the Nordic countries. Furthermore, it shares analytical perspectives with Bartholdsen (2021;2014). It draws on the concepts of power, discourse, and subjectivity by Foucault (1982, 1988) and the elaboration of these concepts by Fejes and Dahlstedt (2013). The presentation is based on a qualitative study with a poststructuralist approach focusing on the subject-positions made available for the children through discourse, social meaning-making and actions being part of the practice of manual-based-programmes. It uses ethnographical fieldwork and interviews. ‘Saying yes’ has been an ethical approach towards the children, meaning that I was very much aware that the children shouldn’t feel uncomfortable with me as a silent/passive observer, instead my approach was to accept the invitations of the children. One could argue that the group-based method of the manual-based-programmes is a setting that supports children in talking about their experiences, and that they through these shared reflections get the opportunity to raise their voice. In this presentation I would argue the opposite, that the programs’ pre-defined focus is so controlling of the conversation that it limits the children’s curiosity, agency, and participation. The results will be used in reflection-workshops with ECEC-professionals.

**manual-based programmes, ECEC centers in Denmark, subject-positions, power, participation**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Children’s agency in the settling-in process: When the transition from home to ECEC is problematic**

Anette Boye Koch, VIA University College, Denmark

The presentation explores professional considerations and ethical dilemmas associated with children’s agency and voices during ‘settling-in’ in ECEC. Good transitions are important for children’s wellbeing in ECEC (Nystad et al. 2021), but observational studies show signs of distress and the tendency for staff to overlook children’s silent struggles during transitions (Datler et al. 2012). The study refers to previous work exploring children’s agency and perspectives (Koch 2019, 2018). The research draws upon theories of wellbeing of young children (Seland et al. 2015, Koch 2016) and the idea that pedagogues work sensitively towards children’s perspectives with pedagogical tact (van Manen 1991). The method includes document analysis, observations and interviews within a qualitative interpretive research paradigm (Denzin&Lincoln 2018). The analysis was conducted within a phenomenological hermeneutical approach (Dahlberg et al. 2008). The inquiry depends on informed consent and voluntary participation by children, parents and professionals. High ethical standards were applied to minimize any distress caused throughout the research. Pseudonyms have replaced the names of participants. Empirical examples are presented showing how children’s voices are interpreted and acted upon by pedagogues and parents in the process of transition. Pedagogues aim to work sensitively towards children’s perspectives during settling-in, but children’s agency and possibility of being listened to is ethically problematic and full of dilemmas. Policies prescribes professionals to involve children’s perspectives in all issues of importance to children, but handling of emotional conflicts during the settling-in process are full of ethical dilemmas, as cultural norms prescribe institutionalization of 97% of all Danish children.

**settling-in, child perspectives, wellbeing, ethical dilemmas, transition to ECEC**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Norms about the parents in transitions and children’s agency**

Lene S. K. Schmidt, University College Absalon, Center for Social Education, Denmark

This paper aims to analyze the transition for children from daycare institutions to school in a Danish context. In pedagogical research about the transition is shown, how parents and children are subject to various norms (Bach et al. 2020). Both parents and children are expected to show specific sets of sociality. The sociality which children must demonstrate to the school is an interactive process, where understandings of norms and relationships are pieced together (Bartholdson, 2009). This is not referring to a classic, pedagogical concept of socialization of someone (e.g. children). Instead, it’s a concept about the forms of sociality through which
both adults and children are required to exhibit and construct themselves (Schmidt, 2017). The paper is based on ethnographic fieldwork in one daycare institution and one school. I take a close, analytical look at the micro-social processes and norms in transitions in children’s lives (Ehn & Löfgren, 2001). I shed light on how the transition process reflects norms for both parents and children, and how the children act themselves. I analyze the children’s encounters with the school’s library, and how norms about ‘the school parent’ and ‘the school child’ are (re)told through stories. In my fieldwork, I worked with both informed consent and situated ethics. I shed light on how the children are expected not only to socialize and prepare themselves for the school setting but also to prepare their parents for this agenda. This opens up new ways to rethink the transition and children’s agency in such practices.

culturally and linguistically responsive pedagogies, children, transitions, sociality, parents

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

A29
CULTURALLY AND LINGUISTICALLY RESPONSIVE PRACTICE
Chair: Victoria Whitington, University of South Australia, Australia

Culturally and linguistically responsive pedagogies in early childhood education
Victoria Whittington (1), Jamie Sisson (1) and Christine Woodrow (2); (1) University of South Australia, (2) Western Sydney University, Australia

Reporting on first stage of a larger project, the presentation’s aim is to explore how EC educators re-imagined their engagement with families in culturally responsive ways. Australian ECE policy identifies culturally responsive pedagogies (CRP) as essential to creating inclusive learning environments. Relationships with families are critical to this endeavour (DEEWR, 2009). Research is needed into how EC educators engage in culturally responsive relationships with families (Sisson, et al., 2021), exploring educators’ co-construction of CRP to that engagement. In this research the term CRP refers to educator practices that incorporate the cultural intelligences of diverse families as resources in learning (Morrison et al., 2019). CRPs are a form of both critical pedagogy (McLaren, 2003) and decolonising pedagogy (Mbembe, 2016), intimately linked to power, culture and transformation. Located within post-structuralism, this research problematizes hierarchical relationships between educators and families. Employing educational ethnography methods, semi-structured interview and professional learning communities’ notes, this qualitative study focuses on educators using critical action research (Carr & Kemmis, 2009) to re-designing their engagement with families in culturally responsive ways. Once organisational ethics permissions for the research were obtained, volunteer co-researcher participants received an information sheet and provided written consent. Pseudonyms replaced names. Preliminary findings identify struggles teachers face in co-constructing culturally responsive family engagement to reimagine practice; site commitment, leadership, and professional identity. Understanding educators’ struggles identifies current gaps, informing research and policy reform. The EYLF calls for CRP however there is little support for educators to understand how to engage with families in culturally responsive ways

culturally and linguistically responsive pedagogies; action research; superdiversity; early childhood education; co-constructed leadership with families.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Implementation of children’s agency and participation in multicultural early childhood education: ECE practices focus on language acquisition and transition to primary education in Echizen, Fukui, Japan
Asato Yoshinaga (1), Yumiko Sasaki (2) and Hiroko Okamoto (3); (1) Kokugakuin University, (2) Ashikaga Junior College, (3) Takasaki University of Health and Welfare, Japan

The purpose of this study is to clarify how to improve children’s Japanese abilities by implementing children’s agency and participation in play through ECE practices in Echizen, Fukui. Previous studies have shown the importance of creating "the vision of meeting place" between early childhood education(ECE) and compulsory school education(CSE) for a smooth transition(Moss, 2013). Especially, it was suggested that developing the continuity of curriculum in language education was necessary for it(Yoshinaga & Okamoto, 2020). Also, it was revealed that non-native-Japanese-speaking children were in vulnerable situations to demonstrate
agency and participate in classes by Japanese, in addition, there is a large disparity between municipalities in initiatives of improvement (Sasaki, 2023). This study is based on play-based learning for agency and participation (Fleer, 2009) and socio-cultural theory (Vygotsky, 1987). This study was conducted within a qualitative interpretive research paradigm (Denzin & Lincoln, 2018). Three observations and interviews were carried out with a Childcare Director and practitioners. The analysis was conducted through a discourse analysis within a hermeneutic approach. The respondents were granted permission for the publication of this study. It adheres to all ethical standards and privacy policies approved by the Takasaki University of Health and Welfare. The findings demonstrate that practitioners prepare an environment where children can spontaneously create their own plays, and provide the time to share them with others. Those supports encourage every child, especially non-native-Japanese children use Japanese. These findings suggest implications for how participation in play with agency and reflection on it might be able to improve language abilities.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Examining racialization in Swedish-speaking daycares in Finland
Maria Saloranta and Jan-Erik Mansikka, University of Helsinki, Finland

The aim of the research is to strengthen all children’s right to inclusion in ECEC activities. This will be achieved through examining how small children include and exclude others. Previous research show that children's play can reflect and reproduce social and cultural inequalities, including those based on race and ethnicity (Lappalainen & Odenbring, 2020; Corsaro, 2003; Howard, 2019; Loodberg & Abera, 2022). This study uses an intersectional frame (e.g. Hill Collins & Bilge, 2016). We use critical race- and whiteness theory to examine how children position themselves through racialization and how whiteness as norm affects the social positions (e.g., Howard, 2019; Gorski & Dalton, 2020). The study adopted a qualitative research design, using ethnographic data collection methods including participant observation and informal discussion with children and staff members (Köngäs & Määttä, 2021). The data is collected from 8 Swedish-speaking daycares in the capital region of Finland and analyzed using a qualitative content analysis approach (Hsieh & Shannon, 2005). Permission for this research was gained from each municipality, the daycare director, staff, as well as caregivers with participant consent forms (TENK, 2019). The children were asked for consent continuously. Findings show how children use racialization when including or excluding others and how this is linked to social positions and affect peer relationships. The results contribute to a general picture of the dynamics of children’s interactions at daycare. The findings of the study provide empirical grounding to work towards an equal and inclusive early childhood education and care for all children.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

A30
INTERNATIONAL ANALYSIS OF THE UNITED NATIONS CONVENTION ON THE RIGHTS OF THE CHILD: IMPLICATIONS FOR EARLY CHILDHOOD POLICY, EDUCATION AND CHILDREN
Self-organised Symposium
Chair: Ann Farrell, Queensland University of Technology, Australia

More than 30 years since the United Nations Convention on the Rights of the Child (UNCRC), children’s rights to provision, protection and participation in Early Childhood Education and Care (ECEC) remains an international policy priority. The symposium presents an international analysis of the UNCRC focussing on the three areas of early childhood policy, education and children. Drawn from a larger corpus of work in 14 countries and five regions of the world, the symposium presenters from five countries (Australia, Croatia, Norway, Spain and Uruguay) challenge participants to consider implications of the UNCRC for ECEC in changing global, national and local contexts.

Adrijana Visnjic-Jevtic (1), Concepción Sánchez-Blanco (2) and Gabriela Etchebere (3); (1) University of Zagreb, Croatia, (2) University of A Coruña, Spain, (3) Institute of Psychology, Education and Human Development (IPEDH), University of the Republic, Uruguay
This paper provides analysis of educational policy in 14 countries regarding the implementation of the UNCRC in the last thirty years. The research draws on the analysis of legislation, policies, and curricula in different parts of the world 30 years since the UNCRC (Visnjic Jevtic et al., 2022). As a theoretical framework for performing this analysis, the paper uses Davis’ (2014) five dimensions of rights for early childhood education in the light of the challenges of sustainability. Qualitative research was conducted, with thematic analysis of legislation, policies, and curricula in 14 countries. International and national guidelines for research ethics were followed (EECERA Ethical Code, 2015; Croatian Science Foundation; 2018). Despite a contemporary (omnipresent) child-centred approach in policy, a more traditional model outlining the role of children as incompetent and (therefore) passive human beings is still common. Corporal punishment is still an ongoing disciplinary practice. Analysis shows that society and families do not look upon corporal punishment as a violence against children, nor a misconduct in relation to children’s rights. By including the UNCRC in national legislation, new possibilities to reach full implementation and respect for children’s rights may be reached. Primarily, it is about strengthening the child as a child rights partaker and for children’s rights to permeate all parts and issues in children’s lives.

**Agentic rights, children’s rights, children’s voices, policy, United Nations Convention on the Rights of the Child**

This application discusses a completed piece of research.


Ann Farrell (1), Adrijana Višnjić-Jevtić (2) and Ewa Lewandowska (3); (1) Queensland University of Technology, Australia, (2) University of Zagreb, Croatia, (3) The Maria Grzegorzewska University, Poland

The research aimed to identify the key elements of the UNCRC for ECEC in five countries and three continents (a sub-set of a larger body of work in 14 countries), with a three-pronged focus on early childhood policy, education and children. The research draws on a wider corpus of work generated within and beyond the team since the ratification of the UNCRC more than 30 years ago. Višnjić-Jevtić, Sadownik and Engdahl (2022) provided an international overview of children’s rights in the last three decades, while Farrell, Kagan and Tisdall (2016) show the impetus of children’s rights for the field of early childhood research. The international analysis is informed by Nancy Fraser’s (2008) social justice framework for redistribution, recognition and representation in relation to children’s rights in ECEC. Using a qualitative research paradigm, thematic document analysis and naturalistic research into children’s rights in 14 countries reveals the UNCRC at the level of policy, education and child perspectives. Ethical considerations in the international analysis include respect for persons, natural justice, scientific integrity, disclosure of funding and/or conflicts of interest and informed voluntary consent. Analysis reveals global and national commitments to the UNCRC in everyday practice in ECEC. Key enablers and barriers to children’s rights in policy, education settings and child perspectives show the importance of active participation, provision, and protection of young children in their everyday lives. Implications relate to children’s rights at the levels of policy, education and child perspectives. The symposium provides a platform for research-based innovation for children’s rights.


This application discusses a completed piece of research.


Katarina Bogatić (1), Alicja R. Sadownik(2) and Ivana Visković (3); (1) University of Osijek, Croatia, (2) Western Norway University of Applied Sciences, Norway, (3) University of Split, Croatia

This paper sheds light on children’s perspectives on the implementation of the UNCRC in Croatia and Norway. The research draws on a wider corpus of work in the implementation of the UNCRC and its consequences for children’s lives (Visnjic Jevtic et al., 2022; Farrell, Kagan and Tisdall, 2016). The analysis from Croatia and Norway is informed by Nancy Fraser’s (2008) social justice framework for redistribution, recognition and representation in relation to children’s perspectives on their rights. Multimodal qualitative research has been conducted. The literature review, document analysis and children’s diaries were used. International and national guidelines for research ethics were followed (EECERA Ethical Code, 2015; Croatian Science Foundation, 2018). Children often express that they perceive an inferiority towards adults, and they also articulate different experiences and unequal conditions of childhood. Document analysis revealed examples of how easy it is to miss the child as an agent, actor and participant when creating the best
possible world for children. This paper concludes with a need for continuous reflection on how children's perspective could be accessed, recognised and implemented, with the sensitivity for diversity among children and their voices. As children and young adults are the majority of humans to live after 2030, children and their perspectives must be respected.

children's perspectives, UNCRC, Croatia, Norway, multimodal qualitative research

This application discusses a completed piece of research.
Intervention programs related to health education in kindergarten

Judit Fináncz (1), Melinda Csima (1), Judit Podráczky (1), Krisztina Deutsch (2), Evelin Soós (2) and István József (3); (1) MTA-MATE Early Childhood Research Group; Hungarian University of Agriculture and Life Sciences, (2) University of Pécs, (3) Hungarian University of Agriculture and Life Sciences, Hungary

The aim of our systematic review is to analyze studies related to health education intervention programs in kindergarten. Previous research has shown that health-supporting habits established in early childhood contribute significantly to the increase of years spent in health and to the improvement of quality of life (Vieno et al., 2005; Csima et al., 2018). In recent years, a number of health education intervention programs have been developed, which support children's health in the kindergarten (Brewer et al., 2018; Kobel et al., 2020; Foulkes et al., 2022). Our research was carried out according to PRISMA 2020 protocol (Page et al., 2021). The sample of research was determined by using the keywords "early childhood" AND "health education" OR "health behavior" OR "health promotion" in Scopus, ERIC and WOS databases published between 2012-2022. From 1376 records 17 empirical studies were selected for analysis. The study follows guidelines of EECERA Ethical Code (2015) including transparency of research strategy and respect for diverse data sources. The findings show that physical activity and healthy nutrition are given increased emphasis in intervention programs used in kindergarten, accordingly, prevention of obesity and reduction of screen use appear as priority goals. The programs are usually short-term, furthermore, topics of sustainability and health education are often interwoven, and besides accentuated attention directed at special groups (ethnic minorities, disadvantaged families) is also typical. Based on the results, content elements related to somatic health dominate, and the conceptual approach to health education is remarkably heterogeneous.

This study was funded by the Scientific Foundations of Education Research Program of the Hungarian Academy of Sciences.

health education, health-supporting habits, intervention, kindergarten, systematic review

Measuring health literacy in early childhood

Melinda Csima (1), Judit Fináncz (1), Judit Podráczky (1), Bálint Bánfai (2) and Henrietta Bánfai-Csonka (2); (1) MTA-MATE Early Childhood Research Group; Hungarian University of Agriculture and Life Sciences, (2) University of Pécs, Hungary

This systematic review aims to explore empirical research on health literacy related to early childhood. Health literacy is an expanding research area, but only a small number of studies focus on the HL level of children under the age of eight (Bánfai-Csonka et al., 2022). However, studying this field is fundamental because the evolvement of health-related behaviours and the establishment of a preventive health attitude take place in early childhood (Bröder et al., 2017; Csima et al., 2018). Our research was conducted in accordance with PRISMA 2020 protocol (Page et al., 2021). The sample was defined in Scopus, WOS, PubMed and ERIC databases by applying the keywords “health literacy” AND “early childhood” OR “preschool” OR “kindergarten”. Out of 894 records, 12 studies published between 2013–2022 were included in the analyses. A wide range of studies was involved in the research according to EECERA Ethical Code principles. Results show that most studies focus on special areas of HL (i.a. food literacy, oral health literacy, health care situations, stroke health literacy). Health literacy contents related to mental and social health along with health-damaging behaviour appear only marginally. General health literacy among young children is difficult to measure, only three studies sought a holistic approach. Mostly picture-based or story-based instruments were applied for measuring HL in early childhood. Knowledge and habits of young children are strongly associated with parents’ health awareness and behaviours. Exploring young children’s health literacy is fundamental for identifying the deficiencies and planning health promotion interventions in early childhood education.
This study was funded by the Scientific Foundations of Education Research Program of the Hungarian Academy of Sciences.

health literacy, measuring tools; kindergar
ten, preschool children; systematic review

This application discusses a completed piece of research.

**Developing children’s agency for wellbeing by nurturing their early learning and development through healthy eating and physical activity**

Helen Skouteris, Monash University, Australia

This research aims to develop a new unified multisectoral nurturing care framework that will transform the way we intervene to foster children’s agency for wellbeing in the early years. The ambitious vision of the 2030 Agenda for Sustainable Development is the goal that all children have the best start in life (United Nations, 2015). Huge inequities within countries create barriers to achieving this goal (Whettam et al., 2022). This program of research is informed by the Global Nurturing Care Framework for Child Development (WHO, 2018) that is underpinned by the bio-ecological theory of human development (Bronfenbrenner & Morris, 2006). A narrative paradigm (Egan, K., 1995) was used to understand the lived experience of pervasive socio-economic disadvantage. Evidence synthesis and a participatory research methodology was also employed to develop a framework for creating equitable systems to promote children’s agency for wellbeing (Skouteris et al., 2020). Lived experience and participatory research has been respected and acknowledged with authorship on published manuscripts (Skouteris et al., 2023; Whettam et al., 2022). For systematic reviews, ethical consideration was given to ensure fair representation of literature from a wide range of sources, with funding sources identified if relevant to avoid possibility of bias. Fostering children’s agency for wellbeing must occur through multisectoral collaborations that support positive developmental trajectories by mitigating adversities when necessary. Person-centred policies, that empower and build agency in individuals, have the potential to facilitate integration across services and sectors for coordinated service delivery and improved experiences and outcomes for children and families.

nurturing care, co-design, multi-sectoral approach, dismantling racism, collective responsibility

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**B3**

**AGENCY AND EXPLORATION IN THE DIGITAL WORLD**

**Chair:** Irina Silva, Queensland University of Technology, Australia

**Young autistic children exploring digital worlds**

Irina Silva, Queensland University of Technology, Australia

This study aimed to understand how young autistic children engaged with digital technologies in the home. Observing children’s practices permitted the identification of the purpose, affordances, challenges, and how digital interactions integrated autistic children’s daily living. The use of digital technologies increased during the COVID-19 pandemic and supported autistic children to engage in multiple activities from their homes (Jayman, 2021; Montag & Elhai, 2020). The impact of these experiences on autistic children’s lives is unclear, and this study provided critical understandings. Two complementary theoretical frameworks supported the study. Sociology of Childhood recognises children’s agency to inform research and demonstrate their realities and viewpoints (Corsaro, 2016). The Affordances Theory framed the analysis of the other elements involved in children's digital interactions, including the context, the digital technologies and others involved in the interactions (Ostern & Rosemann, 2021). Digital Ethnography allowed studying the phenomenon within the home context and provided autistic children and their families various opportunities to participate. They showed their digital activities during in-person and online meetings, video-recordings, and shared their viewpoints during phone calls and text messages. In line with EECERA’s ethical code, the study respected the children’s rights to have a voice and participate actively in all decisions and actions affecting them. Autistic children experienced their agency by exploring digital technologies, engaging with the expected affordances and uncovering new possibilities that supported their
everyday lives in multiple ways. Hence, accounting for autistic children’s viewpoints and including them in research and decision-making processes that affect their lives is essential.

agency, Autism spectrum, children’s digital interactions, digital ethnography, sociology of childhood & affordance theory

This application discusses a completed piece of research.

‘Yeah, I am making new stuff!’ - Responsivity and negotiations of agency during digital storytelling in preschool
Sofije Shengjergji, University of Gothenburg, Sweden

This study investigates: 2) how children’s agency is exercised and negotiated with peers and the teacher during digital storytelling activities that are adult-designed, and 2) how teachers open up and respond to children’s manifestations of agency. There is limited research exploring children’s agency during educational use of digital technologies, even though a large body of literature in Early Childhood Education and Care (ECEC) aims to use digital technologies to position children as authors and creators (Scollan & Farini, 2020). The theoretical framework adopts a socio-cultural theory, as well as Play-Responsive Early Childhood Education and Care theory. The study was conducted within a qualitative paradigm and a design-based research methodology was adopted (McKenney & Reeves, 2018). Video recordings of digital storytelling activities in ECEC settings in Sweden were made and a socioculturally informed interaction analysis was conducted. A consent form including information about the research was provided to children’s parents and teachers. Pseudonyms have replaced the names of participants and preschool. All participants were given the opportunity to withdraw from the study at any time. The researcher introduced the camera and digital tablets to the children prior to the start of the research. Children’s agency is exercised and negotiated by introducing new characters and transforming the story, negotiating the meaning of their drawings, and testing the design characteristics of the digital tablets. Teachers’ responsivity to children’s agency is adressed. These findings suggest implications for how teaching can be responsive to children’s agency during activities that utilize digital technologies.

agency, digital storytelling, responsivity, design-based research, teaching

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Online playworlds: A practice of play pedagogy during COVID-19 pandemic in Indonesia
Ade Dwi Utami, Universitas Negeri Jakarta, Indonesia

This paper aims to explore the implementation of an imaginary play called Playworld in online setting as a pedagogical tool for children’s learning. Creating imaginary situation is identified as the key concept of play. This new understanding of play challenges teachers in implementing play in children’s learning, specifically during COVID-19 pandemic. Playworld as a new model of play based on children’s literature, is improvised to take adult and child in created collective imaginary situations. The data were analysed using the concept of play from cultural-historical theory. A qualitative data analysis was applied to 88 hours of data collected from video observation of 8 teachers and 33 children during the play using zoom software program. The university’s human research ethic committee guides the ethical code of conduct. Parents were asked to talk to their children and discussed their participation in this research. All children and teachers who gave their consent were observed. Pseudonyms were used and any potentially identifying information was masked. It can be seen that teachers created a collective imaginary play using different stories and together with children developed various imaginary situations. Motivating conditions is created through the imaginary situations in Playworld supporting the emergence of new motives for children to participate in the activity and to learn different scientific concepts, namely force, speed and animal anatomy. This innovative project challenges the teachers to reconceptualise the understanding and the implementation of play and offers potential implication in children’s learning, especially during the online learning due to the pandemic.

play pedagogy, children’s learning, early childhood education, teacher, playworld

This application discusses a completed piece of research.
**B4**  
**RHYTHM, PACE AND ROUTINE IN ECEC SETTINGS**  
*Chair: Kristin Dýrfjord, University of Akureyri, Iceland*

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**Mealtimes in the spirit of slow pedagogy**  
Kristin Dýrfjord (1), Gudrun Alda Hardardottir (2); (1) University of Akureyri, Iceland (2) Emeritus, Iceland

Research interest is growing in the relationship between slow pedagogy in preschools (Clark, 2023), mealtimes and children's empowerment and democracy (Paterson, 2022); however, this manner of conducting mealtimes is poorly researched. This research is about such mealtimes. A child empowers herself since no one can empower another; however, it is possible to promote the empowerment of children by creating the conditions and supporting a (democratic) environment (Tengqvist, 2007; Övrelid, 2007)

Theoretical background relates to theories on children's empowerment and democracy (Harðardóttir, 2014). Participants' observations were applied to provide insight into the world of children and increase adults' understanding of their lives and acts during mealtimes. Materials were gathered in one preschool from 2012-2019, primarily videos and analysed based on the researcher's framework connected to democracy and empowerment. As this was ongoing practitioner research for several years, documentation was part of children's daily lives, and they could, for example, choose not to be filmed. When children started, preschool parents gave informed consent to gather and use pedagogical documentation data. The findings indicate that slow pedagogy mealtimes supported: a) Friendship, children's joy and privacy. b) A platform for free dialogue between children opportunity to play with the language. Making jokes about the food or deciding it was something else (eating fish and pretending it was pizza). c) Children's empowerment and independence. These findings can be used to discuss how to make children's mealtimes more in the spirit of slow pedagogy, which supports empowerment and democracy.

*slow pedagogy, empowerment, democracy, mealtimes, friendship*

This application discusses a completed piece of research.

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**Infants’ imitation of acts of caring: Curiosity at play**  
Vanessa Neves (1) and Larissa Monique Lary (2); (1) Federal University of Minas Gerais (UFMG), (2) Universidade Estadual do Sudoeste da Bahia (UESB), Brazil

This study examines infants’ imitation of acts of caring in a Brazilian Early Childhood Education Centre (ECEC). Research has focused on imitation as an act that implies an understanding of other people’s intentions and as a way of learning (Tomasello 2003) and sharing meanings together (Howe et al. 2017). This study is based on: (i) imitation and its role in children’s development (Vygotsky 1987); (ii) curiosity understood as an affect (Spinoza 2008) that drives children’s ways of participating; and (iii) caring that involves stepping out of one’s own personal frame of reference into the other’s (Katz et al. 2020). Based on Cultural-historical Psychology and Ethnography in Education, we videotaped the daily life of a group of infants and toddlers. Through a microgenetic approach, we analyzed one event in which infants imitate adults’ acts of caring. Informed consent was obtained and participants were given the opportunity to withdraw from the project at any stage. When researchers felt that children or teachers were uncomfortable, they stopped videorecording, showed video extracts to participants, and talked about the research’s goals. In this event, an infant sings a nursery rhyme and gently rocks a baby doll. His teacher imitates his movements and, moved by curiosity, other infants join in and imitate movements related to lull the dolls to sleep. These acts of caring are related to infants’ experiences in and out of the ECEC. These findings suggest the relevance of creating a routine that values caring as an ethic of working with infants and toddlers.

*imitation, infants, care, ethnography in education, cultural-historical psychology*

This application discusses a completed piece of research.

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**Using rhythmanalysis to explore children’s everyday lives in England and Greece**  
Olga Fotakopoulou and Jane O’Connor, Birmingham City University, United Kingdom
This paper addresses the methodological challenge of capturing and comparing children’s experiences of everyday life by using a novel rhythmanalysis approach. We were interested in learning in what ways were the rhythms of the children’s days connected to wider social, environmental and cultural factors. Rhythmanalysis offers a way to conceptualise time and space together and to explore the linear (day to day) and cyclical (recurring) rhythms which inform all aspects of human and non-human experience (Lyon, 2019). This paper presents and evaluates an innovative approach, rhythmanalysis, which is seen as a fruitful technique for uncovering otherwise unseen ways in which our social and material worlds are experienced rhythmically in time and space. The collection forms were specially designed to incorporate and reflect the theoretical approach of rhythmanalysis (Lefebvre, 2004). We explored the experiences of sixteen children (up to the age of 8) and their siblings in England and Greece during the 2020 global lockdown. Ethical approval was gained by the University Research Ethics Committee and parents gave their informed consent and children their assent for their participation in the project following the ethical principles of BPS. The data collected indicates that the children’s lives were both disrupted and synchronised during this period, and highlights how their individual experiences were interconnected in time and space by shared rhythms which underpinned the patterns of their day. The proposed paper highlights the utility of the specially designed rhythmanalysis data collection tool and analytical approach for future comparative international studies of children’s everyday lives.

rhythmanalysis, childhood, synchronisation and disruption in the daily rhythms, global lockdown during the pandemic, innovative methodologies for working with children

This application discusses a completed piece of research.

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B5

CHILDREN’S VOICES IN THEIR WORLDS

Chair: Clionagh Boyle, Liverpool Hope University, United Kingdom

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Early childhood teachers as researchers in the classroom. Rescuing children's voices during the pandemic.

Elena González-Alfaya, Rosario Mérida Serrano, María de los Ángeles Olivares, Miguel Muñoz Moya and Julia Carrillo, University of Córdoba, Spain

This contribution presents children’s views on their conception of the quality of teaching in ECEC. We consider children's views as expert voices for improving the quality of teaching. We want to respect their right to participate in their own educational process by including their proposals to ensure quality ECEC and well-being (Dockett & Perry, 2004). To this end, we asked them what skills, competences and attitudes their favourite teachers might have (Rodriguez-Carrillo et al., 2020). Although we wanted to have face-to-face contact with the children, this was not possible because the effects of the pandemic did not allow us to access the classroom and conduct a qualitative research. To solve this problem we contacted our colleagues in the Early Childhood Education Network and agreed on an alternative way of obtaining the information, creating new research skills. The analysis of the drawings produced by the application of the ‘drawing-elicitation self-driven interview’ strategy was done in collaboration with the children, allowing for a free dialogue about the act of teaching. First, children’s competence was recognized. Second, children were informed in ways that made sense to them. Finally, children’s consent was sought throughout the entire data-collection-and-production process. The most relevant findings are: (1) children’s right to have their voice actively heard is highlighted, and it is revealed how children can identify teachers who are authentic listeners; and (2) this form of research with three voices -children, teachers and researchers- offers great benefits for professional development and provides a democratic way of researching ECEC.

children’s rights, qualitative research, children’s voices, drawing-interview, professional development

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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Reflections on the interstices of young children’s engagement in Liverpool’s UNICEF Child Friendly City

Clionagh Boyle and Anna Jackson Ready, Liverpool Hope University, United Kingdom

The focus of the research was to develop a locality informed multimodal toolkit to explore young children's perspectives on their neighbourhood, community and city and pilot this in five children’s centres in Liverpool. Artefacts and documentation of this process
were analysed to better understand young children's perspectives and to both challenge and inform the approach to Liverpool’s UNICEF Child Friendly City Action Plan. The research was situated in scholarship such as that of Alderson (1993, 2017) which emphasises young children's agency, connections between interpretations and implementation of rights, between universal principles and local understandings of these. Theoretical framework builds from Spyriou (2011) and challenges an individualized perspective- voices are situated in the discursive fields of power which produce them. Children’s voices are seen as multi-dimensional, relationally interconnected and interdependent with their social, material, temporal and spatial contexts (Street, 2022). The study is located in a postfoundational paradigm (Moss, 2019) recognising young children’s knowledges as marginalised by hegemonic discourse eg on urban planning. Multimodal approaches illuminate ‘the unrecognized, unacknowledged or unsayable stories children hold’ (Leitch, 2008) Ethical approval was obtained through Liverpool Hope Research Ethics Committee and consistent with EECERA 2014 guidelines. Findings were that we may learn more about young children’s lives from the interstices, the silences, the subversions, the off piste, the censored, the exits than what counts in the adult world as ‘participation’. Through a framework of intersectional childhoods, we can see how race, age, gender, sexuality, class and disability shape the ways children encounter their social worlds.

*multimodal, voice, rights, intersectionality, child friendly city*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Voices of children in the city**

Kaat Verhaeghe and Geert De Raedemaeker, Erasmus Brussels University of Applied Sciences and Arts, Belgium

This research captures the voices of (young) children in Brussels neighborhoods to improve their participation in the construction of a common world. Children’s narratives will be the starting point for intergenerational encounters to re-imagine the world. Starting from the sociology of childhood, every child is seen as an ‘Other’ and equal social actor that constructs childhood and influences society (Tisdaal & Punch, 2012; McGill, 2019). In the vision of Hannah Arendt (1994/1958) education is an intergenerational process in which children and adults try to live together. Natality refers to the capacity of the child to bring something new into the world. Inspired by critical pedagogy and the art-based paradigm, this multimodal participatory research with children uses photo-voice and art-informed methods to uncover invisible stories. The research shows a commitment to children’s rights, the role of relationships, and the need for researcher reflexivity in advancing ethical research (ERIC approach). Approved by ethical commission. Multimodal participatory research may enrich our understandings of children’s encounters, experiences and engagement in public life and how children co-construct childhood. Photo-voice and Art-informed methods challenge the limitations of conventional language-oriented research methods to overcome power imbalances. The research wants to contribute to the implementation of the Right of the Child to express views freely in matters affecting the child and giving these views due weight. It hopes to transform oppressive institutions or social relationships (discourse) and make adults aware of how their image of child influences the space for children to be and to belong.

*children’s rights, intergenerational relations, art-informed methodologies, image of child, sociology of childhood*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**B6**

**DIGITAL PEDAGOGUES CONCEPTS AND METHODS**

Chair: Dean McDonnell, Institute of Technology, Carlow, Ireland

Adapting SELFIEforTEACHERS self-reflection tool to support professional development of (ECEC) professionals

Georgios Kapsalis (1), Stavroula Kontovourki (2), Tharrenos Bratitsis (3), Anastasia Economou (1); (1) European Commission, Joint Research Centre, Spain, (2) University of Cyprus, Cyprus, (3) University of Western Macedonia, Greece

This paper describes the process of adapting SELFIEforTEACHERS (SfT) self-reflection tool to the needs of Early Childhood Education and Care professionals (ECEC) and focuses on their input on its relevance, clarity and semantics. Educators’ digital competence is key to the European Commission (DEAP 2021-2027), focussing on their role in the use of digital technologies for teaching and learning.
Based on the DigCompEdu framework (Redecker, 2017), SfT supports educational policy for training and staff professionalism, promoting reflection and collaboration (European Commission, 2021). It comprises six areas of competences with a six-level progression model and provides personalized feedback and suggestions to level up. Experts adapted SfT to ECEC (Autumn 2022) prioritising young children’s relation to digital technologies, child-centered, active, creative learning and increased parents’ involvement. Following an interpretivist/constructivist research paradigm (Kivunja & Kuyini, 2017), ECEC professionals will provide feedback on the ECEC version of SfT during May 2023 and data from semi-structured focus group discussions will be analysed qualitatively (June-July 2023). Participants will be informed about the study aims and provided with consent forms, describing personal data handling. The study will discuss how the SfT ECEC version is perceived and how it can support professionals’ digital competence development, providing suggestions for improvement. The outcomes will guide the next steps for the tool adaptation. The final-validated version of the tool will shape educational policy on ECEC training-CPD, support practitioners’ professional learning and foster children’s development in the digital era.

digital competence, self-reflection, professional learning, policy & practice implications, professional development

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Practicalities and methodologies of using technology: The role of settings and contexts
Dean McDonnell (1) and Sylwia O’Rourke (2); (1) Institute of Technology, Carlow, (2) South East Technological University (SETU), Ireland

Technologies used in early childhood settings vary considerably as a result of both microsystemic and macrosystemic factors. This research highlights the preliminary findings of a systematic review focusing on Technology use within ECE Settings; and the Role of Technology in Influencing Cognitive and Socioemotional behaviour. The educational landscape is becoming increasingly focused on the use of digital technologies and how these may be influencing the development of children, also being further driven as a result of global pandemic. Previous works (McDonnell et al., 2018) explore the myriad of methodological issues influencing digital technology used within early childhood settings. This research focused on international studies that involved the direct recruitment of children and their interaction with technologies, and not the use of measures to rate the perceptions of parents, practitioners, or organisations towards the use of technology. This research adopted a systematic review approach using set inclusion and exclusion criteria, and addressed the cognitive and socioemotional development of children within settings. There were no ethical concerns due to the nature of the design. The outcomes of this project suggest ways to enhance and understand the role of technologies used within early childhood settings. As theories of child development were inspired during a time of limited technological influence, more interdisciplinary research is needed to support the training and practice within ECEC. Implications regarding the integration of a digital technology in settings are given, in addition to suggestions for policy on the guidance and training for Early Childhood Education practitioners and researchers.

child psychology, digital technology , socioemotional development, cognitive development , research methods

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Exploring the mediating role of concepts for reasoning about integrating digital media in preschool: A potential for enabled agency for early childhood teachers
Emelie Stavholm, Pernilla Lagerlöf and Cecilia Wallerstedt, University of Gothenburg, Sweden

This study explores the mediating role of concepts in relation to integrating digital media in preschool. Research illustrates how early childhood teachers have concerns regarding the use of digital media in preschool, especially in relation to play (e.g., Schriefer et al., 2020). Through a sociocultural perspective (e.g., Vygotsky, 1978), we explored how concepts from a theoretical framework, Play-responsive early childhood education and care (PRECEC) (Pramling et al., 2019), was discussed in relation to integrating digital media in preschool. This qualitative study was conducted through four focus group conversations with an ECEC work-team, including video-recorded sequences of teachers participating in play with children. Sociocultural discourse analysis (Johnson & Mercer, 2019) was used to analyze the empirical data. Informed consent was received from both teachers and children’s caregivers. As the children did not themselves sign the document, attention was paid to if children expressed discomfort being video-recorded. The participants are represented by pseudonyms. The findings illustrate how the concepts mediate an understanding of play and teaching as responsive activities that require mutual (digital) references and how these references can be used for teaching. Findings also suggest that
teacher agency is enabled through discussing theoretical concepts. These findings have implications for professional development in terms of making it possible for teachers to appropriate relevant concepts for taking on challenges in their practice.

EC teachers, mediation, PRECEC, digital media/play, teacher agency

This application discusses a completed piece of research.

B7

CHILDREN'S PARTICIPATIVE RIGHTS

Chair: Veronika Magyar-Haas, University of Fribourg, Switzerland

Children's perspectives on involvement and their ways of participation

Veronika Magyar-Haas, University of Fribourg, Switzerland

The study is conducted in the bilingual canton of Fribourg, Switzerland. Its objective is to reconstruct how children (2–5) perceive their well-being and participation opportunities. The research is situated in the international well-being research (Fattore et al., 2019). Several studies (Kutsar et al., 2019; Lloyd/Emerson, 2017) show the connection between children's assessment of how they see their rights realised and their subjective well-being, with most quantitative studies focus on children over 8 (Children's Worlds; World Vision), few findings for those under 6 (OECD IELS; Sandseter/Seland, 2016; for qualitative research cf. Clark & Moss, 2001). The study draws on participation theory perspectives (Reichenbach, 2006) and shows what is important to children from their point of view, what they experience and think, where they feel involved and how they participate. It is embedded in a qualitative interpretive research paradigm. Guided, play-based interviews (cf. Coyne et al., 2021) were used with 16 children in the places they liked. The analysis of the transcribed data is realised with Grounded Theory (Charmaz, 2006). Besides the consent form for parents, we designed one for children framed in a story. They could stop the interview at any time and also withdraw their consent. All data was anonymised. I show in which matters children see themselves involved (planning holidays, organising leisure time) and how - and what meaning language, space and artefacts have in this. The children name their politically and educationally relevant needs, such as safe routes to the playground, self-determined spaces, frequent contact with friends etc.

participation, involvement, children's rights, child well-being, children's perspectives

This application discusses a completed piece of research.

What do children think about their participation in decision-making in preschool classrooms?

Tatiana Le-van (1), Anna Iakshina (1) and Natalya Filimonova (2); (1) Moscow City University, (2) State budget educational organization "School №547", Russia

The aim is to study children's perspective on decision-making in Russian kindergartens. Children's perspective is one of the drivers of children’s rights research and support (Kjørholt, Moss & Clark, 2005). The basis for democracy development is listening to young children and respecting their rights (Lansdown et al., 2014). Preschool teachers value participation, but often only declare it without involving young children into decision-making (Sandberg, Eriksson, 2010; Brostrom et al., 2015; Church, Bateman, 2019). Children are experts on their lives, and adults need to learn the ways to understand children’s perspective (Norozi & Moen, 2016; Sheridan, Pramling-Samuelsson, 2001). We consider decision-making as a main criterion of participation (Lansdown et al., 2014). Theoretical framework is Vygotskian theory and “research with children” (Kellett 2010). Interpretative paradigm, interview with children, commenting on pictures, structured observation in the classrooms with "Play Environmental Rating Scale" (Shiyan et al., 2023) were used. The sample includes 165 preschoolers (19 classrooms). According to EECERA ethical code, informed consent was gained from children and their parents, children could withdraw at any time. The interviewers ensured there was no imbalance that might have a negative effect on children’s lives. Children’s perspectives on decision-making differ: the majority consider decision-making as think/do some alternative task or implement own idea. Only 5.3% recognize they can decide in the classroom, mostly in free play. Programs don't give children experience of influence on what happens. Our study might impact the European framework of investigation in children’s perspective on participation (Sheridan, Pramling-Samuelsson, 2001; Correia et al., 2019).
Pedagogical constructions of young children's participative rights across initial teacher education and professional learning in Wales
Jennifer Clement (1), Jacky Tyrie (2), Louisa Roberts (3), Alison Murphy (4), Jane Williams (2), Jane Waters-Davies (4) and Sarah Chicken (3); (1) Cardiff Metropolitan University, (2) Swansea University, (3) University of the West of England (UWE) Bristol, (4) University of Wales Trinity Saint David, United Kingdom

This paper explores how Initial Teacher Education (ITE) programmes and wider Professional Learning (PL), support the Welsh Government’s vision for participatory pedagogies for young children within early education. This research sits within a wider ESRC-funded project, attending to the challenge of transitioning young children’s participative rights into educational practice. Whilst there is a commitment to children’s rights in devolved law and policy in Wales (Williams, 2022) teacher knowledge around participatory pedagogies is varied and can reflect ‘restricted’ approaches to children’s enactment of rights. (Murphy et al. 2022). This paper evaluates the planned teaching of young children’s participative rights across ITE and PL using Tibbet’s (2002; 2017) three models of Human Rights Education (HRE) (Values and Awareness, Accountability and Activism) as an initial point of reference. Conducted within an interpretivist research paradigm (Lincoln, 2010), this paper draws on qualitative questionnaire data from both ITE and PL providers across Wales. All participants gave voluntary, informed consent before undertaking the questionnaire and all data was anonymous at the point of collection. Whilst both ITE and PL programmes offered insight into young children’s participative rights, this varied across institutions and organisations. Moving forward the implications for early childhood educators will be discussed as both ITE and PL programmes provide an important bridge between policy rhetoric and educational practice.

Process drama for children’s play and learning
Miriam Wiik, The Arctic University of Norway, Norway

The aim of this study is to research how a kindergarten teacher can facilitate a process drama with children to develop their language skills. The learning occurs through imagination and dialogue, where the children participate bodily, verbally and emotionally. The study builds on previous studies based on process drama, children and learning (Heggstad, 2012; Rønningen, 2015). The study draws on sociocultural perspectives (Bahktin, 1981, 1986; Dysthe, 2012). Theoretical aspects also build on ways children develop language (Høigård, 2019; Valvatne & Sandvik, 2007) and children’s play (Fjørtoft, 2020; Lindqvist, 1997). A qualitative methodology was employed through action research when designing and developing a process drama for children aged 4-6 and their kindergarten teachers. The study is guided by strict confidence and anonymity and complies with ECCERA ethical codes. Ethical standards were assured through written informed consent by parents and personnel, and oral consent from participating children. The children and their parents were given an opportunity to withdraw from the study at any point. The study suggests that a process drama can be applied in a kindergarten context for children to develop their language skills in a dialogical perspective where body,
verbal language, imagination and emotions are activated. The findings suggest new ways for the kindergarten teacher to apply process drama as a way of active learning and developing children’s language skills.

**process drama, language development, play and learning, dialogue, imagination**

This application discusses a completed piece of research.

**The power of creativity - exploring kindergarten staff’s theatre performance**

Anne Eriksen (1), Espen Rognli Olsvik (2), Sofie Ryan (3); (1) UiT The Arctic University of Norway, (2) Ysterhagen Barnehage, Røros, (3) Strandkanten FUS Barnehage, Tromsø, Norway

The research aims are to discover if and how a theater performance project where the employees in kindergarten performed a scene from a play about Santa Claus and The Powder Witch every day throughout December month, influenced the individual staff members’ well being, the working atmosphere and the children’s play. Previous research has shown the importance of adults able to perform music for children in kindergarten (Schei, T.B. 2019.) and that employees own artistic practice influence children’s artistic expressions and play (Møen, I.I. and Thoresen, E. (ed.) 2019.) The theoretical framework draws upon theories on improvisation in drama and theater (Johnstone, K. 1987.) and theories of play (Lindqvist, G. 1997.) This qualitative study is a single case study, and has an auto ethnographic approach (Sparkes, 2002) Data were collected via participatory observations and semi-structured interviews, and analysed by content analysis and organised in three main categories. All participants in the theater project agreed to participate. The consent was obtained orally by the educational manager in the kindergarten. Descriptions and interviews only identify the researchers and authors, and all names of persons in the article have been replaced with fictitious names to ensure anonymity. The project was perceived as self developing for the employees and had a positive impact on the working atmosphere, and inspired the children’s play and the adults’ participation in the children’s play. These findings suggest that kindergarten employee’s creative activities are important both for kindergarten staff and the children.

**improvisation, theater, spontaneity, kindergarten staff, children’s play**

This application discusses a completed piece of research.

**Digital and analogue - Children’s creativity in practice**

Torstein Unstad, UiT - The Arctic University of Norway, Norway

The aim of this chapter was to use children’s interests, both digital through use of Minecraft, and analogue through the use of Lego and drawings, to create a better social environment in the group. The chapter draws on inspiration on the work of Arnot, et. al. (2017) where they discuss creative and dramatic play with technologies. As well as Resnick’s (2002, 2007) research on the use of creative thinking and creations to promote play and learning in early childhood. The theoretical background is based on a sociocultural approach to connectivity and interactions between peers in early childhood (Vygotsky, 1978) as well as children’s value as beings in their own right (Bae, 2007) to creating and sustaining peer-relationships. The methodology used is based on action research (Furu, Lund and Tiller, 2007) where observation and documentation through children’s creations and stories create the canopy of the chapter. The project was part of a practical setting, no data was collected from or about individual children, but all children and parents were informed and approved their participation. Using Minecraft and Lego as a means for a child without weak Norwegian language-skills to be part of a social setting and play. During the project the child became a valued member of the group and an "expert" that was often called upon to help. Digital tools create opportunities in early childhood, especially when used as part of a larger project with analogue components.

**children’s interests, digital technology, creativity, social interactions, play**

This application discusses a completed piece of research.

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**B9**

**CHILD IMAGE, PARTICIPATION AND SAFETY**

**Chair:** Susanna Kinnunen, University of Oulu, Finland
What does the early years space say about the image held of the child?
Fatemeh Sadeghi, University of Edinburgh, United Kingdom

This study explored how children used ECEC spaces in ways that are meaning to them. Additionally, it explored what makes ECEC spaces participatory. Finally, it was concerned with how the image of the child influences ECEC spaces. Participatory pedagogy aims to promote the ideals of equity, equality and co-agency with the aim of modelling this effectively within our classrooms so that it reflects and spreads across the school community and wider society (McNair, et al, 2022; Tisdall, 2017). The study was underpinned by participatory pedagogy, the image of the child and theories on learning environment (Formosinho, 2017; Biesta, 2017; Florin & Linklater, 2010). This study will draw on qualitative, narrative research benefitting from ethnographic tools for data analysis. Ethical approval was received from Moray House School of Education, e.g., beneficence, nonmaleficence, autonomy, and justice, will underpinned. Furthermore, informed consent, truth-telling, and confidentiality and the principle of autonomy was applied throughout the research. The image of the child is socially situated, can impact learning environments, choice of materials and the adaptations of participant pedagogy. Being conscious and reflective /reflexive about the impact of culture and notions of the image of the child, enables the researcher to constantly question their views, analyses, and understandings of the data collected in early years settings. Understanding the relationships between the image of the child, pedagogical practices, culture and early childhood education spaces should inform practice and policy-making decisions.

image of the child, early childhood education spaces, open-ended materials, participatory pedagogy, agency

This application discusses a completed piece of research.

Children’s agency in negotiating safety and routines in preschool
Susanna Kinnunen and Maria Peltola, University of Oulu, Finland

In this study, we explore children’s agency in negotiating safety and routines in preschool. We ask what kind of negotiations emerge between children’s and adults’ actions and expectations concerning safety and routines. Research has shown that routines are an essential part of producing safety in preschool. Less is known of children’s agency in this process (Fatigante, 2022; Gehret et al., 2021). Based on theories of everyday life (Holzkamp, 2013; Dreier, 2021) and childhood studies (Alderson & Yoshida, 2016; Greene & Nixon, 2020), we understand agency as maintaining and changing the conditions of everyday life (Peltola, 2022). We draw from critical and narrative ethnographic approach, applying participatory observation and art-based methods for listening children’s stories at home and preschool (Pink, 2021; Warren, 2021). The material was analysed through holistic narrative method (Lieblich, 2014). We follow the situated ethical considerations of power relations (Kousholt & Juhl, 2021), including children’s informed consent and continuous sensitivity to children’s well-being (Kinnunen, 2015). Our preliminary results show that children challenge the established routines through actively refusing to perform as told or modify them by acting within the routines other way than guided or asked. Also, children negotiate and order their own safety routines inside the common routines. Yet, we found that children also maintain certain parts of the common routines for ensuring their safety. The study offers alternative views for reassessing and (co)creating the daily routines and safety in preschool and recalls the importance of listening to children’s initiatives and negotiations within routines.

children’s agency, childhood studies, everyday life, preschool routines, safety

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Children’s experiences of participation in different activities in Norwegian early childhood and care institutions
Kathrine Bjørgen and Anne Holla Sivertsen, Queen Maud University College, Norway

The aim of this study was to find out how the children and practitioners themselves experience participation in daily activities and environments. The concept of participation is found in the UN’s Convention of the Rights of the Child (United Nations 1989). The Norwegian Framework Plan for Kindergartens states that all children shall have the opportunity to participate in both planning and assessing activities in their ECEC institution. Shier’s (2001) model of participation and co-determination. Eide, Os and Samuelsson (2012) understand participation in the community and at an individual level. Bae (2010) considers participation through playful actions. Social constructivist perspective. Qualitative semi-structured interviews. Totally 16 five years old children from two randomly selected kindergartens in central Norway. Thematic analysis was used. This study was approved by the Norwegian Centre for Research Data (NSD). All data were anonymized, and audio recordings and all personal identifiable information will be deleted by the end of the project period, in accordance with the guidelines of the NSD. The children reported more freedom to make
suggestions, to be listened to and supported more actively in expressing their views in outdoor activities than in physical play indoors and in circle time. The findings conclude that educationally planned and unplanned activity, free play and individual differences among children form the basis of possibilities and limitations for children’s participation. The staff need to discuss a common understanding of what is the “best interest of the child” in different environments in ECEC institutions.

**ECEC institutions, participation, different environment and activities, five years old, plan and unplanned activities**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**B10**

**MUSIC ART AND CREATIVITY AS BROADER APPROACHES TO CHILD DEVELOPMENT**

Chair: Helle Hovgaard Jørgensen, UCL Business Academy and University of Applied Sciences, Denmark

Promote participation and vision development with young children through education for sustainable development (ESD) and artistic practices

Julia Niederhauser, FHNW University of Applied Sciences and Arts Northwestern Switzerland, Switzerland

The study investigates to what extent the inclusion of artistic practices in teaching can contribute to the guiding goal of ESD. Through ESD, students should be enabled to help shape future social developments and thus become capable of making judgments in the context of SD (Künzli David & Bertschy, 2018). Artistic fields are considered to have a high transformative potential for dealing with issues in the context of SD (Deutscher Kulturrat, 2019; UNESCO, 2010). With their means of irritation or alienation, they can help to stimulate innovative processes of change. The students are understood as competent actors in the sense of relational agency (Esser, 2014). The presentation focuses on a lesson implementation with reference to the school garden with Swiss students (ages 4-7) and examines how curiosity can be stimulated and agency promoted. The qualitative study is based on participant observations (Scholz, 2012). These were recorded in writing, partially videotaped, and evaluated. Students, parents, and teachers were informed about the project and informed consent was obtained. The names of all participants were pseudonymized. Participants had the option to withdraw from the study at any time. The extent to which students can participate in the processes of negotiation and deliberation around the school garden and how they can be encouraged to develop their vision by incorporating artistic elements will be discussed. The results can contribute to the further development of (ESD) teaching and show how participation and agency can be more strongly anchored in teaching with young children.

*Education for Sustainable Development (ESD), artistic practices, participation, agency, early childhood education*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Inclusive education through music in ECEC institutions**

Morten Saether, Queen Maud University College, Norway

The aim of my research is to investigate how music can contribute to achieve an inclusive early childhood and care (ECEC) institution. Previous research with relevans for my project is Scott Shulers research (2011). He discuss in his classroom action research that teacher may make music programs in school to encouraging for more inclusion of students with different musical prerequisites. Clipper (2021) finds in her research that creating music is an important part of any child’s music education and also with students with special needs. Theoretical perspectives in this research are concentrated about understanding of communicative musicality (Mallock & Trevarthen, 2009), the phenomenon music (Small, 1987) and the concept of inclusion (Qvortrup, 2012). The research is within the hermeneutic paradigm and I choose a qualitative methodology. I carried out a qualitative research interview with an open interview guide with quite few questions, which could help the informant to elaborate on specific themes. The conduct of the interview was an intersubjective situation as the reflections represent the person’s daily life and experiences (Kvale & Brinkmann, 2009; Tjora, 2012). The interview was anonymized during the transcription. The whole manuscript was read by the informant, described as member-check, thereby rendering greater transparency to text and results (Savin-BADEB & Major, 2012). The preliminary findings which is important for creating an inclusive music pedagogy is: prerequisites for inclusion, music activity in
both individual and groups and creating (composing) music. My research will have an impact for Early Childhood Education teacher training.

early childhood education inclusion, special needs, ic, music pedagogy, inclusion, creating mus, special needs

This application discusses a completed piece of research.

A taste of art: Awakening curiosity and exploring cultural diversity in Wales with early childhood undergraduate students
Gisselle Tur Porres (1) and Prith Blant (2); (1) Swansea University, (2) The Creative Thinking Company, United Kingdom

This presentation introduces a ‘teaching-led research’ experience (Harland, 2016), to explore diversity through arts in a Professional Reflective Practice module for Early Childhood undergraduate students in Wales. It discusses students’ perspectives on integrating creative approaches in their education/research practice and builds capacity to connect with diverse cultural expressions. Pedagogic research has shown that artistic interventions enhance learning experiences, exploration and participation of children, educators and communities (Vecchi, 2013). Drawing on the Reggio Emilian philosophy, this experience recognises that young children do not necessarily rely on verbal languages to co-construct meaning, accordingly, adults need to enable multiple voices in making sense of the world (Edwards, Gandini and Forman, 2011). This practice invited undergraduate students to work with a guest artist and module convenor to taste how children’s experience arts; introduce ('hidden') women in history (in Wales); experience with painting, and work on self-portraits techniques. This allowed students to develop their own arts and reflect on arts as a way of communicating with young children.

Participants assented to take pictures of their work and creations. Anonymity of their reflections were protected. Analysis of the data suggests themes around: cultivating creativity to work with children, reflecting on stories of 'hidden' women from different ethnic backgrounds in Wales, and learning to value own origins and cultural diversity. Initial assessment of teaching-led research shows the importance of building capacity with Early Childhood undergraduate students and integrate creative/innovative approaches to ensure pedagogic provision and research practice that support practitioners'/children’s curiosity and participation.

art, cultural diversity, early childhood students, teaching-led research, Wales

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

B11
PLANNING WITH AND LISTENING TO CHILDREN
Chair: Josefin Rostedt, Jönköping University, Sweden

Young children’s voices.. Do we really listen to them?
Cansu Aytac, University of Strathclyde, United Kingdom

This research focuses on voices of young children and early years practitioners on listening opportunities in nursery settings in Scotland. There has been a growing interest in listening to children’s voices in all matters that affected them (Arnott & Wall, 2022; Cassidy et al., 2022; Clark, 2017) although it is argued that more listening does not always mean more hearing (Komulainen, 2007).

This research draws upon understandings the new sociology of childhood (James & Prout, 2015) and is based on Lundy’s (2007) model for participation. This study adopts a qualitative research design in order to understand how participants perceive and interpret their everyday lives (Gray, 2014; Greene & Hill, 2005). In acknowledging the Mosaic approach (Clark & Moss, 2017), observations, and semi-structured interviews were used for data collection, in addition to photographs and drawings. By using purposive sampling, the study was carried out with early years practitioners and 3-5-year-old children attending nursery settings. Thematic analysis was used to analyse the collected data (Braun & Clarke, 2022). Informed consent forms were obtained from all participants and stakeholders. Participant children’s ongoing assents were also sought during the research. Pseudonyms that were chosen by participants themselves were used in this research. Emerging findings indicate that young children have a clear understanding of what it means to be listened to in the nursery settings. These findings offer ways of listening to young children and implications for how a listening culture might be developed in nursery settings.
children's voices, listening to young children, children's participation, children’s rights, early years practitioners’s voices

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

What I really think about sitting straight, golden time and reward charts: Gathering 4-year-olds views on behaviourist pedagogy in reception
Dawn Jones, Zeta Williams-Brown and Selena Hall, University of Wolverhampton, United Kingdom

The research seeks to understand the views of young children upon the behaviourist strategies used within UK education, specifically reception year. The constant requirements to conform and adapt their behaviour within their reception year is cause for concern. Children are worried about how their behaviour is perceived and thus, impacts upon their “social belonging” (Wilders & Levy, 2020, p.391). The theoretical framework for this research draws upon the ‘pedagogy of listening’ which is embedded within the Reggio Emilia approach (Rinaldi, 2006) while also embodying Clark’s (2020) ‘slow pedagogy’ specifically in relation to slow listening with and though the mosaic approach. The research methodology utilises the multi-method mosaic approach, along with a qualitative interpretation of 50 young children’s personal and collective narratives. Ethics is ongoing and approval from the ethics committee was sought throughout the project. Further daily assent was sought from the children, whose parents identified that they would opt into the research. Young children will be active participants their voice, ideas, opinions will be fundamental throughout the research project. Data collection is due to be completed in July 2022. Research findings will enable a greater understanding of the effectiveness of behaviourist approaches and any indicators of detrimental or positive consequences upon behaviour or self-identity of reception children. The collective narratives of the child(ren) are the focal point for interpretation and supports the research team to be informed of the child’s thoughts and viewpoints on ‘what it is like to be in this space’ (Clarke, 2017, P.10).

behaviourist pedagogy, reception, Mosaic approach, child’s voice, slow pedagogy

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Traces of children’s agency in preschool; teacher’s out-of-classroom planning work
Josefin Rostedt, Jönköpings University, Sweden

This ethnographic case study aims to explore how preschool teacher in Swedish preschools develop their mathematics teaching during ordinary teaching planning times. Out-of-classroom planning work is part of school’s infrastructure and inner organization (Nordgren et.al., 2021). As such, it is governed by standards affecting teaching planning (Grundén, 2020). These aspects might influence both planning work and preschool teacher’s agency which in turn might have impact on how children encounter a subject such as mathematics. Together these arguments make this study about teaching planning significant. The study is building on the critical constructive Didaktik (Klafki, 1983, 2002) blended with teacher agency as a co-concept (Priestley et.al., 2015). The study is positioned in the interpretative qualitative paradigm and uses an ethnographic approach (Hammersley & Atkinson, 2019) limited to preschool teachers recurrent collegial out-of-classroom planning work (cf. Jeffrey & Troman, 2004). Data has been gathered through participant observations and interviews. The preschool staff was informed about the project and its ethical considerations, for example replacing names and places with pseudonyms. When given consent the staff agreed to participate and openly shared their thoughts and ideas. They also knew that they could withdraw their consent at any time during the study. Findings reveal that preschool teachers adapt children’s ideas in their teaching planning. Furthermore, it reveals both children and adult-centered pedagogy, and an infrastructure affecting preschool teacher’s agency. Implications for practice is to discuss Didaktik and teachers agency during time of teaching planning, also how a subject as mathematics is planned and orchestrated.

preschool teacher, teaching planning, critital constructive didaktik, agency, mathematics

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Sustainability in Early Childhood Education SIG Self-organised Symposium

OPPORTUNITIES FOR CHILDREN’S LEARNING, PARTICIPATION AND AGENCY WITHIN NATURE AND THE NON-HUMAN WORLD.
Chair: Kassahun Weldemariam, Gothenburg University, Sweden

The field of early childhood education for sustainability (ECEfS) has for long been dominated by anthropocentric world view. More recently, post-humanist and new materialist thinkers have highlighted the limits of such orthodoxic assumption. The presentations in this symposium offer examples of engagement with the non-human others and its potential to learn for sustainability in ECE. The first presentation highlights how utilizing children’s embodied and material relations with nature enhances their curiosity in science and sustainability education. The second presentation addresses the potential for outdoor education to take a post-anthropocentric approach by honoring and learning from the land. For such ontological shift to take place, teachers play a very critical role by creating the necessary pedagogical and didactical conditions that allow to learn with the non-human others. In that, the third presentation focuses on teachers integral role in facilitating children’s learning from their relations and encounter with other species.

Learning outside together: Learning from the land
Enid Elliot (1), Sheila Grieve (2) and Leona Antoine (3); (1) Camosun College, 2) Vancouver Island University, (3) British Columbia Aboriginal Child Care Society, Canada

Our research focuses on the efficacy of an online course in British Columbia partnership to encourage educators to take children outside. How might an online course encourage educators to go outside? Having developed the first Nature Kindergarten program in British Columbia (e.g., Elliot, 2019), Elliot has experienced the power of relationships with nature on children. Grieve has worked with children growing and maintaining gardens and exploring the use of traditional plants. Elliot, E. (2019). There are relationships beyond the classroom: A Nature Kindergarten. In S. Jagger (Ed.), Early Years Education and Care in Canada (pp. 259-274). Toronto: Canadian Scholars. During the online course educators explore issues of sustainability, along with practical issues of health and safety and gratitude for place. We used a “two-eyed seeing” approach to the course to include both an Indigenous approach to the living breathing world as well as a Western approach for seeing the natural world (Bartlett, 2012).

Braiding together an Indigenous approach and a Western approach to being on, in and with the land both in the development process of the project and in the course itself we also worked to use an ethic of care. Educators’ leadership skills increased and their job satisfaction improved. Some participants experienced a re-connection to their culture; there was cultural sharing; educators new to Canada remembered their own connections to their homeland while developing new connections to British Columbia. Educators are called by the Truth and Reconciliation Commission to rectify damage done by colonization.

early childhood educators, two eyed seeing, learning from the land, narrative, online learning

This application discusses a completed piece of research.

‘He’s coming to say hello to you!’ Does teacher discourse impact children’s relationships with animals?
Patty Born, Hamline University, United States

At a farm-based nature preschool, which aims to deepen children’s connections to animals, I sought to identify ways in which adults influenced children’s experiences with the resident animals. The connection and contact with nature and non-human animals is thought to help children develop stewardship ethics and lead to increased pro-environmental thought and action later in life (Dopko, Capaldi & Zelinski, 2019). These opportunities offer potential pedagogical benefits (e.g. Blaise, Hamm, & Iorio; 2017), and they urge practitioners to (re) consider what pedagogies of care might look like, and how such pedagogical approaches might be grounded in an ethic of care that extends beyond the human (de la Bellacasa, 2017). Influenced by multispecies ethnography (Hamilton & Taylor 2017), and a common worlds approach (Taylor, 2013), the study involved participant observations of two preschool classes, including teachers and farm animals. Audio recordings captured teacher-child-animal interactions. A process of open coding (Saldaña, 2016) was employed to identify themes that emerged. A parental assent form was provided to all adult guardians. I was also guided by Van Patter and Blattner’s (2020) three core principles for “non-invasive, respectful research with nonhuman animal participants”. Remarks made by teachers consistently reinforced anthropocentric framing. The findings suggest that in order to
better support child-nature bonds and center our work in care for nature, we need to resist seeing animals as merely tools in service of pedagogical agendas. This study offers one approach toward noticing adult-driven discourses and poses alternative ways of supporting child-animal relations.

*child-animal relations, nature preschools, farm preschools, common worlds, teacher discourse*

This application discusses a completed piece of research.

**Children’s curiosity in nature, science, and sustainability education – Cultural values and socio-material practices**
Nanna Jørgensen Jørgensen, Birgitte Damgaard, Katrine Dahl Madsen, Katrina Busch Hasselstrom and Mia Husted, University College Copenhagen, Denmark

This paper discusses children’s curiosity in the context of nature, science, and sustainability education in Denmark. We explore children’s curiosity as a phenomenon emerging and gaining significance in specific social, cultural, and material contexts and situations. The paper takes inspiration from theoretical discussions of curiosity within the field of ECE research (Gurholt & Sanderud 2016; Menning 2018; Gobby et al. 2021; Heggen & Løvås 2021), paying particular attention to embodied and material relations (Gobby et al. 2021), social curiosity (Menning 2017), and cultural perspectives (Harju et al. 2020). The paper draws on ongoing empirical research linked to a municipal project aiming at building socially inclusive science and nature education cultures in urban Danish EC institutions. The research is based on qualitative research methods, including interviews and participant observation. The research design is dialogical in the sense that preliminary research findings are shared and discussed with project participants and project owners during the project period. Ethical guidelines imply participant anonymity and attention to children’s perspectives. We present an analysis of children’s embodied, emotional and relational engagements with non-human nature in educational activities, and of early childhood educators’ reflections on how to recognize children’s curiosity, discussing; 1) how curiosity emerges as socio-material practices involving children, adults, and nonhuman nature in educational activities, and 2) how the cultural valuing of curiosity in Nordic ECE colors educators’ relations with children and non-human nature in these educational situations. The dialogical research design, we suggest, strengthens the reflexivity of municipal project holders, hereby contributing to practice development.

*curiosity, Scandinavia, early childhood, nature and science education, social inclusion*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**B13**

COMMUNITY-BASED APPROACHES TO COMBAT EDUCATIONAL INEQUALITY AND SEGREGATION IN ECEC

Self-organised Symposium

**Chair:** Magdalena Joos, Trier University, Germany

Combating educational inequality is one of the most challenging tasks of the 21st century in European countries. Quality early education is considered crucial for this task, even though marginalized and vulnerable children are still widely at risk of reduced access to, and unequal treatment within ECEC. Not only the spaces and places of educational settings and children and families inhabit but the specific educational landscapes and geographies of education (Butler & Hamnett 2007) contribute to educational inequality through their interconnected historical/temporal, social and material dimensions (Heinrich & Million 2022). This session explores how the interplay of socio-environmental settings, educational policy and governance, but also professional practices and innovative pedagogical approaches interact with individual life courses and the production of agency. The three papers analyse how different approaches address educational inequality and the reasons for the fact that in the municipal landscapes individual interests of certain exclusive groups are still enforced.

**Kita social work as a gatekeeper for educational landscapes and potential of children's curiosity**

Andy Schieler and Marina Swat, University of Applied Sciences Koblenz, Germany
We provide scientific support for the implementation of social networks in day care centers (Kitas) applied by Kita-social-work (KiSa). The aims are to pursue how fragmented landscapes can be opened up for and with children with KiSa in order to stimulate children development. In addition to other studies (Noack 2020) we open KiSa to competent systems (Urban 2022), in order to institute enabling communities (Dahme & Wohlfahrt 2011) for children. To challenge theories about early childhood (Honig 2009, Schäfer & von der Beek 2013), agency (Emirbayer & Mische 2017) and the importance of educational-landscapes (Kessl & Reutlinger 2013, Swat & Reifenhäuser 2022) we discuss them in an explorative way. The research is designed as a collaborative-process (Patton 2010) and is based on a method-triangulation by a descriptive and qualitative evaluation (Kuckartz 2019) of all (41) carrier-representatives in Rhineland-Palatinate. The research followed the university’s ethical guideline. Participants were given the oppor-tunity to withdraw from the cooperation at any time. The main-analysis is based on publicly accessible documents. Those responsible were informed in writing about the project. Children themselves rarely appear as actors in the task profiles of KiSa. Rather, the aim is a social-space-analysis that addresses the Kita directly, not the children as a co-developer. Kita is not a room that is shielded from the outside and acts free of influences from politics and society – indeed there is an interaction. We assume that KiSa can contribute to improving equal opportunities for as many children and families in Kitas as possible.

agency, educational landscapes, explore, discover, potentiality

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Parent-run day-care centres – A question of social inequality?**
Johanna Mierendorff (1) and Nina Hogrebe (2); (1) Martin Luther University of Halle-Wittenberg, (2) University of Applied Sciences (HaW) Hamburg, Germany

Our aim is to understand the privileged demographic makeup of self-organised, parent-run day-care centres (parent initiatives) and to identify specific structures and processes fostering segregation. Segregation in the German ECEC system is pronounced (Hogrebe et al. 2021) and related to a highly diversified provider landscape (Meiner-Teutbner et al. 2016). Parent initiatives stand out nationwide with low proportions of disadvantaged children (Hogrebe et al., in press). Educational segregation is understood as the result of a complex interplay of different factors and actors at different levels (micro, meso, macro) (Mayer & Koinzer 2019). Against the background of a very tight childcare market, we focus on the providers’ role in reproducing inequalities. We follow an empirical-analytical design and combines quantitative and qualitative methodologies. Using regression analysis, we measure the impact of parent initiatives as a type provider on preschool composition while controlling other relevant factors using nationally representative data (SOEP; n = 572). Expert interviews (n = 4) with executives of parent initiatives’ umbrella associations in different local settings generate insights into exclusive structures and practices. The German Research Association’s ethical regulations are obeyed. Data are anonymized; inferences about organizations or individuals are impossible. Interviewees gave their consent to research/publication. After controlling for other relevant influencing factors, the provider type parent initiative accounts for an 8% difference in preschool composition. Interviews generate insights into the reasons for this. In the context of local governance (Menzel & Scholz 2022), there is a need to discuss subsidiarity and provider’s responsibility to provide equal access.

social inequality, segregation, acces to daycare, parent’s initiatives, ECE policies

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**‘Under one roof’ – Houses of Education as a pioneering place and practice to combat educational inequality in (early) childhood in Germany**
Magdalena Joos (1), Discussant: Peter Cloos (2), Nadja Schu (1); (1) Trier University, (2) University of Hildesheim Foundation, Germany

The research aim of our case study of The House of Education (HoE) is to explore the strengths of the community-based approach in terms of combating educational inequality and empowering children and their agency. The cooperation between daycare centres and primary schools creates new educational settings and transitional arrangements (Höke et al. 2017). Transition risks should thus be reduced (van Laere 2019). A “third space” (Bührmann & Bücker 2015) emerges that is constructed by the child actors and the professionals. Theories of educational inequality (Boudon 1974; Bourdieu 1986), the MILC-approach (multilevel, intersectional and life-course perspective; Hadjar et al. 2022) and concepts of space and place (Agniew 2011; Freytag et al. 2022) form the theoretical framework. The qualitative case study with interviews, focus groups and guided tours was analysed with Grounded Theory, Situation Analysis (Clarke 2013) and the concept of Boundary Work (Langley et al. 2019). The research ethics guidelines of the European Code
of Conduct for Research Integrity were strictly followed (voluntary and informed consent, anonymity and confidentiality, secure storage of the data). The merge of the educational settings in the HoE with its tools like mixed-age learning, all-day school, inclusion, multi-professional teams, area-related, community-based services and activities offered “under one roof” creates a specific place with a sense of belonging and identification. This practice demonstrates that through the commitment of all actors and organisational solutions, educational inequality can be reduced (e.g., school success) while still ensuring a safe place for children that strengthens their sense of belonging and agency.

*pioneering practice, educational inequality, education house, space and place, local community*

This application discusses a completed piece of research.

**B14**

**Multilingual Childhoods SIG Self-organised Symposium**

**LANGUAGE IDEOLOGIES AND RESEARCH ETHICS IN MULTILINGUAL ECEC SETTINGS**

**Chair: Gunhild Alstad, Inland Norway University of Applied Sciences, Norway**

The purpose of this symposium is to critically examine norms and ideologies that are put into play in research, and educational practices that involves multilingual children. The starting point for the discussion is that language teaching, learning and research are never neutral, but rather deeply embedded in a complex web of political and historical contexts (Apple & Christian-Smith, 1991, p. 2; Curdt-Christiansen & Weninger, 2015, p. 1). Ideologies and norms that needs to be made explicit, examined and carefully discussed.

The three papers discuss both linguistic and cultural ideologies in picture books, ethical aspects which are not covered by personal information protection and language ideologies in early childhood teacher education.

**The significance of multilingual children’s voices in research**

Marit Sundelin (1) and Anja Maria Pesch (2); (1) UiT-Norges arktiske universitet/ ILP, (2) Inland Norway University of Applied Sciences, Norway

The aim is to discuss ethical and methodological aspects of research among multilingual children. The presentation involves a discussion of a field of tension between a view on children as a vulnerable group concerning their participation in research and the claim to include children’s voices in research (Almér, 2017; Alstad, 2021). Relevant background are studies emphasizing multilingual children’s agency and strategies for language learning (Bergroth & Palviainen, 2017; Schwartz, Deeb & Hijazy, 2020) and studies exploring multilingual children’s beliefs on multilingualism (Almér, 2017), claiming the need to include their views. The study is based on methodological discussions on the role of the researcher in ethnographic research with children (Gulløv & Højlund, 2010). Different researcher`s foci might influence both the children`s understanding of the researcher and what research is (Bodén, 2021).

The presentation is based on ethnographic research projects in kindergartens. The data material includes observations of children, interviews with teachers and parents. This presentation aims at discussing ethical aspects which are not covered by personal information protection. For our research projects, informed consent was collected from all participants, and it was possible to withdraw at any time. As researchers, we choose along with the parents’ consent, which children may be relevant participants according to theoretical categories on multilingualism. However, we want to discuss how children might have different views and how their voices could be included. The discussion has implications for research practice among multilingual children in ECEC through questioning the significance of the children’s voices in research.

*multilingual children, children’s voices, research ethics, ethnography, researcher’s perspectives*

This application discusses a completed piece of research.

**Conflicting language ideologies in teacher education syllabi and textbooks**

Gunhild Alstad, Inland Norway University of Applied Sciences, Norway

The purpose of this paper is to discuss how language ideologies are in play in textbooks used in early language pedagogy courses in early childhood teacher education. Textbooks are often regarded as the cornerstone of education and are considered authoritative
and crucial resources in education (Curdt-Christiansen & Weninger, 2015). Previous studies that focus on early childhood teacher education have often focused on more general educational concepts, such as sociocultural beliefs about young children (Lee & McMullen, 2006), learning (Merzliakova et al., 2022), or professionalism (Tummons, 2014), but not particularly on language ideologies. The theoretical framework for bilingual education (García, 2009) are used. The framework makes a distinction between monoglossic and heteroglossic language ideologies. I explore how such ideologies are relevant to the Nordic ECE context with its emphasis on the child-centred approach (Wagner & Einarsdottir, 2006). Three Nordic teacher education institutions were selected for this qualitative case study. The syllabi and textbooks used in early language pedagogy courses were investigated through content analysis. The three selected institutions are anonymised. The emphasis in the analysis is on doing justice to the interpretation of the textbooks, such as using direct quotations to ensure transparency. The discussion revolves around the potential paradox that there are both strong, protective and monoglossic national language policies in the Nordic context, while linguistic diversity and heteroglossic ideologies are encouraged. Findings are useful to encourage critical multilingual teacher awareness in teacher education (García, 2017).

language ideologies, multilingualism, teacher education, textbooks, curriculum

This application discusses a completed piece of research.

(Re)thinking children’s picture books as the mirror of contemporary society
Ellinor Skaremyr, Carina Hermansson, Getahun Yacob Abraham and Margareta Lindström, University of Borås, Sweden

This presentation discusses linguistic and cultural norms reflected in picturebooks used in Swedish, Norwegian and Icelandic preschools. Earlier research exemplifies how images in children’s picturebooks contain messages about social structures (Salmson & Ivarsson, 2015). Picturebooks are analyzed through a postcolonial lens exploring how ethical and political value systems are used to assess who is regarded as inside and outside a community (Yuval-Davis, 2006). Moreover, multicultural literacy (Bishop, 1990) is used to discuss potential understandings of children’s ways of becoming through reading, reading the world, and self as texts (Masny & Waterhouse, 2012). Data consist of 40 picturebooks collected by preschool teacher students. In order to grasp not only frequency but also the palpable and concealed meanings of multilingual perspectives in the books, both quantitative and qualitative thematic analyses are carried out. Before carrying out datacollection, students and staff in preschools were informed about the study’s purpose. When critically examining representations of language and culture, to uncover silent power relations and social positioning’s, we ethically reflect on our prejudices and positioning’s in society. Findings implies that multilingualism is rarely represented and that there is a lack of diversity of languages and cultures in the analyzed picturebooks. Children’s opportunities to develop a sense of belonging in multilingual society is discussed. Implementing a postcolonial perspective to the understanding of children’s ways of becoming in Nordic preschool can contribute with knowledge about majority and minority perspectives conveyed through picturebooks read by children and add to a discussion about children’s becoming in a multilingual society.

multilingual society, picture books, postcolonial theory, early childhood education, multicultural literacy

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

B15
EXPERIENCES OF MOVEMENT IN THE OUTDOOR LEARNING ENVIRONMENT
Chair: Alicja Sadownik, Western Norway University of Applied Sciences, Norway

Cutting together(apart) the entanglements of movement-play-exploration in the rural and urban landscapes of Norwegian ECECs
Alicja Sadownik and Eivind Aadland, Western Norway University of Applied Sciences, Norway

This study aims to trace how the inseparable nexus of movement – play – exploration comes to matter in the urban and rural landscapes of Norwegian ECEC settings. The assumption of an inseparable character of movement, play, and exploration allows the researchers to come closer to the perspective of the intra-active child as vibrantly entwined with their surroundings. Thinking with a posthuman theoretical toolkit allows for the radical relationality of a moving-playing-exploring child to be captured and understood; such an achievement contributes to the co-creation of a radically relational and response-able ECEC didactics. The empirical data
The purpose of present study was to examine the intensity of physical activity in children in different play contexts using an accelerometer. Increasing the level of physical activity offers a variety of health-related benefits and promotes cognitive development in children as well (Hillman et al., 2008). Activity intensity is considered a continuum that extends from inactivity (e.g., sedentary behaviour) through slight movement to moderate-to-vigorous intensity activity, MVPA (e.g., playing tag) (Biddle, 2016). The participants in this study were 125 children (mean age 5.38 years (SD =0.59), 53 girls, 72 boys) from six child care centres in South Korea. The children wore accelerometers around their waists in three different play contexts (a teacher-guided movement activity session, indoor free play, and outdoor free play) during regular preschool hours. This study was approved by the Institution Research Ethics Committee of the authors’ university. Consent was obtained from all of the participating children’s parents, and the children were told that they had the opportunity to withdraw from any activity in the study at any time. A repeated-measures ANOVA demonstrated significant effects of the play contexts on the levels of the children’s physical activity. The children’s MVPA were highest during the teacher-led movement activity, followed by outdoor free play and indoor free play. Additional analyses showed the way different types of free play contributed to the children’s various physical activity levels from light movement to MVPA. This information helps inform interventions and policies designed to promote early active lifestyles.
This research was supported by the convergence R&D over Science and Technology Liberal Arts Program through the National Research Foundation of Korea funded by the Ministry of Science and ICT (Grant No. 2022M3C1B6081061).

physical activity, activity intensity, accelerometer, teacher-led movement activity, free play

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

B16
INTERNATIONAL APPROACHES TO OUTDOOR LEARNING FROM CHILE, IRELAND AND PORTUGAL
Chair: Pablo Rupin, O’Higgins University, Chile

Outdoor spaces and nature in Chilean kindergartens
Pablo Rupin (1) and Catherine Bouve (2); (1) O’Higgins University, Chile, (2) Sorbonne Paris Nord University, France

Our research aims to analyze the relationship with the external or natural environment in the experiences offered to children (until three years old). Psychology has shown the effects of access to nature on child development and learning, emphasizing the disorders caused by its deficit (Fjørtoft, 2001; Lerstrup & Konijnendijk, 2017). Our theoretical approach considers space a fundamental ECE curricular component (Adlerstein et al., 2016). From the geography of childhood (Carvalho et al., 2012; Lopes & Vasconcellos, 2015), this also implies reflecting on the boundaries between external and internal, accessible and forbidden spaces. The project adopts a qualitative approach (Glasser & Strauss, 2010; Kaufmann, 1996), with an empirical ethnographic work to be carried out in four Chilean kindergartens in different urban and rural contexts. The methodology includes observations, interviews, and video elicitation with children and educational teams. The consent of adults and the assent of children to participate will be requested to guarantee their protection, anonymity, and right to retraction (Bertram et al., 2016; DOI: 10.1080/1350293X.2016.1120533). We will especially delve into children’s agency and initiative in outdoor activities; the criteria for the delimitation of spaces; the arrangement and uses of resources and objects; and the definition of “risky” situations and the possibilities for children to experience them. In the context of the global climate crisis and the promotion of education for sustainable development, we seek to contribute to exploring new possibilities for ECE and identify possible inequalities in access to outdoor spaces or in the equipment needed to interact with them.

outdoors, nature, play, children's agency, audiovisual methods

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

More than a learning environment; the attributes of outdoor provision in the regulated Irish early years context
Caitriona Stokes, Tusla, Child & Family Agency, Ireland

This research aims to investigate the affordances and constraints of outdoor provision and challenges of providing or inspecting this pedagogical approach. Research has shown that outdoor play is learning ‘on the job’ (Waite, 2010) associated with opportunities for authentic child-initiated play, where children’s agency, curiosity and participation are key affordances (Brussoni et al., 2017; Sandseter et al., 2021) foundational for deep-level learning (Laevers, 2000). This research draws on Gibson’s (1979) theory of affordances for considering the utility and flexibility of the physical environment relating to the child’s own perceptions of their environment. A qualitative interpretive paradigm underpinned this research. The methodology incorporated fieldwork/ mapping outdoor areas in three early years outdoor settings, semi-structured interviews and focus groups with providers and inspectors. A staged analysis of the fieldwork preceded the thematic analysis of the interviews and focus group. Ethical approval was achieved from Tusla, (Child & Family Agency) and University College Cork, based on the fundamental research principles; to be adequately informed, to anonymity, and to be guarded against any possible harm/ distress, with due consideration of the ‘Hawthorne Effect’ (French, 1953). The findings illustrated outdoors as a learning environment for physical activity, socio-emotional wellbeing and nurturing positive learning dispositions arising from participation, agency, and curiosity as key affordances. Weather, clothing, adult-mindsets, safety/ insurance concerns and training were identified as constraints, but the absence of specific outdoor regulations was not. The research highlights that outdoor provision including risk/ challenge needs to be embraced by services, the regulator and at policy level.
outdoors, affordances, regulation, dispositions, wellbeing

This application discusses a completed piece of research.

**Adult-child interactions at creche outdoor spaces in Portugal**
Ana Sofia de Carvalho Lopes (1), Gabriela Portugal (1) and Maria Figueiredo (2); (1) University of Aveiro, (2) Escola Superior de Educação - Polytechnic Institute of Viseu, Portugal

This paper presents part of an ongoing study on dimensions of the adult role/profile that are considered important by early childhood teachers in interactions with children from 3 months to 3 years old in outdoor spaces. The adult’s role is central to children’s educational experience and an important indicator of quality. Studies in Portugal raised concerns about the adult role as a quality indicator in adult-child interactions (Barros et al., 2018; Cadima et al., 2022) mainly in indoor spaces. The quality of interactions in outdoor spaces, however, is less known (Tonge, Jones & Okely, 2018). In Portugal research has pointed to the growing relevance of being and playing outside at an early age (Bento & Portugal, 2019) but with no focus on interactions. The theoretical framework draws upon the Bioecological Model of Human Development (Bronfenbrenner & Morris, 2006), Experiential Education (Portugal & Laevers, 2018), and Attachment Theory (Ainsworth, 1989; Bowlby, 1969). This study assumes an interpretative research paradigm (Cresswell, 2014) seeking to understand the meaning that different experiences have for the participants. In the first phase, an online survey was launched. Analysis combines statistics with content analysis. Information about the study and a consent form was provided to all participants and anonymity is assured. At this time, collected data enable us to trace a profile of the use and practice developed at outdoor spaces in creche. Will be given particular attention to the adult’s role/profile in providing guidelines to early childhood educators at creche.

outdoor spaces, creche, adult-child interactions, early childhood education quality, adult's role/profile

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**B17**
**Parental involvement in evaluation and inspection of ECEC**
**Chair:** Lána Cummins, National College of Ireland, Ireland

**Parental partnership – Involvement and engagement practices in early learning and care settings**
Martina Carter, Department of Education, Ireland

To explore how and in what ways Early Learning and Care settings are involving parents as partners in learning in line with the Early Years Education Inspection (EYEI) Quality Framework 2018 to; identify what is working well, the barriers and challenges; and with specific regard to inspection process, to consider mechanisms to further support and include parents in these processes. Includes; Epstein (2001, 2009, 2011), Goodall 2013, Kambouri 2021 models which promote a partnership approach. Theoretical Framework draws upon tenets of Bronfenbrenner’s (1979) bio-ecological theory, elements of the ‘Process-Person-Context-Time (PPCT) model (1995) and concepts associated with Epstein’s overlapping spheres of influence theory (1987, 1992, 2001). A mixed-methods approach was used, the rationale being to draw from the strengths of the two approaches, quantitative and qualitative and minimize the weaknesses of adopting just one, (Cresswell, 2012). This involved: a critical review of existing Inspection reports; a parent survey and parent focus groups; semi-structured interviews with educators and inspectors. Ethical considerations included development of measures of validity, reliability and reflexivity. Consent forms, participant information sheets and procedures around anonymity and data storage were developed. Trustful individualised relationships are key to ELC setting parent partnering; parents involvement in inspection processes is central to respecting them; Important to empower parents understanding of quality early education. Findings can be used to guide educators on parent partnership practices, inform parents about quality early learning and support the development of engagement mechanisms with parents in inspection processes respecting their unique knowledge about their own children.

inspection, parent setting partnerships, early education, early years education inspection guide (eyei), promoting parents understand of quality early education
This application discusses a completed piece of research.

**How to improve the culture of participation? Educators, families, and children assess the quality of a childcare in Padova (Italy)**

Monica Gottardo and Emilia Restiglian, University of Padova, Italy

The aim is to co-construct a tool by which adults, from children's curiosity, rethink educational actions considering children's interests. The research involves educators, families, children of a childcare in Padova. Regarding the Proposal for Key Principles of a Quality Framework for Early Childhood Education and Care (EU, 2014), monitoring and evaluation are reflective processes that improve the quality of childcare by involving actors. Considering the empowerment evaluation (Fetterman, 2000), it is crucial to collaborate with educators to bring theory closer to educational practice. The theoretical framework refers to quality in a transformative sense and to participatory evaluation that clarifies the meanings of quality childcare (Bondioli & Savio, 2010). Participatory culture in education contributes to recognize children as competent (Groundwater-Smith, Dockett & Bottrell, 2015). The research refers to the "constructivist approach" (Guba & Lincoln, 1989). The methodology is participatory research as it aims to improve educational practices. Data collection instruments are questionnaire, participatory observation, semi-structured interviews, focus group (Cohen, Manion & Morrison, 2018). About ethical considerations, research intents are made explicit, consent is sought, anonymity is ensured. Data collected is shared with participants. To start the research, a questionnaire on educational quality was shared with approximately 1000 families living in Padova. Data collected highlights parents' perceptions regarding the quality of childcare. The considerations detected constitute elements for reflection for the ongoing focus groups. This research improves educational practices by sharing the idea of quality and stimulates educators to work from the participation perspective.

*This research is part of a NextGenerationEU Doctoral Grant.*

**Conducting peer research: Learning from the evaluation of a parenting support intervention**

Catarina Leitão, Jefrey Shumba and Tara Scott, Childhood Development Initiative, Ireland

The current study aimed to collect the views and experiences of parents who were peer researchers in the evaluation of a parenting support intervention. Peer research has the potential to increase community engagement and the agency of families in research (e.g., Lushey, 2017). However, there is a dearth of research on how to effectively conduct peer research with parents (e.g., Shen et al., 2017). Peer research can constitute a form of community-based participatory research (e.g., Lewin, 1946) since it includes community members as partners in the research process. This study follows the qualitative research paradigm. Four parents participated in semi-structured interviews. Data were analysed via thematic analysis (Braun & Clarke, 2006). Before data collection, verbal consent was obtained from peer researchers. Data were treated confidentially and anonymised. In terms of findings, the benefits of peer research included increased awareness of the organisation’s work, enjoyment of the process, exposure to learning new things, and continued networks among peer researchers. Facilitating factors for peer research included the availability and accessibility of the organisation’s support, and opportunities for knowledge and information sharing among peer researchers. The main challenges related to the type of training provided, level of experience in qualitative research, data analysis, and procedures regarding the organisation of the peer research process. Studying the peer research process can increase the understanding of peer researchers’ needs, preferences, and resources, and inform research aimed at promoting agency in adult’s learning and wellbeing.

*peer research, parents, parenting support, participatory research, community-based*

This application discusses a completed piece of research.
Science and math reconsidered: Learning from David Hawkins

Yoshie Kittaka, Yokohama National University, Japan

This research explores the philosophy of David Hawkins (1913-2002), an American educator and philosopher of science who was ever learning from young children. Previous studies have discussed Hawkins in the context of science education and of quality education in general, oftentimes referring to his emphasis on subject matter (Ishii 2013; Rogers 2001). However, studies on Hawkins remain relatively small in number, his philosophy in its comprehensive form yet to be clarified. It has been pointed out that Hawkins was in close connection with progressive education in the US and abroad, including Reggio Emilia (Armstrong 2013; Featherstone and Featherstone 2002; Sato 2020). This research takes on the task of exploring Hawkins' philosophy in the context of progressive tradition. This research is based on primary sources concerning Hawkins' work. Main materials include his books and articles. Starting from his notion that a child's subject matter is the surrounding world (Kittaka 2023), this research focuses on Hawkins' concept of science and math. Written materials being the main source of this research, ethical consideration has been given to ensuring appropriate citations. Main findings include (1) the possibility of science and math being the "great equalizers" (Hawkins 2000, 21), accessible to each and every child in everyday life, and (2) the impact of Hawkins' wartime experience on his discussion of science and math education. The findings point to the primary importance of children actually experiencing the world with their own ideas, and lead us to reimagine our vision of education that is public and democratic.

science, math, subject matter, progressive education, public education

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Pedagogues' competences and professionalism as a starting point for the development of science-pedagogical learning environments in kindergarten

Karen Bollingberg, University College Copenhagen KP, Denmark

This PhD project aims to investigate how pedagogues use and develop their competences in establishing science-pedagogical learning environments in Denmark. Previous research on school students shows that self-efficacy related to science is influenced by science capital (Archer et al, 2015:940-941) and affective fields (Schindler & Bakker, 2020:307). This study investigates if this relationship also applies to pedagogues working with science in kindergarten - as well as the role of: didactic framing of science activities (Gustavsson et al, 2016: 11-13), children's perspective, science questions and curiosity (Thulin, 2010:38; Brostrøm & Frøkjær, 2016:28-29), a sciencing attitude (Fleer et al 2014:46) and a playworld approach (Fleer, 2019:1276). The study is theoretically based on social learning theory including learning in communities of practice (Lave & Wenger, 1991) and on Illeris learning theory and his definition of competence (Illeris, 2012). It is a qualitative study with a phenomenological approach using ethnography as the research method (Brinkmann & Tanggaard, 2020). Empirical data are collected in ten kindergartens as qualitative observations, semi-structured interviews, field notes, videos and photos. A consent form and oral information will be provided to all participants, including parents and pedagogues, and data will be anonymized prior to publication. Empirical data will be collected from March to June, 2023 and analyzed in time for the conference. This qualitative PhD projekt will contribute with knowledge that can develop pedagogue's professionalism in the field of science, and thus include science in the 0-5 year old child's everyday life, play and democratic education.

science in kindergarten, science-pedagogical learning environments, pedagogue's science competences, science capital, self-efficacy

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Attitudes and beliefs towards science teaching among Norwegian kindergarten teachers: Relationship between adult science content knowledge and children's questions in kindergarten

Asbjørn Magnar Hov (1), Guri Langholm (1), Øystein Guttersrud (1), Sibel Erduran (2); (1) The Norwegian Centre for Science Education, Norway, (2) University of Oxford, United Kingdom

The aim is to investigate the educational staff's attitudes and beliefs towards science in kindergartens. Maier et al. (2013) provided the measurement tool (P-TABS) to identify attitudes and beliefs. This tool is important to get insight and implement measures to teacher training and professional development. Pendergast et al. (2017) uses P-TABS to address professional development: increasing science content knowledge, strengthening self-efficacy through practice and mentoring. We build on cultural-historical theory, expressed by Fleer (2021). The research is part of the professional development program included in the Oslo Early
Education Study (OEES). The main goal is to investigate how daycare facilities in multilingual areas can support language development for all children. In this study we investigate 266 teachers in 198 multilingual classrooms. The project belongs to post-positivistic research paradigm. We use quantitative methodology and a questionnaire (P-TABS) as method. (Maier et al. 2013). The project collaborates with Norwegian Centre for research data (NSD), which secures research data. Data is collected and stored in line with NSD’s requirements and through strict storage routines. About 59% of the teachers reported to be comfortable with science activities. A minor group reported they felt insecure, especially towards physics and chemistry. The challenges are regarding science content knowledge, and answer physics-related questions from children. Educators need strategies to meet difficult questions from children, and a bit more content knowledge in physics and chemistry. An effort should be put in professional development content regarding physics and chemistry.

attitudes and beliefs, science activities, kindergarten, language development, multilingual

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**B19**

**SUPPORTING SOCIO-EMOTIONAL DEVELOPMENT**

Chair: Mirjam Kalland, University of Helsinki, Finland

Supporting social-emotional and motor skills at the transition to primary school with “Lionstrong” to increase curiosity, agency and participation in the first school years
Carolin Quenzer-Alfred, Daniel Mays, Metzner Franka and Wichmann Michelle Lok-Yan, University of Siegen, Germany

“Lionstrong” (Mays et al, 2022) is a multi-professional, flexible and individualized program holistically enhancing the quality of early childhood education at the transition into preschool by promoting social-emotional and motor skills development as a foundation for curiosity, agency, and participation. It refers to research that social-emotional skills help engaging with others, open-mindedness and collaboration while motor skills enable children to manipulate objects, move around freely and engage in physical play (Kankaraš, 2017). This can create a safe and supportive environment encouraging curiosity and the development of self-determination skills, co-determination and solidarity for a responsible participation in society (Koller, 2021; Holler & Long, 2019). The program draws from the socio-constructivist paradigm emphasizing the importance of social interaction and active participation in learning (Cobb, 2002) and the ecological model (Bronfenbrenner, 1993) through play-based learning, peer collaboration, and adult support. The quantitative study employed a waiting-group-control-design combining pre- and post-intervention assessments of social-emotional and motor skills and post-hoc questionnaires to assess the effectiveness of the program. The sample consisted of preschoolers randomly assigned to either the training or alternative training group and preschool teachers. The ethical considerations of the study were carefully addressed, and informed consent was obtained from all participants. The study showed that the program was effective in improving the social-emotional and motor skills of preschoolers and was positively reviewed by teachers. Findings support the holistic and individualized approach supporting the development of social-emotional and motor skills to enhance preschoolers’ openness to experience, collaborating with others and responsible participation in society.

social-emotional development, motoric development, preschool, transition, professional development

This application discusses a completed piece of research.

**SAGA: Supporting social-emotional development in early childhood education**

Mirjam Kalland, Tanja Linnavalli and Silja Martikainen, University of Helsinki, Finland

The research aim is to evaluate the mentalization based SAGA-intervention in terms of child development, impact on teacher mentalizing and feasibility in implementing in ECEC. Previously, shared story-book reading (SSBR) had been found to support language development, but there is also evidence for its usability in supporting social-emotional development in small children (Bergman Deitcher, D.; Aram, D.; Khalaily-Shahadi, M.; Dwairy, M., 2021). In SAGA, SSBR is used to support children’s language development as well as social-emotional development, with the emphasis on supporting children’s curiosity and understanding of the nature of mental states, and their ability to recognize and name feelings and emotions. The SAGA intervention is based on
mentalizing theory (Zeegers, M.A.J.; Colonnesi, C.; Stams, G.J.J.M.; Meins, E. 2017), recognizing the literature using both the concepts of mentalizing and reflective functioning (Stacks, A.M.; Wong, K.; Dykehouse, T, 2013). An intervention research paradigm was applied with case-control groups. Children were tested pre/post intervention using standardized questionnaires and tests developed for the intervention. The research plan was approved by the University of Helsinki Ethical Review Board in the Humanities and Social and Behavioural Sciences, and was carried out in accordance with the Helsinki Declaration. Parents gave their approval for the children to participate in the research, and the child gave his/her own approval. The two trials show positive impact on social-emotional development in intervention children, in comparison with controls. SAGA is easy to replicate and will ultimately be internationally available for anyone interested.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Educators’ thoughts and experiences in relation to children’s social-emotional wellbeing in early childhood education and care settings
Penny Levickis, Lisa Murray, Laura McFarland, Patricia Eadie and Jane Page, University of Melbourne, Australia

This study aimed to explore educators’ thoughts and experiences in relation to challenges and supports for children’s social-emotional wellbeing in early childhood education and care (ECEC) settings. Research shows consistent exposure to responsive and nurturing educator-child interactions may improve children’s school readiness and social-emotional competence, with benefits extending into adulthood (Blewitt, et al., 2021). The current study builds on recent research and policy reforms in Australia highlighting the need to prioritise young children’s wellbeing (Eadie et al., 2022; NMHC, 2021). Drawing on Bronfenbrenner’s bioecological theory (2005) to conceptualise children’s social-emotional development, this study explores individual, relational, and contextual influences on children’s wellbeing from the perspectives of ECEC educators. This mixed-methods study comprised an online survey completed by 81 Australian ECEC professionals, followed by online interviews/focus groups conducted with 25 educators to explore their experiences within their contexts. Using a social constructivist lens, descriptive and reflexive thematic analysis was used to generate key themes from survey and interview data. Human research ethics approval was obtained, and all participants provided informed consent prior to the study commencing. Themes generated from the data include: the interconnectedness of educator, parent, and child wellbeing; the importance of building partnerships with families and health professionals; the impact of workforce issues on child wellbeing and relationships; the need for trauma-informed professional development; and the importance of exploring children’s understandings of wellbeing. Findings reveal insights about child wellbeing from educators’ perspectives, including approaches to strengthening children’s wellbeing to inform the design of future targeted research and supportive practices.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Comparison of scoring on the DCCS test of executive function in children aged 3 to 8 years
Zlatica Zacharová and Dušan Kostrub, Comenius University in Bratislava, Slovakia

The aim of the research was to observe how children solve The Dimensional Change Card Sort (DCCS, Zelazo, 2006), that follow cool executive functions (EF). EF are important for the development of children’s speech and cognitive competences. They include both the ability of inhibition, operational memory and selective attention (Metzler, 2018). The sufficient development of this functions helps to increase academic achievement in primary school (Zelazo, 2006), and support pupils in improving their science education skills (VEGA1/0661/21). In the quantitative study the electronic version of the DCCS was used to determine EF of 243 children (89
boys, M=66.63 months) aged 3 to 8 years (M=70.18 months) in Slovakia. The electronic type of testing allowed not only the analysis of errors in the individual parts of the test, but also the reaction time. Children voluntarily completed the DCCS, often in a familiar environment or by a person they trusted, with confirmed parental consent. All children were allowed to leave the test. The results were analyzed with respect to the age and gender of the children after the first sorting and during the second card sorting. Parents were asked to write down what they noticed when testing their child. It was confirmed that the children felt comfortable completing the first two parts of the DCCS and made a few mistakes during the third part, their brief intervention helped children to achieve better results later on. The results suggest that it is important for parents to be aware of children’s developmental opportunities.

The Dimensional Change Card Sort (DCCS), executive functions, preschool age, science education, parental curiosity

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Teachers and KS1 SATs: A testing time?
Jane Brie, Liverpool Hope University, United Kingdom

This research aims to explore teachers' lived experiences of administering Key Stage One, Standard Assessment Tests (SATs) in England. Assessment has a central role in teachers’ practice and they are increasingly held accountable for the achievement of pupils (Brill et al, 2018; Reeves, 2018). Standardised testing remains in Key Stage One, despite continued argument surrounding its appropriateness for young children (Maksimovic and Vuletic, 2017; Wood and Hedges, 2016). Teacher identity forms a conceptual framework for the research. Identity is complex and multi-faceted and as Beijiard (2004, p. 109) postulates, with the current landscape of the teaching profession, teachers’ identity 'may conflict with what teachers personally desire and experience as good'. The research is a qualitative inquiry set within an interpretative paradigm. Interpretative Phenomenological Analysis (IPA) is the methodological approach for the research as the lived experiences of teachers and how they make sense and meaning from those experiences are fundamental research aims. IPA aims ‘to capture particular experiences as experienced for particular people’ (Smith, Flowers and Larkin, 2009, p. 16) and research focused on teachers' experiences gives their thinking credibility and respect (Denscombe, 2014). This research is the thesis for my Doctor of Education (EdD) and is at the research phase. Full ethical approval has been granted by Liverpool Hope University. Assessment in Early Childhood is an area of continued debate and contestation. However, how teachers’ talk about their experiences is an under researched area. The findings may have implications for future assessment policy direction and for teacher development programmes.

teachers, IPA, assessment, testing, identity

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Piloting of national ECEC quality evaluation system in Finland
Sivi Harkoma, Janniina Vlasov and Tuomas Sarkkinen, Finnish Education Evaluation Centre (FINEEC), Finland

The results of piloting of a national quality evaluation system for ECEC in Finland are presented. The aim of the national system is strengthening the equal provision of ECEC services and to promote equality and social inclusion of all children. Finland has been lacking nationally shared perspective of quality factors in ECEC and a suitable quality evaluation system (OECD 2016; Alila 2014). The piloted system was developed to target this gap. Theoretical foundations of evaluations are based on the principle of enhancement-led evaluation (Patton 1997), which stresses the principles of participation and impact. Data for the pilot is collected by questionnaires from teachers and leaders. The usability of the system and the self-evaluation material is studied. Ethical requirements are carefully considered while developing the system and piloting it. Anonymity of the informants will be assured during data collection and dissemination of the results. Evaluation of Finnish ECEC is holistic and inclusive, and focuses on children’s early educational environment, staff’s pedagogical work and the prerequisites for the child’s learning, development, and well-being (National Core Curriculum 2022). Pilot will offer valuable information how the system and research-based self-evaluation tools support ECEC organisers and their staff in continuous development of both pedagogy and the structures of the services. The main goal of the national evaluation system is to support the commitment and motivation of the ECEC organisers and staff, and to help them to develop their practices. In addition to the self-evaluation data, FINEEC continues to carry out the external evaluations.

ECEC quality, quality indicators, quality evaluation system, enhancement-led evaluation, self-evaluation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Young children becoming student in French nursery school: Does gender matter?
Emilie Poisson, Véronique Rouyer and Corinne Ponce, The University of Bordeaux, France

This research aims to explore, through a longitudinal approach, how 5 and 6 years-old girls and boys adapt to school standards, by looking at three components of becoming student: academic skills, socio-affective and experience (Poisson & al., 2022). Research has shown that some children’s academic skills differ by gender and that these differences depend on the subject matter (Chabannon & Steinmetz, 2018; Owen Blakemore, Berenbaum & Liben 2009). However, few studies consider the effect of a child’s gender on socio-affective component and the school experience. These studies also give little consideration to these differences in French nursery school, before transition to primary school (Mieyaa, Rouyer & Le Blanc, 2012). The theoretical framework draws upon Bronfenbrenner’s development ecology model and on social-developmental theories of gender development (Rouyer, 2007). Questionnaires on Becoming Student (Poisson & al., 2022) were collected from 39 French teachers, at three measurement times (between mid-October and mid-December, in March and in June), for 202 children (44.55% girls). Data were analyzed using several statistical tests and the results were compared between the different measurement times. Ethical considerations of research were done according to the French Code of Deontology of psychologists (2012). All needed consents were collected with the participants of the study, and data has been anonymized. Results show many differences on the three components, in favour of girls, but some of these differences disappear during the year. These findings suggest implications for how teachers could consider gender effects in nursery school to better process gender equality in practices.

This application discusses a completed piece of research.

A double-edged leadership: Female headteachers in chilean early childhood education
Alejandra Falabella (1), Daniela Figueroa Moya (2), Ximena Poblete (1), Blanca Barco (3) and Loreto Fernández (1); (1) Alberto Hurtado University, 2) Finis Terrae University, (3) Universidad Católica de Chile, Chile

The study aims to understand, from a critical gender perspective, everyday practices of kindergarten-level headteachers and level coordinators in schools. The field of educational leadership research has been predominantly focused on school leadership. However, despite the distinctive characteristics of early childhood education, there is limited understanding of educational leadership at this level. Moreover, leadership has been conventionally studied from a traditional masculine perspective, despite the emergence of research literature in issues of female leadership (Fonsén 2019; Hujala & Eskelinen 2013; Siraj-Blatchford & Hallet 2014). The study is nurtured by Judith Butler and feminist theorist in education, such as Osgood, Taggart and Rabin. This qualitative study is based on 30 in-depth interviews with early childhood education headteachers and school level coordinators. In addition, a job shadowing-based technique was carried out to follow the work of six participants over a working week. All the headteachers in the study voluntarily participated, and signed informed consent forms. The study was conducted under the norms and supervision of the University ethics commission. The results of the study suggest that a well-being leadership prevails among the participants, which is consistent with their professional ethics. Although this style can enhance their professional identity, from a gender perspective the research outcomes illustrate that this style has a double-edged dimension. The authors warn against the risk of uncritically praising “female leadership” and illustrate the tensions that can arise from perpetuating gender stereotypes. From an ethic of feminist care, the paper concludes proposing challenges in this field of educational leadership.

This application discusses a completed piece of research.
Perspectives on gender and gender quality in ECEC in Sweden - An overview of last two decades of research
Mia Heikkilä, Åbo Akademi University/Stockholm University, Finland/Sweden

The aim of this research was to conduct an overview of findings and perspectives on gender and gender equality research in Sweden during the last two decades. What trends and directions can be seen in research and what does it mean to ECEC? This research is linked to research areas gender, gender quality, intersectionality combined with early childhood education. This presentation gives an overview of the research area and analyse existing research. Research has moved from compensatory ideas of gender to post-structural feminist theories to the present including socio-material ideas of gender processes in ECEC. This is a study focus on a qualitative research area. By conducting careful search processes in different databases, as well as metadata bases around 120 articles became the result of the search process and about 50 articles are included in the review. The 50 articles were then carefully read and categorized into four different categories, that emerged from the reading process. This research has been conducted in line with the Finnish National Board of Research Integrity and The Swedish Research Council. The findings show that the research on gender and gender equality on Swedish ECEC is solid and vast, but show that gender equality is not achieved or actively present. Policy and national curricula states gender equality as a goal. Gender norms are still present, which means that children cannot fully exercise agency. This research show that teachers knowledge and reflections on gender issues in ECEC should be raised with support from their employers.

gender, gender equality, ECEC, intersectionality, teacher education

This application discusses a completed piece of research.

B22
FACILITATIVE ENVIRONMENTS FOR SUPERVISION, PROFESSIONAL DEVELOPMENT & LIFE LONG LEARNING
Self-organised Symposium
Chair: Joanne Benford, Pen Green Research Base, United Kingdom

Within this symposium the complexities of Supervision, Professional Development and Life Long Learning for adults will be explored. Drawing on working theories about each of the main themes this symposium will illuminate the intricacies of interactions between adults in a professional context, in particular the way Adults learn (Andragogy), approaches to and benefits of Supervision and work based discussions. You will be introduced to the Pen Green approach to working with adults, and the models of supervision being explored through a PhD study.

Andragogy in practice: The Pen Green approach to supporting adult learners
Joanne Benford, Pen Green Research Base, United Kingdom

The research aimed to explore the strategies used by tutors when facilitating learning for Early Childhood pedagogues engaged in higher education to consider isomorphic behaviours for when they are facilitating children’s agency and curiosity. The links between theory and practice are embedded in the adult learning programmes at Pen Green. Pascal and Bertram (2012:480) describe praxeology as a mix of “phronesis, (reflection), power, (politics) and a sharpened focus on values (ethics).” Formosinho (2012:7) describe praxis as “action impregnated in theory and supported by a belief system.” This research brings the ideas together to establish how we facilitate learning for pedagogues. Knowles (1970) defines Andragogy as the art and science of helping adults to learn. He defines it as, “a lifelong process of discovering what is not known” (1970:54). The research is an interpretivist, ethnographic study incorporating case studies and semi-structured interviews. The main ethical considerations were to ensure stories shared by pedagogues were authentic, and accurate interpretations were made. Permissions, working collaboratively and ensuring to member check contributed to the final analysis. BERA (2018) guidelines were adhered to throughout. The research identified 8 key andragogic strategies that were used consistently with adult learners which were aligned to the child centered questions written by Podmore et al (2001) which encouraged reflection on the adult learners pedagogy when facilitating children’s agency and curiosity. Pengreen continue to monitor and evaluate the effectiveness of the andragogic strategies whilst supporting early years pedagogues.

andragogy, praxeology, imposter, curiosity, trust
An exploration of ‘supervision’ to consider how it contains, supports and improves the ‘emotional labour’ and the ‘wellbeing’ of early childhood practitioners.

Felicity Dewsbery, Pen Green Research Base, United Kingdom

The research aims are to explore how ‘supervision’ can contain, support, and improve the ‘emotional labour’ and the ‘well-being’ of early childhood practitioners. The following sub questions have been developed; What is the act/process/experience of ‘supervision’ for early childhood practitioners? What unconscious and conscious processes happen within supervision? How does ‘containment’ enable the development of thinking within supervision? How does supervision support practitioners to develop themselves, enhance their well-being and improve their practice? Soni (2019) has undertaken research on the practice of supervision within the early years sector in the UK. Elfer (2014) states that within the early years sector there is a misunderstanding of the function of supervision and many use it to audit staff. My model of supervision is relational, and based on the work of Shohet and Shohet (2020). ‘Containment’ is a fundamental component of supervision as containment enables ‘thinking’ (Douglas, 2007; p38) ‘Emotional labour’ is emphasised by Hochschild (1983). ‘To be warm and loving toward a child who kicks, screams and insults you – a child whose problem is unlovability – requires emotion work’ (p 52). The research is located within an interpretivist paradigm. Autoethnography and phenomenology are the methodological frameworks and data is gathered using journaling, video diaries, collage, and in-depth interviews. Research participants are colleagues, therefore Ellis (2007) ‘relational ethics’ is applied. I believe the mechanism of supervision should support practitioners development, stimulating reflectiveness to relieve pressures. The aim is to identify a supervisory model to be shared across the early years.

supervision, well being, emotional labour, agency, early years practitioners

Exploring and creating a framework for successfully engaging Level 3 apprentices in the early years sector

Katherine Clark, Pen Green Research Base, United Kingdom

An exploration of adult’s studying early childhood apprenticeships to understand how the interplay between learner, tutor and learning environments can support learning and enable course retention. The proposition of a new framework is made, that builds on the emerging concept of andragogical isomorphism (Clare and Clark, 2021). The conceptual idea of andragogical isomorphism (Clare and Clark, 2021) was used to illustrate the complexities of embedding learning. Skeggs (1988) feminist views regarding working class women in care professions were drawn on alongside Luft and Ingham (1955). Designed with a grounded theory methodology (Charmaz 2006) and qualitative paradigm (Crewell, 2013), a ‘holistic picture’ is gathered through two methods: semi-structured interviews with early years apprentices (Schmidt, 2004; Cohen et al, 2007) and reflective journaling (Fulwiler, 1982). ‘Do no harm’ was adhered to, with the clear ethical stance identified as ‘doing some good’. The European Early Childhood Education Research Association (EECERA) ethical code was applied. The research acknowledges the need for those studying early childhood to be recognised and taken seriously, while illustrating the necessity for educators to consider how adult learning is assimilated. It is suggested that purposeful application of the framework for andragogical isomorphism will enable adult learners to engage, help course retention and support the development of a strong early childhood workforce. Implications are to apply and further explore the framework as a tool to support adults studying early childhood courses, consider its effectiveness in supporting retention and the implications this may have on the early childhood sector.

andragogy, teaching, framework, learning, apprenticeship

B23

SUPPORTING NEWLY ARRIVED CHILDREN & CHILDREN’S PERSPECTIVES OF DIFFERENCE

Chair: Christine Massing, University of Regina, Canada
Does free play enable integration of newly arrived children in Swedish preschools?
Charlotte Löthman and Tünde Puskás, Linköping University, Sweden

The aim with this study is to gain knowledge about newly arrived children’s social and linguistic integration through identifying how interactions with peers enable or disable participation of newly arrived children in free play. In Swedish preschool practice, free play is seen as an important tool that promotes children’s agency and socioemotional development (Lohmander & Pramling Samuelsson 2015; Wood 2014) as well as migrant children’s social and linguistic integration (Kultti & Pramling Samuelsson 2014). At the same time, earlier research shows that migrant children are often socially marginalized in preschools (Cekaite & Evaldsson 2017). The theoretical framework combines Corsaro’s (2010) theory on peer cultures with theories on socio-cultural and ethnic boundary work.
free play, integration, newly arrived children, interactions, boundary work

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

B24

CURiosity AND PROBLEM SOLVING

Chair: Elizabeth Black, University of Glasgow, United Kingdom

ECEC Teachers’ pedagogical strategies to support children’s curiosity and agency in problem-solving play activities with coding toys

Monika Kamola, Francesca Granone, Elin Kirsti Lie Reikerås and Kristin Grøsvik, University of Stavanger, Norway

The aim of the study is to explore pedagogical strategies used by ECEC teachers to support children’s curiosity and agency in problem-solving play activities with coding toys. Research has shown that children’s curiosity and agency can be fostered through activities with digital toys and that problem-solving activities can encourage the perception of mistakes as opportunities rather than failure (Fridberg et al., 2021). ECEC teachers demonstrate a lack of knowledge and understanding about technology and about developmentally appropriate pedagogical approaches to integrate it in practice (Bers & Portsmore, 2005). Little is known about teachers’ role during play activities with coding toys in ECEC institutions (Pollarolo et al., In progress), and therefore this is the focus in the current study. Drawing on Sustained Share Thinking (SST) theory (Siraj Iram et al., 2015) the observations analyzed how the teachers can support children's curiosity and agency in problem-solving activities. Data collection involved video-based observation of five teachers and six groups of 3-4 years old children (3-4 children in each group) playing with coding toy KUBO in about 30 minutes sessions. The study was approved by SIKT and followed ethical guidelines. Confidentiality of participants was ensured, and consent was obtained. Researchers explained the purpose of filming and obtained continuous consent from children. The results show that the pedagogical strategies and approaches the teachers used were modeling, questioning, investigation, and exploration concept’s development. The research provides understanding of how ECEC teachers form and guide pedagogical practice and influence the quality of learning in digital play.

digitalization and technologies in education, teacher's pedagogical strategies, problem-solving, coding, children's investigation and exploration

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Supporting children’s problem-solving transfer in ECEC through coding toy

Enrico Pollarolo and Francesca Granone, University of Stavanger, Norway

This study examines how a coding toy (a robot) can be used in early childhood education and care (ECEC) to support children’s problem-solving transfer competence. The literature highlights the importance of supporting children’s problem-solving transfer skills development, where curiosity is an essential trigger and predictor of this cognitive change. Video recordings of the interactions between six teachers and four 3- to 5-year-old pupils each while they played with a robot were analysed based on the theoretical framework of problem-solving transfer (Mayer & Wittrock, 1996) This exploratory study was conducted within a qualitative research paradigm. A phenomenological approach to data collection was used. A descriptive analysis of the video-recorded play was conducted using a multimodal approach. Informed consent was obtained from teachers and the parents on behalf of the children. The results highlight that three out of four categories of problem-solving transfer can be supported, while the fourth is challenging to be identified. Moreover, the article discusses the importance of teachers’ role in supporting this skill in all children, based on the
theory of semiotic mediation (Bussi & Mariotti, 2008). The study has implications for practice concerning how preschool teachers’ role is fundamental for supporting children’s problem-solving transfer skills through technology.

**ECEC, teachers, problem-solving, transfer, coding toys**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Investigating the complexity of cooperative problem solving in play contexts**

Meilan Jin, Western Washington University, United States

The purpose of this study was to investigate preschoolers’ cooperative problem solving (CPS) during play in classroom contexts. Previous research validates that children are more likely to engage in CPS during child-centered play than during adult-directed activities (Ramani, 2012). However, there is a lack of research focused on children’s CPS during play in everyday preschool classroom contexts (Ramani & Brownell, 2014). CPS occurs when two or more children work together by coordinating their individual perspectives and investigating new ways of approaching a shared problem (Ashley & Tomasello, 1998). The key tenets of sociocultural theory place importance on the positive impact of play on the development of children in general and their CPS abilities in particular (Vygotsky, 1978). This study was conducted within a quantitative research paradigm. The 1080+ minutes of video recordings of 18 children with peers during play were coded and analyzed with MANOVA and ANOVA. A consent form and information sheet were provided to caregivers of participants and their teachers to understand the purpose of this study and their rights to negotiate or withdraw from the study at any time. Pseudonyms of participants have replaced their names. The results demonstrate significant age differences in terms of explanation and suggestion that are subcategories of CPS. This study findings suggest implications for how play promotes children’s CPS and for how play-based learning environments benefit children’s uses of CPS.

**cooperative problem solving, play, preschool, classroom contexts, age differences**

This application discusses a completed piece of research.

**B25**

**FACTORS INFLUENCING PARENT INVOLVEMENT IN ECEC**

Chair: Marius Mader, University of Wuppertal, Germany

Parents’ agency and customized relationships in ECEC

Marius Mader, University of Wuppertal, Germany

The comparative study focuses on consequences of the structural positioning of parents in commercial and non-commercial ECEC-settings concerning access and opportunities to participate and co-create pedagogical relationships. Previous research suggests that the commercial structure of provision has influence on familial access to and quality of ECEC (e.g. Vandenbroeck & Lazzari, 2014; Lloyd & Penn, 2012; Lloyd, 2019), which partially means more flexible and accommodating ways for parents to act as customers and different forms to gain agency (Vincent et al., 2008; Mader et al., 2014; Mader, 2017). To differentiate opportunities of interacting in different settings (Dunkel & Weihrich, 2018; Birken et al., 2012) based on social service theory I focus on parents as users (Schaarschuch, 1998; Schaarschuch, 2020) and organizational quasi-members (Klatetzki, 2004; Klatetzki, 2018) with reference to an approach on organizational culture (Weick, 2018; Kühl, 2011; Kühl, 2018; Mensching, 2008; Mensching, 2018). A praxeological, qualitative-reconstructive approach is used according to the documentary method (Bohnsack, 2017; Bohnsack, 2018). Data consists of problem focused, narrative interviews with parents (Nohl, 2017). Ethical principles of confidentiality, anonymization, justice and respect have been applied. All participants provided informed consent. The study shows how commercial structures and interests affect and superpose pedagogical relationships between parents and pedagogues as well as parents’ agency to co-create relationships and to realize expectations on early care and education. New respective special and potentially unequal forms of gaining action for parents regarding access to ECEC and the co-creation of relationships according to different types of providers are shown.
This application discusses a completed piece of research.

**Analysis of the level of family involvement and its variables: The case of Spain**
Andrea Otero-Mayer, Eva Expósito-Casas and Ana González-Benito, The National Distance Education University (UNED), Spain

This observational study has analyzed the level of involvement and the variables that influence family involvement in ECE through the Family Involvement Questionnaire (FIQ) (Fantuzzo et al., 2000) in Spain. Numerous studies analyze FI in other countries, e.g. China (Xia et al., 2021), America (Sheridan et al., 2019) or Serbia (Vasiljević-Prodanović, 2019) with very different results. Research indicates that high levels of involvement of family members in their children’s education are associated with good academic performance and positive social-emotional functioning in school (Epstein, 2001; Fan and Chen, 2001; Jeynes, 2007) among other, but also with benefits for families (Garreta-Bochaca, 2015) and teachers (García-Bacete, 2003). In the study, the FIQ has been applied to a sample of 659 parents of children in ECE during 2020-2021. Descriptive statistics of the contextual variables were carried out, then contrasts of means (T-test and ANOVA), as well as a correlation with the age data and the score in the three dimensions of the FIQ. No personal data from teachers or children was collected during the observation, so just an informed consent acceptance was needed from the adults involved. The T-test shows significantly higher scores when the mother is the one who answers. ANOVA contrasts show significant differences in home based involvement as a function of the number of children, of the level of studies and of the year of birth of the child. Understanding which variables have the greatest influence on family involvement will help both schools and governments to promote actions that work to improve involvement.

family involvement, early childhood education, family involvement questionnaire (FIQ), quality of education, Spain

This application discusses a completed piece of research.

**Kindergarten ECEC educators’ attitudes towards parent involvement in kibbutz, village, and urban ECEC communities in Israel**
Sigal Achituv (1), David Brody (2) and Orit Dror (1); (1) Oranim College of Education, (2) Orot Yisrael Academic College, Israel

Identifying attitudes towards parents among ECEC educators from urban, village, and kibbutz (collaborative communities) settings in Israel. Understanding how those attitudes reflect the nature of community in these three arenas. Research on ECEC educators’ attitudes toward parents revealed the utility of mutual trust (Poikonen et al., 2011) and challenges for new educators (Mahmood, 2013). The current research goes beyond these and other previous studies by looking at the communal context (Winter et al., 2007) and its possible influence on teacher attitudes. Bronfenbrenners’ (1979) ecological approach underscores the importance of community for ECEC. Parental cooperation and involvement are considered crucial for the success of any ECEC program (Greenbaum & Fried, 2011) and promote school success (Purtell et al., 2022). This qualitative study utilizes semi-structured interviews, including 24 veteran educators. Transcripts were analyzed thematically using grounded theory. Anonymity was achieved and participant identity was suppressed. Oranim College Ethics Committee granted approval. Interviews revealed tight connections between ECEC educators’ daily practice and conceptualization of parental involvement. Their attitudes revealed major themes: focus on the individual child, the intensity of connection, regulation of the relationship, parental involvement and parent gender. Significant differences were found among educator attitudes in kibbutz, village, and city. The kibbutz communal model, which was shown to relate to a more positive attitude towards parent involvement, may prove beneficial to policymakers in other arenas when they seek to bolster the family-school connection.

community, ECEC educator attitudes, relations with parents, parent involvement, kibbutz

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

B26

PRIVATISATION OF PROFESSIONAL BUREAUCRACY IN ECEC
Chair: Paola Pedrelli, Birmingham City University, United Kingdom
Building leadership - a mixed-method study of the leadership of private early childhood education in Finland
Marjo Mäntyjärvi, University of Oulu, Finland

The aim of this study is to describe and deepen understanding of how leadership is built and practiced in the context of private early childhood education (ECE). Research on private ECE has been identified as necessary in many countries (Penn 2011; Ruutaiinen 2022). Studies show that leadership has an important part in the implementation of the basic mission of ECE and pedagogy (Strehmel 2016) and the child participation (Weckström 2021). In this study, leadership is understood as a context-dependent phenomenon consisting of social, economic and cultural relations (Fairchild 2018; Uhl-Bien 2006). With a mixed-method approach achieved a multi-level picture about the leadership in private ECE as a relational phenomena (Johnson et al 2007; Mertens 2014).

The data was collected in years 2015-2021 through three online surveys, with 7 interviews with private ECE leaders and with 38 online news. The survey data was analysed both quantitatively and qualitatively. Narrative analysis was used to other research material. The participants assessed and interpreted private ECE from the customer’s or professional’s point of view. All participants authorized the use of the data. At all stages of the study, ethical requirements have been taken into account. The preliminary findings describe private ECE and leadership in a multifaceted way by the stakeholders within the field. Leadership is built not only between people but in economical and cultural framings. There were tensions in these diverse relations due to aims, interpretations and expectations on ECE. This research offers implications to leadership research and praxis in ECE.

leadership, relations, private services, mixed method, Finland
This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Privatization policies’ enactment in early childhood education centres: a multi case study
Loreto Fernández, Alberto Hurtado University / Diego Portales University, Chile

This study aims to analyse the privatization policies’ enactment in early childhood education centres outsourced to private and public providers. The gross enrolment rate in ECEC increased from 34% in 2000 to 62% in 2019, mostly through private providers, whose participation in ECEC is higher than in primary education (UNESCO, 2021). Neoliberal policies have spread through ECEC, including public funding to private providers, accountability systems, and competition (Roberts-Holmes & Moss, 2021; Urban & Rubiano, 2014), but little is known about their implications considering this level’s particularities. This inquiry draws upon Ball and Youdell’s concept of privatization (2007), defined as hidden and exo privatization, where differences between public and private are blurred and hybrid systems emerge (Verger & Normand, 2015). We use Foucault’s (1991, 2008) perspective to understand discourses, power, and subjectivities. This qualitative interpretative study uses policy enactment (Ball et al., 2012) as a theoretical-methodological approach. Two case studies (Denzin & Lincoln, 2018) were conducted in early childhood education centres (administered by a public and a private provider), including a review of institutional documents, interviews, and participant observation. A reflexive thematic analysis was developed (Braun & Clarke, 2019). All participants were provided with a consent form with information about the study. Preliminary findings show tensions between practitioners’ alignment and their criticism regarding some policy requirements. Practitioners respond to this tension by putting first children and institutions, at the detriment of their own needs. This study allows to understand how these policies affect working and childcare conditions in ECEC.

endo-privatization, hidden privatization, exo-privatization, policy enactment, ECEC providers
This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Early childhood education center as a professional bureaucracy - Designing organisational structure and management system in Finnish early childhood education
Hannele Roponen (1), Raisa Ahtiainen (2), Tuulikki Ukkonen-Mikkola (1), Elina Fonsén (1); (1) University of Jyväskylä, (2) University of Helsinki, Finland

Research aims to find out what the organizational structure and the management system of an early childhood education (ECE) center is, in order to clarify what it needs to function and what ECE leadership skills are critical. ECE in Finland has been under effective development. Challenges affecting ECE include a shortage of qualified ECE teachers and changes in organizational structures that affect the management system. The study is a case study. Mintzberg’s structuring of organizations is used as the basis of analysis of the ECE center’s organizational structure and various research findings and literature have been used to formulate the theoretical framework of the management system. The subject was one ECE center in Finland. The data was collected through interviews (N=7) and observation lasting from September 2022 to May 2023 and was analyzed with content analysis with a
directed approach. Since it is a case study the personal data of participants were anonymized carefully in the translittering phase. Consent to the study was asked before the interviews at the same time as the content of the study was explained to the interviewees. The results indicate that ECE center follows the structural configuration of a professional bureaucracy and multiprofessional teams a simple structure. The function of the organization as well as the management system is challenged by the shortage of skilled teachers. The findings can be used to increase understanding of the organizational structure and management system of ECE center and develop leadership practices that increase the quality of ECE.

**ECE leadership, teacher leadership, management system, organizational structure, case study**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**B27**

**CHILDREN’S CURIOSITY IN OUTDOOR SPACES**

**Chair:** Mary Daly, The National Council for Curriculum and Assessment (NCCA), Ireland

**Entering urban nature’s wonderland: An exploration of children’s curiosity and wonder as fostering agents of learning, friendship and community**

Johana Montalvan Castilla, University of Stavanger, Norway

This study aims to shed light on the role that children’s curiosity -manifested in weekly exploratory experiences of urban nature- have for learning and the building of friendship and sense of community. Children’s curiosity and sense of wonder in outdoor settings, particularly linked to learning and sustainability learning, is a topic that has gained increasing attention over the recent years (Blanchet-Cohen & Elliot, 2011; Gurholt & Sanderud, 2016; Heggen et al., 2019; Ting, 2014). That nonetheless, studies that explore the role that curiosity can have in fostering children’s sense of community are lacking. This study is in dialogue with theories of inquiry-based learning (Pedaste et al. 2015) and experiential learning (Dewey, 1938; Kolb, 2014). Further, it follows a phenomenological research approach. It is a qualitative research study that was carried out in south-west Norway at a pre-school, with two groups of children. Eighteen children, two head teachers and their assistants participated in the study. Methods used include interviews, focus groups, participant observation and informal conversations. Consent letters were sent to children, their parents and all participants, informing on the study and the possibility for withdrawal at any time. The obtained data was anonymised and encrypted to safeguard participants’ personal information. Finding: Children’s unfolding of curiosity and sense of wonder in urban nature contexts can enhance group learning, encouraging the building of friendships and sense of community. The study has implications for teachers’ pedagogical practice, offering insights about how to use children’s curiosity as a didactic element for group learning.

**urban nature, experiential learning, children, sense of community, curiosity**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Promoting curiosity and agency for babies, toddlers and young children in the outdoors through Aistear, Ireland’s early childhood curriculum framework**

Mary Daly and Sharon Skehill, The National Council for Curriculum and Assessment (NCCA), Ireland

This paper focuses on the findings from a recent consultation about strengthening support for outdoor play and learning in Aistear, Ireland’s early childhood curriculum framework for babies, toddlers and young children (birth - six years) (National Council for Curriculum and Assessment (NCCA, 2009). Phase 1 of a 2 phase consultation with key stakeholders has taken place (NCCA, 2023). This research builds on the NCCA’s history of consulting (NCCA, 2005, 2007, 2016, 2018) which places babies, toddlers and young children and their families and educators at the centre of curriculum development. This study embraces the Lundy model (2014) to ensure audience and influence to enact meaningful participation as set out under the UNCRC (1989). It also is underpinned by socio-cultural theory (Vygotsky, 1978) and by Bronfenbrenner’s ecological systems theory (1979, 2005), Hayes et al. (2017). The study undertaken by NCCA used tools such as questionnaires, on-line submissions and focus groups. The NCCA Research Strategy (NCCA, 2019) informed and guided the research processes. All aspects of the consultation were carried out with informed consent and
assent. While overall the findings about Aistear were very positive there were calls to strengthen particular aspects - agency, inclusion, relationships, sustainability, creativity, outdoor play and learning. This paper focuses on the findings about enhancing outdoor learning experiences for babies, toddlers and young children. Findings will lead to the strengthening of outdoor adventurous play, nature pedagogy and sustainability through a nurturing, rights-based pedagogy in Aistear and will be accompanied by on-line resources.

Ireland, curriculum framework, rights, outdoors, play and learning

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Survey with service provider on outdoor play spaces in Irish ECEC settings
Aoife Horgan, Chloe Keegan, Liz Kerrins and Linda Kelly, Early Childhood Ireland, Ireland

97% of Irish ECEC centres report (Pobal, 2022) that they contain an outdoor play space. There is no data on physical and environmental characteristics or the play value afforded. ECI conducted a survey with ECEC service provider members to address this gap. Research by Wooley & Lowe (2013) underpinned survey design. They developed and implemented an observational evaluation tool with 3 dimensions-play value & physical & environmental characteristics-to test the assumption that outdoor spaces in the Kit, Fence, Carpet (KFC) style afford fewer opportunities for children’s play than natural spaces. Their research characterised design approaches along a continuum of KFC, composite and natural, with play value increasing along the continuum. The theory of affordances (Gibson, 1977) underpins the research, where play space characteristics influence children’s perceptions and utilisation. Children actualise potential affordances through exploration and play (Kyttä, 2004). A quantitative approach was adopted. An online survey was emailed in May 2022 to 3,180 services. Following data cleaning, 337 of 490 responses were analysed using SPSS. Participants were provided with information on the purpose of the study for informed consent. The right to withdraw and GDPR/privacy rights was explained. While the survey results are not representative, they suggest that ECEC play spaces are ‘composite’ on the continuum between KFC and natural approaches. Onsite observational research is required to research the relationship between design and actualised affordances in ECEC outdoor play spaces. The study provides data for policymaker to develop supportive ECEC policy in areas like funding, guidance, and CPD.

affordances, outdoors, survey, Ireland, design

This application discusses a completed piece of research.

B28
Mathematics Birth to Eight Years SIG Self-organised Symposium
PLAY AND MATHEMATICS (I)
Chair: Oliver Thiel, Queen Maud University College, Norway

Mathematics emerges in children’s play and everyday life. In this symposium, the EECERA SIG Mathematics Birth to Eight Years presents three talks focusing on various aspects. The first talk by Karin Franzén, Benita Berg and Laura Leonardi is part of the SIG’s book project presented in the self-organised symposium 'Play and Mathematics (I)'. They offer preliminary results from Sweden and Italy about two questions: How do preschool teachers who work with the youngest children identify mathematics in children’s play? And how can they support the children’s mathematical thinking? In the second talk, Elena Severina analyses semiotic resources when 5-year-olds explain hypothetical situations. The third talk by Judith Fábrega and Mequè Edo focuses on children’s mathematical representations when they decompose numbers.

On young children’s use of semiotic resources when reasoning about and explaining hypothetical situations
Elena Severina, Western Norway University of Applied Sciences, Norway

The study examines how young children use semiotic resources when explaining hypothetical situations to different peers. Earlier research suggests that gestures play an important role in young children’s mathematical explanations and related thinking processes (Johansen et al, 2014; Severina & Meaney, 2020). The semiotic resources used by the children may vary depending on the peer the
The results reveal that students’ choice of representation is related to the nature of the session. Also, a decomposition of numbers learning trajectory is directed to (Johansen et al. 2014). Severina and Meaney (2020) suggest that children may be able to reason about hypothetical situations and explain mathematical ideas already at five. Taxonomy of four basic gesture types (McNeill, 1992) and explanation types (Donaldsen, 1986) provided the theoretical framework. Two video episodes document five-year-old child and pre-service kindergarten teacher (PKT) in child-directed playful exploration of hypothetical photobook layouts, coming from the research project on photography as a mathematical activity in a Norwegian kindergarten. For each self-explanation (Salle, 2020) and explanation to PKT, I identified used semiotic resources and related explanation types. The use of semiotic resources was qualitatively compared. Norwegian ethical regulations were followed. Voluntary, informed consent was gained from children, parents, and teachers. Photobook and gestures were actively used during explaining to oneself and PKT, while the speech was mostly used in the latter. Use of self-explaining to explore imaginary layouts, rehearse and elaborate explanations to PKT seems to support the development of deductive explanations, while teacher’s attention and/or physical contact were necessary for the exploration to take place. The research has relevance for practice by highlighting some factors impacting children’s exploration of mathematical ideas.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Play and mathematics in an Italian and a Swedish preschool context**
Karin Fränzén (1), Benita Berg (2), Ester Catucci (2) and Laura Leonardi (3); (1) Karlstads University, Sweden (2) Mälardalen University, Sweden; (3) University of Padova, Italy

The aim of the study is to investigate how Italian and Swedish preschool teachers interact with children in play situations and how they support the youngest children’s mathematical thinking and curiosity. There is a lack of research of the youngest children in preschool and mathematics (Berg, 2022; Linder & Simpson, 2018; MacDonald & Murphy, 2019). Supporting the youngest children’s mathematics learning is challenging (MacDonald & Murphy, 2019). Franzén et al. (2021) show that the teachers tend not to further develop the mathematical content during play situations. The framework of pedagogical content knowledge (PCK) in mathematics (Ball, 2008; McCray & Chen, 2012; Lee, 2017; Shulman, 1986) is used to analyze the play situations. The framework supports the preschool teachers’ competences to notice and interpret mathematics in play situations. Data collected via focus groups, one in Sweden and one in Italy. Researchers and teachers met three times and reflected on supporting children’s math learning in play. The discussions were recorded, lasting 1.5 hours each. Preschool teachers were informed beforehand. Data were treated with confidentiality. A consent letter was distributed. Anonymization protected participant integrity. Participant was allowed to withdraw anytime. The preliminary findings show how preschool teachers reflect on play situations and share how mathematical content can be enhanced. In focus groups the preschool teachers develop the competence to notice and interpret mathematical opportunities emerging in play situations. Implications for policy makers and practice is discussed. This research can support in-service preschool teachers using children’s curiosity for teaching mathematical content in play situations.

**The blank page: Students representations and decomposition of numbers**
Judith Fabrega (1) and Mequè Edo (2); (1) Innovamat Education, (2) Autonomous University Barcelona, Spain

The objectives are, first, to describe and categorize non-guided representations and explanations of 5-6 year old students. Second, to create a tool to interpret and evaluate students’ representations related to number decomposition. Existing research shows the importance of representations in Early years, specially the work of ‘blank page’ (Edo, 2021) and mathematical graphics (Carruthers and Worthington, 2006). This study focuses on representation and communication in ECE (Goldin, 2014; Van Oers, 1994; Vanegas, Prat and Edo, 2022; Worthington, et al., 2019), and decomposition of number and part-whole relationship (Baroody, 2004; Clements and Sarama, 2015). The study was conducted using descriptive-interpretative research approach (Santamaria, 2013), using graphic productions and semi-structured interviews of 22 students. The analysis was carried out in two phases: a) identification and categorization of representations and b) analysis of the mathematical content of the representations. A consent form was signed by all the families, and they were given the opportunity to withdraw from the study. Pseudonyms have replaced the names of participants. The study respected the natural school practice to diminish the disruption in students’ daily routine. The results reveal that students’ choice of representation is related to the nature of the session. Also, a decomposition of numbers learning trajectory.
has been identified, allowing us to develop a rubric to identify students' learning sequence. The “blank page” allows students to represent what they have experienced, choosing what and how to communicate it. This research should continue sharing the rubric with teachers to verify its possible usefulness and/or necessary modifications.

**mathematical graphic representations, decomposition of numbers, blank page, mathematical learning, play-based learning**

This application discusses an ongoing piece of research and findings may be preliminary/emerging

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**B29**

**SCHEMA A WINDOW THROUGH WHICH TO OBSERVE, LISTEN AND PONDER CHILDREN’S FASCINATIONS**

Self-organised Symposium

**Chair:** Julie Brierley, University of Hull, United Kingdom

**Moving to learn or learning to move: Young children’s embodied learning, viewed through a schematic lens**

Julie Brierley, University of Hull, United Kingdom

The paper seeks to demonstrate how schema theory can be used to view and establish the important role of young children’s bodily movement patterns in the learning process. Suggesting and illustrating visible links between young children’s physical actions and possible lines of thought. Athey (2007), Arnold (2010) and Nutbrown (2011) advocate that schema can be observed in children’s play patterns and that children notice elements from their surroundings dependent upon their interests at the time. Neuroscience (Conkbayir 2023) confirms bodily movement is central to the building of neurological pathways throughout the body. White (2015:36) suggests that ‘movement lies at the heart of learning. Data has been analysed against schema theory, physical development and neuroscience theory outlined above. A narrative inquiry approach permitted the collection of the children’s experiences in the world (Pinnegar and Daynes 2007). Photographic observations were used to capture images of the children whilst immersed in freely chosen and spontaneous episodes of play (Bruce, 2005), enabling narratives accounts of those experiences to be written. Frequent interviews with key workers and parents ensured the reliability and validity of the data. All ethical permissions were gained; at all times the child’s ongoing permission was sought. Schematic interest provides children with their own intrinsic motivation. Through the joint action of thought and physical movement patterns, children gain bodily control and are able to unlock new learning opportunities for themselves. Recognising and supporting young children’s schematic motivations provides young children with the space to become social actors in their own learning.

**schema, physical development, embodied learning, motivation, play**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**A qualitative case study investigating the connectivity between young children’s musicality within a schematic theoretical framework**

Christine Parker (1) and Zoë Austin (2); (1) Pen Green Research Base, (2) Guilden Norden C of E Primary Academy, United Kingdom

The researchers observe children at play and problematise each child’s emergent musicality within schemas. What happens when children’s musicality is nourished and the impact on a child’s wellbeing is demonstrated. Research that has investigated children’s schematic play has limited reference to children’s emergent musicality (Athey, 2007; Nutbrown, 2011; Arnold, 2021). However, Trevarthen’s theory of communicative musicality (2009) offers an insight that enriches a view of musicality within schema theory. The chosen theoretical framework is a schematic one (Athey, 2007; Nutbrown, 2011; Arnold, 2010, 2021, 2022), combined with a praxeological approach to research informed early childhood education (Formosinho & Oliveira-Formosinho (2012); Pascal & Bertram (2012). The theory of communicative musicality (Mallock & Trevarthen, 2010) is intertwined. This qualitative and ethnographic research project is based on case study (Arnold, 2015). The methods are narrative observations and video vignettes alongside dialogue with children and parents (Mairs & the Pen Green Team, 2013; MacRae, 2020). Data is shared with schema focus groups to check for validity, currency, and authenticity (O’Reilly & Kiyimba, 2015). A child’s right of participation is the overarching ethical concern. Information has been shared with the children and their parents. Parental consent has been given. A child’s right of
non-participation is consistently adhered to. The children’s and parents’ on-going feedback is acknowledged and honoured. The desirability of observing young children’s play through a musicality lens within a schematic theoretical framework is discussed. A child’s musicality and accompanying wellbeing can be nourished and further developed when attention is focussed on schematic play.

schemas, musicality, praxeology, agency, wellbeing

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

B30
Working with Parents and Families SIG Self-organised Symposium

PERCEPTIONS OF PARENTS AND EDUCATORS OF TODDLERS ON THEIR RELATIONSHIPS DURING AND AFTER COVID-19 IN FIVE COUNTRIES
Chair: Ute Ward, United Kingdom

This self-organised symposium builds on the work of the SIG Working with Parents & Families. Reflecting on the COVID-19 lockdowns, research has identified changes in practice but there is no detailed exploration of how the relationship between educators and parents was affected. Anecdotally it appears that some nurseries ‘returned to normal’ while others maintained changes introduced to limit the risk of infection with Covid-19. This led to the research presented here which interviewed parents and educators working with toddlers in five countries. There are some subtle differences between countries based on socio-cultural contexts, and there are some commonalities which are highlighted in the three papers (Presentation 1 from Poland and Croatia; Presentation 2 from Spain and England; Presentation 3 from Israel). Recommendations will draw out what we can learn from past experiences to offer effective practice now and prepare for similar events in the future.

Perceptions of parents and educators of toddlers on their relationships during and after COVID-19 in Spain and England
Ute Ward (1) and Silvia Blanch Gelabert (2); (1) independent, (2) Autonomous University Barcelona, Spain

The research explored how Covid-19 impacted educator-parent relationships in settings for children from birth to 3 during and after lockdowns and whether the restrictions initially imposed on educators and parents have led to lasting changes in communications and mutual perceptions. The research builds on recent writing by Bigras et al (2021) and Pascal et al (2020) which consider the broader impact of the pandemic on the early childhood sector and communication in particular. The research builds on established partnership models (Epstein, 2018; Hornby and Blackwell, 2018) and explorations of communication between parents and educators (Hadley and Rouse, 2018). The research used an interpretative paradigm and semi-structured interviews (12 parents, 11 practitioners) capturing participants’ perceptions of and reflections on their lived experiences (Kvale, 2007). Grounded theory was used to analyse the data (Strauss and Corbin, 1998). After an initial reading of the data in each country, researchers shared emerging themes, followed by the development of detailed codes and coding structures. Ethics approval was granted by the researchers’ respective university ethics committees. Particular care was taken with confidentiality and anonymity where participants and parents from the same setting were interviewed. Electronic communication tools are used more consistently post-pandemic. Although generally welcomed by parents, they feel the relationship with practitioners is more detached and formal now, especially where drop-off and pick-up take place outside the nursery room. In addition to e-communication, settings should create more opportunities for face-to-face interactions with parents so that they feel part of the nursery community.

parent-educator relationships, trust, communication, use of mobile phones, use of websites

This application discusses a completed piece of research.

Teachers' and parents of toddlers perceptions - The impact of COVID-19 crisis on relationships among them
Clodie Tal, Levinsky-Wingate College of Education, Israel

The aim of this research is to understand how toddlers’ parents and teachers perceive the impact of Covid-19 crisis on relationships among them. Previous findings show that parents attribute importance to their relationship with their children’s educators in general and during the Covid-19 pandemic, in particular (Tish et al., 2023; Tal, Tish & Tal, 2022). This study is based on
Bronfenbrenner’s and Morris’ (2006) ecosystem theory perceiving interactions as proximal processes in development. Qualitative research based on semi-structured interviews. Five mothers of toddlers and three ECE teachers working with toddlers were interviewed between December 2022 and March 2023, the end of Covid-19 pandemic. All participants gave their consent to participate and their identity is kept confidential. Mothers and teachers believe that “transparent” communication between centers and parents is the most important thing before, during and after the pandemic. All interviewees believe that the pandemic influenced parents’ entrance to playrooms and their participation in birthday parties. This is associated with some parents’ dissatisfaction with missing watching their toddlers’ play and engagement in joint activities with them. The parents’ perceptions are thus perceived by some parents as changes related to comfort and not to ideology or the essence of the parent-teacher partnership and by other parents as a missing "organ" of parent educational-staff partnership. There is a need to reclaim the importance of close relationships between parents and teachers and to achieve ongoing agreements between them to enable parents’ presence in playrooms in a way that minimizes the disturbance to the class.

parent-ECE teachers relationships, infants and toddlers, Covid-19 pandemic, parents’ presence in the playroom, communication

This application discusses a completed piece of research.

Parent-practitioners perceptions of co-operation during and after COVID-19 in Croatia and Poland
Krystyna Heland-Kurzak (1) and Adrijana Višnjić – Jevtić (2); (1) The Maria Grzegorzewska University, Poland, (2) University of Zagreb, Croatia

Study aimed to explore parent-practitioners perceptions of cooperation during and after Covid-19 in Croatia and Poland. Research shows that during Covid-19 parents and practitioners expressed anxiety about restrictions but they pointed that distance education in ECEC framed mutual support of children, parents and educators (Mantovani et al. 2021). Some ECE institutions organized online activities, which represented an additional task for parents (Višnjić-Jevtić & Visković, 2021) Ecological theory (Bronfenbrenner, 1992) points to the interdependence of the relationship between all involved factors, especially in demanding situations. Qualitative methodology was used. The data were collected using the interview technique. 10 parents (5 from Croatia, 5 from Poland) and 10 educators (4 from Croatia, 6 from Poland) participated in the research. Participants participated in the research voluntarily and were informed that they could withdraw from participation at any moment. The researchers approached the research in accordance with the EECERA Ethical Code. Despite Covid, parents and teachers tried to maintain mutual communication. Digital forms of communication depended on technical and organizational issues. Participants emphasize the advantages of face-to-face communication. Parents recognize the additional involvement of teachers in initiating communication during Covid, while teachers more often find objections to communication with parents. We recommend that ECEC settings remain open for communication with parent throughout future restrictions, and if necessary implement distance education.

parent-practitioner cooperation in ecec, ECEC practitioner in Poland, ECEC practitioner in Croatia, participation in ECEC, cooperation in ECEC

This application discusses a completed piece of research.
Children’s performance in an indigenous book reading program in Taiwan
Catherine Compton-Lilly (1), Ching-Ting Hsin (2) and Di Tam Luu (2); (1) University of South Carolina, United States (2) National Tsing Hua University, Taiwan

This study aimed to examine the impact of a book program on children’s skills in speaking and reading Indigenous languages. Book reading is an effective strategy for developing young children’s language and literacy (Fitton et al., 2018; Moses & Kally, 2019). Drawing on Culturally Sustaining Pedagogies (Paris, 2012; Yosso, 2005), we developed books based on knowledge of the communities and implemented a program to sustain Atayal. We recruited 26 girls and 19 boys, aged 5.0 years on average, from 3 kindergartens located in northern Taiwan. Over a semester, Indigenous language and classroom teachers collaborated to introduce six books. Before and after the program, children were asked to read two of the books, take an oral language test, and complete an assessment of print awareness. Eighteen children were interviewed to gain their feedback about the program. Qualitative and quantitative (i.e., paired sample t tests) analyses were used to track children’s learning. Consent forms were collected from the parents of all participants. Eight emergent reading behaviors were identified: Declining to read, not looking at texts, looking at pictures, looking at print, dragging fingers across print, pointing to the print, self-correcting, and attending to sentence structures. Children increased the last four behaviors after the program, indicating improvement in word-sound correspondence and metalinguistic skills. Their interviews revealed that they relied on picture clues and memory when reading. Additionally, children improved significantly their reading accuracy, oral language, and print awareness. This study sheds light on designing effective programs that promote Indigenous language literacy.

Emergent reading, indigenous language, reading behavior, early childhood, language revitalization

This application discusses a completed piece of research.

Sparks of curiosity: Young children’s wordless picturebook intra-actions
Sally Brown, Georgia Southern University, United States

This study investigated the ways young children intra-acted with wordless picturebooks and responded through drawing. Ways of knowing, being, and doing evolve when children ask questions and investigate ideas. Intra-actions between humans and the material world offer agentive opportunities to create new realities (Kuby & Rowsell, 2017). Touching materials, asking questions, and moving one’s body during literacy encounters reflects the ways actions are pivotal in the learning process (Pahl, 2014). Posthumanism frames this study as means for re-conceptualizing the ways children become entangled in their worlds (Murrīs, 2020). A kindergarten classroom of 22 diverse children (ages 5-6) served as the participants. A posthuman diffractive analysis of transcripts and drawings drawing identified unpredictable patterns that produced different knowledge as a result of the way discourses and material effects erupted (Mazzei, 2014). Ethical guidelines included parental consent and child assent. Prior to each interaction, the child had an option for participation. The findings demonstrate the innovative ways children fluidly moved in-and-out of material discursive practices to enable unique views of the world (Kervin et al., 2019). Children’s talk and drawings disrupted binary thinking often perpetuated by educators (Latham & Ewing, 2018). An emergent curriculum is needed where there are spaces for children to experience the world in ways that develop competencies as thinkers (Murrīs, 2016). New knowledge is created when there is freedom from constrained teaching approaches and a move toward child generated practices (Hackett & Somerville, 2017).

Literacy, posthumanism, intra-actions, agency, picturebooks

This application discusses a completed piece of research.
Early childhood teachers’ perceptions and knowledge of poetic language in shared book reading
Ellen Tveit, University of Stavanger, Norway

A playful approach to language is beneficial for children’s language development. This study aims to explore early childhood teachers’ (ECT) perceptions and knowledge of poetic – or playful - language in shared book reading (SBR). Research indicates that a rich language environment in conversations during SBR (Hoel & Tønnesen, 2019:1-3) where children participate (Grøver, 2018:73-135) and playful approaches to language (Kibsgaard & Husby, 2014:145-147) contributes to children’s language development. This study draws on a sociocultural perspective on language development (Vygotsky, 2001 [1934]), reader-response theory as reflected in Rosenblatt (1994 [1978]) and literary theory regarding poetic language (Jakobson [1960], in Heldal & Linneberg, 1978). Within this mainly qualitative study there is a mixed data approach, with data from a national survey (conducted by the SPrELL-project, UiS, Norway: https://www.uis.no/nb/filiorum-senter-for-barnehageforskr/ing/sprell-samtalebaserte-leserapriser) on reading practices in ECEC-institutions as a starting point for semi-structured focus group interviews with ECTs. All participants received comprehensible information prior to the interviews and have signed informed consents for their participation. Data from the interviews is presented in a manner that secures full anonymity of the participants. Preliminary findings from the survey and the focus group interviews, indicate quite different perceptions and practices connected to poetic language, but also an acknowledgement of the relevance and importance of this topic in the ECEC setting. Knowledge derived from this study may be applied to enhance language environment (including SBR practices) in ECEC-institutions.

poetic language, early-childhood-teachers, shared-reading, language environment, language development

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

C2
PARENT-TEACHER DIALOGUES ABOUT RACE AND MIGRATION
Chair: Lisa White, American Institutes for Research, United States

Childrearing beliefs of Ukrainian refugee mothers
Veronique Dierkx (1), Magdalena Krakowiak (2) and Olga Wyslowska (3); (1) Utrecht University, Netherlands (2) Jan Amos Komenski Child Development Foundation, Poland, (3) University of Warsaw, Poland

This study has two main objectives. Firstly, a diagnosis of childrearing beliefs of Ukrainian refugee mothers in Poland. Secondly, an exploration of whether a child’s enrollment into a SPYNKA ECEC setting (provisions established in Poland due to influx of Ukrainian families) is related to changing these beliefs. Mothers’ child-rearing beliefs being incongruent with provision values could lead to negative effects on children’s experience and the treatment by educators (Delpit, 2006; Hauser-Cram et al., 2003). Childrearing beliefs, particularly in the context of young refugee children, are vital to assess and take into account when planning ECEC services (Bronfenbrenner, 1963). The quantitative survey included over 150 refugee mothers. They completed a questionnaire on their living situation, plans and childrearing beliefs, once when enrolling the child in a SPYNKA setting and subsequently when signing out the child. The posttest included additional questions regarding SPYNKA services. Participants of the survey signed informed consent twice, at the stage of pre- and posttest. Preliminary pretest results (posttests follow in June) suggest mothers show a high tendency to value other cultures being considered in ECEC and agree to children being opinionated and disagreeing with parents. They alternatively show a tendency to agree to teacher obedience and to prefer staying at home with the child instead of working. Knowledge of the needs, expectations and childrearing beliefs of Ukrainian refugees, allows to consciously shape ECEC services for Ukrainian refugees in Poland and other countries.

childrearing, parental beliefs, ukrainian refugees, parental living conditions, quantitative research

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Talking about culture, race, and discrimination with young children: Parent and teacher perspectives
Lisa White and Leanne Elliott, American Institutes for Research, United States
This research provides insight into how families and teachers explore and teach about race, culture, and discrimination with young children (birth-5) attending high-quality, majority-Black early education programs in the United States. Children are curious about race from a young age (Hirschfeld, 2008). Racial socialization involves caregivers supporting children’s positive racial identity development and understanding of discrimination, which promotes healthy learning and behavior (Caughy et al., 2006). This study is informed by the Integrative Model for the Study of Developmental Competencies for Minority Children (Dunbar et al., 2017; Garcia Coll et al., 1996), which supports the importance of racial socialization for positive identity development. We surveyed families (N=73) and teachers (N=34) about how they talk with children about race, culture, and discrimination and the developmental appropriateness of these activities and used a quantitative, descriptive approach to analyze data. All participants provided informed consent. Participation was completely voluntary, and all data were de-identified prior to conducting analyses. Families and teachers were more likely to promote cultural traditions than discuss race or discrimination with their young children. Teachers, however, believed that these activities should begin at younger ages than families. Findings highlight the need for communication between families and teachers on how to approach racial socialization in early childhood. Additionally, more education for families and professional development for teachers on how to discuss bias/discrimination with children in developmentally appropriate ways is needed.

racial socialization, culture and heritage, race and discrimination , African-American studies, identity development

This application discusses a completed piece of research.

'I feel more empowered to talk about differences and social justice now', Exploring EC-teachers’ (perceptions of) intercultural competences
Kato Luyckx, Eva Dierickx and Hajjar Ben Sliman-Ghomari, AP University of Applied Sciences and Arts, Belgium

In this practice-oriented research project, we studied the impact of participating in a professional development program (PDP) on the (perceived) intercultural competences of early childhood (EC) teachers in Flanders, Belgium. Research and policy emphasize the importance of intercultural EC education, as the preschool period appears to be crucial to support positive intercultural attitudes (About et al., 2012; Birtel et al., 2019). However, multiple studies show that teachers feel insufficiently prepared in this matter (e.g. Agirdag et al., 2016; Slot et al., 2019; Vervaet et al., 2018). Therefore, we developed a PDP through educational design-based research (McKenney & Reeves, 2016), building on the diversity pedagogical and content knowledge framework (Dursun, Claes, & Agirdag, 2021), the goals of antibias education (Derman-Sparks & Edwards, 1989) and guidelines for effective and sustainable PDPs on intercultural education (Romijn et al., 2021). The pilot study of the PDP took place in ‘22–’23 (see: Dierickx & Luyckx, 2022). We gathered data through open ended pre- and post-surveys, researchers’ observations and focus groups, following Nganga (2015). A qualitative thematic analysis was conducted. Informed consent was given by all participants. Preliminary results suggest that after the PDP, teachers’ understanding evolved from colorblind to more antiracist. Teachers indicated that they focus more on diverse representation and critical literacy; they feel more capable of having ‘hard’ conversations; and they gained more confidence in engaging in conversations with families and colleagues. These findings suggest implications for how to increase intercultural competences in the field of early childhood education.

intercultural competences, antibias education, social justice, professional development, design based research

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
This study aimed to investigate and compare whether ecosystemic factors within different socio-economic status groups influence the experience of fear in young children. South Africa is a country prevalent with various social ills such as unemployment, poverty, violence, and divorce. Social ills may cause children to experience high levels of insecurity and fear (Mathews, Jewkes and Abrahams, 2011). Most South African children live under conditions that expose them to negative emotions, uncertainty, and fear (Sandstrom and Huerta, 2013). Bronfenbrenner’s bio-ecological theory was illustrated highlighting the fearful experiences among young children in the different socioeconomic status groups in South Africa. An interpretative, qualitative study was utilized. Children’s agency was ascribed to their age group. Recommendations are provided for schools and the Department of Education for ensuring that we can get our vulnerable children who are from the low SES to break the poverty cycle and add to the success of the South African economy.

**fear, young children’s drawings, primary school teachers, eco-systemic factors,, violence**

This application discusses a completed piece of research.

**Teachers’ perceptions of sex education and its efficiency in preventing sexual abuse among students with learning difficulties (LD)**
Pinar Celik Chippari, Queens University Belfast, United Kingdom

The purpose of this study is to investigate teachers’ perceptions of sex education for children with learning difficulties and to determine various options for activities for preventing sexual abuse. Examining the opinions of the people and teachers who are closest to these children and educate them will contribute to this field. The sex education of children with LD (learning difficulties) has been researched less than that of typically developing children, which shows that more research is needed on the issue of sex education in children with LD. Cooperation with parents is also emphasized by the Ecological-Transactional theory, which explains that everyone should work towards the same goal for the child. Interviews with 5 teachers based in the UK who work with children with learning difficulties were conducted in 2020/2021. The identities of the participants, the institutions for which they work, and the identities of the students and teachers mentioned in the findings were not specified, and code numbers were given. All the participants stated that sex education is an important subject to deliver to children with LD as they are more vulnerable. There were a number of potential challenges raised under the theme of teachers’ perceptions, including communication, cognitive level, taboos and generalisation skills. Further research on a wider scale is needed. The researcher recommends that teaching RSE start at an earlier age, that teachers receive special training in this area, and that more effort is spent on further collaboration between home and school life in this area.

**early years, educators, sex education, families, child sexual abuse prevention**

This application discusses a completed piece of research.

**No! Children’s Perspectives on Harmful Behavior by Professionals in Dialogue-Based Interviews**
Jessica Ferber (1), Dörte Weltzien (2), Rieke Hoffer (3), Ruth Buellesbach (1), Maike Rönnau-Böse (2) and Lara Wintzer (1); (1) Center for Childhood and Adolescence Research (ZfKJ), (2) Protestant University of Applied Sciences Freiburg, (3) University of Applied Sciences Koblenz, Germany

Results from dialogue-based interviews with children in day-care centers in Germany allow an inside view on the emotional experience of young children as well as their perception of harmful behavior of ECEC professionals. Children are entitled to protection against discrimination, neglect, and abuse, as well as an upbringing free from violence. Nevertheless, harmful behavior also occurs in day-care centers (Boll & Remsperger-Kehm, 2021; Maywald, 2022). Despite the legal requirement for violence prevention strategies and initial efforts to prevent harm, there is still a dearth of empirical research on this subject, especially from the perspective of children themselves. The study was conducted within a qualitative interpretive research paradigm. Analysis was conducted through a content analysis within a hermeneutical approach. The interviews were executed in 25 day care centers in Germany, that participate in the prevention project "traut Euch!" in the larger project "Mutausbruch". A consent form and information material was provided to the parents. The children themselves were free to decide at any time whether they wanted to take part in the interviews and whether their interview material was allowed to be used. From an early age, children are able to express which behavior they find harmful and which aspects are important to them in the day-care center. Different activities and
methods can be used to empower children to reject violence they may experience or witness and to develop the courage to protect themselves against harmful behavior from adults.

children’s perspective, dialogue-based child interviews, child empowerment, harmful behavior, participation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

C4
DEMOCRATIC APPROACHES
Chair: Véronique Rouyer, University of Bordeaux, France

Promoting participation and agency in childhood: An exploratory study of the experiences of French children in a children’s municipal council
Véronique Rouyer, Corinne Ponce and Stephanie Constans, The University of Bordeaux, France

This study aims at exploring the role of a local council in the development of citizenship and participation during childhood, based on a study conducted near French children, who were elected councilors during two years in a Children's municipal council. The children and youth municipality councils are an interesting context of citizenship education and participation because children have been for a long time considered as interlopers in civic context (Wyness, 2005). A growing body of research highlighted an important number of limits, but few of them considered children’s perspective and experiences. The theoretical framework draws upon Bronfenbrenner’s development ecology model and theories of children' participation (Percy-Smith & Thomas, 2010). We used a qualitative research paradigm, and led semi-structured interviews with 33 children, and observations of the monthly sessions during three years. We proceeded with a thematic content analysis in a comprehensive approach. Ethical considerations of qualitative research were respected (consent form to each participant, participants’ pseudonyms). Our findings show many differences in the way children experienced their role in the council, depending on the project and activities they conducted, their involvement and feelings. Moreover, our findings reveal some paradox between the political and the educational aims of the council. These findings suggest implications for how adults can better consider children’s agency and promote children’s participation, in everyday life.

participation, agency, childhood, children’s municipal council, citizenship

This application discusses a completed piece of research.

When preschoolers activate public spaces – Another democracy is possible?
Christine Eriksson, BUV, Stockholm University, Sweden

The presentation displays how democratic meetings emerge in public spaces when a researcher and preschool children activate public places. Agency emerge in meetings between different knowledge practices and more-than-human relationships. Cele & van der Burgt (2015) report that society’s youngest citizens have little opportunity to influence the design of public spaces. Public places are considered an adult domain where children have to follow the implicit norms (Bessell, 2017). The presentation is based on Stengers consideration of Another science which participate in creating a democratic sustainable society, and Mol's reasoning about Empirical philosophy which pay attention to how different practices create different public realities. Methodologically, the researcher draws from artistic site-specific practices to curate a context where children can activate public spaces through their everyday preschool practices. The research project is approved by the Swedish Ethical Review Authority, and follow the ethical regulations of safeguarding the children’s identity and integrity. The presentation will show how new public practices emerge: A collective singing practice on the bus, a kinesthetic practice of direct presence in the underground metro and how embodied and sensorial contact zones are established through another practice of reading road lines. In this way the children do not have to submit to adults' practices, but can claim their civil right to establish public spaces by activating their everyday preschool practice. The new practices unmake the conventional public practices of absent presence, and rather value unexpected meetings which take place through physical presence of our bodies being in contact with context.

preschool practice, public space, curating context, emerging another democracy, posthuman theory
Parental participation in preschool teaching – An aspect of democracy
Charlotte Öhman, Jönköping University, Sweden

This project aims to examine how preschool teachers create opportunities for parents to be participant in preschool teaching and thereby be a link to their child’s participation. Research has shown that preschool need to welcome children and families based on everyone’s circumstances to facilitate equity otherwise preschool can become a place where an unequal society is maintained (Van Laere & Vandenbreck, 2017). The project is urgent since parents participation increasingly is understood as an important policy question since it can be related to preschool as an important part of society development (Egilsson et. al., 2021; OECD, 2017; Janssen & Vandenbreck, 2018; Moss, 2020). The theoretical framework draws upon current theories concerning democratic education and teaching in society (Biesta, 2004; Biesta, 2020). The study is conducted with a qualitative interpretive research paradigm by triangulation (Creswell & Creswell, 2018). Methods for data collection are interviews, participant observation and templates. The analysis is conducted through a content analysis within a hermeneutical approach. All participants received a consent form and information sheet. Transcribed data is pseudonymized. The participants could withdraw from participation at any time. The empirical material is stored according to GDPR guidelines. The findings shows that parents mainly want to receive information but do not want to participate in take decisions. Preschool teachers invite parents to participation, but they don’t talk explicit about teaching. These findings suggest implications for how preschool teachers enable participation and therefore teach through democracy.

participation, parents, preschool, democracy, teaching

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

C5

AGENCY, DEMOCRACY AND RISKY PLAY

Chair: Farhana Borg, Dalarna University, Sweden

Democracy and play in early childhood education for sustainability in Sweden and Turkey: A comparison of national curricula
Farhana Borg (1) and Deniz Kahriman-Pamuk(2); (1) Dalarna University, Sweden, (2) Mersin University, Turkey

Although the national curriculum plays a crucial role in strengthening educational activities, research on national policies is scarce (Borg et al, 2021). Our study compares how democracy, play, and sustainability is addressed in preschool curricula in Sweden and Turkey. Studies revealed that sustainability is still not explicitly integrated into preschool curricula in many countries (Ärlemalm-Hagsér et al., 2014; Elliott et al., 2015; Ohlsson et al., 2022). The study uses an integrated approach to sustainability where social, economic, and environmental dimensions are interdependent and interconnected (Elliott, 2023). The study is conducted within a qualitative research paradusing critical content analysis (Cohen et al., 2018) to analyze, interpret and compare the content of text data. Although it is an analysis of curricula, ethical consideration has been given to ensuring fair representation of the literature to avoid the possibility of bias. It is expected that the results will contribute to the improvement of early childhood policy and practices and will benefit early childhood fields within wider society. The preliminary findings indicate that sustainability has explicitly been integrated in the Swedish curriculum, but Turkish curriculum mentioned only environmental sustainability. In Sweden, play is a core value for children’s learning whereas in Turkey, play is mostly referred to as a methodology. Democracy is a core value of the Swedish curriculum, but the Turkish curriculum refers to “democracy” once in the whole text. Our study contributes to create knowledge about policies and practices concerning preschool education in Sweden and Turkey focusing on democracy, play and sustainability.

agency, child rights, critical content analysis, participation, sustainable development

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Agency in early childhood: ECE students’ thoughts, feelings and practices
Tamar Beer and Orit Mualem, Levinsky-Wingate College of Education, Israel
This research aims to uncover students’ agency practices with young children and reveal their thoughts and feelings toward these practices. Agency has been a basic concept for growing research in educational contexts and in teacher training (Juutilainen, Metsäpelto & Poikkeus, 2018). Evidence suggests that listening to children and responding to their initiations appropriately are related to children’s agency (Sairanen, Kumpulainen & Kajamaa, 2022). Reggio Emilia approach highlights children as active participants in learning and teachers as facilitating children’s learning through listening, observing, writing, documenting and reflecting (Edwards, Gandini & Forman, 2012). Reflection studies in teacher education indicates that reflection in general and practicum-related reflection in particular are essential to a teacher’s thinking and for the development of practical theories (Körkkö, Kyrö-Ämmälä, & Turunen, 2016). This multiple case study design was conducted within the qualitative paradigm (Stake, 2006). 10 ECE students documented their one-on-one interactions with children and small group learning experiences including planning, implementation and reflection. Content analysis was used. Confidentiality, privacy, and voluntary participation were assured by anonymity and informed consent. Findings suggest that students use diverse strategies to promote agency in kindergarten both in one-on-one interactions and small-group time: encouraging children’s choice or problem solving, implementing their ideas etc. Furthermore, reflections that revealed both positive and negative feelings about students’ agency practices motivated students to modify their agency practices. The practical implications concern the use of reflective cycles as a tool to encourage agency practice especially when feelings are processed through reflection.

agency, pre-service preparation program, reflection, early childhood education, pre-service practicum

This application discusses a completed piece of research.

Children's agency and the 'play value': Focusing on children's play on risky play equipment in preschools in Japan
Hiroko Inokuma, Ochanomizu University, Japan

The aim of this study is to investigate how children in Japanese preschool show agency when playing on the unique and risky play equipment, and to examine the 'play value', which includes risk. In a previous research, Ogisu et al.(2004) pointed out that in Europe, "safety measures start from the perspective of how to increase 'play value' including 'risk'", in contrast to the US, where the emphasis is on lawsuit prevention. Ogisu was the first to introduce the concept of 'play value' to Japan. Tsujitani (2021) revealed the reality of Japanese preschools that banned risky play, while Brussoni et al. (2012)suggested that overly limiting children's outdoor risky play could hinder their development. Based on Sandseter's (2007) theory, classify the six types of risky play that children are doing in preschools. The study was conducted within social constructionism. It uses an ethnographic methodology and involves participant observation of preschool children's play in three preschools. Participant observation of children was carried out with the consent of the parents or guardians after an ethical review by the university. Only the age of the children was revealed. The findings of the study showed that children prevent serious injuries by not forcing themselves to do what they decide they 'can't' do. One of the 'play value' is that children can develop agency in their play including avoiding risks. It is an important 'Children's Rights' for children to develop agency and gain 'play value' while playing with risks but without serious injury.

agency, play value, risky play, injury , children's rights

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

C6

CHILDREN AS CO-RESEARCHERS AND PEDAGOGICAL LEADERS
Chair: Lara Schindler, University of Applied Sciences Koblenz, Germany

Agency in action in school age childcare (SAC) - The careful decisions of a 6-year-old engaged in research
Mary Roche, Technological University Dublin, Ireland

This research highlights the decision-making capacity of children engaged in research in SAC. The purpose of this study was to explore children's experiences of play and participation in SAC. The National Strategy on Children and Young People's Participation in Decision Making in Ireland, highlights the importance of children’s participation and recognising their progressive capacities (DCYA,
However, competency to make decisions and listening to children’s voices is competing within a developmental discourse about the extent to which children can participate in the research process (Gallagher 2009; Tisdall et al., 2009). SAC is a liminal space between structure (school) and non-structure (home). Research highlights children agentic potential at home (Kuczynski et al., 2019) and in education (Manyukhina & Wyse, 2019), however there’s a paucity of studies detailing children’s agency in SAC. This study recognises children as social actors and rights holders (Tisdall and Punch, 2012) and are conceptualised as experts in their own lives (Alderson, 2012). This research was conducted within a social constructivist paradigm and recognises children’s experiences in SAC as context specific. A qualitative approach to research was used drawing on participatory research methods (Ansell et al., 2012). Written parental consent was provided, child friendly written consent processes were followed and ongoing consent was negotiated with children during the research encounter. Findings are discussed emphasises the decision-making potential of children in research attending SAC using Lundy's conceptualisation (2007). The research emphasises agentic potential of children in research and SAC practice.

children’s agency, children’s voice, participation, participatory research method, school age childcare

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Qualitative research with preschool children as co-researchers: promoting curiosity, agency, and participation
Lisa Schneider, Carolin Quenzer-Alfred and Daniel Mays, University of Siegen, Germany

Challenges and possibilities in conducting research with preschoolers as co-researchers promoting their curiosity, agency, and participation are examined emphasising educational transitions. Educational transitions can affect educational participation. Transitioning to school after kindergarten is especially important, marking the first change within the school system and the entry into formal education for the German system (Griебel & Niesel, 2003). While research focuses on the perspectives of relevant actors as family and teachers, few studies centre on children’s voices (Hartnack, 2019). One reason for this may be that research with children is seen as difficult and time-consuming, and children are considered unreliable research subjects. Based on the theoretical framework of the child-centred approach within a social constructivist paradigm, creative and participatory methods of data collection (in the context of transition to primary school) were developed in the presented project, drawing on the Mosaic approach (Clark, 2017), such as building a Lego school, drawing pictures, and telling stories, to promote children's curiosity, agency, and participation. The study emphasised ethical considerations obtaining informed consent from participants suitable for their age, ongoing consent discussions with children, and maintaining anonymity and confidentiality. Insights for developing child-centred research methods prioritising children’s participation and agency in the research process are derived. The main findings suggest that children can participate in research, contribute unique perspectives and highlight the need for child-centred research methods that facilitate children’s participation and agency. These methods can improve comprehensive and inclusive research approaches also benefiting policy and practice in education.

qualitative research, participative research, preschool children, transition, kindergarten

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

A child’s eye view: A virtual exploration of children’s experiences within a play-based environment
Deirdre Grogan and Charlotte Bowes, University of Strathclyde, United Kingdom

We have created an interactive, virtual tour of a high-quality, Scottish Early Years setting, allowing participants to explore the environment (of play-based spaces, interactions and experiences (Scottish Government, 2020)) through the eyes of the child. The innovative, multimedia setting simulation (including photos, videos, time-lapses and interviews), aims to improve the educational experience of children in the Early Years (ESTYN 2018); learn from research (Barnes & Smith 2007); bridge the gap between (sometimes abstract) educational theory and tangible everyday practice (Funabashi et al., 2013); offer proven quality (Drake 2018); involve knowledge exchange processes by children as they evaluate and describe their learning environment. The theoretical and conceptual frameworks underpinning the provision draw upon general theories of play and learning (Fisher 2016, Moyles 2015, & Sahlberg & Doyle 2019), encouraging practitioners to reflect upon the quality of the environment and consolidate their tacit knowledge in a context-specific way (Wenger et al., 2002). We cover observation, documentation and planning of play, with and for the children. Capturing, interpreting and amplifying the children’s voice in an ethical way has been a key consideration throughout (Lewis, 2010): The children’s informed consent, assent and dissent (Dockett, Einarsdóttir & Perry, 2012; Gallagher et al., 2010) were negotiated and revisited by children, families and staff using developmentally appropriate literature. We have empowered children
as pedagogical leaders, both within their setting and the digital tour. In doing so, our virtual community of practice supports practitioners in understanding the why, visualising the what & enacting the how of play pedagogy.

*play pedagogy, children's voice, virtual communities of practice, pedagogical leadership, curricular innovation*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**C7**

**ROLE OF TEACHERS IN PLAY**

**Chair:** Annerieke Boland, University of Applied Sciences - iPabo Amsterdam, Netherlands

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**Preschool children's free play and the role of teachers in it**

Merle Taimalu, Heily Leola and Taige Kusma, University of Tartu, Estonia

The aim was to find out the time and content of free play in kindergarten and the roles of teachers in it. There are discussions about "schoolification" of kindergarten (Patton & Winter, 2022) and the decrease of free play time (Veiga et al., 2016). Free play is important for developing children's creativity, problem solving skills and supporting curiosity. Teachers are aware of the importance of free play (Rentzou et al., 2018), but children often do not have enough time for this. It is important how to facilitate free play. According to Ivrendi (2020), teachers have five roles as free play facilitators. 52 preschool teachers in Estonia answered the questionnaire. Descriptive statistics and content analysis used in data analysis. The aim of study was explained to the teachers invited to the study. They were informed that the participation is voluntary and that they can at any moment refuse to participate (i.e. stop answering). The data that enable the identification of person was not asked. It was also explained that the results will be presented in a generalized form. 46% of teachers offered 2–3 hours of free play time daily. During free play, children mostly play cooperative games, construction and role games. Teachers participated mainly in the role of co-player and onlooker, and least as director. Conflict solution was mostly mentioned as the reason for free play intervention. Despite the positive attitude of teachers towards free play, their knowledge of supporting free play needs to be improved.

*preschooler, free play, free play time, teacher role, play facilitator*

This application discusses a completed piece of research.

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“**I support taking risks only under my control!**” Preschool Teachers’ Attitudes and Self-reported Practices about Risky Play Outdoors

Rabia Turgut-Kurt (1) and Serap Sevimli-Celik (2); (1) Ankara University, (2) Middle East Technical University, Turkey

This study aims to examine (a) whether preschool teachers’ risky play attitudes differ in relation to school type, number of children, presence of teachers’ aides, professional experience, age groups, and daily outdoor times, and (b) preschool teachers’ self-reported practices about risky play outdoors. The existing literature on risky play focuses on the crucial role of preschool teachers in children’s risk play opportunities (Sandseter et al., 2021; Van Rooijen et al., 2020). Ecological Systems Theory (Bronfenbrenner, 1979) constitutes the theoretical framework for the study, focusing on how teachers’ risky play attitudes facilitate bidirectional interaction with children at the microsystem level. An explanatory sequential mixed method design was used. The quantitative portion included 484 preschool teachers who filled out the Scale for the Attitudes towards Risky Play at Early Childhood-Teacher Form. The qualitative part included semi-structured interviews with 21 preschool teachers. Participants were given informed consent prior to any procedure and the right to withdraw at any time. Pseudonyms have replaced the names of participants. Quantitative results revealed significant differences in teachers’ risky play attitudes in terms of preschool type, presence of teachers’ aides, and daily outdoor time. Qualitative results indicated teachers’ concerns in relation to parents and administrators. That’s, the way parents and administrators perceive risky play, either positive or negative, has an impact on teachers’ practices in allowing or prohibiting risky play outdoors. These findings suggest the need for professional training and continuous collaboration of teachers with parents and administrators in supporting risky play opportunities in school settings.

*early childhood, preschool teachers, mixed method, attitudes, risky play*
This application discusses a completed piece of research.

**The role of preschools' educators' in children's agency and power relationship during play: A case study of Tajikistan**

Zarina Muminova, University of Edinburgh, United Kingdom

This research investigates parental engagement in children's early learning by employing Funds of Knowledge (FOK) theory (Moll et al., 1992). FOK was created to provide meaningful learning experience to children, by drawing on the diverse experience and knowledge they bring into their learning and play (Moll et al., 1992). However, some empirical studies evidence that using FOK in classroom is not that straightforward (Chesworth, 2016; Hedges, 2015). Teachers deal with many pedagogical issues, and this includes some children with more FOK dominating the play, whereas those with less FOK feeling rather disconnected. My study furthers this discussion by critically looking at how teachers navigate their challenges in using FOK in classroom to balance the interplay of power, agency, and status in children's play. This study draws on FOK theory (Moll et al., 1992). I employed a case study approach (Yin, 2018) to investigate the topic and used qualitative research tools - interviews and children’s video-diaries, to collect data. Following the University of Edinburgh Ethics Committee’s approval, all informants signed a consent form and pseudonyms are used to anonymise the data. The findings show that while FOK is useful to provide a meaningful play experience for children, teachers face numerous challenges in deciding which FOK to utilise or discard to ensure inclusivity in children’s play, as well as to balancing children’s agency, status and power relationship during play. The expected result will contribute to teachers’ training policy to inform FOK’s theoretical and practical implications in teaching and learning.

parental engagement, funds of knowledge, peer cultures, children's agency, children's play

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**C8**

**PEDAGOGICAL MODELS, COACHES AND THE RISE OF BLENDED LEARNING**

**Chair: Dalila Lino, The Polytechnical Institute of Lisbon, Portugal**

Exploring the impact of pedagogical coaches on practitioners’ competencies and process quality

Jeroen Janssen (1), Bart Declercq (2), Dietlinde Willockx, (1) Karen De Coninck (3) and Shana Hollander (2); (1) Karel de Grote University of Applied Sciences and Arts - Pedagogy in Practice Research Centre, (2)University of Leuven - Research Centre for Experiential Education, (3) Artevelde University of Applied Sciences, Belgium

This two-year research project aims to evaluate the recent introduction of pedagogical coaches in the childcare sector for babies and toddlers in Flanders (Belgium). Specifically, we investigate whether and how external coaches can have a positive impact on practitioners’ competencies and process quality in general. Although there is a genuine belief that training and coaching benefits practitioners’ professional development and ultimately the children they care for, the literature remains rather inconclusive in terms of the program characteristics that help create a positive impact (Fukkink & Lont, 2007). Potential links between intended coaching activities, expected outcomes and contextual factors were described in a so-called theory of change (Connell & Kubisch, 1998). Mixed methods were used to test our theory, involving both qualitative (Denzin & Lincoln, 2018) and quantitative (Kaplan, 2004) research paradigms. Data on coaching activities, outcomes and contextual factors were obtained from coaches and practitioners through questionnaires, interviews and documents. Content analysis and inferential statistics were used to analyse the data and to draw conclusions about the factors that are associated with success. A consent form and information sheet was provided to all participants. When interviews were conducted online, consent was obtained verbally. Anonymity was guaranteed for all participants, as well as the opportunity to withdraw from the study at all times. Quantitative and qualitative findings demonstrate how pedagogical coaches may support practitioners’ competencies and process quality, ultimately supporting children’s curiosity, agency and participation. Our study suggests implications for how the work of pedagogical coaches might become more effective.

childcare, pedagogical coaching, effectiveness, impact, competencies

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**The development of professional competences in ECE: The role of pedagogical models**
Dalila Lino (1) and Cristina Parente (2); (1) Lisbon School of Education, The Polytechnical Institute of Lisbon, (2) University of Minho, Portugal

The main goal of this study is to understand the role of early childhood pedagogical models for the development of preschool teachers’ professional competences. This study is deeply related with the work of Oliveira-Formosinho and Formosinho (2020), Lino (2005), Clérigo et. All (2020) that show the contribution of pedagogical models to enhance preschool teacher professional competences. The pedagogical models guide the educator’s performance by putting in perspective the role of the child, the adult, the processes and contexts in learning. Following the qualitative paradigm, Portuguese preschool teachers affiliated with three pedagogical approaches (HighScope, Pedagogy-in-Participation, Modern School Movement) and without affiliation to a pedagogical model were asked, through semi-structured interviews, to explain how the use of a pedagogical model supports their educational decisions and thus contributes to the development of professional competences. Data analyses followed the content analysis steps. To ensure confidentiality no information is disclosed without participants’ consent and the interviews were transcribed and sent to the participants for a final revision. The study shows that a pedagogical model supports and guides preschool teachers to make wise decisions to address children’s and families interests and needs. Teachers affiliated with a pedagogical model have a clear and intentional discourse about how they overcome problems, difficulties experienced in their daily practices. This study aims to contribute to inform, teacher education professionals, directors, pedagogical coordinators, preschool teachers, parents and politicians to invest on the training of pedagogical models for early childhood education.

pedagogical models early childhood education, preschool teacher, professional development, quality practices, early childhood education

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Enhancing quality of early childhood education in Nigeria through adoption of blended learning by educators

Oluwaseun Temitope Lawal (1), Taiwo Oladunni Gbenga-Akanmu (2) and Tesleem Akinyemi Amoo (1); (1) Federal College of Education Iwo, (2) Institute of Education Obafemi Awolowo University, Nigeria

This study investigated level of adoption of blended learning as a teaching strategy by early childhood educators in Ondo state Nigeria. Various researches has discovered that blended learning has a positive effect on learner’s engagement in the classroom. This evident why it is a necessity for early childhood educators to adopt blended learning as a teaching strategy in Nigerian primary schools. Hence, this study investigated educators adoption of Blended Learning. Theory of Complex Adaptive Blended Learning System by Wang et’al 2015 was adopted as theoretical framework. This theory centered on the learners, but all its components impact each other. The components in this theory are related to this study, they include: learner, teacher, technology, content, learning support and school. This study employed survey research design. The population comprised all ECE Teachers in Nigerian Primary Schools. The sample size consisted of 450 teachers that were randomly selected from the three Senatorial Districts in Ondo State Nigeria. A self-designed instrument was used to collect data for the study. The instrument was validated with a reliability coefficient of 0.75. Data collected were analysed using frequency, percentages and ranking. Responses was protected by ensuring respondent of their privacy protection through statement of confidentiality. This study revealed that Early Childhood Education teachers in Ondo state Nigeria has adopted blended learning as a teaching strategy but were faced with some challenges on its implementation. Government and other stakeholders in education need to give more awareness on Blended Learning and provide teachers and learners with necessary facilities needed.

blended learning, early childhood education, technology, educators, teaching strategy

This application discusses a completed piece of research.
Natalie MacDonald, Jane Waters-Davies, Natasha Young, Glenda Tinney and Jess Pitman, University of Wales Trinity Saint David, United Kingdom

We sought to develop deeper understanding of pedagogical contexts that afford concept development between practitioners and 2-year-olds in ECEC in Wales. Extending previously published empirical work exploring professional learning in this area (Waters & MacDonald 2020, 2022; Gealy et al. 2020), we consider what more we can learn working with practitioners and including Conversation Analysis (Church and Bateman 2022). The study is informed by Fleer’s (2009) exploration of the dialectical relations between everyday and scientific concepts within play-based ECEC, Tu’s (2006) classification of science-related activity and Fleer’s (2019) explanation of the social production of wonder. It sits within a socio-constructivist understanding of the adult learner in which professional knowledge is seen as situated, contextual and culturally shaped (Rogoff 2003). The learning child is positioned as capable and active. ECEC staff identified excerpts of their own practice in which they felt children’s concept development had been supported and discussed them with us. These were analysed through the theoretical lenses identified above, then subjected to Conversation Analysis. All adult participants, and parents of children involved in the videos provided informed consent. Children’s assent was sought using age-appropriate mechanisms to ensure children could opt out if wished. Two excerpts are used to unpack the learning about adult-child interaction, children’s concept development and professional knowledge that arose from the study, with a specific focus upon children’s capability. The study has implications for professional learning in academic and practice-facing ECEC communities regarding children’s conceptual competencies and how these can be made visible through research.

Curiosity, what more than questions?
Anne Lynngård and Marianne Presthus Heggen, Western Norway University of Applied Sciences, Norway

Curiosity and wonder are general phenomena crucial for children’s development, but they are poorly understood. In a previous study, we suggest that bodily curiosity and bodily wonder should be included in the understanding of these phenomena (Heggen & Lynngård, 2021). In this study, we ask what this expanded understanding of curiosity might look like in early childhood. The study builds on previous research on curiosity and wonder in early childhood, summarized by Heggen & Lynngård, 2021, where exploration is seen as the activity in the space between curiosity, wonder and interest. We further build upon understandings of curiosity and wonder as phenomena of perception, including both verbal and bodily forms (Merleau-Ponty, 2012 & Ingold, 2011). This study is part of a phenomenological study investigating curiosity and wonder. This presentation is based upon an analysis of films of small children playing in nature, looking for expressions of curiosity and wonder. Filming and analyzing children invade their lifeworld, by respecting and considering children’s verbal and nonverbal expressions, their questions, and if they feel comfortable, we ensure that the insights we achieve exceeds any potential harm. We suggest that the range of expressions signal different forms of curiosity and wonder. Through these examples, and in combination with ongoing research, we show how different forms of curiosity and wonder appear in early childhood. Our study shows the importance of expanding the understanding of curiosity and wonder beyond questions by including embodied curiosity and wonder in pedagogical work in early childhood education.

Looking through the lockdown lens to determine whether young children’s curiosity, agency and participation was affected during the COVID-19 pandemic
Jools Page and Jodi Roffey-Barentsen, The University of Brighton, United Kingdom

This study identifies whether young children’s curiosity, agency and participation was affected by the Covid-19 lockdown in England. During lockdown, parents reflected upon how their young children were able to articulate their ideas through creative methods to make sense of the word around them (Cohen and Bamberger, 2021). However, when parents were anxious, they felt unable to participate positively in their children’s play because they did not recognise children’s need for agency (Page, Roffey-Barentsen and Clough, forthcoming). This study draws on Lundy’s (2007) model of participation to highlight how “the concepts of space, voice, audience and influence can be actioned in practice....to meaningfully and effectively implement this right of the child” (Kennan, Brady, and Forkan, 2018, p.206). Adopting an interpretivist paradigm, qualitative data was collected through semi structured
interviews with 10 parents identified through opportunity sampling (Jupp, 2006). Incidences of curiosity, agency and participation were mapped against Lundy’s (2007) model of participation. All ethical documentation was compiled and shared with volunteer participants including informed consent and their right to withdraw, in line with institutional requirements and the BERA (2018) guidelines. Pseudonyms were used throughout. When looking down the lockdown lens, the application of the Lundy model (2007) provided us with clear examples of how close and trusting relationships can harness opportunities for young children to have curiosity, agency, and participation. These findings suggest implications for how practitioners work with parents when children have been affected by life events, and to prioritise close and trusting triangular relationships between parent, child, and practitioner.

**lockdown, curiosity, agency, participation, relationships, parents, young children**

This application discusses a completed piece of research.

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**C10**

**SYSTEM REFORM OF SERVICES FOR YOUNGEST CHILDREN (0-6)**

Chair: Noelia Ceballos López, University of Cantabria, Spain

Sustaining inclusive transitions within the reform on the integrated 0-6 system in Italy. Findings from the INTRANS project.

Lucia Balduzzi, Arianna Lazzari and Martino Serapioni, University of Bologna, Italy

Structural and pedagogical quality concerns have featured prominently in contemporary ECEC debates. Our presentation will report the results of the InTrans project (Erasmus+KA3), aimed at supporting the reform process of overcoming the split system in Italy. As discontinuity and fragmentation between ECEC segments still represent a widespread feature of ECEC systems in EU, multiple studies documented the inadequacy of the way in which transitions are currently governed, in terms of addressing disadvantaged groups’ experiences and constraints (Balduzzi, Van Laere et al. 2019). Starting from the importance to integrate the educational, social and work-life balance policies dimension (EU Recommendation 2022) our framework adopt a systemic approach oriented to promote children inclusion, family’s participation and system competencies (Urban et al., 2012). Within the action-research-for-professional-development paradigm (Ricerca-Formazione), we decided to adopt a qualitative methodology such as policy analysis and interviews to policy decision makers, stakeholders and professionals to sustain grassroot transformational processes in ECEC policy and practice. All those involved have given their informed consent; we always ensure the privacy of participants through data anonymization. The results revealed the importance of investing in pedagogical coordination networks (PCN) as levers of vertical (across 0-3 and 3-6 services) and horizontal (across different ECEC providers) continuity and the importance of the joint training among early childhood educators and preschool teachers. In the context of multi-layered governance PCN play a key role in connecting the needs of local communities with ECEC policy for sustaining tailored approaches to reform implementation and fostering pedagogical experimentation across transitions.

**integrated 0-6 system, ECEC accessibility, inclusive transitions, governance strategies, pedagogical approaches**

This application discusses a completed piece of research.

**What are we missing in early childhood education? A Spanish regional study about the role of early childhood education in building an inclusive school**

Noelia Ceballos López, Ángela Saiz-Linares and Teresa Susinos-Rada, University of Cantabria, Spain

We present a study(NationalR&D/PID2019-108775RB-C42) whose purpose is to analyse policies to identify the main challenges for inclusive education. We analyse the status of ECE(0-3) in the region of Cantabria(Spain)and the main barriers for inclusion detected. We analysed the situation of ECE and discussed the professional models(maternalistic assumption, outcome pedagogy and critical ecology of the profession) to explore the policy implications (Araujo, 2018;Arndt, et al., 2018;Ceballos, Saiz & Susinos, 2022). This is a critical moment for ECE(0-3) in Spain. A new education law and European funds offer opportunities to expand ECE. In Cantabria, they decided to fragment ECE, incorporating 1-year-olds children into primary schools, where architecture and culture are not designed for these children (Ceballos, Saiz & Susinos, 2022). The 1-year-old classrooms receive 12 children under the responsibility of a teacher and a technician. Most ECE centres come under the health department rather than the education department. The research
is framed within the qualitative paradigm. The study is based on a multivocal enquiry process, in which teachers, teacher training professionals, future teachers, representatives of children's centres participate through interviews and focus groups to design a collaborative report (Flick, 2018). Research respects the University of Cantabria’s Ethics Code and is committed to democratic processes. We identify these challenges: Reversing the policies of fragmentation of ECE (0-3). To recover ECE as a stage that covers 0-6 years-old and has its own identity. A process to move centres from health department to education department. We seek to have a political and social impact by constructing respectful ECE narratives.

early childhood education (0-3), inclusive education, participatory research, collaborative reporting, education policy

This application discusses a completed piece of research.

Professional practice during large-scale reform: implementing universal 3-year-old preschool in Victoria, Australia
Patricia Eadie, Jane Page, Penny Levickis, Laura McFarland and Sarah Young, University of Melbourne, Australia

The Educational and Developmental Gains in Early Childhood (EDGE) Study investigates the impact of two years of preschool on children's learning and development, and the impact of large-scale policy reform on the preschool workforce. This presentation describes the professional and pedagogical practice of teachers implementing universal 3-year-old preschool programs during the reform. Recognizing the benefits of quality ECEC, the Victorian State jurisdiction is the first Australian government to provide two years of funded universal preschool. While there is evidence for the impact of targeted ECEC services for vulnerable children (Hewitt & Walter, 2014), the impact of two years of universal preschool when implemented at scale is less clear (Fox & Geddes, 2016). This study is framed within ecological theory and informed by phenomenology. Case study (Yin, 2018) and qualitative methodology were used to provide a holistic understanding of teachers’ experiences of implementing universal 3-year-old preschool in Victoria through interviews with 19 teachers. Ethics approvals were obtained from university and government ethics committees. Participants provided informed consent. Interview data were de-identified. Teachers explained what constitutes their quality pedagogical practices for 3-year-old children and identified challenges and enablers shaping their programs. Structural constraints, workforce issues, and relationships with families and professionals were identified as impacting on 3-year-old programs. This study provided preschool teachers with an opportunity to recount their experiences in implementing a complex and critical reform; universal 3-year-old preschool. Findings may be used to inform further policy reform and practices to support quality early learning for young children.

preschool, teachers, children, pedagogy, quality

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

C11
INVESTIGATING VALUES, CITIZENSHIP AND SOCIAL SUSTAINABILITY
Chair: Nura Jahanpour, University of Cambridge, United Kingdom

‘Children Wondering’ - A project of questioning thinking
Joana Chélinho, Polytechnic Institute of Coimbra - Coimbra Education School, Portugal

The ongoing action-research project “Children Wondering”, designed as an one year pilot-project, aims the stimulation of questioning thinking in childhood and citizenship awareness. Although questions are used for multiple purposes, we reinforce the epistemic function of asking in childhood, following S. Ronfard (2018, p.2), as they allow for explanations or inferences and move towards curiosity or 'wonderment'. Asking questions is considered natural in childhood, but this curiosity needs to be nurtured, opening opportunities for intellectual deepening and progressive critical thinking (Malavasi & Zocatelli, 2013, p. 14). Based on interpretive paradigm (Denzin & Lincoln, 2018), testimonies collected in focus group, participant observation records and children tasks samples will illustrate action-research strategies, developed in three kindergarten, involving 4 preschool teachers and near 90 children, underpinning and revealing the progressive construction of the project, showing how children and professionals challenged themselves in this itinerary. In the ethos of this exploratory project is the commitment of adults to respect avid minds and competent expression of children and their capacity for civic engagement. Informed consent was negotiated with participants.
involved and privacy of all data collected is guaranteed. While developing children’s ability to formulate questions that can challenge them to interpret problems that are part of their citizenship (war, environment, emotions, gender, illness...), project enhances creative processes of wondering through contact with different artistic languages. Preliminary data addresses some strategies to face insecurities and doubts expressed by professionals more used to simplifying than to problematizing in their practices, and to promote and value children’s questions.

questioning thinking, civic engagement, childhood, aesthetic wonderment, professional development

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Exploring parenting values construction through creative engagement: Towards parent-friendly learning
Nura Jahanpour
University of Cambridge, United Kingdom

This inquiry aims to understand parenting value construction and explore creative engagement methods with parents. While past research highlights the consequential impact of values on parental behaviour (Sagiv et al., 2017), building on the notion that parents are powerful vehicles of value socialization (Whitbeck & Gecas, 1988), this study offers a more exploratory research on the origins of parent values. The study examines values as a social concept drawing on ecological systems theories (Partelow, 2018), funds of knowledge (González, Moll & Amanti, 2006), and creative methodologies (Leavy, 2022) to place parent experiences and agency at the forefront of the research. This presentation is based on a qualitative research project with parents (n=20) of children in their early years based in Denmark, and Slovakia through an Ecological systems paradigm. The research adopts a creative qualitative data-collection methodology utilising walking interviews and photo-elicitation methods. The thematic analysis adopted in this study was an inductive method going beyond the semantic level of data to identify underlying ideologies present (Braun & Clarke, 2006).

Ethical principles were considered throughout including informed consent, pseudonyms, researcher positionality considerations and context examination for situated ethics (Guillemin, Gillam, 2004). The findings suggest initial thematic typologies, critical moments of parent value construction and for creative investigation of parent experiences. The presentation contributes to a better understanding of parent needs and advocates for the reimagining of lifelong learning of the parent community by adopting ethical and empowering outreach methodologies that remove barriers to access for diverse parent communities.

Parenting values, parent experiences, early years, lifelong learning, ethically creative methodologies

This application discusses a completed piece of research.

Caring for the whole child in preschool education: Attentiveness and curiosity for children’s different worldviews in sustainable educational professionalism
Magdalena Raivio (1), Ellinor Skaremyr (2) and Arniika Kuusisto (3); (1) Karlstad University, Sweden, (2) University of Borås, Sweden, (3) University of Helsinki, Finland

This presentation focuses on the foundation for a socially sustainable preschool. Based on a literary review, we argue for the necessity of preschool teachers’ care for children’s worldviews and suggest an analytical tool for creating a socially sustainable Early childhood education and care (ECEC). Previous research emphasizes caring for the child’s worldview as vital for the child’s resilience (Eizenberg & Jabareen, 2017), contributing to learning and well-being, both in preschool and in a longer perspective. Postcolonial, feminist care ethics (hooks, 2003; Noddings, 2013; Yuval-Davis, 2011), is used to argue for the importance of teachers’ awareness of power structures that creates exclusion and a need for curiosity and sensitivity toward the child’s worldview with its religious or existential elements. Based on postcolonial- and feminist late modernity-perspectives, a thematic literary review was conducted of 55 research articles found through the database ERIC, concerning educational challenges regarding cultural diversity in ECEC. The sources used were published articles. When reciting other authors’ work, a research ethics stance has been used throughout the study. An effort was made to represent social diversity in the material. An analytical tool for sustainable educational professionalism in ECEC was developed, focusing on six dimensions of care: International (policy, discourse), Societal (national policy), Community (local preschool), Situations (routines, activities), Events (joint attention), and Acts of Care (individual). We wish that the tool provides a model for preschool teachers to assess and or plan for a holistic educational approach in ECEC where caring for the whole child includes also its worldview.

early childhood education and care, worldviews, care ethics, social sustainability, teacher professionalism

This application discusses a completed piece of research.
This symposium sheds light on gender issues in early childhood education and care through a diversity of intercultural lenses. Xu, Andrae and Eidevald report from an international project that explored practitioners’ understanding of gender sensitivity in ECEC in England, China, Germany, and Sweden. They problematize the lack of definition of ‘gender sensitive pedagogy’ in international policies. Elkarif discusses cultural factors in how male ECEC workers deal with sexual matters in everyday practice, by comparing professionals with and without migrant background in Germany. Finally, Genette, Maulet and Pirard discuss gender, and especially the roles of fathers, in childcare services and playgroups from an intercultural perspective. Together, the three papers illustrate that generalistic understandings of gender equality need to be reflected.

Contextualising gender-sensitive pedagogy and practice in early childhood education (ECE): Perspectives from China, England, Germany, and Sweden

Christian Eidevald (1), Yuwei Xu (2), Rachel Lehner-Mear (2) and Markus Andrae (3); (1) University of Gothenburg, Sweden, (2) University of Nottingham, United Kingdom, (3) Dresden University of Applied Sciences, Germany

This paper concerns Sustainable Development Goal 4 (Quality Education), Target 4.a to ‘build and upgrade education facilities that are ... gender sensitive’. It problematizes the lack of definition on ‘gender sensitive’ education in this important international policy and in literature. Many studies have recommended gender-sensitive pedagogy in disrupting gender stereotypes in ECE (e.g., Rohrmann, 2021), but few have discussed in detail what it means and how it is practiced in different socio-cultural and policy contexts. This study is informed by action research and engaged practitioners from China, the UK, Sweden, and Germany in reflections on their own practices in ECE (Altrichter, Posch, & Somekh, 2007). We aim to: promote reflexive practice in exploration of gender-sensitive approaches to ECE; experiment actions facilitating gender-sensitivity; identify challenges and support; and develop cross-cultural reflexivity by looking beyond reflection to a broadly globalised and multicultural context (Hayes, 2014).

Participant practitioners (N=40) took part in a one-day workshop (separately in each country) and contributed to group discussions on how gender matters in ECE. They then took individual reflective journals for a month to document how they interpreted and practiced gender-sensitive pedagogy at work. Ethical approvals were gained from all countries through the researchers' institutions. EECERA Ethical Code is consistently followed. The findings reveal culturally relevant interpretations and practices of gender-sensitive education across the four countries, challenging the universal approach to gender-sensitive education by Sustainable Development Goal (SDG) 4. A culturally-sensitive framework for gender-sensitive ECE is therefore proposed in addressing knowledge gap in the decontextualized SDG 4.

sustainable development goals, gender-sensitive pedagogy, cross-cultural reflexivity, early childhood education, reflective practice

This application discusses a completed piece of research.

Fathers in childcare services and play groups: An intercultural perspective

Christophe Genette (1), Florence Pirard (1) and Nathalie Maulet (2); (1) University of Liège, (2) Office de la Naissance et de l'Enfance, Belgium

In French-speaking Belgium, two research projects seek to improve the understanding of relationships between parents and professionals, specifically places given to fathers in early childhood services, and to identify strategies to enhance these relationships. While literature shows the importance of strengthening collaboration between families and professionals, field practitioners express difficulties in managing their relationship with parents (Sharmahd & Pirard, 2018), especially fathers. These difficulties can be explained by historical and sociocultural factors related to fatherhood, as well as characteristics of services mainly staffed by women practitioners and focused on a maternal approach (Peeters, 2022). Collaborative interdisciplinary research (Jacob et al., 2021), conducted within a constructivist approach to gender and culture (Bereni et al. 2020), was carried out. With the support of researchers, practitioners from childcare services and playgroups produced documentation on their daily practices. All
data were analyzed collectively by practitioners and researchers from different disciplines, before self-regulating participatory assessment initiated by Cresas and IEDPE (EADAP, 2011; Pirard et al., 2021). From 2022, these results have been supplemented with an interdisciplinary collective and participative analysis of contextualized narratives. Research was approved by the ethics committees of ONE and University of Liege. Ethics were ensured through participants’ informed consent and reflexivity of the collaborative process. Results underline importance of the research process and highlight levers entrusting fathers a diversity of places, validated by field experiences. The collaborative research stream exploring gender interaction in childhood services and promotes self-implemented context specific change, hence reinforcing field practitioners’ agency.

gender, interaction, fathers, early childhood field practitioners, collaborative action research

This application discusses a completed piece of research.

Male educators answering children’s questions on sexual matters? A cross-cultural study
Halal Elkarif (1) and Tim Rohrman (2); (1) Cairo University, Egypt, (2) HAWK Hildesheim University of Applied Sciences and Arts, Germany

This study aimed to examine how male ECE educators with different cultural backgrounds are answering children’s questions related to sexual matters. Previous research investigating children’s curiosity about sexual matters focused on the responses and attitudes either of parents (Guder&Alabay,2018; Martin&Torres,2014) or female educators (Ünlüer,2018; Wan Nawi et al.,2021), while little attention was given to male educators, especially from a cross-cultural perspective. The study draws upon Lev Vygotsky’s sociocultural theory, considering the interaction between the child and his social and cultural environment as an important factor affecting the child’s cognitive development. Within a generic qualitative methodology, 18 face-to-face interviews were conducted with current male educators in Germany. Half of the participants had German cultural background, while the other half were migrants from MENA countries. Following the EECERA ethical code for early childhood researchers, both written and verbal taped consents were obtained from the participants documenting their agreement to record the interview for the purposes of transcription and analysis and proving their voluntary participation in the research. The findings revealed that cultural traditions can make it difficult for some practitioners to answer children’s questions about sexual matters. Therefore, future quality policies could be greatly enhanced by enriching the male ECE educators’ knowledge about children and sexuality and encouraging them to reflect on their own philosophies in regard with this topic. This may provide the required confidence to interact with children’s curiosity in an objective scientific way that limits the effect of other factors, such as religion, culture, or personal perspectives.

male educators, children’s questions, sexual matters, practice, cultural background

This application discusses a completed piece of research.

C13
Mathematics Birth to Eight Years SIG Self-organied Symposium
PLAY AND MATHEMATICS (II)
Chair: Oliver Thiel, Queen Maud University College of Early Childhood Education, Norway

The EECERA SIG Mathematics Birth to Eight Years started a new book project on the topic of Play and Mathematics (play in mathematics and mathematics in play) in early childhood. The aim is to present the diverse understandings of play and the interplay between mathematics and play. That includes multiple ways mathematics may emerge in children’s play, and play may support children’s mathematics. The symposium presents three of the proposed chapters. The chapters focus on different aspects: children’s cultural knowledge, mathematical concepts that children use in their free play, and the teacher’s role in enriching children’s play with mathematical ideas.

Acknowledging the multiple aspects of children’s engagement with mathematics in child-led play: Perspectives from England and Greece
Elizabeth Carruthers (1) and Maria Papandreou (2); (1) Bristol University, United Kingdom, (2) University of Thessaloniki, Greece
This study aims to explore the relationship between child-led play and mathematical learning, and analyses sustained mathematical play episodes from three- and four-year-old children in England and five- and six-year-old children in Greece. Sarama and Clements (2009, p. 327) point out that mathematics is expressed in children’s play in two forms, ‘play that involves mathematics and play with mathematics itself’. In this study we discuss both forms. This study is based on sociocultural theory (Vygotsky, 1978) where children’s cultural knowledge influences their mathematics. The research was conducted within a qualitative, interpretive research paradigm (Benoliel, 1996) and case study methodology (Stake, 2006) was used. Data were collected from teachers’ writings, observations, audio tapes, field notes and graphics. Strict ethical guidelines were adhered to, which included parent and teachers written consent and children’s drawing consent. Emerging ethical issues were considered and addressed. Pseudonyms were used and all participants understood that they could withdraw at any time. The findings suggest that children’s play can create children’s own “zones for proximal development” (Vygotsky, 1978) rather than adult ZPD. The play episodes of the younger children underlined pedagogies that require attached teaching (Carruthers, 2021), which acknowledges children’s meanings and ways of knowing mathematics. It is important to empower and prepare teachers to gain confidence in their ability to notice children’s mathematics in play, to understand and embrace what is often unconventional mathematics, and to build on this understanding.

child-led play, mathematics, children’s agency, cultural knowledge, attached teaching

This application discusses a completed piece of research.

Stochastics in children’s outdoor play – First results
Oliver Thiel (1), Lucía Casal de la Fuente (2) and Zoi Nikiforidou (3); (1) Queen Maud University College of Early Childhood Education, Norway, (2) University of Vigo, Spain, (3) University of Ioannina, Greece

The project aims to analyse how 3-5 year-old’s mathematics emerges in different play situations, especially outdoor play. The research question is how mathematical ideas with an emphasis on stochastical concepts (probability and statistics) emerge through children’s play outdoors, considering both free, child-led play and structured, adult-led play. Research has shown that children under the age of 6 indicate basics of probabilistic reasoning and can engage with probabilistic tasks and uncertainty (e.g. Falk et al., 2012; Gualtieri et al., 2022; Nikiforidou, 2019). Language plays a role in children’s probabilistic thinking (Supply et al., 2022). We use the Probabilistic Thinking Framework by Jones et al. (1999, p. 489) and the Epistemological Triangle by Steinbring (2006, p. 135). This is a cross-sectional case-control observational study. Data was collected by video observation, transcribed, coded, and analysed qualitatively and quantitatively. The observed groups differ in educational tradition and pedagogical practice. A consent form and information sheet were provided to the parents and professionals. Children’s consent was negotiated during the time the research was carried out. Pseudonyms have replaced participants’ names. Participants (including the children) were given the opportunity to withdraw at any time. The preliminary findings reveal traces of young children's stochastical thinking during play scenarios outdoors. Their intuitions, predictions and inferences show they can confront uncertainty and chance. They verbalise and encounter probabilistic and statistical notions, but more through adult-led activities than free play. The study will help to develop play-based, child-led approaches to teaching stochastics in early childhood.

mathematical thinking, stochastics, outdoor play, play-based pedagogy, early childhood

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Exploring educators’ perspectives on the mathematics in young children’s play: A cross-cultural study in Norway and England
Camilla Normann Justnes (1), Catherine Gripton (2), Beate Nergård (1) and Anne Nakken (1); (1) Norwegian Centre for Mathematics Education, Norway, (2) University of Nottingham, United Kingdom

This research explores the mathematics that educators notice in young children’s play and their perspectives on how they can develop this. The potential of play to facilitate children’s mathematical thinking depends largely on educators’ ability to react and recognize mathematics (Van Oers, 1996). However, their active engagement in children’s self-directed mathematical play is relatively low (Björklund & Barendregt, 2016), perhaps because pre- and in-service training in mathematics tends to be limited (Verschaffel, Torbeys & De Smedt, 2017). The research was informed by sociocultural views on play (Vygotsky, 1978), and how early childhood educators use play to build on children’s existing mathematical understandings (Dockett & Perry, 2010). Researching educators’ reflections, we conducted a qualitative social constructivist participatory research study. Six educators from Norway and
England engaged in multiple interviews and maintained reflective accounts. Thematic analysis was collective (not comparative) to be respectful for cultural differences, focusing on the mathematics and practices that participating educators recognized, within and asset-based approach. Our design positions educators as competent, capable and expert, inviting them to engage in reflexive practice in mathematical noticing. Participants were anonymised and free to withdraw at any time, without consequence. Initial analysis reveal that practitioners are more likely to observe and extend number than other areas of mathematics, and that practitioners report greater potential mathematics in children's play when they deliberately attune to this within reflection.

Implications are to improve support for educator training on the mathematics in play, interpretation of curricula, and support for structured reflection of mathematics practice.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**C14**

**Outdoor Play and Learning SIG Self-organised Symposium**

**CHILDREN’S ACCESS TO OUTDOORS AND ADULT’S ROLE IN THEIR OUTDOOR PLAY EXPERIENCES**

**Chair:** Merete Lund Fasting, University of Agder, Norway

This self-organized symposium is part of the Outdoor Play and Learning SIG. Outdoor play can spark curiosity and inspire a ‘new adventure in learning’, however in the light of the recent global pandemic we are witnesses of many changes in children’s life, including their outdoor play opportunities. This symposium seeks to carry on the discussions arose in the last year’s SIG self-organized symposium and strengthen them with new research findings from four different countries (China, Australia, Israel, Norway). We will explore children’s access to outdoors and adult’s role in children’s outdoor play experiences during the Covid pandemic and study early childhood education and care (ECEC) employees ‘role in child-managed play in nature.

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**Parents' perceptions of their children's outdoor activities before and during the COVID-19 crisis**

Michaella Kadury-Slezak, Clodie Tal, Sapir Faruchi, Iris Levy, Pninat Tal and Sigal Tish, The Academic College Levinsky-Wingate, Israel

The aim is to show parents’ perceptions regarding outdoor activities after preschool hours before and during the covid 19 crisis. Children’s engagement in outdoor activities enables deep connections with the natural environment and the local community. Parents are sometimes afraid of the risks involved in outdoor activities and often they do not encourage their children to engage in this type of play (McFarland & Laird, 2018). This study is based on Bronfenbrenner’s (1986) bioecological theory of development, stating that development of the child is a product of complex interactions between the children and their immediate social and physical environment. Mixed method design including both quantitative and qualitative methodology (Creswell & Clark-Plano, 2008). The qualitative component is based on semi-structured interviews with 12 parents; the quantitative component is based on a questionnaire that was filled out by 202 parents on May 2022. All parents agreed to participate in the study and their identities remained confidential by using pseudonyms. The questionnaires were anonymous. About 60% of the parents reported that in their childhood they spent more time in outdoor activities than their children. In addition, 45% of the parents reported that the pandemic has reduced the frequency of going outdoors . There is a need in Israel for parent guidance and education to restore the habit of going out to close playgrounds and public gardens on an almost daily basis and to recognize the benefits of outdoor activities in general and during pandemics in particular.

**outdoor activities, parents' perception, Covid 19 crisis, natural environment, risks associated with outdoor activities**

This application discusses a completed piece of research.

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**Adults’ role in children’s play in nature**

Merete Lund Fasting, Ingrid Heald Kjær and Ann Christin Helgesen Bjørke, University of Agder, Norway

The aim of the research is to gain knowledge on ECEC employees’ role in child-directed play in nature. Children’s self-directed play in nature is valuable (Ernst et al, 2021, Fasting and Høyem, 2022), but ECEC employees perceive it as challenging to both promote
(Cheng et al., 2022) and judge how and when to get involved in children’s play (Bubikova-Moan et al., 2019). The framework is based on van Manen’s (2008, 2009) theory of pedagogues’ sensitivity and pathetic understanding, Greve and Løndal’s (2015) discussions on teachers’ tact and Høyem and Fasting’s (2019) focus on embodied knowledge/embodiment and intuition in pedagogical work outdoors. The paradigm is hermeneutical and the method is “focus group” conversation. ECEC employees’ from 8 kindergartens were organised in 6 groups with 3-4 persons per group. They were asked to reflect on their role while the children play in nature. The study is registered in the Norwegian social data services. The participants were informed about the project and participant confidentiality. They were told they could withdraw from the project at any time. Main themes identified: a. DYNAMIC LEADERSHIP: Employees ability to be flexible and to give children space and freedom. b. PRESENCE: The adult’s presence. c. PLACES: Access to exciting places to play. The employee’s role is complex, and pedagogical sensitivity, intuition and tact seems to be of importance when children are engaging in child-directed play. Children’s self-directed play is highly valued, and knowledge around the adult role in play will have implications for practice.

ECEC employees’ role, self-directed play, nature, sensitivity, pedagogical tact

This application discusses a completed piece of research.

Children’s access to outdoor play and learning in early childhood education and care centres in China and Australia during the COVID pandemic

Junjie Liu (1), Shirley Wyver (1), Helen Little (1) and Muhammad Chutiyami (2); (1) Macquarie University, (2) University of Technology Sydney, Australia

Our aim was to examine whether there was a change in outdoor time and space in early childhood education and care centres (ECEC) in China and Australia during the pandemic. A recent systematic review (Liu et al., 2022) showed that COVID-19 restrictions were associated with outdoor activity in ECEC contexts internationally. However, it is unknown how these restrictions may have impacted children’s outdoor time and space, with the evidence that, for most cases, the risk of COVID-19 being contagious is lower outdoors (Rowe et al., 2021). Bronfenbrenner’s ecological systems theory (Bronfenbrenner, 2005; Guy-Evans, 2020) will be used to evaluate children’s outdoor opportunities in ECEC during COVID-19. A post-positivist paradigm was adopted for an online survey that included questions on outdoor time, outdoor space during the pandemic and educator qualifications, specific professional development, and educator’s tolerance of risk. Surveys were completed by 316 early childhood educators working from pre-pandemic onwards in China and 131 in Australia. We will use descriptive and inferential statistics to examine the relationship between outdoor time, outdoor space during the pandemic and educator qualifications, specific professional development, and educator’s tolerance of risk. The project was approved by the Macquarie University Human Research Ethics Committee and allowed for informed voluntary participation, confidentiality, and clear feedback processes. The preliminary findings will indicate if there were any changes regarding outdoor time and outdoor space due to the pandemic and their influential factors. These results will contribute to understanding of how external factors influence opportunities for children’s outdoor play and learning.

outdoor play and learning, outdoor space, outdoor time, COVID-19, China and Australia

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

C15 EARLY CHILDHOOD WORKFORCE STRESS AND RESILIENCE
Chair: Aihua Hu, Western Norway University of Applied Sciences, Norway

Challenges for professional action during crisis: Mitigating factors across five countries
Aihua Hu (1), Kaveri G (2), Sylvia Aleida (3) and Judith Gomes (4); (1) Western Norway University of Applied Sciences, Norway, (2) Singapore University of Social Sciences, Singapore, (3) Monash University, Australia, (4) Australia Catholic University, Australia

This research aims to uncover factors that promote teachers’ resilience in time of crises to fulfil their roles as facilitators of young children’s curiosity, agency and participation in ECE. Teacher resilience, an individual and context-driven quality, is critical in
adapting and negotiating challenges, and promoting meaningful participation in early childhood environments (Beltmaa et al. 2019, Gilligan, 2001). The theoretical framework is adapted from Beltman, Mansfield, and Price's (2011) and Muller et al.'s (2009) models of teacher resilience with a specific emphasis on protective factors, considering different cultural positioning that facilitates an in-depth comparative approach. We collected data through a web-based self-report survey consisting of both open and closed-ended questions. The closed-ended questions and Likert scale items identified descriptive and demographic data. We followed the rigorous six-step thematic analysis procedure based on Braun and Clarke (2006) to analyse participant responses to the open-ended questions. Online anonymous survey tool was used and no sensitive/personal questions were asked. Participants were given clear orientations about participation and withdrawal procedures in the survey's introduction. Our findings indicate teacher identity and pedagogical competence are mitigating factors during crises, e.g., Norwegian participant responses showed teachers adhered to national recommendations while being creative and innovative in using natural and open-ended materials during outdoor play and following Covid-19 safety and hygiene protocols. Findings suggest the need for a greater focus on ECE teacher resilience with rigorous sampling procedures that can inform policymakers and pre-service and in-service professional development pathways allowing planning of resilience-building opportunities for ECE educators.

ECE teacher resilience, individual factors, contextual factors, teacher identity, pedagogical competence

This application discusses a completed piece of research.

Are you stressed? Unpacking early childhood educators’ stressors
Lieny Jeon, University of Virginia, United States

The aim is to understand workplace stressors for educators in the US Head Start settings. Early childhood educators play an important role in creating a responsive environment for young children (Hamre, 2014). Although the role of educators in supporting children’s curiosity is not clear (Jirout et al., 2022), the literature suggests that emotionally competent educators generally promote a positive climate (Buettner et al., 2016). Understanding educators’ stressors is important in creating an environment that maximizes children’s development. The Prosocial Classroom Model (Jennings & Greenberg, 2009) highlights the need for promoting educators’ emotional competence and reducing stress. Head Start educators from three sites (n=34) participated in a training focused on their well-being. We collected survey data using validated measures (e.g., Cohen (1983)’s Perceived Stress Scale). Educators also reported their stressors qualitatively during the training. A mixed method approach (descriptive statistics, t-test, and thematic analysis) was used. The training participants voluntarily participated in research. We obtained informed consent and the data for this study were anonymous. The most common stressors the participants reported were about their organization, such as paperwork/workload, policies and procedures, and compensation. For example, one of causes of stress was “Out of 8 hours, we spend 50% of the time on paperwork.” In addition, a lack of respect or trust, children’s behavior, and communications emerged as important stressors. We suggest ways to better support early childhood educators. Teachers’ positive emotions and feeling promote a more positive climate for young children and this study highlights how to reduce educators’ stress.

professional development, workforce development, educator well-being, stress, organizational climate

This application discusses a completed piece of research.

Stress, coping strategies and resources of ECEC leaders during the corona crisis
Kirs-Maria Heikken (1), Lauri Heikon (1), Raisa Ahtiainen (1), Petra Strehe (2) and Emanual Tamir (3); (1) University of Helsinki, Finland, (2) HAW-Hamburg, Germany, (3) Tel Hai Academic College, Israel

The COVID-19 pandemic has affected early childhood education (ECE) and changed leadership conditions with creating stress and need to coping strategies to master the situation (Crevani et al., 2021). Study aim is to understand the leader’s role in a crisis and provide information on how to support centres in becoming more resilient to face the challenges in the future. Earlier pandemic studies result psychological symptoms and long-time effecting moral injuries (Logan et al., 2021). The role and awareness of leaders, governments and policymakers are essential to protect ECE in crises (Bassok et al. 2020). Our study examines the ECEC leaders’ experiences of stress, their coping strategies during pandemic with the help of Lazarus stress model (Lazarus & Launier, 1978). We employ comparative research design. The data are ECE leaders’ interviews from Finland (N=23), Germany (N=35) and Israel (N=19). Stresses, resources and coping strategies are compared and analysed regarding similarities and differences and consequences for the support of leaders in the unexpected situation. The study was conducted responsibly through honesty and accuracy (Steneck, 2007). Participants confidentiality and anonymity was guaranteed and they were informed about voluntary participation and
possibility to disengage at any phase. Results show that unexpected future and COVID-19 regulations have caused stress but also created new coping strategies and innovations in the middle of the pandemic. Study increases awareness how to protect leaders' performance in the unknown future and promote policies for the welfare of all children (Visnjic-Jevtic et al., 2021).

_COVID-19, early childhood education, leadership, Lazarus & Folkman Model of Stress and Coping, resilience and welfare_

This application discusses a completed piece of research.

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**C16**

**DIGITAL PEDAGOGY**

**Chair:** An Piessens, KdG University of Applied Sciences and Arts - Pedagogy in Practice Research Centre, Belgium

**Exploring AI topics in kindergarten - Study on the didactical development of hands-on toolboxes**

Susanne Schumacher, Free University of Bozen-Bolzano, Italy

The contribution explores the three-year development of didactic toolboxes fostering activities with AI-controlled devices in kindergarten. The intention is to specify the stakeholders’ arguments in defining quality and evaluating the concepts. Apart from the counties’ socio-economic contexts, the perception of quality issues in the context of ECEC depends on perceptions and beliefs, and the needs, roles and motivations of the different stakeholders involved (Litjens & Taguma 2010: 9). In Early Childhood Education practice, there are still many uncertainties about digital media and AI (Mertala, 2017: 14). According to a model summarized by Harrist et al. (2017) four crucial perspectives are considered within the negotiation processes concerning the distinct thematic and substantial configuration of the toolboxes: researcher, policy makers, in service professionals and children. The study draws up theories of participatory research method (see Vaughn & Jaquez, 2020). Four teams in municipal ECE settings in Odense (DK), South Tyrol (I), Berlin (D) and Vilnius (Lt) conducted the study (Stadler-Altmann, Kaminskiene & Knauf, 2022). For the questionnaire, the current EU General Data Protection Regulation (GDPR, 2018) has been considered. Concerning the documents, anonymity can also be guaranteed as all properties have been removed. Initial results point to topic-specific access problems on the part of the educational professionals. To reduce uncertainties in dealing with digital media and AI and to improve both the general attitude as well as the educators’ professional competences low-threshold instructions with many practical examples from real working conditions are available online.

_artificial intelligence, kindergarten, toolboxes, training programmes for educators, participative research_

This application discusses a completed piece of research.

**Digital pedagogy: showing and doing digital media with young children in ECEC**

An Piessens, Mieke Jacomen and Leen Dom, KdG University of Applied Sciences and Arts - Pedagogy in Practice Research Centre, Belgium

The research ‘DIGIPED’ aims to develop a digital pedagogy for ECEC professionals, allowing for different perspectives, like children’s interests, but also professionals’ concerns and practices. Digital media are paramount to young children’s lives. Research literature shows concern about negative effects of digital media on children’s development. However, there is also optimism about the opportunities of digital media, provided that the inequality in access to learning opportunities is addressed. Both strands advise work on digital literacy and digital education in early childhood. (Chaudron, et al., 2018; Plowman, et al., 2010) A participatory research approach was designed to investigate and codesign this digital pedagogy. (Plowman & Stevenson, 2012; Elam et al., 2018) Starting with a survey and smartphone diaries in Flanders’ ECEC, the research discussed the topic with professionals in a research lab, using controversy mapping methods. The research ensured proper privacy for participant children and practitioners through formal procedures like IC. To ensure room for participation, the team ensured proper information, documentation and a protocol for the delivery of the research lab. Discussions about digital education focus on the topic of ‘how to teach children to manage digital media’. This ignores the fact that digital media are already present in daily practices: for management, documentation, communication with parents, and also for the children. The pedagogical question then is: how to deal with the insurmountable presence of digital media in life and daily interactions in ECEC? And, is this the world professionals want to show to children?
This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Adults’ professional activity for digital learning in the early years**  
**Donna Hannaway, University of South Africa, South Africa**

Digital technology has changed history, and it is transforming childhood. This paper critically explores the role of the adult in the possibilities of young children's digital learning, while concurrently circumspecting the constraints. Early childhood stakeholders can take advantage of opportunities by developing their own digital competency, collaborating with children as co-constructors, and acknowledging the role of digital technologies in the early childhood context (Schriever, 2020). Critical theory of technology (Feenburg, 2005), Pedagogy-in-Participation (Formosinho & Formosinho, 2016), and Engelbart's (1962) conceptual framework highlight the need for democratic participation in technical decisions, consideration of the technological and pedagogical context in which digital learning takes place, and understanding the relational characteristics between adults and digital technology. This qualitative study was located in the critical paradigm and reports on action reflection learning (Rohlin, 2011). Ten early childhood stakeholders were interviewed and discussion sessions were held to develop theories for interpretation and action of digital practice in the early years. Ethical clearance was granted to ensure all ethical codes and procedures were responsibly undertaken. Issues of informed consent, anonymity and confidentiality, voluntary participation and accessing data were thoughtfully managed and professional standards of conduct were upheld. Findings forewarned how the adult's role in digital learning, especially with young children, is associated with risks and fears. The possibilities, where pedagogical transformation can take place, were interrogated. The implications for practice are framed in the possibilities afforded through children's digital learning and those proven practices that improve children’s learning through digital technology.

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**C17**  
**PROFESSIONAL DEVELOPMENT FOR LEADERSHIP, MENTORING AND COACHING**  
**Chair: Bob Perry, Charles Sturt University and Peridot Education Pty Ltd., Australia**

**Hybridisation model of leadership facilitating professional development within the early years sector**  
**Paola Pedrelli, Birmingham City University, United Kingdom**

Using my PhD Hybridisation Model of Leadership and secondary Early Years’ research, the aim is to contextualise and situate the model to support professional development and career progression pathways (Campbell-Barr et al., 2020; DfE, 2021; Social Mobility Commission, 2020; Pascal et al., 2020). The Hybridisation model of Leadership, focused on the complexity of Early Years leadership and how to sustain the leadership workforce (Pedrelli, 2021). This model will be mapped against the contemporary sector-specific secondary research, being situated within complex operating environments (Clarke, 2018). The frameworks have been based on complexity of leadership, narratives, career development, professional development within contemporary English landscape (Hartley et al., 2013; Geuijen et al., 2017, Pascal and Ribbins, 1998 and Williams and Shearer, 2011). Hybridisation is considering how leadership norms and practices are formulated and combined to be re-formulated through daily interactions and societal expectations (Crevani et al, 2015, Fairhurst and Uhl-Bien, 2012). The PhD findings were based on social constructionism. The English workforce information is based on secondary research (Denzin and Lincoln, 2018, Teater 2014, 2015). This research has followed EECERA ethical guidelines, key considerations were informed consent, anonymity, confidentiality, benevolent use of power. The discussion will examine leadership skills, focusing on the reflective practitioner’s authenticity and self-understanding of the impact of their own narrative, including the importance of relationships, structures, processes and professional development. The focus is about supporting practitioners in their daily working lives with a combination of soft and hard skills through coaching, mentoring and training courses.

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**leadership, hybridisation, workforce, professional development, facilitation**
This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Coaching and mentoring in the transition to school space - A longitudinal approach to professionals' learning and development
Bob Perry (1), Sue Dockett (1) and Tess Boyle (2); (1) Charles Sturt University and Peridot Education Pty Ltd., (2) Southern Cross University, Australia

This presentation is a critical reflection about longitudinal coaching and mentoring within state-wide transition to school in Queensland, Australia. Previous work in transition to school (Boyle, Petriwskyj, & Grieshaber, 2018; Dockett & Perry, 2022) and coaching and mentoring, particularly critical participatory action research (CPAR) (Kemmis, McTaggart, & Nixon, 2019) are used. Transitions are times when "individuals change their role in their community's structure (Rogoff, 2003, p. 150). CPAR (Kemmis et al., 2019) is the framework for the authors' approach to coaching and mentoring. CPAR provides the paradigm in which the authors' reflect on their roles in planning and implementing observations, conversations, webinars, video vignettes, and on-site visits. Permission to report on the initiative has been granted by the Queensland Department of Education. The data utilised are self-reflections from the authors and each author has indicated informed consent. The authors' approach to coaching and mentoring recognises educators' capacity to engage critically and to build their professional competence as they question 'the ways of doing things around here' (Kemmis et al., 2019, 180). 'Thinking outside the box', has prompted school teams to contest discourses, actions and relationships. Site-specific approaches and the creation of relational trust have been critical (Dockett and Perry 2021). The messiness of CPAR has been apparent (Boyle et al. 2022). Many of the educators have shifted from a technical 'means to end' approach to a more complex, risky, and open-ended approach, encouraging emancipatory perspectives. Such a change would be welcome in policy and practice.

transition, coaching, mentoring, professional learning, CPAR

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Democratic leadership in preschools
Anna Hreinsdóttir and Arna H Jónsdóttir, University of Iceland, Iceland

The aim of this study is to shed light on democratic leadership in preschools and what motivates and hinders managers from practicing democratic leadership. Woods and Roberts (2019) describe democratic leadership as holarchy as opposed to hierarchy that encourages cooperation and honors democratic values that can lead to social justice. Where democratic leadership is practised, there is both formal and informal power, participation in decisions is more general and the development of school work is in the hands of teams rather than a group of managers in upper layers (Harris and Muijs, 2005). Individual interviews were conducted with eight preschool managers in Iceland. Two researchers shared the interviews. The interviews were recorded, transcribed, and used for further analysis. Data analysis was based on Braun and Clarke's (2013) thematic analysis and from the concepts of holarchy and hierarchy. The researchers reviewed the data together and then separately with the aim of increasing the credibility of the study (Braun et al., 2018). Informed consent was given and anonymity ensured. The results show that the managers felt it was important to practise democratic and participatory leadership in the preschools. That was a good way to cooperate with fellow educators. One's own ingratitude, impotence, lack of interest and lack of responsibility were mentioned as the main obstacles in practising democratic leadership and distributing power and tasks. The theoretical value of the study lies in the increased knowledge of democratic leadership and its relationship with, among other things, participation, and social justice in preschools.

democracy, leadership, preschools, social justice, holarcy

This application discusses a completed piece of research.

C18
CURiosity, POLicy, RESEARCH and LISTENING
Chair: Vanessa Neves, Federal University of Minas Gerais, Brazil
Content analysis of recent policies in early childhood workforce development - Where are the provisions for freedoms to enable educators to support curiosity in young children?
Meera Oke and Criona Blackburne, National College of Ireland, Ireland

We aim to identify policy provisions for supporting the freedoms, of early childhood educators to encourage curiosity, agency, and participation of young children through content analysis of recent Eurocentric (2020-23) early childhood policies & priorities. This paper is based on the premise that nurturing educators’ dispositions, values, well-being, and freedoms are central to their ‘functionings’ in providing high-quality learning and development in children. We acknowledged that the well-being and attitudes of ECEC educators directly correlate with those of young children (UNESCO, 2022). Earlier studies and our previous research highlighted high levels of burnout (Oke et al., 2022) and disillusionment (Blackburne, 2020) among educators. The Capability Theory (Sen, 1993), guides this research. Using a directed approach for content analysis (Hsieh & Shannon, 2005) 11 workforce development policy provisions were analysed using the Capability Theory’s concepts of resources, functioning, capabilities, freedoms, values, and well-being. MaxQDA supported the analysis. Based on secondary data analysis, ethical consideration has been given to ensure that all Eurocentric and Irish policy provisions announcements were included. Findings indicate that although there is a proliferation of policy initiatives at International and Irish ECEC, and have somewhat addressed pay, qualifications, and CPD; little attention has been given to nurturing freedoms and functioning to become curious, educators and researchers responsive to uncertain, complex and often ambiguous environments and extend children’s curiosity and agency in meaningful and creative ways. These findings imply the need to develop policies that focus and nurture the freedoms and functioning of Early Childhood Educators in early childhood workforce policy and provisions, capability approach, orientation quality, freedoms and functioning, directed content analysis.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Infants and toddlers’ curiosity for the research
Vanessa Neves (1), Taciana Ramos (2), Nubia Santos (3) and Virginia Oliveira (1); (1) Federal University of Minas Gerais (UFMG), (2) Universidade Federal de Sergipe, (3) Federal University of Juiz de Fora, Brazil

This study examines infants’ curiosity for the research teams in three Brazilian Early Childhood Education Centers. Research has proposed that curiosity emerge from a base of attention processes and exploratory behavior in early childhood (Ainley 2019) and highlight the importance of investigating young children’s intrinsic motivation for learning (Begus & Southgate 2018). This study is based on curiosity as an affect (Spinoza 2008) that drives children’s ways of participating in their contexts. Based on Cultural-historical Psychology and Ethnography in Education, we videotaped the daily life of three groups of infants and toddlers. Through a microgenetic approach, we analyzed a set of events in which infants expressed their curiosity for the research teams and their equipments. Informed consent was obtained and participants were given the opportunity to withdraw from the project at any stage. When researchers felt that children or teachers were uncomfortable, they stopped videorecording, showed video extracts to participants, and talked about the research’s goals. Infants and toddlers expressed their curiosity through attentive looks, attempts to touch the camera, to grasp researchers’ pens and notebooks, to sit on the researchers’ laps and crying. They were able to play an active role in the research process. Researchers reacted to such curiosity recognizing infants’ demands by talking, cuddling, and showing them their equipment. However, these situations posed ethical conundrums as the teams felt it was necessary to keep some distance in order to maintain their social roles as researchers. These findings highlight infants and toddlers’ ways of participating in research.

infants, toddlers, curiosity, ethnography in education, cultural-historical psychology

This application discusses a completed piece of research.

Curiosity, children’s highway to listening skills
Ingrid C. Nordli (1) and Kristian Skog (2); (1) UiT The Arctic University of Norway, (2) Amelihaugen Kindergarten, Norway

This ongoing inquiry explores possible connections between inner/hidden listening steps and children’s verbal and/or non-verbal expressions of these steps (listening markers). Research has shown that the listening process consists of various steps (Glenn, 1989), listening skills are central for learning and interacting (Wolvin, 2010), and curiosity leads to learning (D’Mello et al., 2013; Honig, 2006). The theoretical framework for this study draws upon current theories of the listening process (Brownell, 2017; Wolvin &
Coakley, 1996), listening markers (Ottes, 2007), moments of wonder (Barsotti et al., 2015), and reciprocal dialogue (White, 2015). The study was conducted within a qualitative interpretive research paradigm (Denzin & Lincoln, 2018). Pedagogical documentation (Essen et al., 2018), based on video recordings of children’s listening during music activity, was used to visualize markers for inner/hidden listening steps. Analysis was conducted through a grounded approach (Charmaz, 2006). A consent form and information sheet was provided to parents of all 10 participating children (2-6) in one kindergarten. The project was formally approved by Norwegian Sikt. The recordings took place in the kindergarten and were deleted shortly after. All data was anonymized. The preliminary results of this study reveal varied visible markers connected to the listening steps. However, the overlap of the steps understand, remember and evaluate, makes it impossible to decide affiliation of all registered markers. We therefore describe the listening process in sequences containing a variation of steps and markers. Findings suggest implications for kindergarten teacher’s work regarding implementing knowledge of the listening process in their pedagogical strategies.

curiosity, moments of wonder, listening steps, listening markers, pedagogical documentation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

C19

EXPLORATIONS OF AGENCY WITHIN OUTDOOR CENTRES

Chair: Hanne Værum Sørensen, VIA University College, Denmark

Play, posthumanism and agency after Barad
Mandy Andrews, University of Plymouth, United Kingdom

This research explored young children’s play out of doors, unsupervised, close to home from a posthuman perspective; and the researcher’s process of becoming posthuman, in which agency and curiosity are distributed amongst human and more than human bodies. Sitting within the ‘Third Wave’ in childhood studies (Murris and Reynolds, 2022), authors writing about outdoor childhood-nature are exploring the molecular curiosities of children from a posthuman perspective; Rautio and Winston (2015), Murris (2016) Cutter-Mackenzie, Malone and Barratt-Hacking (2019). Posthumanism challenges theoretical frameworks instead pursuing curious lines of flight and ‘tentacular thinking’ otherwise (Haraway, 2016). Deleuze and Guattari’s (1987/2021) process ontology works with Barad’s (2007) agential realism, Haraway’s multispecies manifesto (2016) and the vibrant materialism of Bennett (2010;2020) in an ethico-onto-epistemology which decentres the adult human, acknowledges distributed agency and offers concept arising from curiosity, agency and affect. Methods were participatory and collaborative: collage, walking, making, performing, and data further diffractively analysed. Process ontology ethics is not ‘applied’ but knowing and being are intertwined with ethics in ongoing events as choices matter; there is an ongoing moral obligation to intra-act responsibly. Procedural ethics were approved by the University of Plymouth and children and families gave informed assent and consent. Posthuman philosophy challenges human exceptionalism and knowledge offers new ways of researching and becoming-with young children. Agential realism is a research and practice approach that considers a wider set of enacting forces in any phenomena or event, prompts consciously ‘thinking otherwise’, ethically, and offers deep knowing from ‘deep hanging out’ (Osgood 2023).

agentic realism, posthumanism, play, diffractive analysis, Rhizome thinking

This application discusses a completed piece of research.

Conditions for sustainability, children’s belonging and agency in outdoor contexts
Hanne Værum Sørensen (1), Birgitte Theilmann (1) and Aihua Hu (2); (1) VIA University College, Denmark, (2) Western Norway University of Applied Sciences, Norway

The aim is to investigate how outdoor play and activities provided conditions for social and cultural sustainability, children’s belonging and agency in Denmark, Norway, China and USA. Previous research has shown positive effects for children’s social play in nature, democratic formation and STEM-learning. We recognize a need to further explore children’s being and becoming eco-citizens belonging to local contexts as well as being citizens in a global world. Children’s curiosity, striving for challenges and motivation for exploration of natural phenomenon together with peers and qualified pedagogues support children as democratic
beings taking part in sustainable development as eco-citizens (Grindheim et al, 2019). The theoretical and methodological approach is cultural-historical, taking departure from the idea of children as active agents in dialectic relations with nature and culture. Qualitative observations, interviews, and visual material; analyzed and categorized according to children’s agency and belonging in outdoor contexts. Information sheets and consent forms were provided to participants in local language. Additionally children were informed during visits to ensure their acceptance. Ethics were treated according to national ethical review-standards approved by national ethical boards in the respective countries. Findings point to outdoor contexts providing conditions for children’s knowledge, experiences and connectedness to nature, i.e. when children are comfortable in taking short-cuts through “wilderness” in the forest to their place, and when they explain the process of frog’s brood to a visiting researcher. Findings point out the importance of children exploring and experiencing nature together with teachers who have skills and knowledge about nature and sustainability.

nature, sustainability, curiosity, belonging, agency

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Nature Kindergartens as Context for Children’ Bildung
Hilde Alme and Monika Alvestad Reime, Western Norway University of Applied Sciences, Norway

From the perspectives of children and educators, the article explores facilitators and barriers for Bildung in nature kindergartens. Previous research shows nature kindergartens as a fruitful context for children’ participation (Alme & Reime, 2021), for enhancing children’ autonomy (Barrable, 2017) and development of social skills (McCree et al., 2018). The study takes departure in Klafki (1998)’ theory of Bildung and is supplemented with educational philosophy (Biesta, 2014). The study is anchored in a social constructivist knowledge tradition and is conducted within a qualitative interpretive research paradigm (Creswell, 2018). 30 children (3-5 years old) and 20 employees from six nature departments in Norway participated in focus group interviews. Data is analyzed by Systematic text condensation (Malterud, 2012). Children, staff and children’s parents, were informed about their rights in written and verbal form. They were informed that participation was voluntary and they could withdraw their consent whenever. Names were anonymized. Data are stored in accordance with ethical guidelines and is approved by the Norwegian Centre for Research Data. Findings show that nature Kindergarten is a good context for children's Bildung processes, since the children participate in events with their own initiative. Kindergarten teachers are a decisive factor to enable this to happen. These findings suggest how nature kindergartens can enable children to participate, become independent citizens in democratic communities and contribute to their own Bildung process, in a new pedagogical practice.

nature kindergarten, Bildung, children's participation, children's agency, improvisation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

C20
ProW: A EUROPEAN PROJECT TO PROMOTE TEACHERS’ WELLBEING THROUGH POSITIVE BEHAVIOUR SUPPORT IN EARLY CHILDHOOD EDUCATION
Self-organised Symposium
Chair: Ana Lemos, Faculty of Psychology and Educational Sciences of University of Porto, Portugal

This symposium presents the theoretical foundations, certain implementation features, and relevant preliminary results of the ProW Project – an ERASMUS+ Key Action 3 Policy Experimentation programme developed in four EU countries, Greece, Cyprus, Portugal, and Romania. The project aims to improve teachers’ and children’s well-being in Early Childhood Education (ECE) settings. In the first paper, the theoretical background and the overall design of the professional development programme will be presented. The second paper discusses the cultural and contextual differences of professional development needs, and how these were acknowledged in the Portuguese implementation. In the third part of the symposium, the case of Cyprus is used to present the primary outcomes of the intervention related to teachers’ wellbeing and perceived levels of burnout, as well as children’s behaviours. The symposium aims to stimulate a beneficial discussion between researchers and practitioners based on the emerged implications.
Advantages of implementing evidenced-based models with a whole-school approach in ECE schools
Michael Demos (1), Andri Agathokleous (2), Vicky Charalambous (2) and Charalambos Vrasidas (1); (1) CARDET, Cyprus, Institute of Development (IoD), Cyprus

This paper presents SWPBS (Sugai et al., 2000) and PERMA (Seligman, 2012) models’ application in Early Childhood Education (ECE) settings, aiming to improve children’s behaviour and teachers’ wellbeing. Previous national efforts have failed to establish support systems for children’s socio-emotional development, while teachers’ wellbeing is usually ignored in educational policies (Damianidou & Phtiaka, 2018; Kokkinos et al., 2004; Pashiardis et al., 2018). Both models follow a systems-change approach aiming to design favourable contextual conditions at school. The experimental research involved 19 Cypriot ECE settings. Teachers (N=78) completed the PERMA profiler and Maslach Burnout Inventory (MBI), as well as Child Behaviour Rating Scale (CBRS) for children (N=657), before and after the intervention. Two-way repeated measures AVONA were conducted to identify altering patterns in the outcomes. All ethical considerations were respected, including official approval from the national authority, school agreements, and parents’ consent forms for children’s participation. The results suggested statistically significant improvement in the treatment group’s wellbeing (F(1,1)=12.95, p<.001) and burnout (F(1,1)=7.11, p<.009) after the intervention, with large (η2=.15) and moderate (η2=.09) effect sizes respectively. For children’s behaviour, the results indicated improvement in both groups. However, the treatment group progressed to a greater extent (F(1,1)=28.44, p<.001). This progression was statistically and practically significant with a small to moderate effect size (η2=.04). Children of the treatment group developed Interpersonal Social Skills (IPS) more than Learning-Related Social Skills (LRSS). Implications will be discussed in light of the potential of whole-school approaches to enhance teachers’ well-being and children’s socio-emotional development.

intervention effects, teacher wellbeing, teacher burnout, child behaviour, whole-school approach

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Teachers’ wellbeing in early childhood education: Applying the PERMA & SWPBS approach across four countries
Anastasia Vatou (1), George Manolitis (2), Maria Evangelou-Tsitiridou (1), Georgeta Chirlesan (3), Bogdan Marinescu (3), Delia Duminică (3), Mirela Nilă Stratone (3), Eleni Nteli (4), Vasilios Oikonomides (2), Maria Kypriotaki (2), Manuela Ciucurel (3), Angeliki Mouzaki (2), Evridiki Zachopoulou (1), Katerina Krousorati (1) and Vasilis Grammatikopoulos (1); (1) International Hellenic University, Greece, (2) University of Crete, Greece, (3) University of Pitesti, Romania, (4) Municipality of Kalamaria, Greece

This presentation describes the ProW intervention design which seeks to enhance the teaching profession's appeal, improve teachers’ motivation, wellbeing, job satisfaction, self-efficacy, and reduce burnout via Positive Behaviour Support in ECEC. To address the challenge of retaining teachers in the profession, many European countries require policies that support and elevate the teaching profession (OECD, 2020). The ProW project aims to accomplish this by empowering ECEC teachers to effectively manage children’s challenging behaviors and advance their careers and well-being. The ProW is based on two theoretical models, PERMA and School-Wide Positive Behaviour Intervention Support (SWPBS) model. The PERMA incorporates five key elements: Positive Emotion, Engagement, Relationships, Meaning, and Accomplishment, which when integrated into teachers’ daily routines, can lead to increased well-being. The SWPBS aims to create a safe and positive school climate, where students understand and practice expected behaviours aligned with ECE values. ECEC teachers were trained, coached, and supported on PERMA and SWPBS frameworks to enhance their careers, job satisfaction, well-being, self-efficacy, school climate, and children's social skills. Adaptations were made to align with each country’s educational structures and cultural characteristics. Researchers sought ethical clearance by submitting a proposal to the university ethics committee, outlining research aims, methodology, participant information, data collection methods, and participant rights protection measures. To minimize children’s challenging behaviors, various strategies were implemented: promoting positive behavior, providing clear expectations, and addressing causes of misbehavior. Professional development opportunities and coaching programs were established to enhance ECEC teachers’ well-being. Implementation of positive education programs can promote teachers’ well-being.

intervention design, early childhood teachers, PERMA, SWPBS, wellbeing

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

“Doing it differently”: Contextual adaptations of PERMA and SWPBS to Portuguese early childhood education teachers
Filipe Piedade, Ana Lemos, Diana Alves, Tiago Ferreira, Carolina Guedes, Teresa Leal, Catarina Grande and Joana Cadima, University of Porto, Portugal
In this presentation, we will describe a one-year (2021-2022) intervention, that integrated the PERMA model (Seligman, 2012) and School-Wide Positive Behaviour Support (SWPBS). Traditional Professional Development (PD) programs are mainly focused on knowledge-building through short-term initiatives (Schachter et al., 2019), and, in many cases, with very indirect connections to the teachers’ everyday practices and allowing few opportunities for in-group sharing and reflection about personal experiences and pedagogical strategies (Jensen & Iannone, 2018). To help Early Childhood Education (ECE) teachers face challenges that influence their well-being and work performance (Luna-Arocas & Danvila-del-Valle, 2021), the PERMA model (Seligman, 2012) was explored to support participants’ well-being, and the SWPBS behavior management approach (Stormont et al., 2008) was used to help them deal with children’s challenging behaviours. The intervention included ten face-to-face training sessions, involving two external coaches and four groups of Portuguese ECE teachers (n=23). The sessions were tailored to the specific contextual and PD needs of teachers, which required privileging a flexible management of each session, allowing significant time for sharing experiences and group discussions, and inferential and transfer learning (Michalski, 1993; Zhuang et al., 2021). Ethical considerations, including schools’ and participant teachers’ consents, were assured. We will share some key components and strategies used and discuss how the previously mentioned features acted as facilitators for relationship building amongst the participants influencing their overall satisfaction with the program. Along with a summary of the feedback provided by the participating teachers, implications of this PD initiative for ECE contexts will be discussed.

professional development, contextual fit, implementation design, programme adaptation, programme transfer

This application discusses a completed piece of research.

C21
LANGUAGE AND LITERACY ISSUES
Chair: Maria Evangelou Tsitiridou, International Hellenic University, Greece

An innovative methodology for early English language pre-service teachers (PSELTs) to tap into young learner agency: The case of storybook integration in early English classrooms in Turkey
Melike Ünal Gezer, TED University, Turkey

In this empirical study, pre-service teacher implementations during storybook reading via lesson planning and lesson microteaching to tap into young learner agency and autonomy in an English language teacher education program in Turkey will be uncovered. Storybooks can be integrated to early English classrooms as tools to support learner agency and curiosity, and thus learner autonomy (Ghosn, 2002). Studies showed PSELT training is a rigorous process and PSELT reflection can be a tool to train novice teachers as those reflections can serve as revelation of their teaching philosophies, instructional, pedagogical orientations (Ünal Gezer, 2022). Transformative teacher education is socio-culturally driven as teacher education and training is a socio-cultural process where the effort is collaborative and social processes are functional in knowledge re-construction (Livingston, 2020). The study was conducted within a qualitative interpretive research paradigm (Denzin & Lincoln, 2005). Lesson plans were written and written/planned lessons were implemented by participant prospective teachers. The analysis was conducted through qualitative document and content analysis of the written and video-recorded lessons within hermeneutic phenomenology approach. Participants who were trained to be English teachers to young learners granted consent to be part of the study. There was no potential conflict of interest. The findings of the study showed alignment with early English lessons, developing vocabulary, grammar, skills are the highlights of the lesson. Gaining social, critical skills, and learner autonomy are secondary goals. Autonomy is not as emphasized in this study. The implications on teacher training for early English education will be discussed.

pre-service english teachers, storybook, young learner agency, reflections, early english education

This application discusses a completed piece of research.

Let’s play and talk! An early years’ teachers professional development programme to support young children’s communication through narrative

This application discusses a completed piece of research.
Let’s Play and Talk aims to address children’s vocabulary, narrative and preschool teachers’ (PT) professional development (PD) on supporting children’s communication skills through narrative. Evangelou et al. (2010, p.81) emphasise the importance of effective practitioner staff development in recognising and responding to situations where all domains of children’s development can be enhanced ‘on the spot’. The quality of early years provision depends upon staff characteristics (Van der Werf et al., 2021). The PD programme is offered through five face-to-face meetings that last at least 2 hours. During these sessions the research team offered presentations, video observations and role play between teachers. Prior to every session, preschool teachers were given 4 recently published papers to read which were discussed. The study’s design is a randomised wait-list controlled trial with 120 children and 10 preschool teachers. During the first meeting preschool teachers’ understanding of dialogic reading, vocabulary, and narrative development, pretend play, the role of the adult in children’s play, executive function, and children’s communication skills through narrative and pretend play were explored via focus group discussion. Teachers’ demographic characteristics were collected, and the Greek validated version of the Self-efficacy Questionnaire was administered. The study has been approved by the Ethics Committee of the University and the Municipality. The results indicated that early childhood teachers had an enhanced knowledge of the key terms of study, learned from the focused training and used research tools to support children’s communication skills. The model of PD used, being explicit and hands-on, exceeded teachers expectations.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Literacy events as spaces for kindergarten pedagogues’ agency in language policy**

Eli Bjørhusdal (1), Gudrun Kłøve Juuhl (1) and Jorunn Simonsen Thingnes (1); (1) Western Norway University of Applied Sciences (Høgskulen på Vestlandet), (2) Volda University College, Norway

This study explores literacy conditions for children acquiring a minoritised written language. The setting is two kindergartens in a Norwegian community where lesser-used Nynorsk is the main language. Research questions are: How do pedagogues involve children in events that foster curiosity about print/texts in the minoritised language? Thus, how do pedagogues exercise agency in language policy? The study combines perspectives from New literacy studies (Barton, 2007) with insights from language policy research on agency (Johnson & Johnson, 2015). Literacy events are occasions in which a piece of writing is integral to the participants’ interaction (Heath, 1982, s. 93). Resulting from negotiation between multiple actors across levels, language policy impacts language structure, functions, use, or acquisition (Johnson, 2013, p. 9). Thus, literacy events are observable activities that create spaces for local actors’ language policy choices. The study examines the interaction and spaces between agency and structure and is therefore located within a constructivist paradigm (Giddens, 1984). We apply an ethnographic methodological framework with data from overt non-participant observations (30–35 hours per kindergarten); pedagogue interviews; and policy document analysis. Ethical limitations as the observer effect, observer’s objectivity, and selectivity are minimised by the involvement of several researchers in both observations and coding/analysis. Informed consent from parents and personnel was obtained. We discuss pedagogues’ creation of events for language acquisition, which may collide with wider policies. Consequently, the study contributes to bridging the scholarships of early literacy and language policy.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**C22**

**PLAY AND PLAYFULNESS IN PRACTICE**

Chair: Astrid Halsnes, NLA University College, Norway

Open-ended-ness in play, science and materials encourage curiosity and participation
The aim of the study reported in this presentation is to investigate how materiality works to encourage young children’s curiosity and participation in playful science activities in Danish ECEC (Pedersen et al., 2023) Research has shown that early childhood teachers find science hard. But procedural knowledge on science is often present in children’s play, and these procedures need to be identified to address the science aspect in e.g. children’s inquiries (Fleer, 2019). The study draws on a socio-material approach claiming that when in play you work deliberately with the material you encounter (Bogost, 2016). Drawing on data from research on pre-school children’s play practices in science activities, the paper builds on a concept of play which is grounded in practice theory, considering play as young children’s primary practice form (Skovbjerg, 2021; Sutton-Smith, 1997). The study has a design-based-research approach (Barab og Squire, 2004) where ethnographic participatory observation studies were carried out in Danish ECEC (Gulløv & Skreland, 2016). Situational analysis of field notes and photo notes were made to point out emergent categories and themes (Clarke, 2003). The professional’s appreciative and guiding attitudes assured the children’s continual consents. A full ethical analysis, based on the BERA (2011) guidelines, has been undertaken before commencement. The findings demonstrate that the accessibility and open-ended-ness of materials play important roles. Moreover, does children’s interest in ‘things’ implicate practice reflections on how and what materials are available and how to work with a child centered approach to playful science activities?

**play, science education, children’s perspectives, materiality, curiosity**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Play as a core area in the professional work of kindergarten teacher**

Astrid Halsnes, NLA University College, Norway

This article sheds light on the kindergarten teacher’s view of play in relation to their own professional role and participation in play together with children. It focuses on play as a core area in the professional work of the kindergarten teacher. This is related to other research about adults/kindergarten teacher role in play, Halsnes (2006) "How does the adult see the playing child?" and Sundsdal and Øksnes (2015). Safeguarding children’s spontaneous and free play. The theoretical and conceptual framework is based on phenomenology and theory of movement in play by Gadamer (2010) and adults position in childrens play by Öhman (2020). The study is based on an interview with a kindergarten teacher and a digital questionnaire for a selection of kindergarten teachers. Data is analyzed through the essence method (Eneroth, 1992) and is presented as small stories and discussed in relation to Gadamer’s theory of play as a phenomenon (Gadamer, 2010) and Öhman's positions in play (Öhman, 2020) There is not any personal information and no participant can be identified at any stage of the research, in accordance to research regulations. To be a playful kindergarten teacher you need to have an eye for children’s play. You have to see children’s play. You have to getting involved in play. That means you have to participate In recent years, several people shouting a warning that children's play in kindergarten must be taken seriously. The kindergarten teaching profession need to take responsibility for its own practice by protecting play and beeing a playful adult.

**playing adult, core area, kindergarten teacher, play, profession**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Prioritising a continuum of play for quality practice and experience in early childhood primary classrooms**

Carol-Ann O’Sioráin (1) and Margaret Kernan (2); (1) Institute of Education, Dublin City University, (2) Hibernia College, Ireland

Provoked by international research, and motivated to improve our own practice as lecturers, we embarked on a critical exploration of play-based pedagogical ideologies and experiences of professional colleagues. International research on early childhood curriculum frameworks emphasises play-based pedagogy as a fundamental component in inclusive, rights-based early childhood education (Barblett 2021; Gray and Ryan 2016; OECD 2012). Also argued are the challenges posed by the narrow interpretation of the link between play and learning witnessed by student teachers on practice placement in Ireland during their initial teacher education degree (Walsh and Fallon, 2021). A nucleus theoretical framework (Ravitch and Riggan, 2017) of the continuum of play (Zosh et al, 2018) was foregrounded. An interpretive, critical theory, mixed method empirical research project was employed using on-line questionnaire and interveiws. Informed by the ethical guidelines of the British Education Research Association (BERA) (2018) and on receipt of ethical approval from the institution’s Research Ethics Committee. Responses highlight the lack of a continuum of
play, re-iterating play-based pedagogy as teacher directing the child’s ‘doing’, therefore commandeering play. Our findings also demonstrate that the concept of a ‘framework’ curriculum is not well understood. While the intention of a play-based curriculum framework is to make space for children’s agency, the evidence points to pedagogical cultures where the power of play remains with the adult. Findings have implications for Higher Education Institutions and the National Council for Curriculum and Assessment suggesting a need to prioritise a continuum of play in teacher education and in early childhood classrooms.

 continuum of play, curriculum frameworks, quality play experiences, pedagogical cultures, professional practice

This application discusses a completed piece of research.

C23

SPACES, NARRATIVES AND APPROACHES IN CHILDREN’S WELLBEING
Chair: Caroline Wright, Bright Horizons, United Kingdom

Windows into the experience of immigration: Immigrant children’s initiative and resilience through the imagery in stories of immigration
Wilma Robles Melendez, Nova Southeastern University, United States


immigration and children, picture books, socially just practices, literacy, children’s wellbeing

This application discusses a completed piece of research.

Young children’s wellbeing through access to and usage of local natural spaces and the effect of adult values
Diahann Gallard (1) and Diane Boyd (2); (1) Liverpool John Moores University, (2) Early Childhood Studies Degrees Network (ECSDN), United Kingdom

This enquiry looked at young children’s wellbeing through their access/use of natural spaces in one area of the NW of England and the effect on their mental health and ecological identity. We were seeking to understand better children’s experiences in natural spaces in the local area during transition and policy change in response to the global climate emergency. We were building on a journal article by Boyd (2018) about place-based learning with children as agents of change in sustainability. We applied the imaginative approach to urban space first conceptualised by Wood (2015) for child-centric local development planning. Using an ethnographic approach, the guiding question was; what is the current access and use of local natural spaces by young children, what influences it and what is their view? It had a multi-focal participation including children, parents/family of children, educators, community members and local politicians. As a place-based research project, it queried and documented the position and
engagement of young children during shifting conceptions in one community about the natural spaces, human needs and responsibilities. The study was approved by the university research ethics committee. We addressed concerns by selecting a participatory, child-voice method using the Mosaic Method (Clark and Moss, 2001). We noted a lack of children’s participation during consultation and policy change and a circular effect on children’s wellbeing. The key themes emerging through thematic analysis of proximity, activity, attitudes, priorities and provocations shed light on the need for children's participation in local planning.

wellbeing, values, sustainability, natural spaces, participation

This application discusses a completed piece of research.

The Nurture Approach: Empowering adults to support children's holistic wellbeing and development
Caroline Wright and Michelle Demirtas, Bright Horizons UK, United Kingdom

We measure practitioner understanding of neuroscientific theories and the importance of co-regulation, before and after introduction of the Nurture Approach, CPD programme; data and findings will inform pedagogy, supporting the design of future training materials and delivery. Previous research (https://www.brighthorizons.co.uk/BrightBeginnings) indicates that children benefit from our curriculum approach, but indicated that teachers need increased knowledge to support emotional wellbeing effectively. The Nurture Approach, developed with Dr Sarah Mundy (https://www.amicuspsychology.co.uk ), uses neuroscientific and relational theories in childhood emotional wellbeing. The CPD programme, available to 1200 practitioners, focuses on self-regulation and attachments within the early stages of children's development, aiming to influence their future trajectories (Moffitt al, 2011; Raver et al, 2011). The programme is in response to trends in the data demonstrating an increase in the prevalence of mental health issues within 5 to 15 year olds (Sadler, Vizard, Ford, Marchesell, Pearce, Mandalia, & Goodman, 2018), and has influenced the design of the programme. Arace, Prino, and Scarzello’s (2021) view that educators play a vital part in supporting children's emotional development and attachment style has influenced our introduction of the programme. Practice based inquiry (praxeology); three main methods: 1. questionnaires; 2. observations in the setting; 3. interviews. Permission sought from the UK Leadership team in BH UK and participants; anonymity maintained throughout. No children involved. The investigation explores early childhood pedagogues' understanding of relational practice, neuroscientific theory and self/co-regulation before the programme; emerging findings indicate improvements in knowledge post-intervention. The research is ongoing and outcomes will influence further praxiological enquiry and policy/procedure.

emotional wellbeing, early childhood pedagogy, nurturing young children, self regulation, relational practice

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

C24
IMPROVING CHILDREN’S PARTICIPATION AND AGENCY IN RESEARCH PROJECTS: LEARNINGS FROM OUR OWN 'FAILINGS' AS RESEARCHER
Self-organised Symposium
Chair: Katrin Velten, Alice Salomon Hochschule Berlin, University of Applied Science, Germany

When children are involved in participatory research, ethical considerations regarding critical reflection of power dynamics, transparency of research aims, children’s ongoing informed consent, and degrees of children’s participation at different stages of the research process become important (Alderson & Morrow, 2020; Bertram et al., 2016; Mayne et al., 2016; Shier, 2019). When considering the responsibility of adult researchers in conducting research with children, ethical challenges arise in "doing participatory research": they must perform a balancing act that respects both the children's curiosity and agency, as well as the research demands and objectives (Velten & Höke, 2023). This symposium explores ethical dilemmas in data collection and their implications for planning and performing reflective research. By examining different apparently "unsuccessful" or “failing” situations in the contributions, practices and strategies for balancing demands and power dynamics are identified, highlighting the importance of ethical data collection and disclosure of purported “failings”.

emotional wellbeing, early childhood pedagogy, nurturing young children, self regulation, relational practice

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
How to handle “failed” Interviews with children – an ethical question

Julia Hoeke (1) and Katrin Velten (2); (1) Catholic University of Applied Science NRW, (2) Bielefeld University, Germany

Our research aim is to explore how to handle child interviews ethically when they are unproductive or even failed from the researchers’ perspective. Participatory research appears to be the new gold standard in childhood studies (Hammersley 2017). At the same time, relational agency (Eßer/Sitter 2014) emphasizes the significance of generational order (Alanen 2005). Interviews as interactions between children and adults are subject to the “omnipotence of the educational situation” (Heinzel 2012). Beyond the concept of competent compliance (Bühler-Niederberger et al. 2015), Ruppin (2018) identifies two sense-generative types of children: the hedonistic and the de-constructivist child. The more freedom the survey of children opens up for participation, the higher the risk that the child will act beyond the research interests. We re-analyse interviews with children (Höke 2016, Höke 2020, Velten 2021), with a focus on the sequential analysis of micro-interactions. In unsuccessful interviews, a turning point often occurs, in which the researcher intervenes strongly in the interview process, regulates the child, and may even terminate the interview (Velten/Höke 2021). Our analysis of “ethically important moments” (Guillemin/Gillam 2004) focuses specifically on ethical appropriateness. The underlying studies were conducted in accordance with the EECERA Ethical Code for Early Childhood Researchers (Bertram et al. 2016). We discuss our results on two levels: first, we address the question of what competencies researchers need for interviewing children to prevent such turning points. Additionally, we ask how to appropriately handle failed child interviews with regard to consideration in the evaluation and publication of results.

ethics in research with children, agency, generational order, interviews with children, turning point

This application discusses a completed piece of research.

Children’s participation and agency in research?! Perspectives from a study on homeschooling while COVID-19

Melanie Kubandt (1), Birgit Hüpping (2); (1) University of Osnabrueck, (2) PH Ludwigsburg, Germany

The presented participative interview study focused on children’s learning strategies while the Covid-19-pandemic at times of homeschooling in a German primary school. Participation and Agency were one specific focus, especially at the level of data collection. For in the New Childhood Studies, there is a long tradition of actively involving children in research while observing research ethics principles (Lundy/McEvoy 2012, Hartnack 2019). According to Eßer and Sitter (2014, 2018), the study is based on the paradigm that children are competent actors. In this view, participatory research approaches aim to broaden children's perspectives and address them as experts of their own life with their own voice (Hüpping/Büker 2019). The study followed a qualitative interpretive research paradigm while the data collection is based on Interviews with 21 children, questionnaires, children’s drawings and non-reactive audio statements. The data was coded according to Grounded Theory by Strauss and Corbin (1996). Ethical considerations were given priority throughout this study. The EECERA Ethical Code for early childhood Researchers (2015) was followed with voluntary, informed consent sought from children, parents and educators. Using the example of critical reflecting on our own methodological approaches in the project, it will be put up for discussion, both for data collection and data analysis, where typical pitfalls as researcher lie and how a participatory approach could be designed even better during the research process. Based on the reflections, recommendations can be derived for researchers on how participation and agency can be improved in research with young children.

agency, participation, self-reflection as researchers, children's perspectives, participation in interviews

This application discusses a completed piece of research.

Ad hoc practices in interviews with children between children’s agency and research demands

Katrin Velten (1) and Julia Höke (2); (1) Bielefeld University, (2) Catholic University of Applied Sciences, Germany

The research aims to uncover habitualised interaction patterns between children and adults in ad hoc practices during interviews with children, which have an influence on children’s participation and agency within the interviews. Early observational studies in childhood research have revealed habitual interaction patterns in which children and adults resort to familiar interaction structures (Corsaro et al., 2003; Mandell, 1988). Interview settings may also have a habitualised character that opposes methodological opening of action spaces for children (Horgan, 2017, p. 247). The presented research is theoretically based on perspectives on active participation of children in the “interpretative reproduction” (Corsaro, 1992) of social structures, generational order and the interplay of positions and roles of adults and children (e.g. Alanen, 2011). Sequences from interviews of three previous studies...
(Höke, 2016, 2020; Velten, 2021) were selected for qualitative sequence analysis according to Schütz et al. (2012) and re-analysed under the described focus, which were previously marked as conflicting or unusable. Interpretive bias of the re-analysis was addressed through independent coding by the two authors and joint moderation. The previous studies were based on the research ethics considerations of EECERA (Bertram et al., 2016). The re-analysis shows different practices of affirmation, of ordering/structuring and around actual or threatened abandonment of the interview which relate to the adult researchers’ and children’s constant balancing act within the interview. Based on the results, reflection questions are developed to help researchers assess the degree of children’s agency and participation in interview settings from an ethical perspective.

habitualised interaction patterns, balancing act during interviews, ad hoc practices of children and adults, children’s agency in interviews, children’s agency in interviews

This application discusses a completed piece of research.

C25
REFUGEE AND WAR DISPLACED CHILDREN IN THREE COUNTRIES
Chair: Controllah Gabi, University Centre Stockport College, United Kingdom

A study of experiences of war-displaced children in UK early childcare and education settings
Controllah Gabi, University Centre Stockport College, United Kingdom

This study examines experiences of 2-3 year-olds who were forced to leave Ukraine and Afghanistan by war. The goal is to understand settling-in processes and support in Early Years settings. This work extends Opiela's (2023) study of Ukrainian female refugees' perspectives on parental kindergarten roles in Poland, experiences and the significance of adults and early years settings. The study utilises Carl Rogers' (1961) humanistic theory to probe the extent to which settings' approaches and processes facilitate recovery, curiosity, growth, development and belonging. Adopting the interpretivist paradigm, the study employs focus groups and interviews with four Early Years practitioners working with these children and families. Braun and Clarke's (2006) thematic analysis is utilised to make sense of the data. To gain access and consent, participant information sheets explaining the aim and purpose of the study were sent to the Early Years settings for approval and participant consent. Acknowledging sensitivities, the study avoided discussing the war and focused on non-invasive practice issues and improvement of services for the children and families, purposively generating benefits for the stakeholders. From focus groups conducted so far, language is a recurring barrier. Practitioners do not feel they have been prepared to handle emotional support needs. Technology is used to resolve the language barrier. The main implication are insights into how best to support refugee children and families in early years settings. Central and local government can also benefit by considering how policy and funding can support settings to cope with the needs and challenges they encounter.

refugee children, transition, displacement, war, migration

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Fostering independence, empowerment, and engagement in learning: A case study of refugee preschool children in Malaysia
Kimberley Kong (1), Katharina Ereky-Stevens (2) and Iram Siraj (2); (1) Universiti Sains Malaysia (USM), Malaysia, (2) University of Oxford, United Kingdom

This case study examines the Montessori approach’s impact on curiosity, agency, and participation in a Malaysian learning centre serving around 200 children aged 4-6, primarily from refugee communities, and explores challenges and benefits of child-centred methods in low-resource settings. Building on Kia-Keating and Ellis’ (2007) findings, this study examines the effectiveness of the Montessori approach in providing a safe and supportive learning environment that prioritises children’s agency and participation, leading to enhanced psychosocial adjustment and academic outcomes. Boyd et al. (2020) emphasise the significance of employing democratic, child-centered approaches to education for trauma-informed communities, further underscoring the relevance of the study. The current study aligns with a constructivist paradigm that emphasises active participation in learning (Piaget, 1973). It employs a qualitative approach to data collection, using 12 hours of classroom observations, and 6 teacher interviews. Researchers
addressed ethics with institutional approval, training, participant consent, confidentiality, cultural sensitivity, and well-being measures in this low-resource study. The findings indicate that the Montessori approach effectively promotes curiosity, agency, and participation in learning among refugee children. The study discusses how a child-centred environment can be set up to enhance children's sense of agency, and equip them with school readiness skills, despite the challenges of low-resource settings. It provides valuable insights into best practices for fostering independence, empowerment, and engagement in learning among refugee children, which can inform policies and practices for their education and well-being in low-resource settings.

refugee children, global south, Montessori approach, self-directed learning, low-resource settings

This application discusses a completed piece of research.

The impact of armed conflict and forced displacement on young refugee children’s play in Lebanon
Sandra El Gemayel, Manchester Metropolitan University, United Kingdom

This paper aims to investigate the impact of armed conflict and displacement on the play of young Iraqi and Syrian refugee children living in Beirut’s northern suburbs, Lebanon. Play is crucial for young children’s development and wellbeing (Wood, 2010); however, experiences of armed conflict and displacement often have drastic impacts on children’s play and opportunities for play (Landers, 1998). This research draws on Vygotsky’s (1978) sociocultural theory of play and Turner’s (1969) theory of liminality to shed light on young children’s play opportunities and constructions of play when stuck in an in-between state. The study adopts a ‘Day in The Life’ approach (Gillen and Cameron, 2010) to data collection with four 4-7-year-old Iraqi and Syrian child refugees, supplemented by questionnaires from a wider population (n=100), interviews with professionals working with refugee children and a school observation. Following BERA (2018) ethical guidelines, careful consideration was given to ongoing informed consent, working with potentially vulnerable participants, anonymity and confidentiality, and risk assessments to avoid harm to participants and/or researcher. Findings demonstrate how lack of access to play resources and constrained space for play push some children to the edge, both physically and socially. Nonetheless, both children and their caregivers used creativity, imagination and transformation to create possibilities out of those constraints, breaking barriers and summoning diverse worlds into one physical space. These findings may impact national and international policies to re-examine refugee children’s rights, including their right to play, and may inform the work of professionals working directly with displaced children.

constructions of play, a ‘Day in the Life’ approach, child refugees, liminality, armed conflict and displacement

This application discusses a completed piece of research.

C26
THE FOUNDATION AND CHALLENGES OF CHILDREN’S AGENCY
Chair: Mariette Koen, North-West University, South Africa

Babies, toddlers and young children as Agentic Citizens: Laying the foundation for learning and development in the update of Aistear: The early childhood curriculum framework in Ireland
Sharon Skehill and Mary Daly, The National Council for Curriculum and Assessment (NCCA), Ireland

In updating Aistear, the early childhood curriculum framework in Ireland, there is an emphasis on the centrality of empowering babies, toddlers and young children as 'Agentic Citizens', establishing this as a foundational principle based on their rights and their responsibilities. Updating Aistear (NCCA 2009) is informed through a 2-phase consultation process to identify what is working well and what needs to be updated in the current framework to reflect changes in policy, research and context. Consultation with babies, toddlers and young children underpin the update of the early years curriculum framework (MU et al. 2023/ NCCA 2022/23). The conceptual framework is guided by Lundy's (2007) model of participation in ensuring the voices of all stakeholders inform the update of Aistear, while maintaining flexibility of interpretation depending on the user of the curriculum framework. This is a qualitative, interpretative process of gathering data to inform the update of Aistear. Phase 1 has involved online focus groups, written submissions and questionnaires from relevant stakeholders as well as consultations and literature review as noted above. Thematic analysis using a reflective interpretative lens guided the analysis to identify key messages in the data(Braun & Clarke).
NCCA research strategy informs and guides processes. Consultation carried out with consent and assent as per ethical guidelines. Emphasis on understanding the rights, and also the responsibilities of the 'Agentic Citizen' in the national early years curriculum framework underpinned by playful pedagogy. Update of national early childhood curriculum framework in Ireland.

curriculum, Ireland, rights, playful, consultation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Multiple perspectives on children’s agency in early childhood
Andrea Tures and Lea Barnikol, Justus-Liebig-University Giessen, Germany

The study examines the perspectives on child development of different stakeholders in the child’s community (e.g. family members, caregivers). We are particularly interested how these perspectives are linked to the child’s agency and participation in their community and day care centre. Studies conclude that a professional and strength based perspective on child development is necessary to foster all children (Neuß 2020: 135; Tures 2022: 204) and that partnerships with families support positive educational outcomes for children (Barnikol 2022: 220). The study views child development as a complex system of relationships and focuses on the microsystem of the child (Bronfenbrenner 2005). It investigates partnerships with families within a framework that looks at the nexus of children, teachers and parents (Fialka 2010: 5). The study was conducted as a mixed-methods design and targeted parents with children at day care in Germany, using qualitative interviews (n = 15) and content analysis as well as questionnaires (n= 195) and statistical analysis. The study used indebted measures to protect participants through consent forms, confidentiality of participants and discussion of results with participants. The findings accentuate that many of the addressed viewpoints about children lack a professional and strength based perspective. The children’s aspiration for agency and participation is often not valued as a desired outcome. Surprisingly there were no differences between professional and private care givers. We argue for the need of a framework for child development which targets the agency and participation of young children in a strength based way.

parent partnership, family environment, strengt-based approach, parent-child relationship, children’s agency

This application discusses a completed piece of research.

Positive education for sustainability to overcome agency challenges in the early years
Mariette Koen, Stef Esterhuizen, Hantie Theron and Seipati Baloyi-Mothibeli, North-West University, South Africa

The aim is to explore how positive education could contribute to overcoming agency challenges in the early years. Dewey (1916), Freinet (1945), Freire (1970) encouraged reflecting on children’s agencies. These ideas are supported by positive education bringing together the values of positive psychology (Seligman, 2011) and best-practice teaching to allow children to flourish (Norrish et al. 2013). Positive education recognises ways to prepare children to prosper in a sustainable way (Adler 2017). It includes positive behaviour, attitudes, coping skills and character strengths, which are furthered by PERMA (Seligman 2011) promoting holistic well-being. A qualitative desktop analysis was used to reflect on the findings of three action learning groups (ALG) in two semi-rural South African districts, Free State and Gauteng. PALAR served as research design when co-researchers (in ALG's) constructed knowledge collaboratively, assigned meanings to experiences, and analysed the data generated by photovoice and collage using thematic content analysis. Edu-Rec from the North-West University and the Departments of Education (Free State and Gauteng) granted ethical clearance to conduct the research. Initial findings indicated that children need to grasp the idea of agency and must also learn how to share responsibilities when leaving classrooms. Knowledge of positive education may assist practitioners in directing young children’s attention away from being people who had things done for them, to individuals who may act with agency in their social contexts. Focusing on training practitioners in positive education could contribute to developing resilience in overcoming sustainable challenges as citizens and rights holders.

positive education, agency, early years, participatory action learning and action research, social context

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
An increasing number of emergent multilingual children with various language experiences and backgrounds are enrolled in ECEC settings. Educators are facing both challenges and opportunities in ways of scaffolding multilingual children’s language development. The Nordic curricula emphasize that reading aloud and parental collaboration should be central elements in language education. This symposium brings together studies from a Nordic perspective in which read-alouds and parental collaboration, are in focus for multilingual children’s education, curiosity, agency, and participation in ECEC settings.

Read-aloud as social justice and practice? Preschool teachers' reported views on read-aloud in Nordic multilingual classrooms

Hilde Hofslundsengen (1), Maria Magnusson (2), (Martina Norling (3) and Hanne Næss Hjetland (3); (1) Western Norway University of Applied Sciences, Norway, 2) Linnaeus University, Sweden, (3) Örebro University, Sweden, (3) OsloMet, Norway

The aim of this research was to investigate the views of read-aloud among teachers with multilingual children in their classrooms in Finland, Norway, and Sweden. Several systematic reviews have shown that reading aloud can be beneficial for second-language learning, including both explicit and implicit word learning (Fitton et al., 2018; Hur et al. 2020; Larson et al., 2020). Hence, teachers have a central role in planning and scaffolding read-aloud activities in preschool. Based on Vygotsky’s (1978) sociocultural theory, learning happens in the context of interaction and communication between children and adults. Language is thus seen as a cultural tool and a link to action. In this mixed-method study, 170 teachers answered a survey about their literacy practices. Data on literacy practices were analyzed quantitatively, and reasons for read-aloud approaches were qualitatively analyzed. No information that could identify the respondents or sensitive data was collected. According to the local ethics committee at one author’s university, no further ethical review was required. Reported read-aloud practices and attitudes among teachers did not differ based on the number of multilingual children in their classrooms. However, 38% of the teachers selected a simpler book when reading with multilingual children. The reasons for this included a different reading style and a view of multilingual children as needing simpler books with illustrations. Preschool teachers are mediators of the majority language, and are expected to emphasize multilingualism. Therefore, they need to reflect on their scaffolding of read-alouds in everyday practice to ensure equal education.

shared book reading, multilingual children, monolingual norm, literacy practices, second-language learning

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Books as communicative tools for collaboration with guardians in a multicultural preschool

Martina Norling, Örebro University, Sweden

The purpose of the study was to investigate how read-aloud activities and books can constitute a bridge between preschool staff and guardians to support multilingual children's multilingualism. Previous research shows a need for goal-oriented processes of language teaching in preschool (Alstad & Kulbrandstad, 2017). It has also been found that multilingual children do not receive the linguistic challenges they need, and that preschool staff seem to have lower expectations of multilingual children (Björk-Willén, 2022). The theoretical framework is based on Barton’s (2007) ecological perspective on literacy and Garcia and Otheguy’s (2020) concept of translanguaging. The study adopts a qualitative approach, using the Critical Incident Technique (Flanagan, 1954) as a method for data collection. The data consists of four preschool staff members’ written descriptions of critical literacy events when conducting read-alouds for children as well as giving books to guardians. Aspects of confidentiality and informed consent were considered according to the ethical guidelines of the Swedish Research Council (2017). The preschool staff gave their consent for participation, and the written descriptions cannot be linked to any specific context or person. The results show that translanguaging approaches used by preschool staff, such as pictures, gestures and books, can support children’s engagement, curiosity, agency, and participation in read-aloud activities. The study highlights the importance of collaborative activities with guardians where using books in several languages reduces language barriers and facilitates joint engagement and participation in supporting children’s multilingualism.
This application discusses a completed piece of research.

Norwegian ECEC teachers’ scaffolding in digital picture book interactions with multilingual children
Randi Høyland and Hilde Hofslundsen, Western Norway University of Applied Sciences, Norway

This study aims to explore teachers’ scaffolding interactions with multilingual children during digital picture book read-alouds in mainstream Norwegian Early Childhood Education and Care (ECEC) settings. Research has shown that high-quality multilingual literacy practices provide comprehensible language input and meaningful opportunities to practice and engage with others (Gort et al., 2012). This study draws upon sociocultural theories of learning through interaction (Vygotsky, 1978). Our approach to language as practice emphasises translingual resources to enhance learning and content understanding in a multilingual environment (García & Wei, 2014). The study was conducted within a qualitative research paradigm. Three ECEC teachers’ picture book interactions with multilingual children (N = 9) were video recorded on two occasions. The video material was analysed using an abductive content analysis approach focusing on the teachers’ high-quality practices involving multimodal resources. Informed consent was given by the participants and the participating children’s parents. The participants were assigned pseudonyms and informed that they could withdraw from the study at any time. The preliminary findings revealed that the teachers used elements of decontextualized and extended conversations with references to shared experiences to scaffold the children’s second language skills. To some extent, the children’s translingual resources were utilized to co-construct meaning and negotiate in embodied conversations, especially by one of the teachers. However, this finding may have been due to the teacher’s proficiency in the child’s first language. The use of video data provides opportunities to raise ECEC teachers’ awareness of literacy practices to discuss and improve multilingual educational practices.

literacy practices, meaning-making, multilingualism, picture book interaction, translanguaging

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

C28
EXPLORING PLAY OPPORTUNITIES FOR YOUNG CHILDREN IN AN URBAN ENVIRONMENT
Self-organised Symposium
Chair: Marlene McCormack, Dublin City University (DCU), Ireland

The project sought to elicit the perspectives of young children and their families on play provision in Dublin city with a view to influencing policy. The value of play transcends time and has long been understood by Froebel and others as a way of making meaning of the world. Children’s access to play opportunities in their local communities is of critical concern to city planners (Dublin City Development Plan, 2016-2022). However, in shaping their play environment, the voices of young children and their parents are not always heard. Traditional research methods have frequently positioned children as research objects (Bergmark, 2020). A participatory action research (PAR) approach, using a Futures Workshop model (Jungk & Müller, 1996) was adopted by the research team from Maynooth University and Dublin City University to support children and families to create a vision of future play spaces within their communities.

Jungk, a Froebelian way of listening
Annette J. Kearns (1) and Triona Stokes (2); (1) Froebel Dept. of Primary and Early Childhood, (2) Maynooth University, Ireland

The aim of this Participatory Action Research (PAR) study was to provide opportunities for participant’s views on play spaces to be given voice, audience and influence (Lundy, 2007; 2012; 2018), in both policy and practice. PAR also aligns with Froebelian thinking, placing the child at the centre, recognising their uniqueness, potential and capacity. Froebel saw play as a valuable mode of learning, believing meaningful authentic new experiences need to be carefully planned to extend children’s understanding (Tovey, 2016). Urbanisation, compounded by inadequate financial resources has in recent years diminished children’s space and opportunities to engage in play within their local communities (Zieff, Chaudhuri and Musselman, 2016). To draw on the children’s knowledge and
experience, and make explicit their thoughts and desires for play, this research utilised the Jungk & Muller (1996) Futures Workshop Approach. Using the PAR approach provides a framework for research and empowers participants to engage in contributing to the creation of their own futures (Ollenbury, 2019), and is primarily used by local groups for local problems to find alternative solutions to that proposed by the establishment (Valqui Vidal, 2006). Participating institutions granted ethical approval. The management, parents and educators in both settings gave consent, in addition to assent from the children. Findings indicated that rather than creating new play utopias, children drew exclusively on their lived play experiences. Having observed the children, parents seemed better able to imagine more possibilities for children’s play within their communities. Participatory consultation with key stakeholders provides meaningful insights for policymakers.

participatory action research (par), Futures Workshop, play, consultation, listening

This application discusses a completed piece of research.

Issues and opportunities for play and play spaces in urbanised Ireland: Theoretical underpinnings and policy context
Marie McLoughlin, Maynooth University, Ireland

The project uncovers perspectives on play and play spaces within urban Ireland from young children and their families with a view to bringing about change and influencing policy. The Dublin City Development Plan (2016-2022) advocates for sustainable neighbourhoods with strong community infrastructure that engender a sense of belonging. The need for local environments that provide for unstructured, informal play rather than formal playgrounds is recognised in the plan and research (Herrington & Brussoni, 2016). Play policies in Ireland and the significant role that public spaces hold for a child’s experience of play in urban Ireland (UNCRC, 1989; DES, 2017; NCCA, 2009; 2015; DCYA, 2016; 2018). Informed by Froebelian principles, it explores the multifaceted nature and benefits of play (Tovey, 2013; Ginsburg, 2007; NCCA, 2009; Zosh et al., 2017; Hyder, 2004), structural and societal barriers to play (Sandseter et al., 2020). The study stems from an interpretivist paradigm, drawing on Participatory Action Research [PAR] methodology (Klocker, 2015). Authentic listening was achieved by adopting the Future’s Workshop Model. Ethical approval was granted from both participating institutions, the management, parents and educators in both settings in addition to assent from children. Findings demonstrate that a co-creative approach, underpinned by Froebelian ‘methods’, research on pedagogy, risk (Gray, 2011; Moss, 2012; Brussoni et al., 2012) and authentic engagement with key stakeholders, has the potential to manifest accessible and engaging public play spaces in urban communities. Play spaces are critical for young children and meaningful encouraging agency with key stakeholders can provide crucial support to policymakers.

play, play spaces, froebel philosophy, urban play, play policy

This application discusses a completed piece of research.

The power of participation in shaping urban play landscapes – What we found!
Patricia Stafford, Maynooth University, Ireland

This project aims to elicit the perspectives of children and their families in the provision of play spaces in the community. Play remains important in the lives of young children (Bruce, 2021) and their families. Their experience of play in their communities is critical to informing the use of space in the city, but their perspectives are rarely heard. The concept of participation (Hart, 1997) provides the theoretical framework. It supports children and their families develop a sense of their own agency. Traditional research approaches have frequently positioned children as research objects (Bergmark, 2020). This study stems from an interpretivist paradigm, drawing on Participatory Action Research [PAR] methodology (Klocker, 2015) to centralise the child. A Future Workshops Model was employed in order to authentically listening to children. All project forms were translated into 17 different languages to ensure that participants were fully aware of their participation in the research. Children’s perspectives on play were gathered with those they trust, that is their parents and educators. While researchers had ethical approval from their universities, we understood ethics as an encounter (Dalhberg & Moss, 2005). The participants were unequivocal in framing their desired play provision. Predominantly, children want spaces for friendship and connections with nature while parents/caregivers want small spaces close to home where children can play safely. The perspectives of participants have strong implications for government in their future developments within the city. Space is at a premium, but the perspectives of children and parents are clear.

children's voices, children's participation, urban play landscapes, future workshops, parents' participation
This application discusses a completed piece of research.

C29
INVOLVING CHILDREN IN RESEARCH - ENABLING PARTICIPATION AND DEMOCRACY THROUGH PARTICIPATORY RESEARCH
Self-organised Symposium
Chair: Birgit Hüpping, PH Ludwigsburg University of Education, Germany

Children’s participation in research is based on discourses, such as childhood studies and UN Convention on the Rights of the Child in 1989. While inclusion of children’s perspectives on their everyday lives has positive connotations, active participation of children in research is far from straightforward. There are questions about the image of child(ren), childhoods and the associated understanding of (research) competence (Büker, Hüpping & Zala-Mezö 2021, Hammersley 2017). The aim of this symposium is to shed light on different degrees of participation of children in research on theoretical and empirical levels, to identify possibilities for children to influence and shape participation in their everyday lives (Bradbury-Jones & Taylor 2015, Büker, Hüpping & Fernhomberg 2021, Hüpping & Velten 2022). Through the participatory research approaches outlined in the contributions, different forms of participation, rights and practices are identified, whose influence on children in the context of experiencing democracy is put forward for discussion.

Undertaking participatory, peer-research with children: Reframing the challenges and solutions
Birgit Hüpping (1), Katrin Velten (2) and Caroline Bradbury-Jones (3); (1) PH Ludwigsburg University of Education, Germany, (2) ASH Berlin, Germany (3) University of Birmingham, United Kingdom

The aim of the paper is to present a new conceptualization of participatory, peer research with children to shift the focus from a deficit to an asset-based lens. Over the past few decades there has been increasing interest in participatory research with children, including peer research (where children research alongside adult researchers) (Taylor et al. 2014). There has been (rightfully), a mounting body of knowledge about the challenges and complexities (Morrow 2008, Bradbury-Jones & Taylor 2013). The paper is grounded in a children’s rights framework, aligning with the UN Convention on the Rights of the Child (1989). The presentation is based on the author’s previous empirical work and literature review, which are used as a platform to reframe the way we think about participatory research with children. The author’s previous participatory research was with children from disadvantaged communities. There were significant ethical issues such as potential coercion and power differentials between the adult researcher and the children. These were mitigated by robust governance procedures. We explore the rewards and challenges of undertaking participatory research with children. We reframe the narrative around how we can understand participatory approaches with children in relation to fostering curiosity, promoting agency and enhancing participation. The paper has implications for research practice as regards laying out the positive potential for participatory peer research, while remaining attuned to the complexities.

asset, children, co-research, participatory approaches, peer research

This application discusses a completed piece of research.

Participatory research with children in international discourse - A systematic review
Birgit Hüpping (1), Katrin Velten (2); (1) University of Ludwigsburg, (2) ASH Berlin, Germany

Participatory research with children is gaining international importance in the intersection of childhood and primary school research. The aim is to identify an understanding of participatory research with children in English as well as German-speaking countries by a systematic review. In the New Childhood Studies, there is a long tradition of actively involving children in research while observing research ethics principles. Participation and agency were one specific focus, especially at the level of involving children in research (Lundy/McEvoy 2012). According to Eßer and Sitter (2018), the systematic review is based on the paradigm that children are competent actors. In this view, participatory research approaches aim to broaden children’s perspectives also for the process of research (Bradbury-Jones, Taylor 2015). Based on a systematic review (Newmann and Gough 2019) English- and German-language keywording of selected terms took place. By establishing general inclusion and exclusion criteria, texts were analyzed that (1) focus on children (ages 5-10), (2) explore primary school and (3) exist as empirically based research. The systematic review will aid researchers who are working within a participatory framework to consider ethical challenges, positive potential and reality of such
research. Results show that in English-language studies, research ethics issues are reflected more systematically in the research process, while German-language studies mainly discuss participatory research approaches in terms of research methodology and questions of generational order, power and asymmetries (Hüpping/Velten 2022, Velten/Höke 2022). We will discuss where typical pitfalls lie and how a participatory approach can be designed during the research process.

**generational order, agency, participatory research, systematic review, children's perspectives**

This application discusses a completed piece of research.

**Children's voices concerning their role as researchers: Implications for democracy, curiosity and agency**

Hannah Fernhomberg and Petra Bueker, University of Paderborn, Germany

The aim of this interview study is to evaluate children's perspectives on their own research processes and their role as researchers during a participatory learning project in primary school. The focus of this paper is on how children aged 7-8 perceived their role as researchers. The study is based on international approaches focussing children's participatory research (Kellett et al. 2004; Kerawalla/Messer 2018; Spriggs/Gillam 2017). The current study builds on a previous study after modifying the setting (Büker/Hüpping/Fernhomberg 2021). Primary school is seen as an important field for realising far-reaching participation of children in terms of children’s rights, democracy learning and empowerment (Büker/Hüpping/Zala-Mezö 2021). The study enables a reconstruction of children's experiences in their role as researchers. Bradbury-Jones/Taylor's (2013) and Lundy's children’s rights-based model (2007) build a framework for analysing the results. At the end of the participatory learning project with children (n=12), eight children were interviewed. The qualitative data were analysed using the documentary method (Nohl 2017; Bohnsack 2014). The study adheres to the principles and practice of the EECERA Ethical Code (Bertram et al. 2015). The contribution discusses ethical complexities of participatory research with children (Spriggs/Gillam 2017). Results show that the children take their role as researchers seriously and argue in a differentiated way about potentials and limitations. The children attach relevance to research for actively shaping their environment. Children's perspectives indicate that research can be an appropriate approach to pursue their own curiosity, questions and ideas and to initiate change processes in daily school life.

**participatory research, children's perspectives, democracy, children as researchers, children as researchers**

This application discusses a completed piece of research.

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**C30**

**DEVELOPING A VALIDATED QUALITY ASSESSMENT SYSTEM TOGETHER WITH PRESCHOOL TEACHERS IN NORWAY**

Self-organised Symposium

**Chair:** Børge Moe, Queen Maud University College of Early Childhood Education, Norway

High ECEC quality, ensuring all children good care and optimal conditions for play, development and learning, is of essential importance, both for each child and their families and in a macro-level perspective. Children’s subjective well-being is an indicator of ECEC process-quality, together with caregiver-child relations, peer-relations and structural conditions. However, recent research illuminates that the process-quality of ECECs in Norway varies in providing nourishing physical and psychosocial environments for children. This symposium presents a three-year research and development project funded by The Research Council of Norway. The overall aim is, in close and mutual collaboration with ECEC institutions, to develop a research-based, validated quality assessment system targeted towards monitoring and improving the process-quality of Norwegian ECEC institutions. The system will include assessment done by practitioners in the ECEC, assessment from collaborating preschool teachers and childrens perspectives on their subjective wellbeing.

**Developing a quality assessment system for Norwegian ECEC institutions**

Anne Grethe Baustad (1), May Liss Olsen Tobiassen (1), Laila Skjel Flormælen (2), Ellen Beate Hansen Sandseter (2), Børge Moe (2), Kristine Warhuus Smeby (2), Vera Skalicka (3), Monica Seland (2), and Pia Paulsrud (2); (1) Nord University, (2) Queen Maud University College of Early Childhood Education, (3) Norwegian University of Science and Technology, Norway
The aim of this project is to develop a research-based, validated quality assessment system for use by practitioners in Norwegian ECEC institutions. The system will ensure both the demands from the Norwegian Framework Plan for the Content and Tasks of Kindergartens, professional judgement, and children’s experiences of well-being in ECEC. It relates to previous work on quality in ECEC demonstrating the importance of high quality (Sylva et al. 2010), and recent research on process quality in ECEC in Norway (e.g. Bjørnestad et al. 2020). The project is framed by theories on quality in ECEC (Buysse et al., 2006), process quality and proximal processes (Bronfenbrenner & Morris, 2006; Lamb & Ahnert, 2006; Phillips & Lowenstein, 2011), and multiple perspectives on quality (Katz, 1992; Sheridan, 2007). The project is situated within a pragmatic approach; Design experiment in education, where quantitative and qualitative data are combined (Hartas, 2010). ECEC teachers are involved as fellow researchers inspired by principles of action research. Ethical guidelines in research including informed consent from all participants, right to withdraw, anonymization and transparency, are followed. All persons and data are treated in accordance with the ethical guidelines of The Norwegian Social Science Data Services. Preliminary results show that practitioners are developing their professional knowledge when assessing each other’s practice. The assessment system seems to heighten the teacher’s awareness on the conditions of quality. Findings might contribute to implementation of a free, easy to use, and context-sensitive assessment system in Norwegian ECEC institutions, which might improve future quality of ECEC.

**process quality, validated system, professional judgment, children’s subjective well-being, peer assessment**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Validation of the BLIKK assessment system as a measure of ECEC quality in Norway**

Børge Moe (1), Vera Skalicka (2) and Anne Grethe Baustad (3); (1) Queen Maud University College of Early Childhood Education, (2) Norwegian University of Science and Technology, (3) Nord University, Norway

The aim of this project is to evaluate whether BLIKK is a valid measure to assess ECEC quality in Norway. This is a part of the study Developing a validated quality assessment system together with preschool teachers in Norway. Children’s development is affected by the process quality in ECEC (Phillips & Lowenstein, 2011). There is a lack of a validated ECEC quality assessment system developed for the Norwegian context. The BLIKK assessment system inculdes both internal and external teacher evaluation of ECEC quality on a scale from 1-6 across six broad domains based on the most important content of the Norwegian Framework plan for Kindergartens (Ministry of Education, 2017), but its validity has not been established. Data from sixteen ECEC institutions consisting of 80 BLIKK observations were analyzed in a factor analysis. The internal consistency of BLIKK was estimated by Cronbach’s alpha. The concurrent validity of BLIKK was assessed by correlating the BLIKK results with The Classroom Assessment Scoring System (CLASS). All data were treated in accordance with the ethical guidelines of The Norwegian Social Science Data Services. We will outline the preliminary results of our statistical analyses to evaluate the validity of BLIKK as an ECEC quality assessment system. A validated quality assessment system, which is free of charge, easy to administer by ECEC and specifically developed for the Norwegian context will be valuable for the ECEC sector.

**assessment, evaluation, ECEC quality, Norway, validation**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Exploring ECEC teachers’ experiences using a structured conversation tool (WBM-R) to gain access to children's wellbeing**

Pia Paulsrud and Kristine Warhuus Smeby, Queen Mauds University College of Early Childhood Education, Norway

This research is part of a project in process of developing a validated quality assessment system for ECEC-institutions in Norway. This paper aims to explore ECEC-teachers’ experiences with one of the tools in this system; the “Well-being Monitor-R” (WBM-R).

Children’s subjective well-being is essential when validating quality in ECEC-institutions. The Norwegian framework plan clarifies that children’s well-being shall be assessed frequently, and that children’s experiences and views shall be used as a basis for assessment (Ministry of Education, 2017). ECEC-teachers and staff find it difficult to assess children’s well-being because well-being is perceived subjectively (Eik and Steinnes, 2017). A main question is how to assess subjective well-being in considerate, ethical, effective, and useful ways. Theoretically, this study considers children’s participation important. In the Nordic ECEC-tradition, a democratic and sociocultural view of development is emphasized (Vygotsky, 1978). The research is based on qualitative focus-group interviews with ECEC- teachers who have used the WBM-R conducting structured conversations with 4-6-year-old children. The objective is to obtain knowledge about children’s well-being in ECEC. Thematic analysis departs from a phenomenological perspective. Ethical guidelines in research including informed consent from children, parents, and teachers, right to withdraw, anonymization and transparency,
are followed. All persons and data are treated in accordance with the ethical guidelines of The Norwegian Social Science Data Services. Preliminary findings suggest WBM-R to be a useful tool for ECEC-teachers to assess children’s well-being as a part of the ECEC-quality. Implementation of WBM-R may improve professional practice, ECEC-quality and children’s well-being.

*ECEC-quality, subjective well-being, children’s agency, children’s participation, assessment*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
**Symposium Set D**  
**Friday 1st September 2023, 9:45 – 11:05**

**D1**

**ANTHROPOMORPHIC PEDAGOGY AND CHILDREN'S NATURE STEWARDSHIP**

**Chair:** Elena Dominguez Contreras, Cornell University, United States

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**Young children contribute to nature stewardship**

Elena Dominguez Contreras and Marianne Krasny, Cornell University, United States

This presentation is based on a Perspective paper, which aims to propose nature stewardship as a method for children to be authentic agents of change. Environmental Education (EE) has traditionally highlighted children as future environmental stewards. EE Research has typically asserted that children's outdoor play in nature results in a connection to or love for nature (Chawla, 1998; Hägglund & Samuelsson, 2009). Thus, these dispositions will be foundational for children to become adults capable of stewardship (Chawla, 2009; McClain & Vandermaas-Peeler, 2016). This perspective draws on ECEfS (Davis & Elliot, 2014) and The UNCR (1989), which both push for actively involving children from democratic countries in local decision-making, emphasizing environmental issues. I will present two children's stewardship projects that I led as a practitioner. I will focus on used pedagogy. However, examples will be used to support children's capabilities to contribute to their communities when adults enable the mechanisms/affordances for them to participate. Thus, there is no method because it is not a research paper. This study is a literature review and is only based on secondary data. We have included a representative sample of literature from various sources. Data regarding the projects is public. Our observations show that young children can contribute significantly to their communities when given the opportunity. Children have agency and the right to participate and should not have to wait until their adulthood to engage in stewardship. It argues for a research agenda and investment in opportunities for children to contribute to their communities.

young children's nature stewardship, children as active agents of change, early childhood environmental education, children's contribution, early childhood education for sustainability

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**Methodological and ethical issues when interviewing preschool children: Experiences from a study on sustainability in Sweden**

Farhana Borg (1), Ingrid Pramling Samuelsson (2), Johan Borg (1), Julie M. Davis (3), Mikael Winberg (4) Nafsika Alexiadou (4) and Niklas Gericke (5); (1) Dalarna University, Sweden, (2) Gothenburg University, Sweden, (3) Queensland University of Technology, Australia, (4) Umeå University, Sweden, (5) Karlstad University, Sweden

To contribute to the methodological and ethical discourse on children's participation in research on complex issues, this case-study critically discusses experiences from a large-scale randomized interview study about preschool education for sustainability in Sweden. Young children's ability to express their views has been subject to debate, resulting in them often being excluded as research participants. Hence, age-appropriate methodological approaches are needed to ensure their participation. This study draws from Joseffsson and Wall’s (2020) concept of children's “empowered inclusion” and Lundy's (2007) model of voice, space, audience, and influence. Employing a qualitative case-study approach, methodological approaches and ethical considerations and experiences of a randomized study are scrutinized. A total of 403 children from 50 preschools were interviewed about sustainability using illustrations. An interview instrument was developed and pretested in two iterations. Data was analyzed thematically. The Swedish Ethical Review Authority did not raise any objection to the interview study. Consent to participate was collected from parents and children. They were informed that the children could withdraw at any time if they wanted. The findings demonstrate that research with young children can be undertaken in an ethically acceptable manner. The use of illustrations was helpful in creating a friendly environment and supporting children's understanding of complex issues. Individual and pair interviews were effective while group interviews were problematic. Children's attention dropped after 12-15 minutes. These findings suggest that preschool children can express their views on important matters under ethically acceptable and methodologically appropriate conditions.

agency, child rights, early childhood education, kindergarten, sustainable development
Exploring factual and anthropomorphic pedagogy as complementary ways to develop children’s social and environmental competences

Kari Nappen (1) and Barbara Marie Sageidet (2); (1) Western Norway University of Applied Sciences, (2) University of Stavanger, Norway

The study seeks to explore possible co-development of children’s ecological and social competences. While multiple researchers underline nature’s influence on children’s social behaviour and competences, educator’s use of anthropomorphism as a pedagogical method has been criticised (Thulin, 2010). However, it is widely used in both children’s play and literature. The Global Sustainable Development Goals (UNESCO, 2015) aim to empower children and youth, and promote transformative education for sustainability and responsible citizenship (Sageidet & Heggen, 2021). Multiple research underlines that early experiences promote the development of interest and skills later in life (Kolb, 2015). Within a sociocultural paradigm, this qualitative study compares two activities related to nature, gardening, and sustainability with children (2.5 – 5 years) in a kindergarten in Rogaland, using a pedagogical approach, based on anthropomorphism on the one hand and with a focus on scientific facts on the other hand. Data was collected through conversations, observations, and video-recording, analysed through qualitatively coding, and presented by use of narratives and conversation excerpts. Ethics include the respecting and considering of children’s verbal and nonverbal expressions, their questions, and if they feel comfortable. Results seem to indicate that the children who experienced the factual-based activities were more engaged in recalling the experiences, and they remembered more details than the group following the anthropomorphic approach. However, the anthropomorphic approach seems to promote children’s empathy, connectedness, and attachment towards animals, and each other. Developing children’s ecological and social competences may promote children’s active ecological citizenship in a more sustainable society.

experiential learning, anthropomorphism, pedagogical approaches, children as eco-citizens, social and ecological competences

D2

SOCIAL EXCLUSION AND STRESS

Chair: Simone Breit, University College of Teacher Education Lower Austria, Austria

Supporting children with psychosocial stress within EY settings

Simone Breit and Monika Hofer-Rybar, University College of Teacher Education Lower Austria, Austria

The study captures the interaction between professionals and children with psychosocial stress within EY settings. Psychosocial stress in children and their families can have an impact on their health and development and thus these impacts can reach into entire life (Sammons et al, 2004; Walper & Grgic, 2013; Zimmermann & Spangler, 2001). When children are confronted with stress, risk factors and protective factors interact in a complex structure (Wustmann, 2016; Fröhlich-Gildhoff & Rönau-Böse, 2022). In the compensation model, the EY setting and professionals are also considered influencing factors: Continuity and reliability of relationships as well as an appreciative attitude and solidarity of the professionals are supportive parameters for children with psychosocial stress (Fröhlich-Gildhoff et al, 2020). The data basis is formed by written vignettes of 17 professionals, which retrospectively describe situations of encounters with children in EY settings, whose behavior they experienced as stressful, irritating and disturbing. The material is evaluated by means of sequential analytical procedure. The material was written in anonymised form, so that the focus is on the interaction practice rather than the case. Distancing was done by writing in the 3rd person singular. The reconstructive study shows to what extent the EC teachers fulfil the quality standards for professional relationship design (Kasúschke & Fröhlich-Gildhoff, 2008) – also in the context of supporting children with psychosocial stress. The results can be used to learn how stressful life events of children can be dealt with in EY settings. This is helpful for initial and further teacher training.

stressful events, psychosocial stress, professional interaction, vignette, reconstructive study

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
The aim of the research is to determine the perspective of children at risk of social exclusion (RSE) on their experiences in ECEC institutions. Research shows that ECEC institutions still fail to respond equitably to the children at RSE and their families, but that there are examples of good practice (Lazzari and Vandenbroeck, 2013). At the same time only 15% of teachers estimate that they are educated in some form of support for children (MORENEC, 2021). The research with children, between the ages of 6 and 16, has shown that RSE has a significant impact on their lives (Walker et. al., 2008). Consequently, cumulative risk factors of social exclusion have multiple negative effects on the quality of life and development of children of early and preschool age (Farkas, 2014). Qualitative methodology was used. The data was collected using the semi-structured interviews. In total, 43 children aged 5 to 7 participated in the research. Due to The Ethical Code of Research with Children (RH, 2020), the response to distress and disclosures was a challenging aspect. Consent of children and parents was ensured. During the interview, the children could give up, however, none gave up. Results show that children recognise: (poor) quality family relationships, (un)quality adult behaviours and (bad) consequences. It is possible to conclude that children are exposed to various types of punishment within family relationships which represents a risk factor. This data implies a need for the improvement of support and quality of pedagogical practice for children at RSE in ECEC settings.

children of early and preschool age, family relationships, support for children, risk of social exclusion, quality of pedagogical practice

Parenting 365
Lána Cummins (1), Alexandra Alcala (1), Sonya Goulding (1), Jennifer O’Neill (1), Marie Boyne (1), Jackie Glynn (1) and Siobhán O’Neill (2); (1) National College of Ireland, (2) Saol Research, Ireland

Parenting 365 supports young children with disabilities and their parents in area of socio-economic disadvantage. It aims to empower parents, while providing the children with a creative and safe play space to explore. It offers families with the challenge of disability the chance to connect, support and resource each other. Parents of children with developmental disabilities suffer significantly increased levels of stress (Barroso et al., 2018). Although early diagnosis and intervention is seen as effective (Brian et al., 2015), families in Ireland wait years to receive an assessment of need and required support. Connolly and Gersch (2011) find that a parent’s experience begins on first detection of developmental delays, and that support from other parents can help them on their ‘journey’. This project follows social learning and ecological systems theories (Vygotsky, 1978; Bronfenbrenner, 1979) and the action reflection cycle (McNiff and Whitehead, 2006; Bleach, 2016). Community action research focused on changing practice, understanding of practice and conditions of practice (Kemmis 2009; Bleach, 2013) was used alongside ‘dynamic conversations’ (Schön 1983). Opportunity to discuss any concerns were provided to participants, in conjunction with referral to appropriate services. A debriefing sheet was provided at the end of research. Parent and child evaluation data indicate that the children’s confidence grew and parents noted a difference in their child’s behaviour at home and developmental progress. Parents reported progress regarding their own goals as a parent. This research illustrates the positive effects of community based support groups for parents and children with disabilities.

parenting, additional needs, community groups, young children, early years

D3
THE IMPORTANCE OF CONTEXT WITHIN EARLY CHILDHOOD TEACHER EDUCATION
Chair: Andri Schoonen, North-West University, South Africa

Early childhood pre-service teachers’ curiosity on professional experience during COVID-19 and beyond
Alicia Phillips and Wendy Boyd, Southern Cross University, Australia
The COVID-19 pandemic impacted education globally with health and safety guidelines designed to protect teachers, children, and families. Lockdowns in Australia commenced in 2020 when early childhood (EC) teachers worked online, and/or on-site, depending on the EC centre. This study explored EC pre-service teachers’ perspectives, undertaking professional experience this time. Professional experience is highly-valued real-world experience for EC pre-service teachers (Harrison & Joerdens, 2017) enhancing their development (Hyson et al., 2009), and influencing careers in ECEC following successful placement (Schleicher, 2019). This is critical for ECEC as Australia faces significant teacher shortages (Education Services Australia, 2021). The bio-ecological systems theory (Bronfenbrenner & Morris, 2006), provided the conceptual framework: pre-service EC teachers were influenced by contexts.

A qualitative paradigm, using online surveys with 6 open-ended questions, N= 53 pre-service EC teachers prior to professional experience; analysed using Braun and Clarke’s (2006) tool. Ethics approval was provided by SCU Ethics committee (2020/071), pre-service teachers were advised participation was voluntary, had low risk and could discontinue anytime. Pre-service teachers were excited, curious and nervous about placement. Four themes were identified: (i) uncertain times; (ii) opportunity and threats; (iii) support and well-being; and (iv) success and relationships. In-depth findings of these themes will be presented; with financial pressures to undertake placement a key concern. Recommendations are made for preparing pre-service teachers for placement beyond COVID-19. One recommendation is for provision to be made for pre-service teachers to undertake their professional experience without suffering financial hardship, possibly being paid for their work on practicum.

**early childhood teacher education, pre-service early childhood teachers, professional experience, curiosity and excitement, well-being of pre-service teachers**

This application discusses a completed piece of research.

**Exploring indigenous Sámi perspectives through aesthetic learning processes in early childhood teacher education**
Kristin Gregers Eriksen, Åse Lund, Terese Wilhelmsen and Jocelyne Von Hof, University of South-Eastern Norway, Norway

This paper investigates how aesthetic learning processes contribute to students’ professional development related to inclusive practice. The paper reports from a study where teacher students explored Sámi culture through aesthetic learning processes. Norwegian national guidelines for teacher education maintain that Sámi culture is a core topic (UHR, 2018, p. 6). Research suggests that ambitious policy statements do not necessarily pan out, and lack of competency among professionals is a key obstacle (Olsen, Sollid & Johansen, 2017). Boler (1999) upholds that self-reflexivity is needed to ensure respectful encounters with the indigenous “other”. Aesthetic learning processes, recognized by experiences and emotions being processed through aesthetic language (Austring & Sørensen, 2019), may be a strategy for increased reflexivity (Eriksen, Aamaas & Bjerknes, 2023). The empirical material is derived through action research, from a project where students developed an exhibition for children. The material consists of field notes, exhibition pictures and group interviews. The project is situated within a critical paradigm. The project is approved by the Norwegian Agency for Shared Services in Education and Research. Participants received information about the project, rights and that non-participation would not influence grading. Preliminary findings suggest that aesthetic learning processes work as a fruitful path for stimulating self-reflexivity. The convivial nature of the aesthetic learning processes enable a safe space for challenging one’s own prejudices. The paper contributes insight on why and how aesthetic learning processes can be applied for anti-racist learning in teacher education, as well as how professionals can use similar approaches in their pedagogical practice.

**teacher education, indigenous, Sámi, professional development, aesthetic learning processes**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Transforming teacher education to enable socially and contextually relevant early learning: A case for communities of inquiry**
Andri Schoonen, Itumeleng Lesabe and Corné Kruger, North-West University, South Africa

This two-year collaborative, reflexive and participatory research project aims to develop an inclusive and theoretically informed framework for early learning teacher education programmes in South Africa. Current research emphasizes the need for engaged, contextually relevant (Osika et al, 2022) and more inclusive (Mahadew, 2022) approaches to learning in the early years. Teacher education programmes should create enabling spaces for teachers to develop inclusive and contextualized teaching practices (Trumball et al, 2020). In this study, we draw from the social constructivist theory (Vygotsky, 1978) and the concept of developing praxis through Communities of Inquiry (Garrison et al, 2000). This participatory action research study is conducted within a critical transformative paradigm (Mertens, 2017). Our action learning group, comprising five ECD-researchers and five ECD-teachers,
collaboratively identified and reflected on the research topic using arts-based methods. The findings were analyzed thematically through a transformative lens. We negotiated informed consent with the participants and agreed on confidentiality, respect, beneficence and truthful reporting, in line with the EECERA code of ethics (Bertram et al., 2015). Our findings revealed a need for teacher education programmes to enable the development of communities of inquiries among ECD-stakeholders to better prepare teachers for their roles in establishing socially relevant and contextualized teaching, learning, social, emotional and cognitive presence. The knowledge generated from this research can support early years teachers and teacher education institutions to improve their teaching practices through communities of inquiry to be more responsive to the social and contextual needs of young children.

contextually relevant teaching, curriculum transformation, diverse educational communities, learning in the early years, teacher education

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

D4
REPETITION, INVENTIVENESS AND JOY AS ASPECTS OF LANGUAGE
Chair: Fran Paffard, University of East London, United Kingdom

“I mean to say” An investigation of the communication funds and strengths of children thought to have poor language
Fran Paffard (1), Lisa Clarke (2) and Rose White (3); (1) University of East London, (2) Comet Nursery School and Childrens Centre, (3) London Metropolitan University, United Kingdom

By researching the communicative inventiveness of children, this study interrogates the current focus on the language deficiencies of children from 'disadvantaged' families, challenging prevailing views. The research builds on Clarke, White & Paffard ‘Octopus and Noodles’ (2018) challenging simplistic implementations of research Hart & Risley (1995), Law et al (2017) and suggesting more nuanced ways forward. Based theoretically on Chesworth’s (2016) ‘Funds of Knowledge’, and Wells’ (2009) theory of linguistic benefits, the focus is informed by Brooker’s (2015) application to early years of Bourdieus (1986) theories of cultural capital. Building on our 2018 study, this research explores the communicative versatility of two to four year olds in a nursery school, and practitioner strategies that support them, using a situated interpretivist paradigm (Lave and Wenger 1991). Researchers and five participant staff collected written observations and video of children’s communications and contexts, alongside focused practitioner discussions. Using open-ended action research methodology participants collaboratively analyse data and adapt research foci as findings develop (Rhredding-Jones 2003). The power relationships between education providers and marginalised families are considered. All staff and families involved in research have given informed consent for use of data, and pseudonyms are used. Children’s ongoing consent is monitored and respected. Early findings indicate that children perceived as limited in language have innovative strategies for meaning-making, and far greater funds of knowledge and communication than suspected. Strategies for communicative enrichment based on recognising children’s agency and extending their own language enable practitioners to nurture communicative versatility more effectively than remedial approaches.

language, communication, agency, disadvantage, inclusion

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Enhancing vs blocking expression of children’s curiosity in repeated picture book reading (RPBR)
Clodie Tal, Academy Hemdat College, Israel

The aims of this presentation are (1) To show the potential of dialogic RPBR to elicit children’s agency and curiosity, (2) To show characteristics of mediation interactions that enhance as opposed to those that block the expression of curiosity and cognitive and emotional growth and (3) To show improvement in teachers’ mediation following reflections and learning. The present study is based on both dialogic picture book reading (Sipe, 2008) and the implementation of Feuerstein’s and Klein’s criteria for analyzing interactions (Shohet & Givon, 2022; Tal, 2004). The work presented is based on Vygotsky’s socio-constructivist and Bakhtin’s dialogic approaches and the implementation of “opening classroom interaction” (Smith & Higgins, 2007). Mixed methods design including
qualitative analysis of two cases of implementation of RPBR and quantitative analysis (use of Feuerstein mediation criteria) of 40 transcripts of RPBR performed by ECE teachers enrolled in graduate courses of mediation. The main concerns involved assuring the rights of children and students participating in the study. Anonymity of children is assured and students gave consent to participate in the study. Initially, teachers tended to control the discourse through the use of multiple questions and tended to name features rather than encourage children's interpretations. In the process of making a guided inquiry into their interactions, all teachers learned to appreciate the children's creative interpretations, and the number of children's turns including questions increased along with a vivid dialogue among them. Recommendations include instituting RPBR as common practice and engaging teachers in the systematic analysis of their interactions during RPBR.

repeated picture book reading, dialogic reading, teacher-children interactions, mediation, mediated learning experience (MLE)

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Joy in young children's literacy practices in early childhood education
Alexandra Nordström, University of Helsinki, Finland

In this paper based on my doctoral thesis, the focus is on young children's joy in the context of their literacy practices in Finnish early childhood education (ECE). By approaching joy as an affective intensity (e.g. Ahmed, 2004; Leander & Ehret, 2019) that emerges and unfolds in-between, beyond the individual child (e.g. Murris, 2016; Zembylas, 2016), I seek to provide an increased understanding of the relationality, materiality, and performativity of joy, situated in historical and cultural contexts and practices (see also Kuby, 2014; Leander & Boldt, 2013). The aim is to explore joy empirically, theoretically and methodologically by widening sociocultural perspectives (e.g. Kumpulainen et al., 2020) toward new materialist (Hackett et al., 2020) and posthuman (Barad, 2003) perspectives. The study explores and develops postqualitative and non-representational methodologies for examining joy in ECE and its literacy practices. The empirical material consists of ethnographic data, which includes observational field notes, video recordings, photographs, interviews and children’s artefacts. The study was conducted according to the responsible conduct of research following the ethical guidelines of the Finnish National Board on Research Integrity (2019). The findings illustrate diverse ways in which joy emerges during everyday literacy practices in ECE. Joy can be subtle, surprising, or sticky, and might unfold when making and producing, sharing experiences and sustaining interest. In addition, the findings show the importance of exploring children’s seemingly unremarkable and mundane practices. The paper contributes to the emerging field of affective and embodied research practices in ECE by disrupting and reimagining the way we approach and research joy and early literacy education.

joy, affect, literacy practices, postqualitative methodologies, non-representational approach

This application discusses a completed piece of research.

D5
PLAYFUL LANGUAGE
Chair: Eleni Tympa, International Hellenic University, Greece

Role-play and language learning
Oda Steindal Romarheim, Western Norway University of Applied Sciences, Norway

This study examines the connection between role-play and language learning in a Norwegian multilingual preschool context. There are two written standards of Norwegian. The Eastern Norwegian dialect is often perceived as the oral equivalent of the majority written variety, and studies report that children living outside of Eastern Norway switch between their local dialect and an Eastern Norwegian dialect when role-playing (Kleemann, 2013; Strand, 2020), indicating that it is a prestigious variety (Sandøy, 2009). As children acquire a second dialect in addition to their local dialect, the conceptual framework draws upon theories of second dialect acquisition (Siegel, 2010), as well as theories of role-play and language variability (Strand, 2020). The study was conducted within a social constructivist paradigm (Berger & Luckmann, 1967). The presentation examines preliminary findings from longitudinal observations of children in role-play employing audiovisual recordings. The study was conducted in a preschool in Western Norway, where the local variety of the participants is a Western Norwegian dialect. Consent forms and information sheets were provided to
Effects of model of learning situations drawn from play (LSDP) on the emergence of written language in children

Krasimira Marinova (1), Christian Dumais (2), Raymond Nolin (2), Camille Robitaille (1); (1) University of Quebec in Abitibi-Temiscamingue, (2) University of Quebec in Trois-Rivieres, Canada

Our objective is to study effects of model LSDP on the emergence of written language in children. Diamond et al. (2007) consider that play-based models are advantageous for child’s motivation, socio-affective adaptation and learning. For Whitebread et al. (2012) such models generate higher learning compared to academic teaching. We adopt a Vygotskian’s approach stating that the play creates a zone of proximal development, in particular the one for the written language’s emergence. The latter is defined as a complex system of skills that the child constructs over time thanks to socially shared knowledge, experiences, behaviors and attitudes (Hancock, 2008) without direct teaching (Giasson, 2012). In the context of a quasi-experimental research a test measuring the emergence of written language white three scales –functional, conventional and phonological components—has been administered to 363 children two times (after and before the intervention). Between these two measures, a LSDP model has been applied in the experimental group while the control group has rather been exposed to academic teaching. The results have been analyzed using a multilevel model. The wish of children to participate and the parental authorization were respected. The children from the experimental group got better scores on the emergence of written language, in particular for the functional component, compared to the control group. Contrary to genre, age has a significant effect regardless of group. The results invites political agents to favour, into preschool educational programs, play-based learning models for written language.

preschool education, play, play-based learnig models, model of learning situations drawn from play, emergence of written language

This application discusses a completed piece of research.

‘Let’s play and talk!’ A development of an early years’ intervention to enhance children’s soft skills through sustained planned pretend play

Eleni Tympa (1), Maria Evangelou-Tsitiridou (1), Lake Gillian (2), Vatou Athina (1), Vatou Anastasia (1) and Evridiki Zachopoulou (1); (1) International Hellenic University, Greece, (2) Dublin City University, Ireland

Let’s Play and Talk aims to address children’s language and soft skills (communication) through sustained planned pretend play. During the Covid-19 pandemic very young children in Greece did not attend preschool. Parents had to support children’s vocabulary growth and social skills (Ferjan et al., 2020). A report by the EECEA (2019) recommends learning through play while finding the right balance between adult and child-initiated activities. Bodrova (2008) states that young children can master necessary prerequisites of academic skills through engagement in mature make-believe play. Evangelou (2010) highlighted the role of pretend play as one that can enhance language and socio-emotional development as it allows children to interact with adults, siblings and peers. Children’s soft skills were developed by participating in 10 small group pretend play sessions of well-chosen stories that have been read to them also in the same small groups of 5. Children planned, acted out and reviewed a planned pretend play episode based on the storybook which was read that week. Preschool teachers were playing with them, coming in and out of role while wearing a visual prompt. The study’s design is a randomised wait-list controlled trial with 120 children and 10 preschool teachers. The study has been approved by the Ethics Committee of the University and the Municipality. The results of children’s pretend play will be presented at the conference. The current study emphasises the use of ‘teacher in role’ playing with the children during sustained planned pretend play sessions (Yogman et al., 2018).

soft skills, intervention, preschool children, pretend play, teacher in role

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Patriarchal connectivity and dreams for their children: Qatari fathers perspectives on raising children
Radhika Viruru and Zohreh Eslami, Texas A&M University, United States

This qualitative study aims at exploring how authoritarianism and connectivity are embedded within the social construction of fatherhood in Qatar. Previous research in the Middle East has suggested that fatherhood is characterized by authoritarianism and deeply embedded beliefs about gender differences in how children should be raised. However, this has not been studied in Qatar. Most studies of fatherhood have centered the experiences of married White biological fathers in monogamous marriages (Inhorn, Chavkin & Navarro, 2016). Other studies have focused on the absentee father (often of color) who failed to live up to expectations. More recently, however, scholars have adopted a variety of lenses to study both what Aitken (2009) calls the “institutional tracings of men’s lives” known as fatherhood and the emotional work of fathering. The work draws from a year-long critical constructivist qualitative study on fatherhood in Qatar. The research was approved by institutions both in Qatar and in the United States. Fathers in Qatar were deeply aware of their responsibilities as fathers during a time of great change. The data suggests that current ideologies that position fatherhood in the Middle East as authoritarian do not do justice to the strong connections that fathers exhibit with their children as well as their acceptance of their responsibilities. Further, fathers did not noticeably differentiate between genders when parenting their children. Understanding fatherhood and how it is enacted in various contexts is extremely important in creating culturally appropriate policies that govern young children's lives.

fatherhood, patriarchy, constructivism, gender differences, Middle East

This application discusses a completed piece of research.

Exploring the strategies and types of fathers’ shared reading with infants and toddlers: A qualitative study
Ming Fang Hsieh, National Tsing Hua University, Taiwan

This study aimed to explore: (1) the strategies fathers used when reading with infants and toddlers over time and (2) the types of shared reading fathers presented based on the different strategies used. Studies have demonstrated that shared reading predicts children’s language and cognitive development, specifically from infancy (Auger et al., 2014; Ensor et al., 2014; Hutton et al., 2015). However, most studies have emphasized maternal interactions with preschoolers (Miller, 2016). As fathers can benefit children’s reading (Foster et al., 2016), exploring their shared reading is critical. Beck and McKeown’s (2001) text talk approach and Chambers’ (1993) book discussion process were used to understand fathers’ shared reading strategies. This longitudinal qualitative study included 48 pairs of fathers and children. Observations and interviews were conducted with children at 9, 19, and 26 months respectively to explore fathers’ use, changes, and beliefs of reading strategies over time. The study was approved by the ethics review board. All participants provided informed consent. During data collection, fathers were enabled to adjust the reading speed or discontinue/withdraw shared reading based on children’s needs. The reading strategies fathers used included questioning, labelling, describing, clarifying, and predicting. As children aged, the proportion of fathers’ strategies increased and diversified. Based on different permutations of their strategies, the types of fathers’ shared reading were classified: interactive, literal-based, interruptive, disorganized, and passive. These findings suggest that early reading promotion programs should consider fathers’ types of shared reading and the limitations of the strategies that might enhance the shared reading quality.

shared reading, fathers, infants and toddlers, longitudinal study, strategies

This application discusses a completed piece of research.

Is it possible to satisfy children’s curiosity about gender in a binary society? A retrospective autoethnography of educational discomfort
Greta Persico, University of Milano-Bicocca, Italy

Starting from my experience as a researcher involved in gender issues in ECEC, and my experience as a mother of two children aged 2.5 and 4.5, this presentation aims to explore whether and how it is possible to indulge children's on-gender curiosity in a binary and
heteronormative society. The contribution draws on those theoretical approaches that, in questioning gender role models, propose the plurality of adult figures as a means of deconstructing stereotypical gender roles. From a theoretical perspective, I will challenge gender role model theories. Autoethnographic events, such as interactions between me (the researcher and mother) and my 2 children, are considered ex-post in order to highlight some rising problems for a non-heteronormative and binary education, and related countermeasures, and the difficulty of making synthesis between my professional expertise on the subject, the existing literature and the sense of displacement when not discomfort in proposing a non-binary educational approach to gender in a society expressly so. From a methodological point of view, this is an experimental qualitative research, mainly carried out with a reflexive approach inspired to autoethnography. Ethical issues are mainly two: the first related to the risk of projection of my perspectives on my two kids, while the second is related to an over exposure of private details in a professional context. The results are grafted onto some research hypotheses and pedagogical proposals that I have been exploring in my more recent work, from an intersectional perspective in ECEC. Implications are related to promoting a diverse teaching staff.

auto-ethnography, non binary education, diverse teaching staff, intersectionality, ECEC

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

D7
EARLY MATHEMATICS AND TEACHER’S ROLE
Chair: Isabelle Deshaies, University of Quebec Trois-Rivières, Canada

Professionals’ role in early explorative mathematical argumentation
Friederike Reuter and Christiane Benz, Karlsruhe University of Education, Germany

The presented research aims at describing and analysing professionals’ role in children’s explorative mathematical argumentation (EMA) and determining how to foster collaborative processes of knowledge construction. The concepts of learning to argue and arguing to learn play an important role in mathematics and science education (Asterhan & Schwarz 2016). Mathematical argumentation can be observed in pre-school children, but there is a need for further research in this field (Brunner 2019). The presented research draws on the concept of "explorative argumentation" which was introduced by Ehlich (2014) and adapted to mathematics education by Reuter (2023). In the presented study, EMA processes are identified using the Toulmin model (Toulmin 2003) combined with the concept of mathematical anchoring (Lithner 2008). The introduced analysing scheme allows an insight in tools, modes and interactions within EMA. The qualitative videoanalysis (Knoblauch & Tuma 2011) follows a paradigm of focused observation (Seifert 2015). Data privacy is an important aspect in video-based research. All parents gave their consent to the recordings, children’s participation was voluntary and they profited from the learning environment. The findings of the study show that explorative mathematical argumentation occurs in different mathematical content areas. Professionals can help young learners to extend their knowledge using language, gesture and material in order to find relational patterns, develop hypotheses, and draw on analogies. Awareness of explorative mathematical argumentation and its support, as well as its value for learners’ mathematical development can help professionals initiate and foster such processes and adopt a dialogic and co-constructive attitude.

early mathematics education, argumentation, knowledge construction, teaching-learning-interactions, video analysis

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Embodied collaboration for concept development: How teachers can support children’s spatial thinking
Amanda Bateman (1), Caroline Cohrssen (2) and Amelia Church (3); (1) Swansea University, United Kingdom (2) University of New England, Australia, (3) University of Melbourne, Australia

We aimed to identify the teaching practices that foster kindergarten children’s understanding of spatial orientation. Early childhood educators recognize the importance of children learning concepts of number, shape, measurement and geometry, but low self-efficacy in mathematical literacy can prove challenging to purposeful pedagogy (Opperman, Anders & Hachfeld, 2016). Grounded in ethnomethodology, Goodwin’s (2018) concept of environmentally coupled gestures is used to frame a teacher’s use of shapes on a lightboard and children’s gaze and bodily orientation and to make the concept of symmetry visible. Conversation analysis (Sidnell
and Stivers, 2013) reveals the coordinated practices of pedagogy (Church, Bateman and Danby, 2022). Participants provided assent and consent to use the video data for the purposes of teaching and research, and video data are anonymised using filters and audio deletion of names. Knowledge-in-interaction is a collaborative achievement: children and teacher’s mutual monitoring of gaze, gesture and talk scaffolds the concept of bilateral symmetry. Pedagogy is not simply sequential (i.e. the teacher does something and the child does something else next), but shaped and moderated as the child and teacher ‘inhabit the actions of the other’ (Goodwin, 2018). Findings from this research demonstrate how effective, responsive engagement depends on the teacher’s close attunement to what the child is paying attention to, and how early mathematics learning can be mobilized through the use of typical, play opportunities.

high quality child–teacher interactions; , conversation analysis, multimodality, mathematics teaching and learning, spatial thinking

This application discusses a completed piece of research.

Quality of learning support provided by the teacher and implementation of a mathematics support model for preschool 5-year-olds: Influence of a co-construction process
Isabelle Deshaies, Océanne Éthier, Laurence Ruest, and Crystel Bizier, University of Quebec Trois-Rivières, Canada

The primary goal of this research was to understand the influence of a continuous training process based on the co-construction of a mathematics support model among six teachers at the preschool 5-year-olds in Québec, Canada. In Québec, the quality of learning support provided by the teacher in preschool, observed using the CLASS tool (Pianta et al., 2008), was qualified as low to average (Duval et al., 2016; Montminy et al., 2020). Essential to supporting the child’s global development (MEQ, 2021), concepts (Pianta et al., 2008), curiosity and mathematics skills (Boily and Deshaies, 2021), this is a questionable level of support provided by the teacher in the development of the child’s mathematics skills. In order to highlight the impact of the co-construction process on the quality of learning support provided by the teacher and the type of mathematics support provided to the child, this research employed a mixed methods methodology (Creswell, 2011). Quantitative analysis using the CLASS tool (Pianta et al., 2008) and qualitative analysis based on the teacher’s logbooks and their daily observations. This research was approved by the university’s ethics committee. The recruitment of participants was voluntary and ensured their anonymity. The results reveal the impacts of the co-construction process on the quality of learning support provided by the teacher and on the type of mathematics support provided to the child. This project opens up the discussion on the importance of providing continuous training, to teaching staff with a focus on the quality of mathematics support to the child.

preschool, quality of learning support, mathematics, children , co-construction process

This application discusses a completed piece of research.

D8
INCREASED STAFFING - POSSIBILITIES AND IMPLICATIONS FOR QUALITY
Self-organised Symposium
Chair: Karin Hognestad, University of South-Eastern Norway, Norway

ECE quality is composed of both structural and social aspects and leadership is important for quality development in ECE (Douglass, 2019). The background for this study is a political decision to temporarily increase staffing in three public ECE centers in one municipality in Norway. This symposium examines the significance of increased staffing in children’s groups for the quality of pedagogical work. The three papers in this symposium reflect ongoing exploration of how ECE directors, teachers and children experience how increased staffing influences ECE quality and have impact on children’s participation and inclusion in everyday life in ECE. Each paper explores empirical data drawn from qualitative interviews and/or observation and may reveals the importance of strengthening the child/staffing ratio in ECE centers.

Children’s opportunities for participation and inclusion in kindergartens with increased basic staffing
Kathrine Brekke and Kristin Ingolfsrud Olsen, The University of South-Eastern Norway (USN), Norway
The aim of this study is to develop knowledge regarding how increased staffing can have an impact on children’s participation and inclusion in the children’s community. Further, the purpose is to focus on children’s perspectives on their everyday life in kindergarten. Previous research shows that the presence of qualified teachers and high staff-to-child-ratio appears to have a positive impact on the quality in kindergarten (Bjørnestad & Os, 2018). The study is based on sociocultural theory (Vygotsky, 1978). Key concepts in the presentation are participation (Bae, 2011; Ree, 2020), inclusion (Bae, 2012), and community creation (Brinkmann, 2011). The study is placed under the social-constructivist paradigm (Mertens, 2010). The material is based on 2 days of qualitative observations (Løkken, 2012) in six units in kindergartens with increased staffing, and one focus group (Halkier, 2012) with six pedagogical leaders. Ethical considerations are taken care of through institutional ethical procedures (NSD Sikt). Participants have given written consent to participate, and anonymity is secured. We are aware that research involving children requires special ethical considerations (NESH). Preliminary results show that increased staffing contributes to create opportunities for the kindergarten staff to be engaged in interactions and play with the children over time, and opportunities for child-initiated activities that strengthen children’s participation. Small groups during meals and activities increase opportunities for dialogues and conversations. Implication is that increased staffing may contribute to enhancing the quality of interaction and children’s opportunities for participation and inclusion. The results may have an impact on staffing standards in Norway.

participation, inclusion, increased staffing, community creation, quality

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Transitions in kindergarten and increased staff resources
Karin Hognestad, University of South-Eastern Norway (USN), Norway

The purpose of this study is to develop knowledge regarding the significance kindergarten staff experience that increased staff resources has for their work with facilitating smooth transitions for children in kindergarten. There is limited research on transitions in Norway (Hogsnes, et al., 2020). Existing research emphasizes the importance of security in the transition from home to kindergarten (Abrahamsen, 2013; Drugli, 2018). Kindergarten quality is complex, but factors such as adult-child-ratio and the presence of qualified teachers can have an impact on quality (Bjørnestad & Os, 2018). The study is based on sociocultural theory (Vygotsky, 1978). Key concepts in the presentation are vertical and horizontal transitions (Vogler et al., 2008) and children’s participation (Bae, 2011). The study is placed under the social-constructivist paradigm (Mertens, 2010), with a qualitative design. The material is based on nine focus groups (Halkier, 2012) with the kindergarten staff. Ethical considerations are taken care of through institutional ethical procedures (NSD Sikt). Participants have given written consent to participate, and anonymity is secured. Preliminary results show that the kindergarten staff experience increased staff resources, contributing to the children’s well-being, and that the children seem to become more confident in the transitions. A closer cooperation with the parents is also highlighted. An implication is that increased staffing can contribute to the staff having more time to participate in play and support children’s relationships, as well as being able to adapt activities and content to a greater extent, which may contribute to strengthen children’s participation.

quality, transitions, increased staff resources, cooperation, children’s participation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Centre directors leading in the context of increased staff resources
Karin Hognestad, University of South-Eastern Norway (USN), Norway

The aim of this study is to explore how centre directors lead to improve pedagogical quality in a context where centres have increased staff resources. Centre directors have a significant role leading professional communities (Douglass, 2019; OECD, 2020). Increasing staff’s competence and staff’s resources do not automatically contribute to quality improvement; thus, leadership is essential (Alvestad et al., 2019; Eide & Homme, 2019; Gjerustad & Bergene, 2020). The theoretical framework draws upon leadership as social practice which provides an understanding of the realities of leadership work (Mintzberg, 2009; Tengblad, 2012). Our position is that leadership is socially constructed through experience-based practices (Bryman 2011). We use a leadership taxonomy to analyze leadership enactments (Bøe & Hognestad, 2017; Mintzberg, 1973). This qualitative study is based on 12 individual interviews with four centre directors conducted in the period 2021-2023 (Kvale & Brinkman, 2015). The Norwegian Agency for Shared Services in Education and Research approved the qualitative study. The interviews were designed to meet the Norwegian privacy requirements. All participants were informed about ethical guidelines and gave their written consent. No one
withdrew their consent during the research period. The findings demonstrate what centre directors do to take advantage of the increased staff resources and how they improve pedagogical quality through their way of leading. Leadership enactments are discussed in terms of structural quality and process quality (Janta, et al., 2016). These findings are important for policy makers and others who want to consider ways to design policies that may strengthen quality.

*pedagogical leadership, ECE centre directors, leadership enactment, professional activity, quality*

This application discusses a completed piece of research.

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**D9**

**ASPECTS OF AGENCY IN ECEC**

**Chair:** Diane Boyd, Early Childhood Studies Degrees Network (ECSDN), United Kingdom

**The legacy of attending a sustainably friendly school: An impact case study**

Diane Boyd (1) and Naomi McLeod (2); (1) Early Childhood Studies Degrees Network (ECSDN), (2) Liverpool John Moores University (LJMU), United Kingdom

This research explores the longitudinal legacy of attending ysgol san sior - a sustainable school in Wales, and to ascertain the impact and the value in every day life. Given that underpinning personal values, attitudes and dispositions are formed in the early years (Boyd, 2018, 2020; Siraj-Blatchford et al, 2010), this research builds on the contribution of early childhood education for a sustainable society (Pramling, Samuelson, & Katz, 2008). The research aligns with the key principles of sustainability (transformation, empowerment, agency, critical thinking) for social justice. It includes participatory, rights based, research methods involving open conversations ‘with’ children currently at the school and past alumni who attended the school, and listening to their daily learning experiences and their value in relation to sustainability as part of life. The participants (children and alumni) were consulted and respected at every stage. They gave their consent verbally (Clark, 2017). Interpretive analysis indicators (McIntosh, 2010) reveal the long-term impact of positive dispositions and intra-personal skills that enable an appreciation of otherness such as caring for the non-human world and empathy for the disadvantaged and vulnerable. In contrast to the outcome driven model of education dominant today in England, this research indicates the importance of nurturing positive dispositions to learning in policy and practice for a sustainable world. Findings from this research show how dispositions such as caring, compassion, self-awareness, critical thinking, and agency enable children to make decisions and take action for a sustainable world.

*longitudinal, sustainability, agency, dispositions, critical reflection*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Children’s curiosity, agency and participation in co-developing a transition to school right’s charter.**

Wendy Gorman (1), Lennie Barblett (2) and Fiona Boylan (2); (1) The Association of Independent Schools (AISWA), (2) Edith Cowan University, Australia

The aim of this study was to empower children’s agency by facilitating their participation in research with a focus on co-developing a transition to school rights charter with their educators. Previous research emphasises the importance of effective transitions to school (Dockett & Perry, 2014, 2022). Evidence shows that negative experiences will influence children’s ability to cope with future transitions (OECD, 2017). A participatory framework based on commitment to a ‘rights-based approach, where children’s evolving expertise is valued’ (Gibbs et al., 2018) informed the project design. In this qualitative study 11 educators across five schools used methods of dialogic drawing, talking circles, photo elicitation and discussions to gather 52 children’s perspectives (aged three to five years). Data was analysed using a content analysis framework and themes were induced from drawings and conversational data to develop a charter with children. All ethical permissions gained from University, participants and children gave informed assent and all given opportunity to withdraw at any time. Pseudonyms used. Children remembered their entry into school seven months later, suggested what was important and how to improve it. They described the importance of home-school connections, outdoor play, friendships and security and stability as key features of their transition experience. The outcomes showed these techniques were
effective in gathering opinions of children, analysing data and using findings to inform practice in co-designing the charter. Educators described changing practices with a renewed child’s rights focus and new tools to ask children their opinions on other matters.

child agency, research with children, co-design with children, transitions, transition charter

This application discusses a completed piece of research.

A case study of agency and food scarcity in mealtimes in disadvantaged ECE
Bonnie Searle, Emma Cooke, Sally Staton and Karen Thorpe, University of Queensland, Australia

Observations were carried out in two ECEs in very disadvantaged areas of Queensland, Australia. This composite case study explores the mealtime environment and interactions between children and educators. Research shows that mealtime educator-child interactions in ECE are low in quality (Thorpe) and tend to reduce child agency (Ward, 2015) in order to control the amount and type of food eaten (Searle, 2023). We draw upon Paulo Freire’s Banking method concept (Freire, 1968) and neoliberal discourses of health to critically analyse notions of child agency and food scarcity in ECE meals. This mixed methods case study uses a qualitative crystallisation framework (Richardson, 2000) that combines a DRAW (Departing Radically in Academic Writing) methodology with standardised observations. Parent surveys, mealtime observations, educator interviews and InCLASS measures were conducted across 12 mealtimes. Families provided informed written consent and children provided verbal assent prior to observations. The centres are presented as a composite case study to protect participants’ identities. The findings demonstrate that in very disadvantaged ECEs children experience low quality educator-child interactions and low agency during mealtimes. Educators sought to control the order of food eaten and ration children’s home packed meals to last across the ECE day. Across the day, quality educator-child interactions decreased, and conflict increased, which we posit may be linked to child hunger. The ideal ECE meal combines enough food with child agency: systemic policy action is needed to achieve this in disadvantaged ECEs.

childcare, poverty, agency, mealtimes, interactions

This application discusses a completed piece of research.

D10
TEACHER AND CHILD INVOLVEMENT OR EXCLUSION IN PLAY
Chair: Ilse Aerden, College of the Moving Minds (UCLL), Belgium

SIG Play: How ECE-teams learn to play-2-gether in professional learning communities
Annerieke Boland (1), Annemieke Mol Lous (2), Anke Creutzburg (3), José Hillen (4) and Sophie Verhoeven (4); (1) University of Applied Sciences - iPabo Amsterdam, (2) University of Applied Science - Thomas More, (3) Marnix Academie, (4) University of Applied Science - De Kempel, The Netherlands

This study aimed to design team professionalization for ECE-teachers to build positive relationships with every child. It builds upon Playing-2-gether, an effective program to create warm teacher-child relationships, also if children show challenging behaviour (Vancraeyveldt et al., 2015). It strengthens children’s agency in play-sessions and focuses on children’s relational needs. Elaborating on the manual for individual coaching by experts (Vancraeyveldt et al., 2022), this study focused on peer-learning and peer-coaching for establishing sustainable change in teams. Playing-2-gether is rooted in attachment-theory (Pianta, 2015). The learning-trajectory met the key-elements of collaborative design: situatedness, agency, a cyclical process (Voogt et.al., 2015), continuing dialogue and reflection (Henrichs, Slot & Leseman 2016). Three professional learning communities of ECE-teachers collaboratively designed instruments and activities that enhance qualitative peer-coaching in reflecting upon interactional patterns and children’s relational needs. The adequacy of the reflection-instruments and activities were tested and evaluated. Changes in the teacher-child-relationships were monitored. Data consist of group interviews, filmfootage, structured notes and the teacher-child-relationship-questionnaire (Koomen, Verschueren & Pianta, 2007). EECERA-ethical guidelines were followed: children took the lead in play-sessions; parents were asked for informed consent. Teachers appeared to be capable of supporting each other in the reflection on relationships with children: the trajectory resulted in change of beliefs and improvement of positive interactions with children. Teams appreciated input by the expert but took more agency during the process. Structural conditions appeared to be crucial for a
sustainable professional culture. These findings can add to pedagogic practice that values strong teacher-child relationships, well-being and play.

*teacher-child relationships, play, professionalisation, relational needs, professional learning community*

This application discusses a completed piece of research.

**Capturing teachers’ educational beliefs concerning peer relationships in preschool: Should I (as a teacher) intervene in peer relationships or not?**  
Ilse Aerden, Caroline Vancraeyveldt and Anne Slaets, UC Leuven-Limburg University of Applied Sciences (UCLL), Belgium

This study aims to capture preschool teachers’ educational beliefs concerning peer relationships and teachers’ intervening role during play. The meaning of peer relationships in preschool has been contested in literature and in practice (‘egocentric preschoolers’). Little is known about teachers’ educational beliefs concerning peer relationships in preschool (Papadopoulou et al., 2014) which may guide educational processes and outcomes (Kluczniok & Roßbach, 2014). In developmental psychology peer relationships have been conceptualized along three dimensions: individual, dyadic, and (sub)group (Bukowski et al., 2019). The socio-constructivistic approach stresses the important role of teachers in preschoolers’ peer relationships during free play (Singer & de Haan, 2007). Four collaborative case studies provided in-depth knowledge of preschool peer relationships. Teachers and researchers made several videos of free play which were discussed during five focus groups. Conversations were recorded and transcribed. Qualitative analysis was conducted through a grounded approach within an interpretive research paradigm (Denzin & Lincoln, 2018). An informed consent form following General Data Protection Regulation was provided to teachers and parents of children. Oral consent from teachers for recording and transcribing the focus groups was requested. During focus groups teachers searched for a common language to talk about peer relationships (e.g., quarrel versus fight). The video-discussion enabled multiperspectivity on peer-relationships (Bukowski et al., 2019) and sharpened teachers’ educational beliefs about intervening in these relationships. Collaborative research between teachers and researchers improves in-depth insight in peer relationships. Discussing videos of play improves teachers’ critical reflection and confidence in intervening (or not) in peer relationships.

*free play, preschool, teacher professionalisation, teacher educational beliefs, peer relationships*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Exclusion and the staffs positioning in the play communities**  
Lisbeth Iversen, University of Stavanger, Norway

This study is part of a PhD project. The aim of this study is to increase insight of how the staffs affect the play communities when children are excluded, and how this might affect the children’s participation. Research question: How do the staff position themselves in relation to exclusion in/from the preschool’s play community? Former research shows that exclusion in preschool is a widespread phenomenon (Lund et al., 2015), and that there are different practices when it comes to staff positioning in the play community (Broström et al., 2014). The study is based on sociocultural theory. More specifically, Bourdieu’s (1999) conceptual framework: position, field and capital is central theoretical lenses. The data material is based on qualitative research, with observation in two play community inn 2 preschools with children of age 3-6 years. Each play community were observed over 6 -8 weeks. The analysis is conducted within a phenomenological hermeneutic approach. Participation was based on voluntary informed consent. The participants were able to withdraw from the project at any time. The observations are made anonymous, and confidentiality and safe storage of materials is ensured. Preliminary findings show that the staff position themselves in diverse ways and to varying degrees of participation when exclusion occurs in the preschools’ play communities. It appears that the staffs positioning affects the play communities. Implications for practice may be the importance of awareness when the staff positioning them self in the play community.

*exclusion, play community, preschool staff, position, capital*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
This self-symposia, Education for Sustainability in Early Childhood Education — Constructing Creative Way of Understanding and Handling Complex Sustainability Issues, is organized by sustainability SIG members. Its primary focus is on three perspectives of early childhood teacher education for sustainability. For instance, O. Sullivan focused on whether an employer-led CPD program impacts teachers' willingness to become agents of sustainability with action research. Moreover, Alici and Alan are examining the Village Institute's teacher education program. On the other hand, Årlemalm-Hagsér is researching initial teacher students' understandings of sustainability issues through 79 exam reports comprising 238 pages of text.

Education for sustainability in early childhood education - Swedish initial teacher students meaning-making about children’s learning, agency and participation
Eva Årlemalm-Hagsér, Mälardalen University, Sweden

This study extends Early Childhood Education for Sustainability (ECEfS) (Elliott et al., 2021) knowledge, and addresses the need for deeper understandings about sustainability among ECE initial student teachers. This study builds on previous ECEfS research (Davis, 2009, 2014; Elliott et al., 2010), responding to the call for research about how they implement ECEfS and their understandings of children’s learning, agency and participation. It is positioned within a critical theoretical perspective (Jickling & Sterling, 2017) that promotes critical transformative ECEfS pedagogies and theoretical perspectives encompassing children’s active participation and as agents of change (Davis, 2014). In this qualitative research the data consists of 79 examination reports comprising 238 pages of text. In the analysis an abductive process in line with a reflexive methodology approach (Alvesson & Sköldberg, 2009) where used. Ethical guidelines were considered (EECERA, 2014; Swedish Research Council, 2017). Prior to data collection, the students were informed of the study aims, design and methods, plus confidentiality issues, data management and voluntary participation. The main findings demonstrated that children’s participation and influence seemed to be important among teacher students. They describe this as children’s influence on the content and learning objectives and how these are to be implemented in pedagogical and didactic practice. However, students struggled with how they could lead transformative learning and change and children’s integral part of this change. This study has implications ECE initial teacher education practice and policy, especially understandings of sustainability, the teaching profession and children’s active participation in the complexities of sustainability.

Early Childhood Education for Sustainability, early childhood education initial teacher students, children’s active participation, transformative pedagogies, critical theory

This application discusses a completed piece of research.

A snapshot of village institutes about global citizenship education
Sule Alici (1) and Havva Ayca Alan(2); (1) Kirsehir Ahi Evran University, (2) Middle East Technical University, Turkey

This study aims to investigate Village Institute's (VI) curriculum in terms of global citizenship education (GCED) through critical theory. The 21st century brought interdependency and rapidly shifting circumstances to the global village that require a citizenship education through critical and emancipatory approaches that have come to focus (Schugurensky & Wolhuter, 2020). Target 4.7 under SDG 4 highlighted GCED in order to actualize sustainable lifestyles. One of the obstacles to GCED is teachers' lack of capabilities; therefore, teacher education programs (TEPs) should be enriched regarding pre-service teachers' needs to meet the GCED learning objectives (UNESCO, 2018). This study uses a comparative analysis of learning domains and topics in Delors's report (1996) revised regarding GCED and SDG 4.7. VI Curriculum-TEP is analyzed concerning four pillars. These are (a) learning to know-cognitive domain, (b) learning to be-cognitive domain, (c) learning to live together-social & emotional domain, and (d) learning to do-behavioral domain. Through a critical perspective, the VI curriculum is investigated by a document analysis of program books, photos, and memories. The data analysis continues. Required permissions from ethical board and participants' informed consent were obtained. According to preliminary results, there are some clues about GCED’s domains in the VI curriculum. For instance, teacher candidates experienced acting effectively and responsibly at local and national levels for a more sustainable life via
collaboration with colleagues and the community while constructing new school buildings and sharing their resources. Based on the innovations and 21st-century competencies VI curriculum can be renewed regarding digital literacy and multicultural perspectives.

**teacher education, village institutes, early childhood, sustainability, global citizenship**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

How do we mitigate the risk of embedding sustainable practice being reliant only on teachers/educators who are curious about sustainability?

June O’Sullivan, London Early Years Foundation, United Kingdom

My research study aims to understand if an employer-led CPD programme can build a community of Sustainability informed ECEC teachers/educators. It is showing that limited evidence exists about how such programmes can encourage ECEC colleagues to make necessary changes to embed sustainability in the workplace (Boyd, 2019). Phase one this study appears to support evidence that teachers/educators who are more curious about sustainability are more willing to become agents of change and influence their less interested colleagues (Ferreira et al., 2007 and Borg, 2009). This presents an opportunity to reassess how we help teachers/educators to lead change, mitigating the risk that sustainable practice remains reliant on individual interest and failing to build an organisational culture of sustainability (Plutzer et al., 2016; Kunkle and Monroe, 2019). The research approach is action research because it generates knowledge about educational practices and their complexity by the teacher/educators for themselves and by themselves (Greenwood et al., 2005). The research is framed within a participative praxeological paradigm (Pascal et al., 2012; Formosinho et al. 2012a). Data were collected through questionnaires, semi structured interviews and focus groups. The challenge of being manager/researcher and inside/outside researcher was mitigated by through consent forms and right to opt out (BERA, 2018). Early findings point to the importance of building a change model into the CPD programme to leverage teachers/educators’ curiosity to systematically embedding sustainability into the workplace. Is coaching for change an essential element of CPD programmes for staff learning to become sustainability-informed.

**sustainability, curious, change model, coaching, community of practice**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**D12**

**NURTURING CHILDREN’S LEARNING AND PROFESSIONAL DEVELOPMENT IN A COVID-19 AFFECTED WORLD**

Self-organised Symposium

**Chair:** Lynn Ang, University College London (UCL) Institute of Education, United Kingdom

This symposium brings together critical perspectives from the UK, Japan and internationally on important topical debates around children’s learning, teacher professional development and quality early childhood education. The papers will examine the ever-changing situation affected by COVID-19 from multifaceted perspectives and the impact on children and families. The paper from Japan aims to present the implications for early childhood practices during and after the pandemic based on survey data, and discuss the challenges faced and countermeasures taken to support early learning. The UK presentations will include findings from an inner-London study on supporting the professional development of early childhood teachers to inform children’s early language and development. The symposium will discuss the wider issue of educational inequality from a global perspective and the importance of creating more equitable early childhood education.

Supporting practitioners to nurture children’s language and communication development: Evidence and implications in a COVID-19 affected world

Sinead Harmey, University College London (UCL) Institute of Education, United Kingdom

The aims of this study were (a) to conduct a systematic review to assess the weight of evidence about pedagogical strategies to support early language and (b) to engage with practitioners to communicate findings to support embedding research into practice. Research demonstrates that language development in early years is associated with cognitive development and that types of
support provided in early years mediates development (Weigel et al., 2007). Given the evidence that partnership is essential to embed research into practice, the theoretical framework drew on a participatory approach (Cumbo & Selwyn, 2021). A weight of evidence systematic review (Basma & Savage, 2018) was used to locate empirical studies about strategies to support early language. Included studies were evaluated for fidelity, rigour and focus. High-quality studies were analysed for key themes and practitioners and researchers engaged in dialogue to consider how to communicate findings. The ethical considerations were to ensure fair representation of findings by ensuring inter-rater reliability on quality ratings of studies and considering funding sources. Ethical approval was sought to engage with participants with an ethos of informed consent. Findings demonstrated that the successful approaches to supporting language attended to social and emotional development with adults as active partners in conversation. We engaged with practitioners about how to communicate the finding to ensure uptake of strategies. Given lost opportunities to engage in conversations during the COVID-19 pandemic, findings can be used by practitioners and policy makers to inform how they can successfully support children’s language.

language, communication, participatory, systematic review, partnership

This application discusses a completed piece of research.

An examination of the positive aspects of the impact of COVID-19 on ECEC practice in Japan: Reconsideration and reconstruction of the way and meaning of practice
Sachiko Nozawa (1), Mikiko Tabu (2) and Sachiko Asai (1); (1) The University of Tokyo, (2), Seitoku University, Japan

The aim of this study is to examine the impact of COVID-19 on ECEC practice in Japan, based on data collected through a short-term online longitudinal survey conducted between August 2021 and March 2022. Although much research has been done on the influence of COVID-19 (e.g. Pattnaik and Jalongo, 2022), the positive aspects of practice changes still need to be examined. The Bronfenbrenner’s biocological-approach (1979, 2005) was used as the research framework. The free statements of the 375 facility-directors, who responded to the survey were analyzed using qualitative text analysis software (KH Coder), followed by qualitative content analysis. Having responded to a call for cooperation sent to the lists of associations for ECEC providers nationwide, the facility-directors had given us their written consent regarding the data collection. Coding using the software revealed that 37.9% of respondents mentioned words related to “reexamination and consideration”, 26.7% to “aim and meaning”, 32.3% to “children”, and 8.5% to “child-oriented and child-agency”. Qualitative analysis of the statements suggested that the ways of practices were reviewed and changed as infection prevention measures became an issue. A certain number of respondents reexamined the aims and meanings of their practices that have been considered self-evident until then. In some cases, the process of considering and changing practices involved shifting from an adult-led to a child-oriented approach. It was suggested that the crisis brought about by COVID-19 prompted ECEC directors and staff to reconsider their practices and, in some cases restructure their practices to provide child-oriented activities and learning.

COVID-19, Japanese ECEC facilities, content analysis, ECEC facility-director, reconsideration of practice

This application discusses a completed piece of research.

Global perspectives in creating equitable early childhood education and tackling educational inequality
Lynn Ang, University College London (UCL) Institute of Education, United Kingdom

This paper aims to critically discuss the global challenge of creating equitable early childhood education. There are two main research questions: i) What evidence-based pedagogical strategies can effectively enhance teacher professional development in supporting early communication and language development? ii) What does the existing evidence say about research-informed practices in early childhood education that can potentially close the educational gap especially for children from disadvantaged backgrounds? The paper draws on the study Manor Park Talks (Ang & Harmey, 2019) and international policy reports e.g. the global analysis of remote learning policies (UNICEF, 2020). It references evidence from empirical research on quality early learning and effective strategies that support children’s learning and teacher development. The discussion is informed by social constructivist equity theory (Britto et al., 2011) and ecological learning theory (Bronfenbrenner, 2005) which explains that early development and learning occurs most effectively when mediated through social interactions. The research employed a sociocultural paradigm based on a systematic review and participatory methodology. A search of articles published between 2008 and 2018 was conducted using the ‘weight of evidence’ (WOE) method (Gough, 2007) to code the items. A Head teacher and early years educators closely participated in stakeholder discussions to inform the research. Participants' confidentiality and informed consent were ethnically
considered. A key finding is that the quality of practitioner interactions with children alongside guided, playful activities is beneficial for supporting effective learning. The study informed the development of an evidence-based practice toolkit for early years teachers.

children’s learning, educational inequality, professional development, sustainable development goals, early childhood education

This application discusses a completed piece of research.

D13

REFLECTIONS FROM THE FROEBEL PARTNERSHIP ON THE RELEVANCE OF FROEBEL’S OCCUPATIONS FOR THE 21ST CENTURY

Self-organised Symposium

Chair: Helen Lyndon, Centre for Research in Early Childhood (CREC), United Kingdom

The Froebel partnership represents an international collaboration of Froebel-inspired practitioners and researchers in England and New Zealand who collaborate in an exploration of pedagogic principles and practices. This symposium set will provide an overview of the latest research project in which practitioners in both countries have documented children’s explorations with the Foebelian occupations. The partnership, now in its second phase, is a community of practice (Wenger, 1991) between Guildford Nursery School and Family Centre, Severn Stars Kindergarten and the Centre for Research in Early Childhood. Through this symposium set the relevance of Froebel’s occupations for the 21st Century will be considered.

An exploration of the relevance of Froebelian occupations within Te Whāriki practice

Helen Lyndon, (1) and Anne Denham (2); (1) Centre for Research in Early Childhood (CREC), United Kingdom; (2) Seven Stars Kindergarten, New Zealand

Empowerment (whakamana) and contribution (mana tangata) are at the heart of Te Whāriki; Seven Stars Kindergarten strive to provide a Froebelian-inspired learning environment woven within a holistic curriculum. This project documents the development of provision around Froebel’s occupations and seeks to exemplify their connection with Te Whāriki guidance. Previous research supported reflective research processes and the inception of an analysis strategy which supports further professional development (Froebelian Approach to Data Analysis, Pascal at al., 2022). This research continues within the same reflective context. Place-based education (Penetito, 2013), the concept of unity (Lilley, 1967), and He Mapuna te Tamaiti (Ministry of Education, 2019) provide a culturally attuned lens through which the relevance of Froebel's occupations can be documented. This qualitative, participatory study follows action research principles and documents children’s developing skills using occupations such as sewing, woodwork and clay. The empowerment and contribution of all participants supports the choice of occupations and the pace of research and analysis. EECERA ethical principles have been adhered to; consent is sought from participants and the assent of children monitored; data is anonymised; the study has value and is committed to supporting every child to develop their identity, language and culture. Children’s encounters through sewing, clay, woodwork etc., illustrated both the principles and strands of Te Whāriki curriculum guidance. Froebelan occupations support a culturally appropriate and holistic early childhood curriculum and have relevance within 21st Century Te Whāriki practice. Engagement with Froebelian analysis (FADA, Pascal et al., 2022) supports professional development.

Froebel occupations, Te Whāriki, professional development, participatory, reflective practice

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Supporting inclusive education through Froebelian occupations

Sally Cave, Guildford Nursery School and Family Centre, United Kingdom

The research provided the opportunity for practitioners to develop their pedagogic strategies through Froebel’s occupations specifically documenting their relevance when supporting inclusion across the nursery school setting. Froebelian principles (Bruce et al., 2019) have supported previous research (Pascal et. al., 2022) through which engagement with nature and a specific Froebelian Approach to Data Analysis (FADA) has supported reflective professional development. The occupations support creativity and
encourage children to continually refine their ideas (Froebel in Lilley, 1967); the Froebelian principles (Bruce et al., 2019) are woven through the development of such occupations and connect with current issues of sustainability, diversity and inclusion. This participatory research design gave practitioners and children voice and offered choice in the development of occupations. Practitioners documented developing interests in weaving and sewing, woodwork, and cooking. Consent and assent of all stakeholders, including parents of children, was a central feature of this praxeological research design which allowed both children and practitioners freedom to follow their interests. Anonymity is a primary concern when detailing approaches to inclusion and the entire team ensures the children’s identities are protected through use of pseudonyms and strict data sharing protocols. The findings indicate that Froebelian occupations provide a protected space within which all children can explore and engage with a developing skill and expand their creative repertoire. There is relevance for the Froebelian occupations within current English educational policy and beyond with specific scope to support inclusion and sustainability goals. Engagement with Froebelian analysis (FADA, Pascal et al., 2022) supports professional development.

Froebel Occupations, slow pedagogy, participatory, inclusion, sustainability

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Rhythms of childhood - An exploration of temporality and seasonality within Froebelian practice
Chris Pascal and Tony Bertram, Centre for Research in Early Childhood (CREC), United Kingdom

The research aims to document the way Froebel’s ‘Occupations’ offer children experiences where time can be re-sculpted and pedagogic practices can be transformed and identify how learning affordances are re-shaped by the dynamic of time and seasonality. This research draws on a cross-national project documenting and analysing Froebelian pedagogic practice in England and New Zealand. The focus on Froebel’s ‘Occupations’, builds on a previous project exploring how young children ‘Engage with Nature’ (Pascal et al., 2022) using Froebelian principles and ethics (Bruce et al., 2019). This project adopts a Praxeological (Pascal & Bertram, 2012; Formosinho & Formosinho, 2012) and Affirmative Inquiry (Cooperrider, 2008) approach, drawing on Froebelian principles and practices (Bruce, 2022) and Clark’s (2023) notion of slow pedagogy. This small scale, qualitative, praxeological project uses case study methodology, where practitioner researchers document practice and children’s learning experiences using multi-model methods (Pascal et al., 2021) and uses a new approach to data and evidence analysis, Froebel Approach to Data Analysis (FADA) (Pascal et al., 2022). All participants provided informed ethical consent, all data was anonymised and stored securely. The affirmative inquiry reduces risks to participants and researchers take issues of power distribution seriously. The findings indicate that pedagogy attuned to time and seasons promotes child and practitioner flourishing, wellbeing and many areas of learning. It reveals a more subtle, companionable pedagogic approach can be effective in supporting children’s learning. The study findings promote a slower and more companionable pedagogic approach which would benefit adoption in wider early years practice.

Froebel occupations, slow pedagogy, practitioner research, praxeology, child wellbeing

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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D14

IMPLEMENTING POSITIVE BEHAVIOUR SUPPORT IN EARLY CHILDHOOD EDUCATION AND CARE IN EUROPE: WHAT, WHY, HOW, WITH WHOM AND FOR WHOM?
Self-organised Symposium

Chair: Vitor Oliveira, Centre for Research and Innovation in Education (inED), Polytechnic Institute of Porto, Portugal

Building children’s socioemotional competence and addressing challenging behaviors from the early years of education are key to enhancing social inclusion and educational engagement in Early Childhood Education and Care (ECEC). A European consortium of five partners from four countries (Portugal, Cyprus, Greece, and Ireland) initiated the project “Implementing Positive Behaviour Support in Early Childhood Education and Care” (PBS-ECEC). PBS-ECEC aims to strengthen ECEC professionals’ education and training and provide evidence-based practices for promoting socioemotional development in a socially inclusive environment in ECEC settings, a crucial dimension of child well-being and development. The promotion of positive behaviors is expected to benefit not only children, but also professionals, families, and all stakeholders in ECEC. This symposium addresses the important questions of this endeavor: What, why, how, with whom, and for whom? The project results related to the needs assessment, design,
A European Project entitled “Implementing Positive Behaviour Support in Early Childhood Education and Care” (PBS-ECEC)

A consortium of five partners from four European countries (Portugal, Cyprus, Greece, and Ireland) initiated the Erasmus+ project entitled “PBS-ECEC: Implementing Positive Behaviour Support in Early Childhood Education and Care” which aimed to respond to this need by promoting a schoolwide framework in ECEC. Through collaboration between ECEC centres and academic institutions, the project focuses on promoting the Program Wide-Positive Behaviour Support (PW-PBS) across Europe and helping teachers effectively address challenging behaviours, by building children’s socioemotional competence, a crucial dimension for their overall development and well-being. Nowadays, many EU policy reports systematically highlight the need to develop effective European schoolwide frameworks that promote social inclusion and educational engagement (Swain-Bradway, Pinkney & Flannery, 2015). Program-wide Positive Behaviour Support (PW-PBS) is an evidence-based framework consisting of practices that promote children’s positive behaviors and socioemotional competencies (Horner et al., 1990). In this project, a mixed-method approach was adopted, with 121 teachers participating in the needs assessment and 8 coaches, 10 trainers, and 100 teachers participating in the implementation. All procedures were aligned with GDPR and ethical codes in terms of integrity, independence, objectivity and competence were used. As a result of all project activities, several deliverables were developed, including an ECEC Guide on PBS, five modules of PW-PBS Instructional Practices, an Impact assessment study with practice recommendations, and a Policy and Strategy Toolkit with recommendations for PBS in ECEC. The project contributed to the knowledge and expertise of implementing PW-PBS in ECEC in the respective countries and developing supporting material for educators.

PW-PBS, PBS Guide, PBC-ECE, PBS Toolkit, policy recommendations

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

The perceived impact of program-wide positive behaviour support implementation in ECEC settings: Experiences and lessons learned from a case study in Cyprus

This study examined the impact of the Program-wide Positive Behaviour Support implementation in Cyprus based on ECEC teachers’ perceptions (N=50) about their knowledge of PW-PBS and the effectiveness of the training provided, using a pre and post-questionnaire. Professional development is fundamentally associated with better child outcomes when is ongoing, system-wide, and designed based on schools’ needs (Jensen et al., 2017). ECEC teachers’ knowledge and capacity in promoting socioemotional skills and dealing with challenging behaviours remain an under-investigated area (Schachter, 2015), especially after the COVID-19 pandemic where challenging behaviours have become a major challenge in education. In this context, the project PBS-ECEC focused on examining the impact of PW-PBS on enhancing teachers’ competency concerning the promotion of the socioemotional development of children in ECEC settings (Fox et al., 2010; Sugai et al., 2000). PW-PBS is a three-tiered framework that provides training, technical assistance, and practice-based coaching in collaboration with a site-based leadership team on data-based decision-making and implementation of the PBS. To achieve the aforementioned aim, quantitative data were analyzed using the SPSS Statistics 27 searching for differences in teachers’ perceptions before and after the implementation as well as any changes in children’s socioemotional development as perceived by teachers. Sampling and implementation procedures were aligned with GDPR and ethical codes regarding integrity, objectivity, professionalism and confidentiality were followed. The implementation positively impacted teachers’ perceptions of PBS and the school climate. Policy recommendations with effective teacher practices when using the PW-PBS are provided to ECEC stakeholders at different levels (classroom, school, community).

PW-PBS, socioemotional development, school environment, teacher's professional development, teacher's practices
This application discusses an ongoing piece of research and findings may be preliminary/emerging.

A needs assessment following ECEC professionals' voices in four European countries: Why using PBS in ECEC settings
Silvia Barros (1), Sara Araújo (1), Miguel Santos (1), Katerina Krousorati (2), Vasilis Grammatikopoulos (2), Victoria Michaelidou (3), Andri Agathokleous (4), Aleksandra Szproch (5), Moya O’Brien (5), Vitor Oliveira (1), Vicky Charalambous (4), Panagiotis Kosmas (3) and Charalambos Vrasidas (3); (1) inED, Escola Superior de Educação, Polytechnic Institute of Porto, Portugal, (2) International Hellenic University, Greece, (3) Center for the Advancement of Research & Development in Educational Technology (CARDET), Cyprus, (4) Institute of Development (IoD), Cyprus, (5) Institute of Child Education and Psychology Europe, Ireland, (6) The National Distance Education University, Spain

This study examined the perceptions of Early Childhood Education and Care (ECEC) professionals about the current status of young children’s behavioural and socioemotional difficulties, their current pedagogical practices in this area and their impact. ECEC teachers’ knowledge and needs in promoting socioemotional learning (SEL) and dealing with challenging behaviors remain under-investigated (Jensen et al., 2017). Although there is a growing concern about challenging behaviors (Carter et al., 2010), initiatives focusing on designing professional development programs on this topic are recent and scarce (e.g., Jensen et al., 2017). This study emerged from a project based on the Positive Behaviour Support approach, intertwined with the bioecological theory (Bronfenbrenner & Morris, 1998). Considering ECEC settings’ role in promoting SEL and tackling behavioural difficulties, this quantitative study examined teachers’ perceptions in Cyprus (n=44 ECEC professionals), Greece (n=40), Ireland (n=41) and Portugal (n=40). Procedures were aligned with GDPR and approved by an Ethics Committee (IHU, Gr). ECEC professionals revealed that a considerable number of preschool children experience difficulties in social interactions and managing/expressing their emotions; however, problem behaviours are not very frequent. Most institutions do not have clear guidelines addressing SEL and challenging behaviors. Some efforts were in place, but professionals identified the need to have further training and better conditions to promote SEL and to manage behavioral difficulties. This research allowed to gain a better understanding of the current situation in the 4 countries regarding practices and needs related to SEL and problem behaviours, which can inform professional development programmes and educational interventions.

socioemotional learning, behavioural challenges, teacher’s perspectives, positive behaviour, professional development

This application discusses a completed piece of research.

D15
Multilingual Childhoods SIG Self-organised Symposium
ENGAGING MULTILINGUAL CHILDREN IN CONVERSATIONS ABOUT LANGUAGES, LEARNING AND PICTUREBOOKS
Chair: Claudine Kirsch, University of Luxembourg, Luxembourg

This symposium explores the concepts of agency, participation, and curiosity in the contexts of language and literacy learning as well as researching multilingualism with young children. The three studies from Luxembourg, Israel, and Portugal demonstrate the children’s active roles. The study in Luxembourg analyses children’s participation in literacy activities in three day care centres as well as the children’s agentic behaviour displayed with peers. The three-year-olds creatively reproduced interaction patterns and literacy practices, thereby opening spaces for multilingualism. Developing a language portfolio, the children in Israel showed awareness of early experiences with multilingualism, attitudes towards multilingualism, motives for language learning, issues in language socialization, and knowledge of language teaching and learning strategies. The final study involved Portuguese children and repeated picturebook read-alouds in English. Findings provide evidence that children used their linguistic repertoires and creativity for agentic responses to the picturebook as aesthetic object.

What can we learn about how children view their multilingual environment by means of a language portfolio?
Mila Schwartz and Orit Dror, Oranim Academic College of Education, Israel

The aim of this study was to explore children’s awareness of their multilingual environment and what they think about it by means of a language portfolio (LP) created by them, in interaction with researchers. Although some attention has been given to the role
children themselves play in their language learning, much less research focuses on how children’s active participation in research shapes their awareness of early experiences with multilingualism Schwartz, Kirsch & Mortini (2020) and Bergroth & Palviainen (2017). LP as a tool is widely applied in school context to encourage students to monitor and assess their efforts, progress, and achievements in language learning. However, there is no evidence about how we can use LP as a tool to research with children, in order to explore their child’s language-based agency. In this mini ethnography, two research assistants conducted four individual sessions with six 5-year-old bilingual children speaking Arabic or Russian as L1. The children were educated in a monolingual Hebrew-speaking preschool in Israel. The communication with children was in their home language, as this was their choice. During these sessions, the LP was created in the form of drawings and collages of pictures, to co-construct meaning with young children. The study was approved by the ethics committee of the Ministry of Education. Before entering the target classroom, we received permission to take field-notes and make video and audio-recordings in the preschool from the teachers, the children and their parents. The following categories emerged by analysis of the personal LP: Awareness of multilingual environment, motives for languages learning, issues in language socialization, and knowledge about strategies of language teaching/learning. The study showed how teachers can use LP as a constructivist concept where the child is the main agent.

multilingualism, language portfolio, child's agency, family language policy, state language policy

This application discusses a completed piece of research.

**Picturebook read-alouds in a foreign language: Mediation for children’s multilingual agency**

Sandie Mourão, CETAPS, FCSH Nova University Lisbon, Portugal

The objective of this empirical study was to investigate the affordances of picturebook illustrations for children’s language development during repeated read-alouds in English foreign language (FL) sessions. In pre-primary FL contexts, picturebooks afford language and literacy benefits and contribute to children’s overall development (Mourão & Ellis, 2020), yet often picturebooks are selected for the words they contain rather than the multimodal affordances they provide for authentic, agentic interactions (Bland, 2013). Following a socio-constructive framework which respects children’s transactional, agentic interactions (Sipe, 2008) using their linguistic repertoires (Lüdi, 2006), this study was conducted within a qualitative, interpretive paradigm (Merriam, 2009). Data collection involved transcriptions of 21 video recordings of repeated picturebook read-alouds and a researcher journal. Analysis was conducted through a directed content analysis. The participants were three groups of Portuguese pre-primary children aged 4 to 6 years old (n= 84). Informed consent was collected from carers and children’s consent was negotiated during the data collection period. Pseudonyms replaced children’s names. Children responded to the multimodality of the picturebook and used their linguistic repertoires according to the response categories of a grounded theory of literary understanding (Sipe, 2008). An overview of the response categories identified in the data is presented, together with instances of children ‘giving away the punchline’ and producing ‘accumulated narratives’ , all examples of agentic behavior in response to the picturebook. Conclusions provide implications for mediation of picturebook read-alouds in a FL which respect agentic response categories and children’s linguistic repertoires.

picturebooks, linguistic repertoires, agentic responses, multimodality, mediation

This application discusses a completed piece of research.

**Children’s agentic behaviour in literacy practices in crèches in Luxembourg**

Claudine Kirsch and Valérie Kemp, University of Luxembourg, Luxembourg

Agentic behaviour of young children has been researched in relation to language policies and language learning (Schwartz et al., 2021) but not in literacy practices. The present paper examines children’s participation in multilingual literacy activities in two crèches in Luxembourg and their agentic behaviour. A previous study has shown that three-year-olds displayed language-based agency and interpretively reproduced translanguaging practices (Kirsch & Mortini, 2021). According to language socialization theories, children actively participate in culture-specific events and appropriate norms, values, and interaction patterns, which they reproduce (Corsaro, 2005; 2018). These interpretive reproductions testify to children’s agentic behaviour. The data of the present qualitative longitudinal study include thick descriptions and video-recordings of literacy activities. All interactions were analyzed with conversation analysis (Seedhouse, 2007). To examine, children’s agentic behaviour, we compared their interactions in planned literacy activities to those with peers. Prior to the data collection, the educators and the parents gave informed consent. During the data collection, we maintained the children’s assent by ensuring that they felt comfortable and only observed them in naturally
occurring situations with educators. The findings reveal three types of agentic behaviour: children replicated strategies, creatively reproduced interaction patterns and literacy practices, and opened up new spaces for developing literacies in home languages. The study has implications for educators as it shows them the ways in which children make meaning of their literacy activities. It is a reminder of the importance of being a good role model, a careful observer and listener, and a reflective practitioner.

*agentic behaviour, multilingualism, Luxembourg, creative reproduction, home languages*

This application discusses a completed piece of research.

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**D17**

**LISTENING TO YOUNG CHILDREN IN EDUCATIONAL SETTINGS: THEORETICAL, ETHICAL AND METHODOLOGICAL REFLECTIONS**

Self-organised Symposium

**Chair:** Lucia Carriera, University of Milan Bicocca, Italy

This symposium presents reflections on the theoretical, ethical, and methodological considerations related to listening to young children in educational settings. Three contributions are presented to highlight different aspects of this topic. The first contribution focuses on the concepts of children's participation, agency, and voice, and their importance in educational interventions. The second contribution considers the significance of creating a "listening space" for children in alternative care settings, adopting art-informed research methodologies to promote participation and express opinions. The third contribution explores the possibility of requesting informed assent from preschoolers in participatory research with photovoice, highlighting the importance of respecting children's competencies and rights. The paper emphasizes the need to reconceptualize the notions of participation, agency, and voice to ensure opportunities for children to experience democratic contexts, active citizenship, and emancipatory participation in educational settings. The findings offer practical suggestions for meaningful ways to promote children's agentic power in participatory processes.

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**Children’s participation, agency and voice: Developing educational interventions**

Elisabetta Biffi, Lucia Carriera and Chiara Carla Montà, University of Milano Bicocca, Italy

The paper presents a narrative literature review (Bouhris, 2017), part of a wider PhD study, on the concepts of child’s participation, agency and voice. It theoretically frames the present symposium. Studies on history and sociology of childhood underline the development of a new paradigm (James et al., 1998), where children are seen as social and political actors beginning with their participation in everyday contexts (Bobbio, 2007). The research is framed within a pedagogical rights-based approach (Lundy, 2007). However, recognising children’s rights is only a foundational first step: participation, voice and agency are the 'tools' that make their implementation possible.

Within a qualitative and naturalistic paradigm (Mortari, 2007), the narrative literature review was conducted using EBSCO and the following keywords: "children's and young people's participation", "agency" "voice of the child". Attention was given to how perspectives of authors and research participants were represented; we remained reflexive about our subjective positioning, by keeping a journal; we sought audience-appropriate transparency to maximize ethical impact (SIPED, 2020). Literature offers incomplete representations of children's voices, particularly of the youngest ones. At the same time, a paradigm shift is redefining children as reliable key informants and experts in their lives. To ensure opportunities for children to experience democratic contexts, active citizenship, emancipatory and subversive participation, the notions of participation, agency, and voice of the child need to be reconceptualized in accordance with new pedagogical perspectives (White, 1996). In this respect, schools and educational services play a crucial role by providing daily opportunities for doing so.

*participation, agency, voice of the child, children rights, education intervention*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**Listening to children in alternative care: Methodological reflections on artistic languages**

Samantha Tedesco, University Milano Bicocca, Italy
This contribution considers the significance of ensuring children in alternative care settings have the right to be heard and to participate in decisions that affect them. Specifically, we will focus on using arts-informed approaches in creating a listening space. Participation in choices is a crucial factor that supports the construction of one's life project. However, it is challenging and requires balancing the institutional mandate to protect the child with the need to promote participation (Glynn & Mayock, 2019; Montà & Biffi, 2019). Listening spaces (Lundy, 2007), in which one can genuinely express an opinion—including through "non-verbal" and artistic forms—are essential in the context of the UN strategy on the rights of children (2021) and the European Child Guarantee (2021). The contribution, framed within a rights-based approach, reflects collage (Butler-Kisber, 2008) and other art-informed research methodologies to provide children in alternative care a space to be heard and express themselves, drawing on case studies the researchers were involved in. Wang and Redwood-Jones [65] highlight several specific ethical considerations for researchers using participatory artistic methods. Participants' understanding of consent and context, safety, ownership, and researcher influence are key concerns. The use of artistic languages presents several opportunities to promote children’s agentic power in participatory processes but also several challenges and ethical considerations that cannot be overlooked, especially in alternative care. Promoting artistic languages can support the implementation of a participatory approach in everyday educational practices in alternative care settings.

**alternative care, children rights, listening , arts-informed methods, agency**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Requesting informed assent from preschoolers involved in participatory research through photovoice: A practical possibility**

Letizia Luini and Monica Guerra, University of Milano Bicocca, Italy

The paper presents a possibility of requesting informed assent from preschoolers during a participatory research with photovoice as a meaningful experience of participation and expression of agency and advocacy. The literature highlights that asking children for informed assent represents a key ethical expedient for engaging them in photovoice processes (Samanova, et al., 2022; Root et al., 2017) to which little attention is paid from a practical perspective. In accordance with the UN Convention (1989) and the sociology of childhood (Corsaro, 1979), which conceptualize an idea of expert child with agency, practical experiences of involvement in assent processes that respect children's competencies and rights need to be identified. The research is conducted within a participatory paradigm (Creswell, 2013) and data are collected through a qualitative method following the photovoice methodology (Wang, Burris, 1997), accompanied by participant observation and audio-recordings analyzed through thematic analysis. Research started after receiving the informed consent/assent, withdrawable at any time. Utilization of pseudonyms was implemented to ensure participants’ privacy. A process of authentic participation and advocacy was possible through implementation of a voting system where children feel free to take the floor and give their informed assent or express disagreement, showing they felt comfortable giving a response that was distant from adult expectations. A practice based on acceptance and listening atmosphere can be an opportunity to express children’s agentic power in a participatory process. The results offer practical suggestions of meaningful ways to achieve informed assent from preschoolers, as a step in which participation can be realized.

**informed assent, participation, photovoice, agency, advocacy**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**Awakening practitioner curiosity: Narrative accounts of postgraduate learning journeys**

Elizabeth Black, Marie McQuade, and Craig Orr, University of Glasgow, United Kingdom

This paper explores the learning journeys of students on the MEd Childhood Practice, a leadership qualification for Scottish early years practitioners. Wingrave and McMahon (2016) translate to the childhood practice sector a model of professional learning developed iteratively by scholars of UK school leadership programmes (Reeves & Fox, 2004; Reeves & Drew, 2013). This model...
encourages student curiosity, questioning assumptions in order to develop critically reflective leaders, while also meeting a professional registration standard (SSSC, 2016). Our project adopts the Wingrave and McMahon (2016) model as a conceptual framework for professional learning. Working within an interpretivist paradigm (Waring et al., 2012) and a phenomenological methodology (Spencer et al., 2014), we use thematic analysis (Braun & Clarke, 2006) of data from three sources - collaging (Butler-Kisber & Poldma, 2010), a ‘learning story’ narrative writing approach (White & Sands, 2022), short Zoom interviews - to identify participants’ perceptions of their own agency and development (professional and personal) within the learning process. Beyond compliance with ethical approval, the lecturer-student power dynamic and time pressures on working students were key considerations (BERA, 2018). In mitigation, interview questions were shared in advance, participants were able to withdraw at any time, and multiple short points of engagement were designed for flexibility. The use of dialectical methods allows representation of students’ own interpretations of their learning journeys: achievements, challenges and key messages for their future practice. We consider whether students also see themselves as curious, questioning professionals and potential implications for our practice as teachers.

**professional learning, learning journeys, student curiosity, professionalism, collage**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Disentangling relational pedagogy and professionalisation for the early years graduate working with infants, toddlers, families in the community**

Lydia Murphy, Dundalk Institute of Technology, Ireland

This research aims to explore the values of early years graduates’ (EYGs) when working relationally with infants, toddlers, and families in a space where outcome-based measures are driven by a privatised market. The doctoral study will build on the work of Schon, who believed our education system and workforce was in a crisis of professionalism (1992). Little is known about Early Childhood Education and Care sectoral views on attachment in culture (Robertson et al., 2021). This study is based on Bronfenbrenner’s and Morris (2005) Bio-Ecological Framework focusing on the processes of engagement i.e., the dance of dispositions happening with the infant toddler and family. The study utilizes an interpretative mixed method approach, combining a quantitative survey with qualitative action research methods that will discover the dispositions and skills needed as an early year’s degree student to facilitate a Parent Toddler group (Gavin et al., 2019). Ethical consent for this study has been obtained from Dundalk Institute of Technology including informed consent, right to withdraw, confidentiality, data protection, and relational safeguarding upheld. This study taking place in the North-East of Ireland. Informal viewings of relational engagement in the participants’ lives should develop strengthen ideas of the EYG’s role in an interconnected web of relationships over outcome-based policies. Finally, the study should facilitate babies being heard and allowed to take up meaningful space in communities This study foresees a new role for early years graduates, prominence for babies and toddlers in literature, while holding more agency in their communities.

**early years degree student, communities, relational pedagogy, professionalism, babies, toddlers and families**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Exploring of being an early childhood educator in the culturally diverse North with peer interview method**

Riikka Kess, University of Oulu, Finland

The aim of this dissertation study is to deepen understanding of being an educator in the culturally diverse North with peer interview method. The aspects of educator’s life and work in the culturally diverse North are rarely discussed, despite the increasing interest to explore ECEC in the northern areas (e.g., Garvis, Harju-Luukkainen, Sheridan & Williams, 2019), in culturally diverse contexts (Tobin, 2020; Vandenbroeck, 2017) and from perspectives of educators’ professional growth and identities (Estola, 2003; Uitto et al., 2014). The study is based on the concepts of narrative identities in place (Kess & Puroila, 2021; see Antonsich, 2010; Skogheim et al., 2018) and culturally responsive teaching (Gay, 2000). The ontological and epistemological basis of the study lies in narrative research (e.g., Clandinin & Rosiek, 2007; Heikkinen, 2002). In this study there was a curiosity to try a novel research set-up. Thus, 24 educators encountered each other without the presence of the researchers in peer interviews (Devotta et al., 2016; Juutinen & Kess, 2019). The analysis was conducted through holistic reading and the three-sphere context model (Zilber et al., 2008). The educators gave their voluntary and informed consent to participate, and the research material was anonymized. The findings show how peer interviews may support educators in culturally diverse communities by offering a space to share experiences and
ethical questions of everyday practices and learn from their colleagues (Kess & Einarsdóttir, 2023; Kess & Puroila, 2021). The peer interviews can also be used in teacher education to support student teachers during studies.

narrative research, early childhood educator, peer interview, cultural diversity, the North

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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D19
INCLUDING REFUGEE AND MIGRANT CHILDREN
Chair: Helena Luis, IPSantarem, Portugal

Establishing an ECEC offer in the face of the refugee crisis - lessons learned from the Polish SPYNKA project
Magdalena Krakowiak (1), Veronique Dierkx (2) and Olga Wyslowska (3); (1) Jan Amos Komeński Child Development Foundation, Poland, (2) Utrecht University, The Netherlands, (3) University of Warsaw, Poland

The study aims to identify strategies that facilitate the establishment of new ECEC services with and for the Ukrainian refugees in Poland, named SPYNKAs. Structural characteristics of ECEC settings is considered a prerequisite for process quality, related to children's well-being and learning (Vandell et al., 2010) and to the well-being of ECEC professionals, which affect children's experiences (Benchekroun et al., 2020) Interplay of factors at different levels of the system is crucial for shaping structural conditions of ECEC (Bronfenbrenner, 1963). In the refugee context, characteristics from both the host country and the refugees should be taken into account. Semi-structured interviews with 45 educators (84% Ukrainian), photographic documentation and researcher notes were collected at 20 SPYNKAs. A qualitative descriptive and comparative approach was used to identify challenges and strengths in developing strategies that meet structural standards at the level of policy and professional expectations. A consent form and information sheet was provided to all participants. Participants were given the opportunity to withdraw from the study at any time. Preliminary results reveal that effective strategies need to clearly assign actions to different organizational levels e.g. architectural consults may be maintained at the national level, the search for locations for provisions at the regional and the selection of materials at the setting's level. At all stages representatives of refugee communities need to take part. Defined strategies can be an inspiration to other countries/regions facing the challenge of fast extension of the ECEC sector resulting from the influx of large numbers of refugees.

Ukrainian refugees, structural characteristics of ecec, qualitative research, ECEC policy, ECEC networks

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Curiosity as a coping mechanism for refugee traumatic stress in children
Charity Mokgaetji Somo, The University of South Africa, South Africa

The purpose of this study is to consider the mental health outcomes of refugee children and the impact of psychological trauma on curiosity. Research shows that psychological trauma interrupts learning for children (Joyce & Liamputtong, 2017) and stifles creativity and curiosity. Curiosity can help to address trauma as it is associated with wellbeing (Kashdan et al., 2018). The Stress response theory (Connor-Smith et al., 2000) posits that children respond to stress through adaptive and maladaptive strategies. Curiosity offers a healthy coping mechanism to address psychological trauma. The data was secondary data of publicly published documentary videos. The documentaries featured refugee parents and children, and psychologists discussing wellbeing following displacement. The analysis focused on the mental health of refugee children as discussed in the documentaries. The analysis was conducted as part of a completed PhD study. The findings of the study are used to discuss the implications of poor mental health on curiosity and agency. Consent from participants in secondary data of published documentaries is not required. Inclusion criteria: Documentaries had to feature refugee children and parents who had been displaced by war working with a psychologist to address war induced trauma. The following traumatic stressors hinder exploration, decreases stress tolerance and stifles social curiosity: (1) Traumatic stress (2) Resettlement Stressors (3) Fear and anxiety (4) Aggressive behaviors. Due to war related trauma and PTSD, refugee children need psychotherapeutic interventions that will enhance curiosity. Play therapy can be used to develop refugee children's curiosity and agency in a safe space.
This application discusses a completed piece of research.

**Supporting children’s curiosity about diversity and difference: Developing an evidence-informed toolkit in 5 countries and finding alternative approaches to including refugee and migrant children**

Jennifer Kontoulas (1), Alison Tobin (2) (3), Angelika Popyk (4), Donna Gaywood (5) (2) and Josephine Gabi (6); Early Years Intercultural Association, Australia, (2) Centre for Research in Early Childhood (CREC), United Kingdom (3) Birmingham City University, United Kingdom, (4) University of Warsaw, Poland, (5) University of Gloucestershire, United Kingdom (6) Manchester Metropolitan University, United Kingdom

This paper examines the development and use of an educational toolkit to support refugee and migrant children. As a trauma-informed evidence-based intervention which facilitates inclusive and equitable practices, the toolkit offers an alternative approach that fosters children’s curiosities and promotes community cohesion. This project draws upon 'The Walk' (Good Chance, 2021) the empowerment of migrant families (Tobin, 2016), the challenges affecting identity and relationships (Bove & Sharmahd, 2020) and making meaning of migratory experiences (Kirova, 2010). To develop this play-based resource, Refugee-crit theory (Strekalova-Hughes & Wang, 2019) was applied alongside a praxeological methodology (Formosinho & Formosinho, 2012; Pascal & Bertram, 2012). The research is positioned within a socio-constructivist paradigm and the methodology is qualitative and interpretivist.

Through a participatory design, early educators in five countries (UK, Australia, Turkey, Greece and Poland) trialled and evaluated the toolkit in ECEC settings. The study was informed by the best ethical practices of researching with refugee children, including problematising prevalent trauma narratives by interrogating educators’ and researchers’ positionality to circumvent the white saviour complex (Gaywood et al., 2020). Findings suggest that the use of the toolkit not only supported refugee and migrant children, but it also had a role in supporting community cohesion within the ECEC setting and beyond. While increasing research has sought to support pedagogical practices and deepen our understanding of the experiences of refugee and migrant children and their families, the availability of evidence-informed and contextually compatible resources, which may support educators in this area remains scarce.

refugee and migrant, evidence-based, educational resources, inclusive practice, trauma-informed

This application discusses a completed piece of research.

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**D20**

**MONOLINGUAL, BILINGUAL AND MULTILINGUAL ISSUES IN ECEC**

Chair: Maria Fredriksson, University of Stavanger, Norway

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**Everyone is a hero/shero in a community-based e-service learning**

Miranda Lin, Illinois State University, United States

This study examines how the collaboration/partnership supports emergent bilingual learners’ (EBL) learning and teacher candidates’ professional growth in a virtual setting via a service-learning project. Previous research indicates that teacher education programs must provide teacher candidates with the experiences to foster their confidence in working with EBL (e.g., Wurr, 2018). In addition, valuing the voices of community partners is vital to the service-learning paradigm executed as part of any teacher education program (Tinkler et al., 2014). In addition, a heightened focus on adaptability and communication during COVID-19 or a crisis is recommended to ensure successful virtual service-learning experiences for all involved (Reffie-Stice, 2021). Dewey (1933, 1938) believed learning occurs when learners apply their knowledge in the sociocultural context. This is what service-learning is about: “how learning takes place, what the learning is, and the relation of learning to action”(Giles & Eyler, 1994, p. 79). Participants included two second-grade teachers and 25 teacher candidates. Data were collected and analyzed using an interpretative framework from teacher candidates’ presentations and reflections, teachers’ feedback, and email communications. The institutional IRB committee approved the project. The study reveals virtual service-learning nurtured teacher candidates’ practice and creativity in communicating with EBLs were enhanced. However, they also faced many challenges. Opportunities for college students and
community schools or community-based organizations to interact virtually can indeed support everyone involved to feel empowered and heroic. Nevertheless, the complexity of virtual service-learning yields challenges and benefits for higher education instructors for us to reevaluate and revise existing service-learning practices.

**virtual service-learning, teacher preparation, emergent bilingual learners, empowerment, diversity**

This application discusses a completed piece of research.

**Between governance and local autonomy – Fields of tension in Swedish preschool text practices**
Petra Classon and Annika Åkerblom, University of Gothenburg, Sweden

The aim of this paper is to present and discuss some results from a study concerning how local language policy documents are discursively constructed within the pedagogic recontextualizing field (Bernstein, 2000, 2003). It is stated in the Swedish national curriculum (Lpfö18, 2018) that one of the preschool teachers’ tasks is to support the development of the majority language, Swedish, as well as the child’s mother tongue. Previous studies have shown that the monolingual norm is strong in Swedish preschools, and this creates a challenge for many preschool teachers (Kultti, 2012; Lunneblad 2017; Cekaite, 2018; Åkerblom & Harju 2019). To handle this challenge, local language policy documents are established to give the preschool teachers advice and govern the language development work. The theoretical point of departure for this paper is Bernstein’s (2000, 2003) pedagogic device. The paper is conducted within a qualitative research paradigm and the data, 120 pages of local policy documents, was analysed using qualitative text analysis. Ethical considerations have been made both in the selection as well as anonymizing the names of the municipalities. Preliminary results showed that the language policy could, at the same time uphold the monolingual norm and norms of multilingualism. Multilingual development was portrayed as something that contrast language development in the majority language. The local language policy documents brought forward a deficit perspective on the multilingual children. Based on the results of the study we ask how the expressed policy could influence preschool teacher’s autonomy, leaning on the ambiguous formulated documents.

**prechool, multilingualism, discourse, language policy, municipality**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Positive factors for collaboration between preschools and multilingual home – A systematic review**
Maria Fredriksson (1), Margrethe Jernes (1), Trude Hoel (1), and Elizabeth Vieira Rodrigues de Sousa Beth (2); (1) University of Stavanger, Norway, (2) Federal University of Minas Gerais (UFMG), Brazil

In this systematic review (SR) the aim is to contribute with a scientifically based overview of knowledge about positive factors for collaboration between ECEC institutions and multilingual homes. Following questions will be addressed: - What factors are stressed as positive for collaboration and for whom? - How are the identified factors beneficial for children’s development and learning? Collaboration between ECEC institutions and parents is a vital factor for children’s learning (Anders et al., 2011), especially for children with foreign backgrounds (Khalfaoui et al., 2020). Despite this, prior research shows challenges relating to lingual, social and cultural aspects when it comes to collaboration. An identified need for research recognizing positive factors for collaboration (Norheim & Moser, 2018) will be addressed. The review follows the theories and systematics developed for SR (Descombe, 2021). The paradigm and methodology are in line with SR (Booth & Grant, 2009). The result of the search will be presented in the PRISMA flow chart (Page et al., 2020) and MMAT (Hong et al., 2018) will be used for assessing the quality. Data will be extracted based on PerSPECtIF (Booth et al., 2022). The review is transparent and systematics in line with the ethics of SR (Booth et al., 2022). Additionally, a tool like ROBIS (www.bristol.ac.uk) will be used in the research team to assess the risk of bias. The presentation will discuss an ongoing piece of research. New and synthesized knowledge is important for both researchers and practitioners as well as for policy makers.

**collaboration, multilingual homes, systematic review, postive factors, ECEC institutions**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
What has changed in the partnership between schools and families since COVID-19? A comparative study in five different regions in Spain
Silvia Blanch Gelabert, Ana María Forestello and Anna Tarres, The Autonomous University of Barcelona, Spain

The research explored how Covid-19 affected the partnership between schools and families and aimed to detect strategies that had transform the school in vulnerable contexts. Previous research indicates the confidence of teachers and the ability of the school and families to be resilient (Trujillo-Saez et al., 2020) in complex contexts. There is evidence that the health crisis that have led to rethinking the school during and after the pandemic (Thorn & Vincent-Lancrin, 2021). Also, pedagogic strategies that impacted positively in children (Simón Rueda et al., 2021). A systemic approach was used, understanding the school as a transformative agent in poverty and exclusion contexts (Boggs, Chadwick, 2023). A mixed method research: quantitative, questionnaire to 320 professionals and 22 schools; qualitative, 29 semi structured interviews to the directors of the schools. All the participants in the research had agreed in participating on a voluntary way. The confidentiality of the participants was granted and also the use of the data for an educational aim. The results showed that on the schools with a previous relationship, a variety of strategies promoted stronger partnerships: diversifying the channels and innovating when the relational channel of face-to-face could not be maintained. The use of technologies, mobile phones, platforms or schools’ website are some of them, but also it was highlighted the support and closeness created between them. The research aims to generalize the findings to other schools, all the strategies developed and valued as good practices can be very useful for other schools in vulnerable contexts.

school-parent relationships, strategies, roman-families, resilience, vulnerable-context

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Making the case for early years provision in a post-covid era – Parents and carers’ views of access to early years provision for 2-year-olds
Fufy Demissie and Sally Pearse, Sheffield Hallam University, United Kingdom

This study’s aim was to examine parents’ and carers’ perceptions of access to early nursery provision in the aftermath of the Covid pandemic. Extensive research has shown that early access to high quality provision has a transformative impact on a range of child and parental outcomes (Melhushi & Gardner, 2021; Melushi et al., 2017). Similarly, the quality of interactions between practitioners and families/careers has also been shown to promote healthy ecologies of parent/school interaction in the longer term (Sammons et al., 2015; Wolfson & King, 2008). Bronfenbrenner’s ecological perspective was used to theorise how positive relationship between children, parents and practitioners facilitated the children’s learning and development and the parents’ and carers’ well-being. The study is framed within the qualitative paradigm that used interviews with parents to elicit their views and perspectives. The research participants were provided with a consent form and information sheet and participants were aware that they could withdraw their consent at any point of the research. Group analysis of interview data suggested that parents and carers’ experiences were mediated by positive and trusting relationships that impacted on parents’ well-being and their children’s development. The paper argues that putting parents/carers at the heart of EY provision can create a ‘healthy ecology’ with lasting positive child outcomes. If policy makers are serious about tackling inequality and Covid’s legacy, they must protect and prioritise early years settings that prioritise child and parental outcomes, particularly in areas of economic and social challenge.

parents, Covid, 2 year-old provision, nursery, qualitative

This application discusses a completed piece of research.

Snapshot of the restart after the COVID-19 pandemic in Italy: 0-6 services and parent’s involvement
In Italy, ECEC services were severely affected by the COVID-19 pandemic. In many cases, the reorganization of daycares and preschools had an important impact on the presence of parents and the relationships with families. We aim to explore the characteristics of educational team choices and the effects on parents’ participation. A very large number of studies analyzed the effect of the pandemic on ECEC services in Italy and around the world, using different research tools (Berti et al., 2021; Garaffo et al., 2022; Kim et al., 2022). We will discuss parent involvement considering different levels of participation (Pellizzoni, 2018) and the perspective of Vandenbroek (2021). From a perspective of descriptive research, we will present data from an ample survey encompassing about 1800 Italian ECEC services, conducted during November and December 2020 with the support of the Italian Gruppo Nazionale Nidi Infanzia (GNNI). A quantitative analysis was performed, considering data from multiple-choice questions, and the open answers were analyzed through content analysis. Questionnaires were totally anonymous, and the research aim was reported on the first page. Questions concerned only organizational data and strategies, not involving persons. First results show that about half of the services involved parents in the choices concerning the restart of educational activities, but frequently the involvement was purely formal. Similarly, the presence of parents during the settling-in phase or daily routines was limited, and meetings with parents were performed mainly online. Our results highlight the need for discussion about strategies of the parent partnership.

ECEC, parent partnership, COVID-19 pandemic, daycare, preschool

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

D22
DEVELOPING PROFESSIONAL PRACTICE
Chair: Ximena Poblete, Universidad Alberto Hurtado, Chile

Friday 1st September, 9:45 - 11:05, C7, Floor I, Estoril Congress Centre

Teacher students’ reflections upon the literary conversation as an arena for value education
Aastrid Tysvaer and Siri Hovda Ottesen, NLA University College, Norway

We investigate what student teachers find beneficial and challenging in literary conversations in ECEC. How do the students reflect upon their role in conducting the conversations? Do they encourage the pupils’s curiosity, agency and participation? Do they find the literary conversation suitable for value education? Our earlier studies have shown that literary conversations can be a suitable arena for value edacation, but the teacher’s role is crucial (Ottesen & Tysvaer, 2017; 2020; 2022). Other studies have also discussed the teacher’s role in literary conversations (Andersson-Bakken, 2015; Hoel og Håland, 2016; Michaelensen & Strand, 2017; Fredwall, 2022), but this study investigates the student teachers’ reflections upon the teacher’s role. Our theoretical and conceptual framework includes theory on Lesson Study (Munthe, Helgeland & Bjuland, 2015; Dudley, 2014), Litterary Conversations (Aase, 2005; Andersson-Bakken, 2015; Hennig, 2012; 2017; 2022; Skardhamar, 2011; Svanes & Andersson-Bakken, 2021). The study belongs to the social constructivist paradigm. It is is a qualitative study as we gather our data from focus groups both during and after the student teachers’ Lesson Studies. The study is approved by the Norwegian Agency for Shared Services in Education and Research (SIKT). Research participants have received oral and written information about the study. The study verifies full anonymity to both students and pupils during data collection and publication. The study will shed light on whether Lesson Study is a suitable tool for student teachers' training in making the literary conversation an arena for value education. The study will contribute to educational improvement.

value education, pupil’s participation in literary conversations, teacher’s role, student teachers' training, lesson study

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Professionally curious: challenges of (re)learning to be curious to become professional
Ximena Poblete (1), Paula Guerra (2) and Daniela Figueroa Moya (3); (1) Alberto Hurtado University, (2) Silva Henríquez Catholic University, (3) Finis Terrae University, Chile

This research aims to understand how early years educators construct their professional identities analysing the tensions existing within discourses of professionalism. Working in the early childhood education (ECE) sector has been acknowledged as a “messy business” (Urban, 2008, p.144). Research has shown that professional identities in ECE must be understood as multiple, relational, unpredictable, and situated (Arndt et al., 2018). Thus professionalism requires educators to be active agents and highly autonomous in their practice (Osgood, 2012). Agency and curiosity are critical attributes of professional identities in ECE. However, they are not often prioritized in technocratic policies of professionalism (Osgood, 2012; Moss, 2014). This research draws on a feminist poststructural framework (Butler, 2006; Foucault, 1972; MacNaughton, 2000) as it contributes to the analysis of professional identities as subjectivities and provides the means to be critically aware of how subjects are constituted within discourses while shedding light on ways to do otherwise. A critical paradigm is assumed seeking to highlight practitioners’ situated experiences (Cresswell, 2012). A qualitative approach is used to grasp the messiness in discourses (Denzin & Lincoln, 2011). Interviews and focus groups were conducted with 51 practitioners in Chile Participation was voluntary and anonymity of people and places was assured. While agency and curiosity are core elements of professionalism they are undervalued hindering practitioners’ professional status. Educators’ curiosity becomes a challenge for their professionalism within technocratic discourses It is important to explicitly promote curiosity for developing agency in educators through initial training and professional development opportunities.

professional identities, feminist theory, discursive agency, gendered practice, caring subjectivities

Teacher’s exploration fostering questionnaire: A scale development study
Ildikó Katalin Fieberg and Michael Glüer, Fachhochschule Südwestfalen University of Applied Sciences, Germany

The goal of the research is to develop a scale to measure the explorative teaching methods used by kindergartner teachers in their praxis. The exploratory activities are the hallmark of pedagogical work quality, they are regarded as one of the central teaching-learning methods in early childhood education (ECE) (Bildungsgrundsätze NRW, 2018; OECD, 2004; Hedegaard, 2020). A growing body of literature describes several methods that can be used successfully in the ECE praxis (e.g., presenting collative objects, formulating intuitive theories, seeking explanations, etc.) to foster children’s exploratory behaviors (Schulz & Bonawitz, 2007; Wellman & Liu, 2004; Danovitch & Mills, 2018; Legare, 2012). So far, although the literature notes some possible ways to foster exploratory behavior in children: e.g., inducing curiosity, supporting reflection, and giving explanations (Jirout & Klar, 2012; Fraizer et al., 2009) no instrument is available to comprehensively assess the way that kindergartner teachers encourage exploratory behavior. This research focuses on the development and validation of teacher’s exploration fostering scale (TEFS). The initial pool of items for the TEFS consist of seventy items. Exploratory factor analysis will be employed to identify the factors structure and convergent, and concurrent validity of the TEFS will be performed. Participants received an information sheet and consent form, withdrawal was anytime possible. The data collection is in process. The findings contribute to the process quality in ECE settings. TEFS might inspire further researches aiming to reveal to what extent teachers accentuate the exploratory activities, how is it related to children’ exploration and knowledge acquisition.

supporting exploration, exploratory factor analysis, early childhood education, teaching methods, scale

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

D23
CURIOSITY, AGENCY AND EXPLORATION: PEDAGOGICAL APPROACHES THAT CAN LEAD TO A CHILD-CENTRES APPROACH IN ECEC SYSTEMS
Self-organised Symposium
Chair: Jan Peeters, Innovation in the Early Years/ Fair Start Stories, Belgium
We present a SIG on implementing a child-centred approach based on curiosity, agency and exploration in different countries. We start in The Netherlands where Bart Declercq (KULeuven) will focus on a research that is measuring the impact of the experiential approach that is based on the child as co-constructors of his learning on process-quality. Khatuna Dolidze from Ilia State University, Tbilisi, will focus on research that aimed to get in-depth understanding of the challenges of an important reform of the ECEC system of Georgia from teacher-led to child-centred pedagogy. Sarah Klaus and Jan Peeters were involved in a study on critical factors that facilitate the transition of teacher centred and top-down approach towards a more democratic ECEC approach with a focus on the young child as actor of his own learning process through stimulation of curiosity, exploration and agency.

The impact of an experiential approach on process-quality. An intervention study in early years settings (0-4 years) in Zuid-Limburg (the Netherlands)
Bart Declercq and Dorien Dams, Centre for Experiential Education, KU Leuven, Belgium

This research is a collaboration between 3 Childcare organisations and Centre for Experiential Education (ExE), KU Leuven to improve the process-quality – the interactions with other children, adults, their families and the environment - by implementing the process-oriented approach. It builds on earlier research with SICS (EECERA 2007, 2012), POMS (Lenaerts, et al., 2017) and the MeMoQ pilot and baseline study (EECERA 2015, 2017). Process-quality is the most proximal driver of children’s development, learning and well-being (MeMoQ, 2017, OECD, 2022) and the lever to fulfill the tremendous potential of children. This is captured using Leuven scales for well-being and involvement (Laevens et al., 2005, 2012). The underlying paradigm is the recognition of the capable child as co-constructor. All staff (107) of 11 involved settings are trained in key concepts of ExE and the Leuven Scales. In a pre- and post-test design, levels of well-being and involvement (for 207 children) and 5 factors in the learning environment are observed in 24 groups. Individual children (544) are assessed with POMS by practitioners. This data informed daily practise. Participants were intensely informed and participated by mutual consent. Results are discussed and processed anonymously. The research reveals that (1) training and coaching has a significant effect on the observed approach (2) maintaining levels of well-being and involvement despite Covid19, (3) indications for sustainability of the observed improvements. The process-oriented approach is an effective way to improve process-quality. Observing well-being and involvement empower practitioners. This improves the ‘quality of life’ for children in settings.

quality assessment & improvement, well-being & involvement, learning environment, process quality, continuous professional development

This application discusses a completed piece of research.

Transitioning to child-centered practice in early childhood education in Georgia: Inside the classroom
Jan Peeters (1) and Khatuna Dolidze (2); (1) Innovation in the Early Years/ fair Start Stories, Belgium, (2) Child Development Institute, Ilia State University, Georgia

The study aimed to get an in-depth understanding of the staff’s pedagogical approach, what are the challenges they face, the extent to which the practices are aligned with quality international and national standards in early childhood education in Georgia, and how are the actual experiences of children while being in the setting. In recent years different studies were initiated to examine the strengths and the weaknesses of the ECEC system in Georgia, to identify the challenges of the introduction of new Standards (NAEC, 2018; Peeters, et al., 2018). But there is no research that describes what happens inside the classrooms in relation to specific challenges. What is the quality of children’s participation in the educational process, and what is the environment created for their learning and development? The European Framework for Early Childhood Education and Care was used as research framework to structure the study. Observations were carried out in 43 settings as part of a comprehensive diagnostic study on the ECEC system in Georgia. The parents were notified of the research aims, objectives, and activities. Children themselves were also informed of the presence of the observer. Consent was obtained from participants. The findings provide evidence regarding the extent to which the staff is promoting a teacher- or child-centered pedagogy and how the pedagogical approaches and environmental factors affect children’s levels of involvement. The findings set a solid ground for clear recommendations for policymakers, pre-service and in-service providers for improving ECE practice in Georgia.

child-centred pedagogy, children’s experience, quality standards, ECEC system, professional development

This application discusses a completed piece of research.
Transforming ECEC systems: Critical factors in introducing child-centred approaches that stimulate children's curiosity, exploration and agency
Sarah Klaus (1), Jan Peeters (2) and Tatjana Vonta (3); (1) Georgetown University, United States, (2) Innovation in the Early Years/fair Start Stories, Belgium, (3) University of Primorska, Slovenia

There is consensus among researchers and international organisations that child-centred approaches in ECEC are most appropriate for young children, yet, teacher-centred approaches are still dominant in many countries. We focus on critical factors that facilitate the transition to a child-centred approach. We will refer to recently published European research on the topic of transforming ECEC systems (Peeters, et al., 2015; Sharmahd et al., 2017). The theoretical framework for this research is the Competent System of ECEC. Improving pedagogical practice is not solely the responsibility of the individual educator, rather, the framework defines the need for a competent system to implement quality ECEC (Urban et al., 2011). Our research is based on in-depth interviews and focus groups with 40 change agents involved in introducing child-centred approaches into traditional ECEC systems in 30 countries as part of a long term, 24 year project (Klaus, Peeters, Vonta, in press). A consent form was signed by all interviewees. Our research supports the competent system model and proposes as a necessary condition for transformation of early education systems the establishment of a democratic culture based on trust, respect and warm relationships. Our research suggests that introducing child-centred pedagogy is not a linear process, and that change can appear years later, thus reinforcing arguments for longer-term investments in ECEC reform projects.

democratic pedagogy, child-centered, professional development, reform, political transformation

This application discusses a completed piece of research.

D24
CHILDREN’S AGENCY AND SELF-REGULATION
Chair: Gabriela Arias de Sanchez, University of Prince Edward Island (UPEI), Canada

“That steady hum…” Assembling kindergarteners’ agency during free play time
Gabriela Arias de Sanchez and Melissa Bishop, University of Prince Edward Island (UPEI), Canada

This study explored how kindergarten teachers perceived children's agency during classroom free play time. The study was conducted in Atlantic Canada and is part of a three-year investigation aiming to revitalize play pedagogies. Even though free play offers an ideal context for young children's agency to develop (Ryan, 2005; Wood, 2014), the narrative of free play continues to disrupt Canadian neoliberal school expectations. Overall, the so-called schoolification of kindergarten has increased teacher-direct academic instruction and steadily decreased kindergarteners’ play time (Fleer, 2021; Pyle & Danniels, 2017). Drawing from relational lenses (Oswell, 2013), this investigation situated children's agency within a network of assembled and entangled relationships (Spyrou, 2018). A qualitative research design utilizing action research methodology (Stringer, 2014) was used to invite kindergarten teachers to participate in six focus groups. Recruitment happened through the provincial teachers' registry; teachers from rural and urban areas received a letter of invitation and a consent form. Ten teachers agreed to participate. Thematic analysis (Babbie, 2010) revealed that kindergarteners' agency was entangled in free play scenarios where children felt safe; further, daily encounters with free play time became a significant assembled piece for children's agency capacity to unfold. The study also indicated that teachers’ perceptions and children’s funds of knowledge were critical pieces that prompted or inhibited kindergarteners' agency. The study suggests that renegotiating the discourse of free play as a relational space for kindergarteners' agency capacity to be practiced could shift the ways free play is defined within Canadian kindergarten classrooms and school policies.

free-play, kindergarten, relational, agency, Canada

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Playing with a puppet encourages the curious toddler to take agency and participate in the research on compassion
Jaana Keränen, University of Oulu, Finland
The article focuses on how toddlers show curiosity, agency and participate in research on compassion in early childhood education and care (ECEC) using play, drama and puppets. Drama is understood through play (Heikkinen, 2002) and the puppet acts as a child’s friend and supporter (Gобек, 2012; Korošec, 2012; Winnicott, 1971). Through play and drama, one can learn to interpret and show compassion towards others (Nussbaum, 2014; Rajala et al., 2017). When toddlers’ curiosity is given a chance (Parlakian, 2020), participation and agency are expressed verbally and non-verbally through drama (Gunnarsdottir & Bateman, 2017; Majaron, 2012). The research is ethnographic (Kananen, 2014), its methodological approach focuses on childhood research (Alanen, 2009) Play, drama and puppet have an important role in supporting the child’s development (Vygotsky, 1933, 2002; Brėdikytė, 2022). Toddlers create and participate in their own ways (Hultgren & Johansson, 2019). An adult can support or prevent an activities (Holt, 2004; Løkken, 2009). The research group consists of children from toddler group in a northern Finnish daycare center. The data is collected in practice, by attending and observing. The analysis is data-driven. The research follows the GDPR and ethical guidelines (EECERA, 2015; TENK, 2019); permits from guardians and the willingness of toddlers were observed. Preliminary results show that the use of play, drama and puppets supports the development of the child’s compassion and strengthens the toddler’s learning, well-being and interaction. The research raises questions about adult’s authority to support and prevent and the operating culture of ECEC (cf. Rajala et al., 2017)

toddlers, agency, puppet, play, compassion

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Examining environmental affordances for self-regulation in Australian early childhood settings
Deborah Pino-Pasternak and Emily Regan, University of Canberra, Australia

This study examined how the physical and social environment of Early Childhood (EC) classrooms invite young children to engage in self-regulation (SR). Self-regulation involves the capacity to set goals, monitor performance, and sustain goal-directed action (Baumeister & Heatherton, 1996). Despite widespread evidence of the benefits of SR interventions, there is a dearth of research examining how EC teachers promote SR in daily routines (Vasseleu et al., 2021). The study used Affordance Theory (Gibson, 1979) as its theoretical lens. Affordances are “…features of the environment that invite us to do something or to undertake a particular action” (Little & Sweller, 2015, p.338). A constructivist paradigm was adopted (Denzin & Lincoln, 2018) with observations conducted in one school and adjacent long daycare centre. Fifteen educators working in five preschool and four kindergarten classrooms participated. An observation schedule was used to examine affordances for SR. Thematic analysis (Braun & Clarke, 2006) was undertaken resulting in a continuum of affordances that ranged from adult- to student-determined. Information letters and consent forms were sought from teachers, education assistants, families and children. All records were anonymised for the purposes of analyses. Findings showed more varied affordances for children’s SR in preschool classrooms when compared to kindergarten. Missed opportunities for children’s agency were consistently observed in both groups, but considerably diminished in kindergarten. Our findings suggest that a key component of SR, goal setting, may be currently neglected in favour of aspects of this construct better aligned with self-control and inhibition.

early childhood, agency, self-regulation, affordance theory, observation

This application discusses a completed piece of research

D25
YOUNG CHILDREN’S CREATIVITY AND CuriosITy ENCOURAGING EXPLorATON
Chair: Anne-Marie Shin, University of South Australia, Australia

Sticks, crosses, shapes and sculptures: exploring young children’s creativity and curiosity in art museum spaces
Dimi Kaneva, University of Huddersfield, United Kingdom

This study explores young children’s creativity and curiosity in an art museum in North West England. Three workshops utilised loose parts resources and museum exhibits to encourage exploration within an environment not typically accessed by young children (Herman 2012). Art museums can be seen as incompatible with child-centred exploration due to overwhelming architecture,
stillness and artwork displayed too high (Andre et al., 2017) that are at odds with young children’s exploratory behaviours (Hackett, 2014). However, such settings offer immense exploratory potential in terms of abstraction, concept and scale. The study is informed by process-based learning through design and redesign of resources, enabling children to create transient art and objects to take away. The workshops encouraged the entanglement and evolution of process and product to inspire creative thinking (Pacini-Ketchabaw et al., 2017). A qualitative interpretivist paradigm (Silverman, 2021) was employed. Engagement was recorded through snapshot observations and photographs, accompanied by annotations from informal discussions. Data was analysed thematically (Braun & Clarke, 2006). Parental informed consent was obtained, children’s verbal assent was negotiated, and behaviour was observed to confirm ongoing assent. Photographs were taken with parental permission. Participants could withdraw at any time. The findings demonstrate children’s active engagement with loose parts resources and curiosity in exploring their function, durability and limits. Transient and more permanent artworks emerged as evidence of children’s creativity in addition to the unexpected ways in which they incorporated exhibits into their play. These findings highlight the role of art museums in supporting young children’s creativity and curiosity.

creativity, loose parts, art museums, process-based learning, children’s artwork

This application discusses a completed piece of research.

Opportunities to support and develop creativity in ECEC
Irina Vorobeva, Igor Shiian, Olga Shiyan, Anastasia Belolutskaya, Anna Lakshina and Tatiana Le-van, Moscow City University, Russia

The aim of the study is to analyze how the kindergarten environment supports children’s creativity. Educational environment has been proven to be important for the development of creativity in preschool age: formative experiments show that the support of children’s ideas and the creation of a special supportive environment affects the manifestation of creativity in play and narratives (Craft et al., 2007; Ellermeyer, 1993; Murray, 2022; Hoffmann & Amp; Russ, 2016; Hoffmann, 2019). The study is based on the cultural-historical approach. We developed the Creativity Environment Rating Scale: ECERS Extension (CERS) to assesses how the educational environment is focused on zone of proximal development and creates an intellectual and emotional challenge for solving creative problems. CERS consists of 4 items: “Understanding of development processes”, “Questioning”, “Invention and transformation of contradictions”, “Imagination”. EECERA ethical code was followed. All subjects participated voluntarily in these studies. The average score of the sample is 2.69 (of 7). We discovered that mostly the classroom provides the basic conditions for understanding developmental processes (for example, there are materials that help children understand the sequence of actions or the dynamics of transformations; teachers pay attention to changes in some contexts), teachers ask children some of the same type of questions or try to develop small dialogues - but higher level conditions are extremely rare: educators rarely create problem situations when children can offer their own idea or make a suggestion, rarely draw children’s attention to a discrepancy of points of view. The CERS scale can be recommended as a navigator for self-assessment and the quality development in ECEC.

creative abilities, dialectical thinking, imagination, questioning, educational environment assessment scale

This application discusses a completed piece of research.

Co-curiosity - Enabling young children as cultural contributors: What can we learn from Artists?
Anne-Marie Shin (1) and Sally Chance (2); (1) University of South Australia, (2) Sally Chance Dance, Australia

This doctoral study of artists’ work with young children and families investigates arts-based pedagogies for democracy in early childhood. Potential for arts-based pedagogies to enhance school-aged children’s participation in cultural life has been recognised internationally ( Hall & Thomson, 2017), however less attention has been paid to how these enhance very young children’s participation as cultural citizens An onto-epistemological framework (Lenz-Taguchi, 2010) was used to unpack material-discursive arrangements within a ‘family lab’ framing children as cultural contributors. Within a qualitative post-structuralist paradigm (Hughes, 2001), this ethnographically informed case study of an 8 session ‘family lab’ investigated how 4 artists engaged with parents and children aged 3 years and under. Nexus analysis (Wohlwend, 2021) of data, including audio/video recordings, examined significant mediated actions identifying pedagogical implications Information provision and formal consent, included participants’ right to withdraw from the research at any time and signed consent from all adults and parents on behalf of children. Beyond this, congruent with reflexive observation, I was ready to withdraw if signs of dissent were shown by children, parents or artists at my presence or recording (Dockett, Einarsdottir & Perry, 2012). Findings reveal how materials, sound, movement, and gaze intra-acting
with discursive arrangements enabled vibrant co-curiosity between adults and children. This reciprocity sparked adults’ active noticing of children’s creative agency, enabling pedagogical responses to the unpredictable. Artists’ planning and improvisations provide examples for educators seeking to build curiosity and agency in their own pedagogies and highlight the importance of arts opportunities for young children and families.

*arts-based, material-discursive, pedagogy, democratic participation, ethnographic*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**D26**

**LANGUAGE AND CURIOUSITY**

Chair: Karen Boardman, Edge Hill University, United Kingdom

Supporting communication, language, and literacy: Exploring families’ perceptions of literacy learning with under-fives in England

Karen Boardman, Edge Hill University, United Kingdom

This research circle study aims to explore families’ perceptions of communication, language and literacy (CLL) development (at home and in school) for children under the age of five. Many researchers are concerned with gaps in children’s learning related to CLL - the ‘language gap’ (Avineri et al., 2015), ‘word-gap’ (Fernald, Marchman, & Weisleder 2013), alongside a renewed focus of the quality of talk for very young children. This has been further emphasised, given that children’s speech and language development appears to have been delayed post-pandemic (Clarke et al., 2022). This study is based upon a participatory action research tool - Research Circle (RC) (Persson, 2018), exploring perceptions of CLL learning. This mixed methods study employed 60 short questionnaires, 3 focus group workshops and 11 interviews within a qualitative interpretive action research paradigm (Lewin, 1944; Gillis & Jackson, 2002) in response to the research question ‘How do you support very young children with their communication, language and literacy development?’ A consent form, information sheet and information sessions was provided for all participants. Informed consent was negotiated with the families involved and re-negotiated during the research circle project. All participants were given the opportunity to withdraw from the study at any time. The key finding highlights the need for settings/schools to focus more on communication and language, rather than the formality of literacy (reading and writing). These findings suggest that further collaboration with families/communities focused on nursery rhymes, songs, rhythm and the value of communicating in back-and-forth conversations encourages CLL.

*research circle, communication and language, literacy, families, perceptions*

This application discusses a completed piece of research.

**Young children’s language socialisation to a culturally-authorised curiosity in ‘Dovubaravi’, a small rural Indo-Fijian community in Fiji**

Alexandra Diamond, UniSA, Australia

This research investigates young Dovubaravi children’s language socialisation to expressions of curiosity about others’ identities. Language socialisation, which explores how individuals are socialised to and through communities’ ‘embodied communicative practices’ (Ochs, 2022, p. 7), has repeatedly demonstrated that children agentively participate in these processes (e.g., Said & Zhu, 2017; Shohet, 2013), but not researched young children’s language socialisation to culturally-authorised curiosities. This investigation is framed by i) recognition that elders’ language, by communicating culturally-authorised ideologies and practices, plays powerful roles in children’s socialisation (Ochs & Schieffelin, 2008), and ii) Bourdieu’s theory that formation of ‘habitus’, whilst constrained by social environments, orders of power and symbol systems, requires individuals to agentively ‘construct their version of the world’ (1989, p. 18). This ethnographic study aligns with constructivist, qualitative paradigm (Lincoln, et al., 2011). Participants were 11 Dovubaravi children younger than 43 months, and their mothers, extended family members and neighbours. Data included recordings of interactions with young children, semi-structured conversations with children’s mothers, and adult participants’ ideas about data meanings. Analyses sought patterns of contextualised linguistic practices affording young children’s apprehension of Dovubaravi’s abiding interest in individuals’ identities. Central attention to participants’ informed, withdrawable consent,
relationships and decisions about data collection, anonymity and interpretations, enacted decolonising ethics (Santos, 2018). I recognised children’s actions (e.g., retreating) as communications of dissent. Findings indicate Dovubaravi children’s curiosity about individuals’ identities is culturally-authorised and mediated by elders’ language, and challenge educators to discover families’ diverse interests when planning for or evaluating children’s curiosities.

language, socialization, culture, identity, communication

This application discusses a completed piece of research.

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**D27**

**WELLBEING, PLAY AND PEER INTERACTION**

**Chair:** Andrea Adelman, Florida International University, United States

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**The embodiment of wellbeing through play in birth-to-age-3 settings**

Mary McMullen, Indiana University, United States

The presenter discusses play with birth- to 3-year-olds that addresses the well-being of the 'whole child' from a perspective that integrates psychological, physical, and socio-relational elements of being. Drawing from her two recent books on supporting play and well-being in first years settings, the lead researcher shares findings from decades of research and the experience of her co-author, a distinguished infant-toddler practitioner. Their philosophical lens is holistic: a child’s rights perspective (i.e., right to play, choice-making, and centrality of children’s voices) (UNICEF; Wall & Robinson, 2022); ‘being’ and ‘well-being’ perspective (i.e., focus on lived experience here-and-now and overall wellness (Elfer 2019; Uprichard, 2008); and individual, collective, and cultural appropriateness (i.e., U.S.’s developmentally appropriate practices) (NAEYC, 2020). We honor children's voices presenting material from the point-of-view of birth-to-three-year-olds. Example, discussing changing needs/motivations for well-being ("I am one with the environment," "I am this person") and talking about development/learning ("I learn how things work," "I learn who I am and how I feel"). This work is based upon the presenters' existing published and human-subjects sanctioned work; no individuals are identified and a 'goodness' perspective is maintained throughout (Lawrence-Lightfoot, 1997). A focus on overall psychological, physical, and socio-relational wellness in the first years is critical to 'being' and 'becoming' healthy as babies grow, develop, and learn throughout life. This presentation will promote discussion about the embodiment of well-being through play; encourage intentionality in planning for play that meets changing needs and motivations; and inspire advocates of play in first years settings.

well-being, play, infant-toddler, first years, child care

This application discusses a completed piece of research.

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**Creating empathetic learners who advocate for inclusion of all: Project WeFEEL**

Andrea Adelman and Daniela Foerch, Florida International University, United States

This research examines the WeFEEL approach's (Social-emotional learning; SEL) impact on student (birth-age 5) empathy, implicit bias, and advocacy toward inclusion. Building empathy in children is an essential strategy for reducing implicit biases (Miklikowska, 2018) and research suggests that implicit biases may be more malleable in early childhood (Gonzalez et al., 2020). Prejudice, particularly toward ethnic/racial minorities, is known to begin in early childhood between age 3-6 (Raabe & Beelmann, 2011) and SEL approaches have been suggested to increase empathy and decrease implicit bias (Sleeter, 2012). The theoretical framework that guides this study is positive youth development, which is based on the developmental systems theory and the ecological systems theory. Our conceptual framework of the WeFEEL consists of five main components: Bubble of Emotions, WeFEEL Framework (SEL), Thinking/Emotion Games, Children’s Literature, and Yoga/ Meditation. This research is a mixed-methods participatory action research study integrating a coaching model. We utilize video data for participant (teacher) self-analysis in combination with formal assessment and focus group data to coach participants while examining the impact of the WeFEEL. Participants include teachers, students (birth-5), and their caregivers. We had concerns with confidentiality and researcher bias so we integrated member checks, de-identified data, and stored it in a password-protected SharePoint. Student empathy and advocacy for inclusive practices both
increased, while implicit bias decreased. Empathy and advocacy were observed to be generalizable skills. Implicit bias is suggested to be more malleable in early childhood; SEL training can encourage advocacy for inclusive practices in the classroom/community.

social-emotional learning, cultural responsiveness, inclusion advocacy, implicit biases, empathy

This application discusses a completed piece of research.

Revealing curiosity, agency and participation in peer relationships in infant and toddler daycare
Wiebke Wüstenberg (1) and Kornelia Schneider (2); (1) Frankfurt University of Applied Sciences, (2) frühLernwerk, Germany

Our aim is to encourage early child care workers to trace and support peer interactions and peer relationships as a vital source for children's holistic development and make it an essential part of their curriculum and daily practice. Our own work and international research in everyday situations of early childcare has revealed that vibrant peer relationships in dyads and groups among toddlers are obvious, if body language is acknowledged. Attention for embodied language provides early childcare staff rich opportunities to reflect on toddlers' communication style in contrast to their own verbally determined engagement with them. Our work is focussed on qualitative methods and ethnographic field studies in childcare centers. We refer to: Self-Determination Theory, agency concept, intersubjectivity, importance of self-initiated play, importance of peer relationships as a source of its own for children's physical, cognitive, social and emotional development (see for instance White, E. J. et al. 2019). We present an overview of international research and provide scenes among toddlers in order to promote better understanding of peer relationships among professionals. Informed consent has been obtained and participants - even very small children - could withdraw at any time. The overview of international research confirms that toddlers benefit from playing with same-age peers. By heightening educators' awareness on toddlers competencies and pleasure in interacting with girls and boys in stable early childcare settings educators satisfy toddler's basic needs for self-determination. The research has different implications for policies, organisational structures, pedagogical concepts, professional qualification.

togetherness, sense of belonging, cooperative pretend play, shared expressiveness, humorous play activities

This application discusses a completed piece of research.

D28
EVALUATING, INTEGRATING AND PROMOTING STEAM PRACTICES
Chair: Linda Bosman, Stellenbosch University, South Africa
This study explores early childhood teachers’ conceptions, experiences and challenges faced in promoting young children’s curiosity, participation and agency through STEM education, a first of its kind in Singapore. STEM education is critical in developing skills for future readiness in Singapore (Lee, 2015). STEM learning involves inquiry, curiosity, active participation and critical thinking (Clements & Sarama, 2016). There is a need to understand how STEM is perceived and implemented in the early childhood setting. Koh & Tan (2021) found an emerging level of awareness of STEM education in Singapore among secondary school teachers although there is still a lack of experience and know-how in implementing STEM activities. Sensemaking theory (Weick, 1995) framed our analysis of how the teachers gave meaning to their experiences in implementing STEM learning and how they understood what STEM education was. Using a qualitative interpretive research approach, questionnaire surveys (n=41) and semi-structured interviews of 8 in-service teachers were used to collect data. Informed consent was obtained from all participants who were given the opportunity to withdraw from the study at any time. The findings revealed that teachers interpreted STEM in both the disciplinary and integrated perspectives, most of them admitting having a surface-level understanding of STEM education. Lack of knowledge, resources, time and class sizes were cited as barriers to implementing STEM learning. The findings shed light on possible professional development that can provide targeted support to facilitate teacher competence and confidence to integrate STEM in the early years classroom.

**Promoting children’s curiosity, agency and participation through STEM learning: Experiences and challenges faced by early childhood educators in Singapore**

Cynthia Lim and Jiayao Li, Singapore University of Social Sciences, Singapore

This study explores early childhood teachers’ conceptions, experiences and challenges faced in promoting young children’s curiosity, participation and agency through STEM education, a first of its kind in Singapore. STEM education is critical in developing skills for future readiness in Singapore (Lee, 2015). STEM learning involves inquiry, curiosity, active participation and critical thinking (Clements & Sarama, 2016). There is a need to understand how STEM is perceived and implemented in the early childhood setting. Koh & Tan (2021) found an emerging level of awareness of STEM education in Singapore among secondary school teachers although there is still a lack of experience and know-how in implementing STEM activities. Sensemaking theory (Weick, 1995) framed our analysis of how the teachers gave meaning to their experiences in implementing STEM learning and how they understood what STEM education was. Using a qualitative interpretive research approach, questionnaire surveys (n=41) and semi-structured interviews of 8 in-service teachers were used to collect data. Informed consent was obtained from all participants who were given the opportunity to withdraw from the study at any time. The findings revealed that teachers interpreted STEM in both the disciplinary and integrated perspectives, most of them admitting having a surface-level understanding of STEM education. Lack of knowledge, resources, time and class sizes were cited as barriers to implementing STEM learning. The findings shed light on possible professional development that can provide targeted support to facilitate teacher competence and confidence to integrate STEM in the early years classroom.

**Reflecting South African preservice teachers’ voices on implementing inquiry-based science/engineering education (IBSE) in foundation phase (FP) classrooms**

Linda Bosman, Stellenbosch University, South Africa

This research aims to reveal South African pre-service teachers’ (PT) experiences of hands-on, minds-on IBSE training and implementation in Grade 1-3 classrooms. Inquiry-based STEAM education in early childhood is a curriculum priority worldwide (Lin, et al., 2021), yet teachers generally struggle to implement IBSE in practice (James et al., 2019). Quality experiences during the formative years are critical to promoting children’s STEAM development (Murcia, et al., 2022), hence teachers must be specifically prepared (Bansal, 2021). Socio-constructivist theory (Vygotsky, 1987) was applied to interpret the PTs experiences of IBSE implementation as co-constructed within the university and school contexts. An interpretative, multiple case study design (Stake, 1995) with observation-in-action, learning stories-and-reflection, and productions was used to co-construct data with three PTs from different city schools in South Africa. A thematic inductive data analysis process was followed. Ethical clearance, gatekeeper permission and participants’ informed consent were given. Principles of autonomy, non-maleficence, beneficence and justice were applied. PTs constructed strength-based child views (e.g. child-scientists) and competencies as IBSE facilitators; and revealed context-specific factors affecting the implementability of IBSE in FP classrooms. Suggestions are made for supporting teachers’ construction of essential competencies to implement IBSE in FP practice during the critical early years.

**inquiry-based science education (IBSE), preservice teachers’ voices, foundation phase, STEAM, child views**

This application discusses a completed piece of research.
Inclusive approaches in early childhood education and care. A comparison between Italy and Germany

Daniela Bulgarelli (1), Beatrice Ragaglia (1), Laura-Therese Sprigade (2) and Anne Henning (2); (1) University of Turin, Italy, (2) University of Applied Health Sciences - Campus Gera, Germany

The project aims at comparing the inclusive concepts and practice for children with and without disabilities in Early Childhood Education and Care (ECEC) in Italy and Germany. No similar research has been published, specifically focused on the inclusion of children with disabilities in ECEC. Italy and Germany differ in policies and praxis regarding inclusion (e.g., EASNE 2017): Italy suppressed special schools in 1977; in Germany, segregation and separation remain part of policies and praxis. Standards for inclusive education in ECEC have been formulated by the European Agency for Special Needs and Inclusive Education (2017). Data are collected through an online questionnaire and semi-structured expert interviews addressed to coordinators and educators of ECEC services, with questions about the inclusion of children with disabilities. Data collection is currently on-going. Data will be subjected to qualitative content analysis and quantitative analysis. The UniTo Ethics Committee approved the research. Respondents signed an informed consent, that declared no risks in participating. Respondents could leave the study without any disadvantage. A content analysis run on the first data showed that, in both countries, the concept of inclusion is related to the themes of individualized and child-centered approach, good relationship and open communication with the families, and fostering participation in daily group activities with all children. In-depth comparisons between European countries allows comparing challenges to inclusive ECEC and identifying successful strategies in one country that may support the development towards inclusion in other countries by e.g. informing advanced educational training and supervision of transition to inclusive settings.

inclusion, early childhood education & care, children with disabilities, cross-country comparison, theory and practice

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Understanding inclusion through democratic communities - A case study in three Swedish preschools

Mimmi Örberg, Nina Klang and Ingrid Olsson, Uppsala University, Sweden

This study aims to make a theoretical and practical contribution in understanding the complex relation between democracy and inclusion by exploring how democratic communities (Dewey, 2008) can be created in early childhood education (ECE). The study is motivated by the ongoing shifts and contradictions within theorizing on inclusion (Magnusson, 2019; Nilholm 2020). Inclusion is highlighted globally as a key factor in enabling education as a right for all (Ainscow, 2020; UNESCO, 1994). The interpretability of the concept can lead to difficulties in translating an inclusive education into practice (Göransson et al., 2011; Magnússon, 2019). The study is placed within a pragmatic approach based on Dewey’s (2008) theory on democracy. Based on a community-oriented perspective on inclusion (Göransson & Nilholm, 2014) concepts of community, common and communication are used to explore which aspects of democratic communities are created in the cases included. The study is conducted within a qualitative interpretive research paradigm, with a multiple-case study design (Yin, 2007). Empirical data collected through observations and interviews with staff, headmaster and children. Upon ethical trial (Dnr 2020-06788), informed consent was collected from participants with special attention to children’s assent to participate (ECCERA’s Ethical Code for Early Childhood Researchers, 2015). The emerging results show that different ways of understanding inclusion and democracy more or less enable the creation of democratic communities. The study contributes with knowledge for ECE-practices about how inclusion from a community-oriented perspective can take shape. This is relevant in working towards the educational goal of inclusive education for all children.

inclusive education, early childhood education, democratic education, democratic communities, participation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Framework factors in ECEC Quality work for supporting Inclusive Education: A case study on the organization of monitoring practices in Cyprus, Italy, and Sweden
This case study aims to identify organizational framework factors that impact ECEC quality for all children. It is based on the three-year Erasmus project NEMO, which compared monitoring systems in five European countries. Educational monitoring is a dimension for assuring ECEC quality (EC, 2018). Unitary ECEC systems are evaluated as more effective regarding the organization of services and quality assurance, whereas split systems weaken the provision of high-quality ECEC (Eurydice, 2019). Nevertheless, several European ECEC systems are governed according to a split system. A concern is that split organization systems compromise ECEC quality for the youngest children. NEMO noted this is particularly problematic for children at risk of development-related variations that arise at an early age and may compromise the child’s well-being, e.g. autism. Holding a holistic approach to understanding quality for all (Katz, 1993; Pinata et al., 2016) the picture was more complicated. From a cognitive semiotic perspective, development, and education both are individual, but also group-dependent processes (Deely & Semetsky, 2017; Vygotsky, 1978). Qualitative data was collected from policy documents, laws, and experts’ reports derived from a study-specific questionnaire. Experts and researchers collaborated as project members. No personal information was processed. Accuracy was continuously checked in feedback correspondence. Analyses disclose additional organizational and political factors, for instance, having centralized or decentralized governance of ECEC, formal relations to support functions (e.g. Child Health Care and special education authorities), and policies reflecting educational values and the child's best interest. Based on this, recommendations are given to practitioners and national policymakers.

structural quality, framework factors, inclusive education, monitoring, holistic approach

This application discusses a completed piece of research.

D30
CAPTURING CHILDREN’S VOICE AND CRITICAL THINKING
Chair: Glenda Walsh, Stranmillis University College, United Kingdom

Oral storytelling, critical thinking & preschoolers: A design-based research pedagogical intervention
Catherine O Reilly, Trinity College Dublin, Ireland

The aim of this research study is to provide the opportunity for preschool children to engage in critical thinking during early education through interaction with oral storytelling as pedagogy. Critical thinking is a way of thinking that improves how you think (Paul & Elder, 2019). Critical thinking is identified as a 21st-century competency that should be taught at all levels of education (Alsaleh, 2020). However, research investigating critical thinking in early education is primarily under-researched (O Reilly, et al., 2022). The theoretical framework draws from Vygotskian social-constructivism theories with dialogic inquiry (Vygotsky, 1978; Wells, 1999). The conceptual framework builds on theories of Storytelling as pedagogy (Landrum, et al., 2019; Philipps, 2012). The study was conducted within a mixed method paradigm (Bakker & Van Eerde, 2015). Methods included: classroom observations, video/audio recordings, field-notes, and researcher journal. The participants were 17 preschoolers and two educators. Analysis was conducted using Braun and Clarke’s (2021) thematic analysis. Information booklets, details of data protection, data storage/access and the use of pseudonyms for participants; Informed consent from parents/carers, assent forms from children, opt-in requirements, participants could withdraw without prejudice from the study at any time. Children’s critical thinking skills include analysing, discussing points of view, and problem-solving through evaluating facts or experiences. Conditions for critical thinking include storytelling and dialogic inquiry used to stimulate thinking. Findings suggests children in preschool can engage in critical thinking. In this project, a Storythinking Programme has been developed as a resource for educators.

critical thinking, storytelling, pedagogy, young children, dialogic inquiry
This application discusses a completed piece of research.

The diluted place of power and the influential action of children in building a culture of peace
Teresa Natália Fernandes and Teresa Graça, Institute of Education, University of Minho, Portugal
This study aims to contribute to building a culture of peace, mobilizing children as active subjects of rights. This investigation “confronts visions and knowledge about childhood and child(ren) in a globalized and constantly changing world” (Tomás et al., 2021, p. 13), brings Peace to the field of Social Studies of Childhood, to the “center of our occupations as teaching and research professionals” (Jiménez-Arenas, 2020b, p. 39), and also to the daily action of children. The study challenges the traditional conception of power (Muñoz, 2001) and invests in demonstrating the coherence (Jares, 2004) between theory and practice (Muñoz, 2001) giving particular emphasis to the “Pacifist Agency” (Arenas, 2020b) of children, as active subjects of rights (Fernandes, 2021), in the intergenerational construction of a culture of peace. The study joins the critical current and the participatory paradigm as an epistemological basis for conceiving a participatory investigation with children. Research dynamics were developed that consider the transformation and sharing of intergenerational power relations. (Fernandes & Marchi, 2020). We ask consent to parents, explicit the ethical care of anonymity and confidentiality. The assent of the children was based and was made known to be able to leave or enter at any time. To ensure children’s privacy, it was opted for pseudonyms. Surprising evidence was obtained resulting from the dilution of power, empathy and recognition of the other. The child pacifist agency emerged and effectively transformed. The findings suggest that the "art" of "living peace" can be replicated in multiple environments and with different characteristics.

children, peace, participation, power, mutual recognition
This application discusses an ongoing piece of research and findings may be preliminary/emerging.

‘We have lots to tell you’: Consulting with babies, toddlers and young children on their early childhood curriculum framework, Aistear in Ireland
Glenda Walsh (1), Leah O’Toole (2) and Liz Kerrins (3); (1) Stranmillis University College, United Kingdom, (2) Maynooth University, Ireland, (3) Early Childhood Ireland, Ireland

This presentation draws on a consultative study which elicits the views and perspectives of babies, toddlers and young children on their Early Childhood Curricular framework. Following the UN Convention on the Rights of the Child (1989), there has been a movement internationally towards greater consultation with children for research, policy and practice. However, participation with the youngest children tends to be less well developed (Blaisdell et al., 2019). Embedded in a rights-based lens, and underpinned by Lundy’s (2007) model of child participation, this study set out to develop an innovative methodology which would allow the youngest participants to have their say. Set within an interpretivist lens, a Participant Action Research approach was employed, leveraging partnership with practising early childhood educators to uncover children's experience of their curriculum framework. A purposive sample of 11 settings and 136 children ranging from 9 months to 6 years participated in the study and a suite of methodological instruments were used, culminating in 885 items of data, analysed using MAXQDA. Ethically, babies, toddlers and young children were viewed as agentic and capable of self-expression. whereby consent was negotiated on an on-going basis through attunement, respect and responsiveness (Arnott et al., 2020). Relationships and friendships are of paramount importance to these babies, toddlers and young children where a slow relationship nurturing pedagogy was identified as their priority. These findings suggest how our youngest children have much to contribute to policy and practice on matters that affect them.

consultation, curriculum framework, babies, toddlers and young children, participant action research, Ireland
This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Making it explicit - Sustained shared thinking dialogue as a method to explore children’s perspectives on quality
Katrin Macha, International Academy Berlin, Germany

In order to negotiate quality, we must ask from different perspectives what constitutes a good centre for children. By using Sustained shared Thinking (Siraj-Blatchford et al., 2002) the study tries to make children’s perspectives and reasons on quality explicit. The leading question is: how can SST support children in expressing their perspectives on quality in ECEC? Several studies (Einarsdóttir, 2005; Nentwig-Gesemann et al., 2021) have described profound methodologies to obtain children’s perspectives by observing, interviewing, and conducting group discussions. This presentation introduces research that combines raising children’s perspectives with Sustained Shared Thinking (SST). Raising children’s perspectives has pedagogical components and cannot simply be viewed as a research method. Focussing on the dialogue following the rules of SST, I conducted and analysed group discussions with children about their lives within a children’s centre. The children were asked to think about aspects of quality. Children and their parents consented in participating in the study. Furthermore, children could leave the research at any time. The children expressed their own ideas, wishes, likes, and dislikes within the centre explicitly and profoundly. Following the lead of these children, a dialogue developed in which children and researchers equally contributed and lead the way. Children could act out their agency and were capable of expressing rational and reasonable opinions. I argue that SST helps to see the pedagogical side of raising children’s perspectives and acknowledge this as a pedagogical and political act. Children experience being heard and having a say in shaping situations.

This application discusses a completed piece of research.

Exploring children’s views of educators in two Swedish preschools through the mosaic approach
Nils Eriksson, Mid Sweden University, Sweden

By utilizing the mosaic approach, this study aims to develop knowledge with regard to children’s views of educators in two Swedish preschools. Earlier research demonstrates that children in preschool are capable of providing valuable information of educators (White, 2016: 40), although research in this area is limited (Einarsdottir, 2014: 683). The theoretical framework for this study draws upon a social constructivist perspective (Dahlberg et al., 2014) and a lifeworld perspective (Johansson, 2003). Together with the concepts of meaning-making and intersubjectivity, these perspectives help clarify children’s views of educators (Dahlberg et al., 2014; Johansson, 2003). The study is conducted within a qualitative interpretative paradigm, while the methodology is based upon a case study design and the mosaic approach (Creswell & Creswell, 2018; Clark, 2017). Methods used are audiovisual recordings in relation to participant observations through roleplay and child conversations (Clark, 2017). The analysis is conducted through a reflexive thematic analysis (Braun & Clarke, 2022). A total of 18 children and 6 educators participated in the study. Information sheets and consent forms were provided to the preschool staff and children’s legal guardians. Informed consent was provided and negotiated with the children throughout the research process. All adult and child participants were pseudonymized and informed that they could withdraw from the study at any time. Preliminary findings demonstrate that children view educators as caring, but also as a social community of their own. These findings suggest critical reflections among preschool educators, regarding how child-educator relationships can be enhanced based on children’s perspectives.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Supporting children’s participation in the daily activities
Sigrún Grétarsdóttir, Pála Pálsdóttir and Friðbjörg Gísladóttir, Hólaborg, Iceland

This two-year participatory action research aim is to increase educator’s knowledge in how to support children’s participation in decision making in four ECE settings. Research shows that children have limited opportunities to have a say in ECE and show a lack of agency (Hreinsdóttir, 2009, 2012, 2013; Pramling & Sheridan, 2003). The practice of actively involving children in decision making should not be in the hands of adults but a right of the child (Lundy, 2007). Therefore, training of educators is needed on how to involve children in ECE activities. The study is based on the Lundy model of participation (2007) which includes space, voice, audience, and influence. The daily schedule and activities of four ECE settings were revisited considering the model and ways found to increase the participation of the children. This was a participatory action research that involved one researcher and educators from four ECE settings collaborating to understand the importance of children’s participation and how to support it (Christensen & Prout, 2002; Dockett, et al., 2011). Ethical issues of informed consent, assent, dissent, confidentiality, anonymity, and privacy were considered (Alderson & Morrow, 2020; Lundy & McEvoy, 2012). The findings show that increased knowledge of educators on ways to include the voices of children can lead to increased participation of children. This includes giving children the opportunity to voice their opinion. The importance of educators making sure that the opinions of children are considered and reflected on and ways found to make them count.

participation, involve, teacher’s role, decision making, Lundy

This application discusses a completed piece of research.

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E2

NEUROMYTHS, MEMORY AND MOVEMENT
Chair: Lotta Uusitalo, University of Helsinki, Finland

Neuromyths held by Finnish early childhood educators
Lotta Uusitalo (1), Kati Sormunen (1), Jo Van Herwegen (2), Pirjo Aunio (1) and Nina Heräjärvi (1); (1) University of Helsinki, Finland, (2) UCL, United Kingdom

We examined neuromyth beliefs among early childhood (special) education teacher students and practitioners. Neuromyths are commonly held misconceptions about the brain. OECD (2002) described a neuromyth as “a misconception generated by a misunderstanding, a misreading, or a misquoting of facts scientifically established to make a case for the use of brain research in education and other contexts”. Despite having been repeatedly debunked, the neuromyths continue to circulate as scientifically based truths all over the world. The endorsement of neuromyths in educators has been widely studied (Dekker et al., 2012; see Torrijos-Muelas et al., 2021, for a review). However, there is no data from Nordic countries including Finland. The participants in our study were 136 early childhood (special) education teacher students and practitioners. The questionnaire was originally developed by Van Herwegen and her colleagues in the UK (see Gini et al., 2021). In our Finnish online-survey, participants responded to 15 items concerning general myths (such as “we only use 10% of our brain”) and 30 myths related to neurodevelopmental disorders (such as “all children with dyslexia see letters backwards”) using a 1–4 Likert scale (true...false). Participation was voluntary and anonymous. In the EECREA conference we will present the results of the ongoing data collection. As incorrect beliefs can lead to stigma and diminish children’s agency it is important to understand the magnitude of the problem. Such understanding will allow for further insight into training needs and future educational actions at the initial university training level.

neuromyths, early childhood education, finnish education, special education, teacher education

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Olfactory LearNap: Olfactory stimulation during learning and nap to strengthen memorization in early childhood
Elèna Cipollone, Elisabetta Tombolini, Francesco Peluso Cassese and Stefania Morsanuto, University of Niccolò Cusano, Italy
This pilot-study investigates if olfactory stimulation, proposed both during learning and nap, to children aged 2-3 years, can impact on the consolidation of a mnemonic trace and learning. Researches demonstrate how sleep plays a central role in this processes (Dastgheib et al., 2022; Soleimannejad-et al., 2022); specifically, in early childhood, sleep, like nap, favors brain development (Jiang, 2019; Hanron et al., 2023). Smell, sense active during sleep (Salimi et al., 2022; Schrek et al., 2022), supports learning and memory (De-Luca & Botelho, 2020; Aqrabawi & Kim, 2020). Infact olfactory bulb is strictly connected with hippocampus and amygdala, centers linked to learning processes (Dolah, 2022). This study is centered on olfactory memory, the link between memory, learning and sleep the centrality of sleep for the brain development of children. It is a quantitative experimental research, which compares the acquisition of specific information in a T0 and a T1. Between these tests, a language training is planned for both experimental groups, which will be accompanied by olfactory stimulation during learning and nap only for the experimental group; it will use lavender and rosemary (Dolah et al., 2022). A consent form and information sheet was provided to all participants. Informed consent was negotiated with children involved and re-negotiated during the time the research was carried out. Pseudonyms have replaced the names of participants. Participants were given the opportunity to withdraw from the study at any time. In conclusion, the possibility of having olfactory stimulation, during learning and nap, can help children to memorize the stimuli. This could become a valuable resource for the educator to use in the educational offer, to enhance the development of specific skills in the child.

kindergarten, olfactory memory, sleep, memory consolidation, children development

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

The move-play-explore nexus – New conceptualisations through microanalysis
Maria Grindheim and Elin Eriksen Ødegaard, Western Norway University of Applied Sciences, Norway

This presentation reports on the findings of a qualitative study conducted with an aim to capture and conceptualise the nexus of move-play-explore using microanalysis of videorecorded moments of children in ECEC settings in Norway. The study is a part of a multi-methodological and interdisciplinary research project; MoveEarly at Western Norway University of Applied Sciences, and aims at cultivating knowledge about how to better facilitate for and enrich ECEC pedagogy sensitive to children’s movement, play and exploration, and to improve practices (Stodden, et al. 2021, Ødegaard, 2021, Sanderud, 2020). Inspired by an ecological approach (Rogoff, 2003, Ingold, 2018, Ødegaard, 2021, Sanderud 2020, van der Kamp, 2019) movement, play and exploration is perceived as fundamental concepts for agency and participation, and studying the connection between the concepts is of relevance for sensitive pedagogies. Through microanalysis (Rogoff, 2014) of videorecorded moments of what teachers perceive as children being immersed in the move-play-explore nexus the study aims at investigating the relation between the concepts in action in the situated settings. The analysis will be co-created and validated by teachers and researchers, by identifying a variety of microfacets of the nexus move-play-explore. The study is conducted in line with international ethical and privacy protection guidelines. Parents have consented and the teachers and researchers were sensitive in the act of filming and respected children’s wishes of withdrawal. The findings of the analysis will be discussed in this presentation. It is expected that the results of the analysis will inform child sensitive pedagogical practices.

movement, play, exploration, microanalysis, child sensitive pedagogy

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

E3
EMOTIONAL REGULATION, SOCIAL SUSTAINABILITY AND ETHICS IN PLAY
Chair: Kristine Ingridz, Malmö Universitet, Sweden

Ethics of play care in a Norwegian school
Ingvild Olausen (1), Maria Øksnes (2), Kristine Warhuus Smeby (1) and Else Johansen Lyngseth (1); (1) Queen Maud University College of Early Childhood Education, (2) Norwegian University of Science and Technology, Norway

The research is part of a larger innovation project exploring transition from ECEC to school in a Norwegian municipality. This paper aims to explore ethical challenges related to first grade teachers in Norway and their experience of tensions between what they
want to do, and what they interpret they are imposed to do from different actors (Togsverd & Aabro, 2021; Solbø & Østrem, 2011). The study connects to studies questioning the role of play in children’s school life (Bjørnstad et al., 2022; Schanke, 2019). Theoretically, this study is inspired by Nel Noddings (2003/1984) and her perspectives on how ethics of care can contribute to developing a more holistic and human understanding, which considers the complexity and vulnerability that is part of our lives. The project has a qualitative approach. The main data material analyzed is several formal qualitative interviews with seven schoolteachers (Kvale & Brinkman, 2015), supplied by spontaneous conversations. A thematic analysis (Braun & Clarke, 2008) departs from a phenomenological perspective (Brinkmann & Kvale, 2008). Ethical guidelines in research including informed consent, the right to withdraw, anonymization and transparency, are followed. Findings suggest that from strictly relating to traditional school rules, teachers seek to listen to children and learn more about their perspectives. Scheduling play is not enough, it must be followed by ethical caring, and judgments in concrete situations (cf. Noddings) The teachers in our study ask for leadership in school that look at structures of schools and classrooms and lift the discussion about what school should be.

**transition from ECE to school, ethics of play, care for childrens’ perspectives, teachers’ perspectives, teachers’ practice**

This application discusses a completed piece of research.

**Children (dis)engaged in independent play: Microanalysis**
Giedrė Sujetaitė-Volungevičienė, Vytautas Magnus University, Lithuania

This study aimed to analyze how disengaged children start to join independent play with peers. Recent research on playworlds and self-regulation development has been combined to improve the professionalism of ECE pedagogues (Hakkarainen et al., 2015; Colliver & Veraksa, 2021). Moreover, the need for slow pedagogy strategies grows (Clark, 2022), as well as the need for help for children to (re) connect with peers after a pandemic (Egan et al., 2021). In a cultural-historical framework, the pedagogical adult play strategies that help young children join collective make-believe play based on emotional self-regulation are still in question. The research involved a qualitative case study design. Ten playworld sessions took place in the Play Research Laboratory. The microanalysis of over 120 hours of ethnographic digital visual data, has captured changes in adult and child behaviour. All participants provided informed consent in line with university ethical processes; children could withdraw at any time and were aware of camera recordings. Main findings emphasize the importance for an adult to mediate in regulating the emotional relationships of the characters in play; apply strategies for emotional flexibility and personalized learning; to achieve an elementary level of emotional regulation in children through playful interventions. The case study proved that playworld can be a space for slow pedagogy as adults can help all children reach an elementary level of emotional regulation, monitor if all children get involved in a shared emotional play and if not, then stay in the shared play activities.

**early childhood education (ECE) practice, playworld, peer play, participation, emotional regulation**

This application discusses a completed piece of research.

**Teaching in relation to play; Navigating between experiences and multiple communications for social sustainability**
Kristine Ingridz, Malmö Universitet, Sweden

The aim of this study is to contribute with knowledge to the field of EEC as to PRECEC_SCS on how social sustainability as equity can be related to teaching in relation to play, response and multiple languages. Considering previous studies (Pramling et al., 2019) there is a need to explore teaching in relation to play with a focus on social sustainability. This study ties into the theory Play Responsive Early Childhood Education and Care for Social and Cultural sustainability (PRECEC_SCS). The study refers to social sustainability as related to equity and social change within an educational setting (Cazden et al., 1966). This study explores what can hinder or enable teaching in relation to play with a focus on several languages, includes body language, and responses. Drawing upon a 5-month ethnographic fieldwork where data is collected with a video camera this study explore teaching in relation to play. The empirical data is analyzed through interaction analyzes (Goffman, 1981; Schieffelin & Ochs, 1986; Goodwin, 2012). The following study has been ethically reviewed and approved (dnr 2021-03573) and all participants have given written informed consent through themselves or through a guardian. Participants are anonymized. The Initial results show how teaching in relation to play and responses through multiple languages for communication and different experiences can be linked to social sustainability as equity. These findings suggest implications for several ways of how the body as a communicator as multiple languages are of significance for teaching in relation to play and relates to social sustainability.
teaching, response, play, multiple languages, social sustainability

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

E4
THE ROLE OF CRITICAL REFLECTION IN PROFESSIONAL LEARNING
Chair: Jacquelyn Brien, Department of Education and Training, Australia

Curiosity and wonderings about the role of professional reading in professional learning and growth
Jacquelyn Brien, Department of Education and Training, Australia

This research aimed to explore perceptions and experiences of early childhood professionals about their professional reading. Building upon research about the role of professional reading for other professions (Horder, 2004), and limited recent research in the field of education (Gleeson et al, 2022). Ecological systems theory (Bronfenbrenner, 1979), and professional learning theories, particularly Hollingsworth and Clarke (2007), underpinned the research. Reflected an appreciative inquiry research paradigm (Cooperrider, 1987), aiming to engage participants in seeking positive meaning. Qualitative research methodology was utilised, including questionnaires and interviews. Ethical concerns related to the researcher's involvement in the professional context, potential privacy concerns related to participant voice, and respect for confidentiality. To mitigate these, the researcher clearly identified her own 'voice', and informed consent was gained from participants, with use of pseudonyms. In summary, findings indicated that educators focussed on their curiosity and learning about children's environments, interactions, and experiences, using professional reading to inform reflective and improve professional practice. Leaders were found to be curious learners who used knowledge from professional reading to support those who worked directly with young children, developing policy, resources, and practice expectations, and reflecting on and sharing information. Professional reading was found to act as an enabler for a significant level of motivation, inspiration and transformative professionalism. The imperative for this research arose from policy expectations for evidence-informed practice (DET, 2016; ECA, 2016; COAG, 2009, UNCRC, 1989). This research implies that professional reading provides a valuable enabler, that should also be encouraged through policy, for informing and motivating professional practice.

professional reading, professional learning, professional curiosity, professional growth, leadership

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Reflection on concepts of child – A master key to professionalisation
Sandra Frisch, University of Applied Sciences Merseburg, Germany

Reflection of pedagogical action is the basis of working professionally. The ability of reflection has to be learned and is an important part of the study. The research is about different methods that invite students to reflect, shows resulting types of reflection and (non)transformation of habitus. Professional habitus and the option of transformation is the topic of different habitus-reconstructing ideas and methods (e.g. Bourdieu 1993; Oevermann 1991, 2001, 2004). Theoretical and conceptual framework is based upon paradigmatic changes in childhood (Zsambahoki/Patyi, 2018). For the research, students reflected before, while and after their theoretical and practical experiences in ECEC, esp. their concept of child and their concept of a pedagogue with different written and thus documented methods: short definitions and learning diaries. Out of these documents the different dimensions of professional habitus: the concept of child and the own role, were reconstructed with habitus hermeneutic methodology (Oevermann, 1991, 2000) and methods (Bohnsack, 2013; Kramer, 2022). The students were informed about the research project and the use of data and were free to give the permission to have their documents investigated. The documents were submitted anonymised by the students and the anonymisation was doublechecked and ensured by the researcher. The main result are different types of reflection that lead to different types of (non)transformation of professional habitus and have practical conclusions for teaching. These results have impact on pedagogue's ability to reflect and thus on their opportunity to work professionally. Therefore, they are a basic element for teaching the future pedagogues.

concepts of child, professionalisation, reflection methods, transformation of habitus, teaching future pedagogues
From tacit knowledge to explicit agency: Finnish early childhood in-service teachers use of critical reflection for designing influential texts
Alexandra Anton (1) and Jui-Arna Aerila (2); (1) Åbo Akademi University, (2) University of Turku, Finland

The aim of this study is to explore how Finnish ECEC professionals take theory to practice when engaged in guided critical reflection as part of a professional development course on teachers as social influencers. The new curriculum for ECEC emphasizes Finnish teachers’ agentic role in applying it holistically and responding to children’s diverse needs (FNAE, 2018). This study expands our knowledge about the open practicalities that help clarify teacher’s agency (Kangas & Harju-Luukkainen, 2021). We employ culturally sustaining pedagogy (Paris, 2012) and the theory of professional agency to reflect on teacher’s sociocultural perspective (Eteläpelto et al., 2013), and to describe how agency manifests itself (Archer & Brock, 2017). A multiple-case design using a qualitative research paradigm was used (Miles et al., 2019), and the thematic content analysis technique was used. Data collected during and after the course, consists of influential texts, written critical reflections, and semi-structured interviews. The study group included eleven multidisciplinary early childhood professionals. Informed consent procedures were followed, and pseudonyms were used to protect the identities of participants (Zeni, 1998). Preliminary findings indicate three main approaches in-service teachers manifest explicit agency. Some incorporate child-centered emotional elaboration, using children’s voices and lenses to the world; Some opt for research-based rational and intentional elaboration; While others combine the two, which informs about the crucial role of reflecting on their own agency. For the future, we would argue that course designs that involve guided critical reflection and highly individualized assignments are necessary for transforming tacit knowledge into proactive agency.

critical reflection, in-service teachers’ agency, professional development, culturally sustaining pedagogy, diverse children

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

ES
PERCEPTIONS OF OUTDOOR LEARNING FROM CHILDREN, TEACHERS AND PARENTS
Chair: Sara Tours, Slippery Rock University, United States

Analysis of children and parents’ satisfaction and importance of experiential landscape of forest kindergarten: Focusing on the phenomenological landscape
Ji Youn Shin and Lim-Jung Lee, Sahmyook University, South Korea

This study aimed to analyze the characteristics of location satisfaction and importance for the phenomenological experiences of children and parents, focusing on forest kindergartens. Although many studies have been conducted on the efficiency of forest education locations recognized by teachers and experts (Nastran, 2020), few studies have focused on investigating the satisfaction of experimental landscapes according to the forest kindergarten location recognized by children and parents (Kang, 2019). The phenomenological approach was used for identifying individual experiences and uniqueness, as opposed to the existing scientific and quantitative approaches (Lim, 2009). The index of the experiential landscape locations were set through a focus group interview (FGI) and then a face-to-face survey was conducted to determine the level of satisfaction and importance of 16 locations by 178 children and 128 parents. The IPA (Importance-Performance Analysis) was used for identifying areas that needed improvement and areas where excessive investments have been made. Participants were provided with a consent form and guided the autonomy of the survey. All the information collected is kept strictly confidential and ensures the anonymity of participants. The findings demonstrated that children and parents had higher satisfaction and importance with natural locations such as lakes, lawns, forests, and natural playgrounds than locations that were artificially created such as the Forest Experience Center. On the other hand, parents preferred a safe and clean environment compared to the children who experienced the forest firsthand. These findings suggest implications for deriving guidelines and evaluation criteria for creating experimental landscapes of forest kindergartens.

forest kindergarten, phenomenological landscape, experiential landscape, importance-satisfaction analysis, children and parent

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Teacher perceptions of the outdoor experience on traditional playgrounds: A case study
Inaki Larrea (1) and Alexander Muela (2); (1) Mondragon University, (2) University of the Basque Country UPV/EHU, Spain

The aim of this study was to analyse teacher perceptions regarding the outdoor experience on traditional playgrounds. It is considered important to investigate teachers’ perceptions regarding their outdoor experiences, since they can influence children’s outdoor play and learning activities. Some teachers associate the outdoors with freedom, play, autonomy, curiosity or adventure (Waite, 2011), even though their interventions may not be consistent with these concepts (McClintic & Petty, 2015). A lack of comprehensive understanding of the benefits of outdoor education has also been pointed out (Tulling et al., 2019). However, few studies have collected teacher perceptions regarding their experience in paved and sports-oriented playgrounds. This case study was carried out at a school (2–16-year-old children) that limits its outdoor experience to recess time on a traditional playground. All 78 teachers from the school participated in the study. Focus groups and a questionnaire were used. The study was carried out in accordance with the ethical standards established by EECERA and it was approved by our university’s Ethics Committee. Teachers gave a positive assessment of outdoor education for student socio-emotional development and a negative evaluation of the characteristics of the outdoor space of their school. They defined it as a space that caused people to feel uncomfortable or stressed and they cited its lack of suitability. Various perceptions towards their role were identified. As some teachers indicated, to promote outdoor education and children’s curiosity, it is not enough to simply make improvements on the spaces, but better teacher training must also be achieved.

outdoor, teacher, teacher perceptions, teacher role, playground

This application discusses a completed piece of research.

Fostering children’s curiosity, agency, and participation through the forest school approach
Sara Tours, Linda Zane, Enoh Nkana, Hye Ryung Won, Jessica Jordan and Laura Kelley, Slippery Rock University, United States

The research aim was to explore perspectives of American children within the inception of a forest school approach. Forest Schools provide students with the opportunity to participate in “exploratory learning and play activities to take place, it is also somewhere where the children focus on specific tasks over a period of time” (O’Brien, 2009, p.51). A number of themes were gleaned from the data, the most significant ones being the agency over their selected play, curiosity that was fosters through the activities, and the social and emotional benefits. This study supports the work of Turtle et al. (2015) who explored students’ perspective of Forest Schools. The methodology was qualitative in nature. Using the paradigm of Photovoice along with written evidence allowed for multi-modal triangulation of data. The methods were conducted by university faculty and undergraduate researchers, who analyzed both the visual images and written reflections of the elementary student group and middle school student group. Themes and patterns of meaning were analyzed by the researchers, noting trends within the data. The ethical concern was that the researchers would hinder student experiences in the Forest School. Therefore, researchers were not present during data collection. Children’s perceptions of their initial exposure to a forest school teaching methodology will be shared within the session, along with visual evidence of data points that were gathered. Contrary to common weather and/or safety concerns, our research supports that children reap many benefits from the forest School Approach.

forest school, play, nature, outdoor education, alternative approach

This application discusses a completed piece of research.

E6
PRE-SERVICE TEACHERS BELIEFS
Chair: Lisa Schneider, University of Siegen, Germany

Friday 1st September, 11:30 - 12:50, 7th Grade Room, Level 2, Colégio D. Luísa Sigea

Learning outdoors in the higher education: Experiences of pre-service teachers
Hatice Sebnem Cetken Aktas, Gunes Ezgi Demirci and Serap Sevimli-Celik, Middle East Technical University, Turkey
The study aims to determine the pre-service teachers' experiences on their practical and theoretical knowledge within a semester-long course on Outdoor Education. Outdoor education in the early years is essential in child development, and educators play a crucial role in giving children this opportunity (Waite, 2010). Thus, teachers' competence level and knowledge have great importance (Sandseter et al., 2012; Tuuling et al., 2019). According to Froebel, exposure to nature helps children understand ideas in a concrete way and fosters their capacity for problem-solving, physical development, and sense of community (Bruce & Dyke, 2017). 7 pre-service teachers who took the course provided the data for the current case study through one-on-one structured interviews and focus groups. Content analysis was used. Approval from the research ethics committee of Middle East Technical University was obtained. According to preliminary findings, participants usually have positive feelings about their outdoor education course experience. The participants stated that when they became teachers, they planned to use the outdoors to support children’s holistic development and provide meaningful and active learning. Moreover, parental attitudes, cultural differences, classroom management, and weather conditions are their perceived barriers. There were also changes in participants’ personal development, such as more qualified nature time and taking sustainable actions, and professional development such as increased conceptual knowledge, and self-efficacy after the course. This research aimed to develop the theoretical and practical knowledge of early childhood pre-service teachers on outdoor education, and contribute literature by giving insight into the course content, scope, and practices.

outdoor education, teacher education, early childhood education, pre-service teachers, teaching and learning

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Enhancing early childhood education student teachers’ mentalization and interaction skills: An online intervention
Jenny Marttila (1), Ruben Fukkink (2) and Maarit Silvén (1); (1) University of Turku, Finland, (2) University of Amsterdam, Netherlands

The aim of the intervention study was to promote mentalization and interaction skills of Finnish early childhood education (ECE) student teachers. Some evidence suggest that ECE teachers’ reflections on mental states (mentalization; Sharp & Fonagy, 2008) are positively related to higher-quality interaction (Degotardi and Sweller, 2012) and child development (Colonnesi et al., 2017). To date, however, evidence on ECE student teachers is absent. The focus of the Video Enhanced Reflective Practice (VERP) was on mentalization and interaction. Four teaching components were applied (Hamre et al., 2012): knowing (e.g. lectures about high-quality teacher-child interactions), seeing (observing interactions), doing (practicing interactions in daycare centers) and reflecting (written assignments and discussions). Twenty-one ECE student teachers in a BA degree program participated in the VERP intervention as a part of their online studies on children’s language development and teacher-child interactions. The students’ and the VERP trainer’s talk about mental states (e.g. cognition and emotion) was analyzed from recorded group discussions. Students’ self-reports of attuned interaction and guidance were collected before and after the intervention. Written informed consent were collected from all the participants concerned. They were allowed to withdraw from the study at any time point. The participants’ talk about children’s cognitive states increased over time. In addition, the students perceived their attuned interaction skills higher after the intervention. The possible transfer effects of the intervention will be presented. Finnish undergraduates seem to benefit from VERP training when combined with evidence-based teacher training, although a stronger focus on emotional states is needed.

mentalization, interaction, early childhood education teacher training, intervention, video enhanced reflective practice

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Portuguese Initial teacher’s education curricula and the family involvement and participation issue
Sonia Cabral, Lourdes Mata and Francisco Peixoto, Centro de Investigação em Educação (CIE ISPA), Instituto Universitário (Institute of Applied Psychology - ISPA), Portugal

This study aims to analyze whether Portuguese initial teachers’ education (ITE) curricula programmes address family involvement and participation (FIP) and how do they do it. Research is drawing more attention to the gap between ITE significance and their lack of explicit information and scientific evidence on FIP contents (Epstein, 2018; Nathans et al., 2020). In Europe researchers state that most ITE programmes do not include explicit information on how to develop FIP (de Bruïne et al., 2014; Thompson et al., 2018). It is now consensual that FIP in education increases the quality of students’ academic and social development (Smith et al., 2020), and it
is therefore crucial to prepare future teachers to promote it (Epstein et al., 2019; Mancenido & Pello, 2020; Walker, 2019). This study fits into a pragmatic paradigm using a mixed methods approach (Creswell & Plano Clark, 2018) to uncover FIP in Portuguese institutions addressing preschool and primary education teachers training. A content analysis was carried out using MaxQDA (Kuckartz & Rädiker, 2019). The intercoder reliability was good, $k$-Cohen = .75 (Cohen, 1960). It was approved by Ispa Ethics Committee. Contents of 560 programmes were analyzed from a representative national sample of ITE master’s degrees ($N=33$). The results showed that, mostly, the learning to promote FIP is not explicit, although Portuguese government already contemplates it through specific legislation. Explicit competences to develop, FIP contents, or references in the programmes were not frequent nor consistent, corroborating international studies. These findings contribute to the international growing body of research on ITE for FIP, specifically in Europe.

initial teachers' education, curricula, programmes, family involvement, family participation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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E7

RESEARCH AND INQUIRY BASED PROFESSIONAL DEVELOPMENT

Chair: Svava Mörk, University of Akureyri, Iceland

Observing the observation: A co-constructivist-postmodern ethnography on the observation and documentation procedure of the early excellence approach

Magdalena Hartmann, University of Osnabrück, Germany

This one-year ethnography aimed to provide theoretical descriptions of the observation and documentation practices of pedagogical professionals. In doing so, it followed up on preceding ethnographic studies of observation and documentation procedures (esp. Cloos and Schulz, 2011; Kerle, 2022). Referring to Nicolini’s (2012) practice-theoretical tool-kit approach and an observational theory perspective (Honig, 2010; Cloos, 2008; Kalthoff, 1997), the study investigated how the social position of the pedagogical professionals is established in interaction with other actors (materials used, observed child, other children, colleagues). The study was guided by a (co-)constructivist (Charmaz, 2011, 2014) and postmodernist (Clarke, 2012) understanding of grounded theory and combined with the research style of ethnography (esp. Breidenstein et al., 2013; Emerson, Fretz & Shaw, 2011). In terms of ethnography, multiple methods (participant observation, interviews, document analysis) were used. Informed consent was obtained from all participants. For the children, consent was first obtained from their parents and then negotiated with the children on an ongoing basis. One of the core results demonstrated that the observation and documentation procedure characterizes the transformation into the figure of a distanced observer. This leaded to a multiple distancing, in that pedagogical professionals distanced themselves from the pedagogical events and interaction in kindergartens, from the child to be observed as well as from the already existing knowledge about the observed child. With reference to the conference theme, it can be asked whether professionalization of pedagogical is not fundamentally opposed to the participation of children and different forms of observing has to be implemented.

professional observation and documentation procedures, (co-)constructivist-postmodern ethnography, practice-theoretical perspective, observational theory perspective, constructivist and postmodern grounded theory approach

This application discusses a completed piece of research.

Professional development of student teachers: Supporting professional competence

Svava Mörk and Anna Elisa Hreidarsdottir, University of Akureyri, Iceland

The research aimed to generate knowledge and support student teachers to work on an integrated project based on the national curriculum connected to two Early Childhood Teacher Education courses focusing on inquiry-based learning (IBL). Recent studies (Gholam, 2019; Voet & De Wever, 2018) show the importance of IBL for student teachers with the focus on empowering and motivation, as well as engagement in IBL, affected knowledge goals and self-efficacy. The theoretical foundation is IBL, drawing upon theories of creativity in preschools (Rinaldi, 2021; Vecchi, 2010). IBL combines learning and practice for student teachers and
constructs knowledge through collaborative and communicative processes (Khalaf, Zin, and Bt, 2018). Therefore, IBL can be implemented in student teachers' and young children's learning to develop knowledge and skills effectively. The study is action research using a multimethod approach. Data were gathered with professional developmental conversations, reflections, field notes, questionnaires, teaching materials, student projects, photos, and documentation. All participants gave their informed consent and were promised confidentiality. Preliminary findings show that students liked being challenged academically and found the approach essential to their learning. Students also discussed how their previous ideas that creative work and academics were challenging to connect had changed by intertwining these two courses, one that focuses on creativity and the other on theory. By planning the study session and the projects based on different courses, there will be an opportunity to further support student teachers with an emphasis on their professional competence.

**professional competence, professionalism, inquiry-based learning, action research, ECE teacher education**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Educators developing their professional practice with toddlers: ‘I think it was a great to get the opportunity to take part in the project, it stirs you up a little bit’**

Ingibjorg Sigurdardottir and Hrönn Pálmadóttir, University of Iceland, Iceland

The aim of this study was to strengthen educators’ professional development and preschool practice with toddlers. Previous studies have shown that collaborative action research is effective approach to improve practice and for teachers’ professional development (Bruce et al., 2011). In the study, professional development is seen as formal and informal education. It deepens and expands educator’s competences and knowledge (Richter et al., 2011). Professional development is related to daily practice and leads to improvements and evolution. Moreover, it promotes professional satisfaction and decreases the likelihood of burnout and elimination (Starfsbrúinn kennara, n.d.). The methodology of collaborative action research was used in the study which lasted over four years. Educators working with the youngest children in three preschools and two researchers collaborated through the research process. Collaborative action research can be personal as participants examine their own work and practices. Emphasis regarding ethics in such research is that all participants have the same right to express their views at all stages of the study, regardless of their role (Locke et. al, 2013). The findings show that educators experienced the research process as educational and empowering. The process provided opportunities to reflect on their practice and improve it. Collaboration was important factor in the process, inside each preschool and between preschools. The study contributes to knowledge about how action research can be effective approach for educators’ professional development. Furthermore, it highlights the importance of giving educators opportunities and time for professional reflection which lead to improved practice and education for young children.

**professional development, preschool practice, collaborative action research, toddlers, empowering**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**E8**

**INCLUSION ISSUES IN ITALY, PORTUGAL AND SWEDEN**

**Chair:** Christine Parker, Pen Green Research Base, United Kingdom

the importance of job resources and work-related sense of coherence in Swedish preschool's work with children in need of special support

Veronica Semelius Granevald (1), Monika Vinterek (1) and Lotta M. J. Strömsten (2); (1) Dalarna University, (2) Umeå University, Sweden

This study aims to show how job demands and resources are estimated by preschool teachers and ‘child minders’ in working with children in need of special support (CINSS) and in relation to work-related sense of coherence (Work-SoC); how job demands, and resources co-vary; if there are any differences in how this is estimated by the professions. Previous research show that a preschool with good quality is considered in Sweden to be closely linked to inclusion (Palla & Sjögren, 2022), but preschools have difficulty meeting children’s differences (Gäreskog & Lindqvist, 2020) and high teacher stress is reported (Ramberg et al., 2022). The
Theoretical framework draws upon Job Demands-Resources Model (Demerouti et al., 2001) and the theory of Work-SoC (Vogt et al., 2013). A cross-sectional web survey within a quantitative research design was answered by 93 preschool educators from 57 randomly selected municipalities. They had participated in special educational group supervision (SEGS). Descriptive statistics, Mann Whitney’s non-parametric tests and Spearman’s rho correlation tests were mainly used as analysis methods. The web survey was voluntarily after informed consent. The results show SEGS as a highly estimated job resource; no group differences existed between professions estimates of job demands and job resources; the strongest relationship was shown between social support and self-perceived control; Work-SoC was positively related to many job resources and negatively related to demands/difficulties. Implications for practice concerning demands and supporting factors that can encourage professionals in meeting children’s needs and to promote children’s curiosity and participation in preschool activities are discussed.

**children in need of special support, work-SoC, job demands, job resources, preschool**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**The Thinking big/Pensare in grande project as a key for a high quality inclusion in the early childhood education and care**

Vanessa Macchia (1), Stefania Torri (1), Gianluca Amatori (2), Silvia Maggiolini (3) and Moira Sannipoli (4); (1) Free University of Bolzano-Bozen, (2) European University of Rome, (3) Catholic University of the Sacred Heart, Milan, (4) University of Perugia, Italy

The project aims to implement the quality of educational interventions in Italian services for children from 0 to 6 years of age, in order to help professionals enhance every child, including those with disabilities and special educational needs. Research has shown that ECER is crucial, both for the development of the person and for the early recognition of difficulties. (European Agency, 2017; Motiejunaite, 2021). Underpinning the study is inclusion as a value principle for developing the potential of all individuals to the highest possible level, with a holistic view of the child. This is also the vision of the Linee Pedagogiche, (2021) the cultural and pedagogical framework of the integrated 0-6 system in Italy. This study uses questionnaires and is conducted within a mix-method interpretive research paradigm. They are filled in by 400 teams of teachers and educators in different ECEC contexts in Italy. The analysis is conducted both through a content analysis and by converting the answers into numerical data. All participants were provided with a consent form and an information sheet, with the opportunity to withdraw from the study at any time. Expected findings are: geographical differences within the country, tensions between educational and health care institutions, deficits in the training of educators and teachers, but also reporting of good practices, even in the most challenging situations. Data collected will offer reflections and guidelines in order to standardize pedagogical practices, which to date are still very heterogeneous, suggesting implications for how environment and routines could be adequately used.

**quality in ECEC, ECEC in Italy, integrated system, teacher’s voice in ECEC, teacher training**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**The effect of a psychomotor intervention program on motor and socioemocional skills of preschool children with autism and typical development: a pilot study**

Adriana Frazão (1), Sofia Santos (2), Celeste Simões (3), Ester Pereira (4) and Paula Lebre (1); (1) INET-md, Faculdade de Motricidade Humana, University of Lisbon, (2) UIDEF – Instituto da Educação, Faculdade de Motricidade Humana, University of Lisbon, (3) ISAMB, Faculdade de Motricidade Humana, University of Lisbon, (4) Leiria Hospital Center (Centro Hospitalar de Leiria), Portugal

This study investigated the effects of an inclusive psychomotor intervention program (Psicomotricidade IE!) on motor and socioemocional skills of preschool children with autism spectrum disorder (ASD) and typical development (DT). The development of motor skills from an early age plays a fundamental role in children’s learning (Alonso-Vargas et al., 2022). Movement-based interventions (e.g., psychomotor interventions) in preschool children with ASD required for effectiveness (Hume et al., 2021). Hypothetically, an integrated intervention intentionally targets both motor and socioemocional domains, aiming to promote the social inclusion, a determinant of mental health and wellbeing (Van Bergen et al., 2019). A specific program was designed to improve both domains, supported by several theories where the child is the agent of bodily play experiences. An exploratory longitudinal study involved a convenience sample of 22 children aged 4–6 years (4 with ASD; 18 with DT) that had 12 sessions of psychomotor intervention program, developed in preschools in Leiria (Portugal). A pre-post assessment included data from Neuropsychomotor Function Evaluation Battery (NP-mot.pt), Preschool and Kindergarten Behavior Scales - Second Edition (PKBS-2), and Child Behavior Checklist 1.5-5 (CBCL). Ethics Commission of Centro Hospitalar de Leiria approved the ethical procedures of the project. A statistically significant difference was found in NP-mot.pt (z=-4.108, p<.001) and CBCL between both assessments (z=-2.050,
p=.040). No statistically significant differences were found in PKBS-2 (p>.05). Limitations are discussed. Findings point out the contribution of bodily play experiences to psychomotor development in preschool children with ASD and DT and the importance of a whole school approach.

preschool education, autism spectrum disorder, psychomotor intervention, motor skill, socioemocional skill

This application discusses a completed piece of research.

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**E10**

**Teacher's lived experiences and professional beliefs**

Chair: Jenny Henriksson, Kristianstad University, Sweden

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**Learnings from educator lived experiences of quality ecologies**

Susan Grieshaber and Elise Hunkin, La Trobe University, Australia

This report paper on the preliminary findings of a study that aims to disrupt dominant notions of quality in early childhood settings by accessing educator lived experiences of the phenomena. Existing, dominant views of quality in early childhood settings overrepresent observation-based scales and ratings that draw on interpretations of quality as process or structural factors (Henry et al., 2022; Roberts-Holmes & Moss, 2021). What is much needed are insights into the personal, contextual nuances of quality (Garcia et al. 2020; WBG 2016). This view of quality as lived, interconnected, moment-by-moment experiences we have theorised as quality ecologies (Hunkin & Grieshaber, in press). The study is a critical digital ethnography (Pink, 2012). In phase 1, we utilised an online digital platform to access educators', including pre-service teachers, creative (i.e. photographs, texts, audio or video) responses to provocations about how they experience and co-construct quality in EC settings. Phase two then extrapolated on Phase 1 key themes and topics through focus group interviews. Ethical approval has been obtained from La Trobe University and the Victorian Department of Education. No identifying information was collected or stored. Preliminary findings suggest quality ecologies to be: co-created, multi-dimensional, impactful moments, emergent and spontaneous, and impacted on by agents human and non-human. This implicates a theory of quality ecologies as able to convey divergent, multi-perspectival thinking about quality. Identifying complex dimensions of quality from the experiences of educators and pre-service teachers can reveal new insights into how to support quality ecologies in early childhood settings.

quality in early childhood, critical ecologies, educator perspectives, critical digital ethnography, lived-experiences

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**Professional beliefs about child development and care in infant-toddler childcare centers**

Ana Margarida Fialho (1), Vanessa Moutinho (1), Ana Aguiar (1), Andreia Carvalho (1), Cindy Carvalho (1), Gabriela Bento (1), Luisa Barros (2), Joana Cadima (3) and Raquel Corval (1); (1) ProChild CoLAB, (2) University of Lisbon, (3) University of Porto, Portugal

This study aims to examine the beliefs of professionals working with infants and toddlers in early childhood education and care (ECEC) centres. Beliefs have an important role in the way professionals conceive early child development and learning and can be reflected in their observed practices (DeGotardi & Gill, 2017; Pianta et al., 2005). Early life experiences, characterized by responsive and sensitive interactions, can positively impact infants' and toddlers’ development and well-being, with short and long-term effects (Ainsworth et al., 1978; Smith & Pollak, 2020). In deprived social and economic environments, opportunities for quality interactions between children and adults are important to minimise the negative impact of adversity (Shonkoff et al., 2012). High-quality ECEC centers can serve as a protective environment for children, providing enriched experiences and relationships (Burchinal et al., 2015). 84 ECEC professionals from eight centers in four Portuguese regions (Lisbon, Aveiro, Oporto and Guimarães) participated in this study. The assessment of beliefs about infant/toddler development and care was based in a 63 Likert items measure adapted from Valloton and colleagues (2015). A consent form and information sheet was provided to ECEC professionals and were given the opportunity to withdraw from the research at any time. The descriptive analysis conducted reveals developmentally appropriate beliefs despite a tendency to be more directive. The results will be discussed in terms of its contribution for a deeper understanding
of the mechanisms involved in high-quality practices, highlighting the importance of targeting professional beliefs on pre-service and professional development approaches in the ECEC field.

*infants, toddlers, quality, beliefs, pedagogical practices*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Contextual understandings – Swedish preschool teachers’ constructions of the concept of teaching**

Jenny Henriksson, Kristianstad University, Sweden

The aim of the study is to contribute with insights about preschool teachers’ understandings of the concept of teaching, and the underlying social constructs on which understandings are based. Previous research shows that perceptions of the concept of teaching have transformed, and the concept has partly been given new and sometimes conflicting meanings (Berg, 2022; Hilden et al., 2018; Jonsson et al., 2017; Olsson et al., 2020; Vallberg Roth et al., 2021). Social constructionism (Burr, 2015; Gergen, 1985; Linell, 2006, 2009) is used to analyze how teachers’ conceptualizations are constructed in a social and communicative context. A key assumption according to social constructionism is that individuals socially construct understanding of the outside world in interaction with others in specific historical and cultural contexts. People are also assumed to act based on these social constructs.

Adopting a thematic life story approach (Goodson & Numan, 2003) interview conversations (Goodson & Sikes, 2017) were conducted through videocalls or phone with nine participants. A thematic content analysis is used (Riessman, 2005). The research adheres to ethical guidelines (Swedish Research Council, 2017) including: informed consent from participants handled in accordance with GDPR, researcher’s interpretation and reconstruction of jointly generated data and the processing of the life stories. Findings shows thirteen social constructions of teaching. They appear as concurrent, conflicting and intertwined, and together form a multifaceted whole. The study contributes to a continued and nuanced discussion about the concept of teaching and with knowledge that enables reform of ECEC teaching practices.

*preschool, teaching, teachers, social constructions, patterns of action*

This application discusses a completed piece of research.

**E11**

**EARLY CHILDHOOD EDUCATION, THE WAY FORWARD**

**Chair: Nancy Barbour, Kent State University, United States**

**Challenges influencing development of young children in ECCE centres in a South African context**

Benita Taylor, Jeannine Keating and Stef Esterhuizen, North-West University, South Africa

This study explores challenges hampering holistic development of children in under-resourced ECCE centres in informal settlements in the North-West Province, South Africa. Literature states that children’s holistic development is crucial for later learning and optimal thriving (Darling-Hammond et al. 2019; Gabbard 2022), which can be hampered by the environment in which a child is raised (Haywood & Getchell 2020). Critical transformative learning theory (Mezirow 2000) guided the research, since it focuses on critical thinking, reflection and learning partnerships (Wood 2020). Participants (practitioners and researchers) formed an action learning set (ALS) where we collaboratively enhance our learning, praxis and policy implementation to overcome challenges influencing the holistic development of children. Within this qualitative study, a participatory paradigm framed the participatory action learning and action research (PALAR) design (Wood 2020). The ALS encouraged one another to collaboratively reflect on our experiences in practice to overcome challenges hampering holistic development of children. The ALS collaboratively generated and analysed data thematically, utilising ALS discussions and questionnaires. Ethical clearance was granted by relevant departments. We adhered to PALAR’s principles by ensuring the ALS was well-informed. They signed ethical agreement forms and confirmed their commitment. Therefore, each other’s voices, rights and opinions were respected and acknowledged. Findings indicated that various challenges, including limited resources, practitioner training and high staff turnover, hampered the holistic development of children. Collaborative training and programmes are necessary to overcome challenges and take ownership to improve practice and policy implementation in under-resourced ECCE centres to promote holistic development of young children.
This application discusses a completed piece of research.

Looking forward, looking back: Creating an historical dialogue of EC practices
Nancy Barbour (1), Nancy File (2) and Andrew Stremmel (3); (1) Kent State University, (2) University of Wisconsin, (3) South Dakota State University, United States

As "elders" in the field, we see how Early Years Education has changed over time. Trends have come and gone, leaving traces to be treasured, questioned, or potentially reclaimed. We have asked six different pairs of fellow "elders" to dialogue together regarding their area of expertise (e.g., curriculum and pedagogy, EC systems, play) for an edited volume, in progress. It behooves all of us to explore the history of the field. Our aim is to elicit a more personalized historical perspective, one quite different from histories such as Lascarides and Hinitz's History of Early Childhood Education (2000). The dialogues we have orchestrated are more like the oral history interviews of child development scholars gathered by Milton Senn (US Library of Congress, 1969). Through an electronic format, framed by essential questions, our scholary "elders" have provided accounts that are personal, reflective, and expressively different from an academic historical report. We have chosen a qualitative and highly personal approach to exploring historical trends. We have long time leaders in the field examining particular questions related to their work and experiences. We have chosen a dialogic approach for its generative capacity. Chapter authors have given their consent to the dialogic process. Examination of the field's trends and history by those who have lived them, with the opportunity to reflect forward and backward provides a perspective different from a history framed by important events and influential individuals. The edited volume is aimed at EC future practitioners as they negotiate their place in the field.

EC history in the US, curriculum trends, play, families, EC systems

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Nurturing early childhoods for all our tomorrows
Kathryn Peckham, Centre for Research in Early Childhood, United Kingdom

This study reflects on pedagogical practices as experienced by children and the resulting engagement, proposing new ways of thinking about early years practice in classrooms. Echoing concerns of downward pressures for didactic instruction troubled by Nicolopoulou et al. (2015) and the measuring, computerisation and standardisation of young children’s abilities (Blair et al., 2005; Howard et al., 2016). Within a child-centred study, the phenomena of early learning as experienced by children is explored. Incorporating the realised impact of pedagogy on the development of learning dispositions. This qualitative and naturalistic approach to viewing early childhood supports a cognitive exploration of deeper learning motivations (Nicolopoulou et al., 2015) as viewed through the actions of adults and children. Exploring the complex realities of early learning it recognises children, not as passive recipients but as individuals within an ecological whole. Following full disclosure, consent was obtained from adults and children with ongoing weekly assent. Fluidity built into the methods allowed for dissent and feedback loops at every stage retained integrity. Sitting within a larger study, children’s declining engagement on school entry is explored along with inconsistencies between the understanding of children’s abilities and those being demonstrated. Indicating the disservice being done to our young learners and troubling the notion of learner identity. Through a greater understanding of the phenomena of early learning, the impact of pedagogy on child engagement can be better understood as we support child engagement during these formative years. A developmental theory and toolkit will also be presented.

pedagogy, child engagement, learning environment, children’s perspectives, phenomenological study

This application discusses a completed piece of research.
E12
Rethinking Play SIG Self-Organised Symposium
PLAY AS THE SPACE FOR AGENCY DEVELOPMENT: CULTURAL-HISTORICAL PERSPECTIVE
Chair: Milda Bredikyte, Vytautas Magnus University, Lithuania

From the developmental perspective, playing is an activity that supports the formation of self-regulation and agency in children. Despite being a children’s activity, high-level, complex social play hardly appears without adult mediation. Sensitive support strategies are crucial in developing children’s agency in play. The critical questions should be considered: How do teachers understand play and its role in child development and learning. How do their play support strategies focus on children’s meanings and initiatives. How do teachers balance children and their initiatives while constructing joint play. How do they move from a position of a teacher to a position of a play partner. Do they notice how children’s creativity and initiatives reveal in play, are children's initiatives always creative. How does the teacher’s agency is transformed in joint play with children.

Subjectivity is key: Teacher’s perspective on play and its relation to the play support strategy
Anna Iakshina and Tatiana Le-van, Moscow City University, Russia

The aim is to study the relation between teachers’ perspectives on play and the strategies of play support. Playful teacher is a mediator conveying the ideal form of play (Vygotsky, 2001). The ideal form is a developed play with an imaginary situation and double-subjectivity (Kravtsov, Kravtsova, 2017). Directive intervention ruins play (Oers, 2014), outsider position doesn’t support play though it remains the most popular (Iakshina, Le-van, 2023). Teachers’ shift from outsider or didactic to partner position is the most challenging issue for play support (Bredikyte, 2022), and it may be related to teachers’ perspectives on play. Theoretical framework is Vygotskian theory (Vygotsky, 2016). Interpretative paradigm, qualitative and quantitative analysis were used. Interviews (with commenting on 2 videos of play and pseudo-play) were conducted with 34 preschool teachers. Play support strategies were assessed with the "Play Environmental Rating Scale" (Shiyan et al., 2023)in 28 preschool classrooms. Participant’s consent was obtained after providing written information. Data were anonymized. The research is conducted according to EECERA ethical code. The quality of play support differs: minimal level but wide dispersion (mean= 3.35, sd=1.31, min=1.29, max=6.00). Significant difference is revealed in the play support strategies among teachers with a contrast understanding of the pseudo-play video. Teachers who use children's imagination and subjectivity as criteria to distinguish true play create a multifunctional play environment, provide more time for play and more often participate in joint play as partners. The results may impact in-service programs on play support.

play, play support, teacher's perspective, Vygotskian theory, quality assessment

This application discusses a completed piece of research.

Developing self-regulation through play (3–6-year-olds)
Milda Bredikyte and Agne Brandišauskienė, Vytautas Magnus University, Lithuania

Self-regulated behavior is a prerequisite for learning and success in life. This study explores the relationship between (3-6-year-olds) children's play and self-regulation skills. The play has among researchers a status of activity having a decisive impact on development and learning in early age. High-quality play hardly appears without adult mediation (Fleer, 2015; Hakkarainen, Bredikyte 2020). The framework of the study is a cultural-historical theory of play Vygosky (1987), El’konin (2005), Smirnova (1998). This is a quantitative study that was conducted in two stages. In the first stage, 454 children participated. The level of children’s play and self-regulation skills were evaluated by filling out a Children’s Play and Self-Regulation Checklist. Narrative play interventions were performed in the second stage, 57 children participated. Before and after the interventions, play and self-regulation skills were assessed using the same instrument. The research was conducted following the ethical rules of the Helsinki Declaration. All parents were informed about the study and gave their children written permission to participate. Data analysis revealed that the levels of children’s play and self-regulation skills are statistically significantly linked: the better the child performs an assumed role in play, the higher the level of their self-regulation. The children’s play and self-regulation improved after the narrative play interventions. The study's results suggest that sensitive adult participation in play improve children's play and self-regulation skills. The checklist might
serve teachers as an tool, evaluating the actual level of a child’s play and self-regulation, and observe the dynamics of children’s play development.

**play, self-regulation, narrative play interventions, children’s play and self-regulation checklist, Cultural-Historical Theory of Play**

This application discusses a completed piece of research.

**The interrelation between children’s creative thinking and their initiative in play**

Olga Shiyan, Anna Lakshina and Igor Shiyan, Moscow City University, Russia

The aim is to study the relationship between creative (dialectical) thinking and play initiative in 6-year-olds. Play is a context for the development of various psychological phenomena - executive functions, emotional regulation (Bodrova, 2017, Fleer, 2016), creativity (Russ, 2019). Creative (dialectical) thinking - solution of contradictory situations (Besseches, 2019, Veraksa, 2020) - was studied in the context of children problem solving and storytelling (Shiyan, 2021). Theoretical framework is cultural-historical approach to play (Vygotsky, 2001) and dialectical approach to creative thinking (Veraksa, 2019). 57 6-year-old preschoolers participated in the study. At the first stage we elaborated the checklist to assess the initiative in pretend play in preschool settings with unstructured materials (without teachers’ involvement). Children’s pretend play sessions were videotaped. At the second stage we used two tools to assess creative (dialectical) thinking: 1) resolving contradictions according to pictures (Shiyan, 2010) and 2) creating of own narratives (Shiyan, 2022). Parent’s consent is obtained after providing written information. Children participated voluntarily and could withdraw from the study at any time. EECERA ethical code was followed. Using checklists, we counted the number of play initiatives for each child. The correlational analysis of the study data reveals the interrelation between the children’s initiatives and their manifestation of creative (dialectical) thinking in composing narratives (0,32, p< 0.05) and in resolving contradictory situations (0,28 p<0.05). The study outcomes can be used for in-service training focused on play support, fostering child’s initiative and creativity.

**play, creative thinking, dialectical thinking, initiative, Vygotskian theory**

This application discusses a completed piece of research.

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**E13**

**DEMOCRATIC RIGHTS AND VIRTUES IN ECEC**

**Chair:** Jan-Erik Mansikka, University of Helsinki, Finland

**Comprehensive internationalisation – Democratic rights and agency**

Carita Sjöberg Larsson and Ingmarie Bengtsson, Kristianstad University (KU), Sweden

The aim of this empirical study is to develop internationalisation work in higher education exploring students experience on the concept of internationalisation for all in Preschool Teacher education, KU, Sweden. In governing documents (SOU 2018:3; SOU 2018:78) the need of development on comprehensive internationalisation is emphasized. Fjellström (2018), Gravis and Lenz-Taguchi (2021) and Lunneblad and Hammarén (2018) points out that inclusion in democratic processes can promote intercultural understanding in international exchange. Interculturality is defined by Lahdenperä (2018) as something that denotes coexistence with interaction, also seen as a starting point in school development work and a quality aspect of education and communication. SOU (2017:19) highlights the importance of internationalisation in higher education. The study has a qualitative approach, through virtual networking between two universities in Pennsylvania US and Sweden. Data consists of 107 individually written student reflections on experiences of sharing perspectives. Reflections were sorted and analysed into themes (Denscombe 2018) on dominating patterns. Prevailing ethical principles have been considered from The Swedish Research Council (2017). Student participation by choice of hand in reflections. Anonymity was guaranteed. The dominating findings are the students expressing an increased interest in intercultural interaction, knowledge about cultural differences and similarities and understanding for the need of developing professional didactic strategies, advocating intercultural knowledge and human rights to agency. The themes derived from student reflections will be used in collegial dialogues and future developmental work in Preschool Teacher Education regarding global competences on intercultural interactions and internationalisation for all - teacher and child.
**Democratic virtues in ECEC**
Jan-Erik Mansikka, University of Helsinki, Finland

The aim of the study is to develop awareness of the conceptual dimensions of democracy in relation to ECEC. I ask what kind of democratic virtues are seen as valuable in working within ECEC. There are many studies in the late decades exploring how the concept of democracy is connected to the practice of ECEC, both in a Nordic (Bae, 2012; Einarsdóttir et al. 2015; Eriksen, 2018) and European (Moss, 2021; Sousa & Oxley, 2022) framework. This study will take its departure in John Dewey's seminal work Democracy and Education (1916/1997). I will trace the impact of Dewey's argumentation on the present discourse on democracy and education, in order to look at the dynamics and variation of how democracy is conceptualized within ECEC. The study is a theoretical analysis of literature. I will use philosophical argumentation, in a hermeneutical framework, to make a conceptual analysis. I will overcome ethical concerns about perspective and bias by working with diverse educational research philosophies, paradigms and methodologies as well as acknowledge and promote original and informing research. I will show how the close relationship between democracy and education in the last decades also has become an integral part of qualitative ECEC in Europe. The concept of democratic virtues has been discussed in relation to higher education (see Dekker, 2022), but in this case applied to ECEC. It is important to develop the democratic foundations of ECEC. This study will provide conceptual tools for both self-reflection of teachers and teacher education programs within ECEC.

*democracy, ECEC curriculum, children's rights, participative pedagogy, pedagogues role*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Resting on democracy but what democracy? Democratic citizenship in Swedish early childhood education policy in times of juridification**
Jenni Nilsson, Uppsala University, Sweden

The aim of this paper is to study ideological governance of Swedish early childhood education (ECE) by exploring the educational task of promoting democratic ideals through policy and how it is affected by juridification. This study takes indicators such as declining democracy globally (FreedomHouse 2022), tensions between child-centered curriculum and subject-centered curriculum within Swedish ECE policy (Liljestrand 2021), and increased legal regulation of education changing the educational task (Arneback & Bergh 2016, Novak 2019, Murphy 2020). Using neopragmatic curriculum-theory and its interests in educational values and language (Säfström & Östman 1999), the governance of democratic citizenship is explored through an analysis on how the terms democracy and citizenship are used in policy texts. A historical and intertextual approach on speech act theory by Quentin Skinner is applied; the main analytical concepts being speech act potential and criteria of application (1988). The study is a conducted within a qualitative interpretive research paradigm. The empirical materials consist of a selection of Swedish ECE policy texts published between 1986 and 2020. Although the data consists of public documents, ethical consideration is given throughout the process. To ensure a nuanced analysis the data is carefully selected with full transparency regarding criteria for chosen data. The emerging findings indicate that although the ideals of democracy and citizenship haven’t changed significantly on a textual level they may carry different meanings in different times due to changes in context surrounding the texts. This is relevant for understanding the complexity of governing through policy.

*early childhood education, educational policy, democracy, juridification, speech act*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Internationally, countries are experiencing an early childhood teacher workforce (ECT) crisis. In response, initiatives intended to increase the supply of ECTs are being rolled out, but without due attention to the impact of these initiatives on ECT quality. Research shows that ECTs contribute significantly to the quality of an early learning environment (Manning et al., 2019), yet this finding is not unequivocal (Early et al., 2007), suggesting that graduate ECT quality is variable and contextually influenced. We present research from Australia that interrogates ECT quality from three perspectives: (i) how might ECT quality in the early years be assessed? (ii) what ecological factors influence teacher quality? (iii) how is the practice of degree-qualified ECTs different from vocationally-qualified educators? The symposium will raise provocations about, and invite delegates to consider, how ‘quality’ can be at the forefront of efforts globally to increase the ECT pipeline.

**How is the practice of exemplary degree-qualified ECTs different from vocationally-qualified educators?**

Sandie Wong, Macquarie University, Australia

This research aimed to explore differences in early childhood educators’ practice, across different qualification levels. Higher educator qualifications have long been linked to higher quality early childhood education, including higher quality learning environments (Burchinal et al., 2002), language interactions (Degotardi et. al., 2016), and educator-child relationships (Manning et al., 2017). However, the evidence linking educator qualifications and quality is equivocal (Manning et al., 2017). One potential reason for this mixed evidence is that studies often fail to discern between differently qualified educators (Fenech et al., 2022). Indeed, little research has been conducted to examine differences in the work of degree qualified teachers from their vocationally trained colleagues (Fenech et al., 2022). The overarching study from which data for this presentation was drawn, of Australian exemplary early childhood educators, was conceptualised and framed within a practice architectures theoretical lens. (Kemmis & Grootenboer, 2008) This approach considers both the practices, dispositions, actions and abilities of educators, and the arrangements that enable and constrain these practices. Embedded within a social constructivist paradigm, the data were collected through 45 focus groups (n=111 participants) and ten in-depth case studies, that included observations and interviews (Gibson et al., 2023). Participation in the study was voluntary and all data were de-identified. The findings demonstrate differences across qualification levels, in educator knowledge, skills, values, dispositions and practices. The paper contributes to evidence that points to the unique role of ECTs and which can be used to support advocacy for ECTs.

*early childhood teachers, early childhood educators, qualifications, theory of practice architectures, exemplary practice*

This application discusses a completed piece of research.

**A longitudinal investigation of the ecological influences on early childhood teacher (ECT) supply and quality**

Marianne Fenech, The University of Sydney, Australia

This presentation reports on the first wave of a longitudinal study tracking early childhood teachers (ECTs) in Australia from degree commencement to early career. The study aims to produce new knowledge about the personal and contextual factors that support or constrain the recruitment, preparation, retention, and wellbeing of a quality ECT workforce. While early childhood workforce research is extensive, there is a lack of prospective and longitudinal tracking of ECTs' career trajectories; small rather than large-scale studies; and little attention to ECT-specific workforce issues, often conflating ECTs with vocationally-qualified educators (Fenech et al., 2021). The research is situated in complexity theory (Cochran-Smith et al., 2014) with a holistic, ecological conceptualisation of ECT workforce issues. Through this lens, the supply of a quality ECT workforce is deemed contingent on multiple influences that interact within and across varying complex nested systems over time. A social constructivist investigation of these influences was undertaken through a national survey (administered early 2023) designed to explore first and final year preservice ECTs’ personal and degree profiles, career motivations and aspirations, and beliefs about teaching. The survey included measures from two Australian studies, including the internationally renowned Factors Influencing Teaching Choice scale (FIT-Choice; Watt & Richardson, 2007). Survey protocols sought to uphold participants’ confidentiality and privacy, and minimise coercion. Latent profile analyses revealed different types of preservice teachers. These types, and associations with program features and career plans, will be presented. Implications for ECT degree programs and workforce policy will be discussed.

*early childhood teachers, quality early childhood education, initial teacher education, teacher quality, workforce*
This application discusses a completed piece of research.

**The teachers in early education (TEE) tool: An innovative approach to assessing teacher quality in the early years**

Sandie Wong (1) and Marianne Fenech (2); (1) Macquarie University (2) The University of Sydney, Australia

This presentation reports on the development of a tool that assesses early childhood teacher (ECT) quality in context. We contend that such a tool is needed given the limitations of current research measures and professional teaching standards, including having the early childhood setting as the unit of analysis, and standards/observations that do not adequately reflect the scope of ECTs’ practice (Fenech & Watt, 2022; Garvis et al., 2018). The Tool is situated in a holistic, ecological conceptualisation of quality ECTs as multi-dimensional, socially constructed, and context-specific (Dahlberg et al., 2007; Fenech, 2011; Urban, 2016). From this social constructivist paradigm, we have drawn on implementation science (Metz et al., 2015) and a co-designed Delphi approach (Green, 2014) to progress the Tool’s development. Ethical issues include consideration of how the Tool might be used to support professional development rather than a punitive performance appraisal. Findings are drawn from a national workshop comprising 30 sector stakeholders, and a review of relevant policy documents. Preliminary prototype items and design considerations pertaining to the purpose and principles underpinning the Tool will be presented. Findings highlight complexities in operationalising the scope of what ECTs do, and how ECTs’ practice differs to the work of vocationally-qualified educators. Scope for the Tool to be used in systems of teacher registration and to support policy that seeks to improve the quality of ECEC services through the employment of ECTs, will be discussed.

early childhood teachers, teacher quality, assessment, quality early childhood education, standards

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

### E15

**Sustainability in Early Childhood Education SIG Self-organised Symposium**

**PLACES AS IMPORTANT VENUES IN CHILDREN’S MEANING MAKING ABOUT SUSTAINABILITY**

**Chair:** Barbara Maria Sageidet, University of Stavanger, Norway

This symposium presents research within Early Childhood Education for Sustainability (ECEfS), recognizing places as important venues in children’s meaning making about sustainability. Places, their affordances (Gibson, 1979) and characteristic dispositions, connect learning to children’s lives (Smith, 2005), and play key roles for children’s understandings about the processes that underlie the sustainability of natural and social systems (Grunewald & Smith, 2008). Within a sociocultural paradigm, these three qualitative studies use a literature review, action research, and an interactive approach, respectively, and are based on observations, conversations with participants, or databases. The studies follow international ethics for researchers, and respect the participants’ expressions, contributions, and anonymity. The symposium exemplifies places as nation states, neighbourhoods, and gardens, and reveal their (potential) influences on kindergartens as areas of sustainability, and on children’s curiosity and understanding of sustainability related issues. This symposium may inspire to further develop various places to facilitate children’s meaning making for sustainability.

**Children’s active contribution to the Anthropocene**

Barbara Maria Sageidet and Ove Bergersen, University of Stavanger, Norway

This ongoing qualitative study explores how children can be involved in activities and play, related to conservation agriculture and ecological citizenship, as a contribution to a more sustainable formation of the Earth’s upper layer. In the geo-stratigraphic unit of the Anthropocene, human activity is significantly traceable in earth strata all over the world (Zalasiewicz et al., 2019). These upper Earth’s layers are both human’s historical record, and children’s place to live on. The Anthropocene is an unfinished narrative. This project will promote children’s capability to contribute actively, playfully, and positively to this ongoing narrative, through garden activities. Theoretical frames are sustainability, rhetorical and environmental citizenship (Sageidet & Heggen, 2021), and garden learning. Within a sociocultural paradigm, the study follows an interactive approach (Svensson, Brulin, & Ellström, 2015). It combines children’s and adults’ perspectives, and brings together data (observations, and video-recorded conversations) from activities with ECEC students, related to a community garden, on the one hand, and activities with children and ECEC teachers in a Norwegian garden.
kindergarten, on the other hand. Ethics include active listening, respecting the children's verbal and nonverbal individual expressions and (re)actions, and also adaptations of all activities and related questions, to be understandable and comfortable for each child. The study reveals children's engagement, and beginning understanding, related to ecological processes in soils, and their related social and language development. The study may contribute to facilitate children's active and discursive participation as environmental citizens, in transitions to further develop a more sustainable upper Earth's layer through garden activities.

children in the anthropocene, environmental citizenship, rhetorical citizenship, gardening, ecological play

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Education for sustainability in Portuguese early childhood education (ECEfS): Where do we stand and where do we want to go? Maria Assunção Folque (1), Tiago Almeida (2), Ana Rasteiro (1) and Ana Cristina Simões (1); (1) University of Évora, (2) The Polytechnical Institute of Lisbon, Portugal

This study explores the status of early childhood education for sustainability (ECEfS) in Portugal, by identifying recent developments and challenges for the future. It builds on Folque & Oliveira (2016) who identified changes in ECEfS in Portugal over ten years, by use of the Environmental Rating Scale for Sustainable Development in Early Childhood (ERS-SDEC) (Siraj-Blatchford, Mogharreban, & Park, 2016). Theory relates to the dimensions of sustainability addressed in ECEfS; underlying views of children (Waldermariam & Wals, 2020); relationships between humans and non-humans (Kopnina, 2020), and pedagogic practices. Within a sociocultural paradigm, this qualitative study explores current ECEfS research and practice initiatives and teacher’s training programs, by help of a literature review based on databases (university repository for master teachers’ training and PhDs; research projects funded by the Portuguese Foundation for Science (FCT)). The study used public references from a comprehensive range of databases. It used clear definitions of key-words, and critically and reflexively considered influences of researchers own positioning, database biases, inclusion and exclusion criteria of the studies and funding resources enhancing scrutiny possibilities. ECEfS reveals to be an emerging field in Portugal, but EFS is not yet a clearly relevant part of the curricular guidelines in early childhood education. However, several practical projects in ECE settings reveal a growing interest. Both in initial training and in research there is a need for more investment to strengthen ECEfS. This study will inform both teacher’s training programs and curricular documents and practices. Project Funded by FCT UIDB/04312/2020.

education for sustainability, teacher training, views of children, literature review, human and non-human relationship

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Places as supporting structures for early childhood sustainability education in Denmark
Mia Husted, Katrine Dahl Madsen and Nanna Jordt Jørgensen, University College Copenhagen, Denmark

The research aimed to map places where EC institutions bring children to engage in sustainability education. The paper addresses the knowledge base of Nordic early childhood sustainability education (Jørgensen & Madsen 2020, Husted & Frøkjær 2019, Hägglund & Pramling Samuelsson 2009). A theoretical backdrop related to awareness of place, materiality and supporting structures (Gruenewald 1999, Nxumalo & Cedillo 2017, Wickenberg 1999) guided a study of how sustainability appears - and what is absent - when early childhood educators and municipal administrators reflect on ECE based on geographical places identified in their local community. The methodology was informed by Action Research (Reason and Bradbury 2001) and carried out as ‘bottom up’ mapping inspired by systemic action research (Saija 2014, Burns 2017), highlighting knowledge produced in processes based on the participants’ own appointments of important places in their local community (Chambers 1997). 18 participants from six ECE institutions situated in one rural and one urban municipality in Denmark participated Ethical guidelines implied joint ownership to data and participant anonymity. The mapping resulted in four main findings: 1) Sustainability education appeared closely linked to traditional nature and outdoor education. 2) Sustainability also appears through a whole-institution approach (Carlsson 2020). 3) Places holding strong supporting structures were highlighted. 4) Places holding cultural values and societal conflicts were absent. The paper discusses participatory mapping as an approach to formulating critique of existing frames, as well as identifying potentials for transformation in EC sustainability education.

sustainability, action research, absence, presence, dilemmas

This application discusses a completed piece of research.
E17
CRITICAL PERSPECTIVES ABOUT CHILDREN’S PARTICIPATION IN EARLY CHILDHOOD EDUCATION
Self-organised Symposium
Chair: Catarina Tomás, CICS.NOVA/ Lisbon School of Education (ESELx), Portugal

This symposium aims to mobilize a critical perspective on how children's participation in early childhood education is discussed. From the rhetoric of the child-actor to practices that accentuate the image of the child-object, this path continues to mark many educational contexts in Portugal. We intend to reflect on this aspect, based on the Social Studies of Childhood and the Sociology of Childhood, mobilizing a discussion of the concept of participation and of the child's voice, articulating it with the pedagogical dimensions of the work carried out in contexts of early childhood education. Examples of research with children in the context of crèche and kindergarten will be mobilized, illustrating research practices with children, which respect their status, voice and perspectives, as powerful mechanisms for building an active citizenship, based on more reciprocal and more negotiable relationships between adults and children, particularly when adults work together with them.

When neoliberal policies reach early childhood education: What children’s participation?
Catarina Tomás, The Polytechnic Institute of Lisbon, Portugal

In the international and national context, we are witnessing an intense debate around the role and function of Early Childhood Education (ECE), mainly due to the enormous pressure that the demands of the neo-liberal society places on its professionals, families, and children. The neo-liberal discourses based on the apology of performativity, flexibility, individual choice, accountability, rankings, meritocracy, early promotion of school skills, and curriculum narrowing, also reached ECE and this is reflected in pedagogical practices. The scarcity of research on this issue in the ECE field, mainly focusing on how children experience these schooling demands and the principles of participation made possible by the right to play, generate countless tensions in kindergarten daily life. In the wake of a critical position that we have been maintaining since 2016 in the research carried out on policies and practices in the ECE in Portugal, and in which we dialogue with Sociology and Education Sciences, this communication focuses on the analysis of those tensions, aiming to apprehend the ways in which the children and educators deal with them. Considering an ethical children’s rights approach to research, observations and interviews carried out in public and private kindergartens located in Lisbon, Cascais, Porto, and Braga, between 2017-2023, allow us to detect the presence of schooling processes in detriment of playing, doubly devaluing it as a right and a way of children's participation. The assertion and tensions inherent to these traits have reconfigured children into pupils, educators into teachers and ECE in preschool education.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Theoretical frameworks of children’s participation from the Sociology of Childhood
Gabriela Trevisan (1), Natalia Fernandes (2) and Catarina Tomás (3); (1) ProChild CoLAB, (2) University of Minho, (3) Higher School of Education of Politecnic Institute of Lisbon, Portugal

Theories and models of participation have been mobilized interchangeably in discourse and in practice, although there are substantial differences between the two, not always explored theoretically (Malone & Hartung, 2010). Even though participation theories are frequently drawn from the UNCRC (UN, 1989) and different models, there are difficulties when implementing these principles in children’s contexts, may it be early childhood education or community projects. Alongside these difficulties specific paradigms on the way adults look at children and childhood have a major impact on the opportunities created for them, as argued by Sarmento, Fernandes and Tomás (2006). As we have argued elsewhere children’s actions are multiply situated in complex contexts, and childhood should be analyzed as a differentiated collective, which makes it difficult to create models to homogenize their experiences. The understanding of these contexts in exercise of citizenship and participation in formal processes of codecision challenges the child’s place in the public space. In this presentation we will look at these theoretical challenges and its impacts on children’s daily lives contexts on exercising their full image as citizens and bearers of rights. This presentation does not entail research data. We will look at these theoretical challenges and its impacts on children’s contexts on exercising their full image as
citizens and bearers of rights. There is a growing awareness that it is more significant when it is inscribed in the daily lives and contexts of children as we discuss impacts of different conceptions of participation in children’s educational contexts.

**children’s participation, sociology of childhood, early childhood education, participation models, practice implications**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**E18  
ECEC WORKFORCE - SYSTEM CHALLENGES  
Chair: Kirsi-Marja Heikkinen, University of Helsinki, Finland**

**ECEC workforce shifts over time: the SEEPRO-3 study in 33 national contexts**

Pamela Oberhuemer (1) and Inge Schreyer (2); (1) University College London, Social Research Institute, United Kingdom, (2) State Institute for Early Childhood Research and Media Literacy, Germany

This three-year research project (2021-2024) aims to investigate core characteristics of the ECEC workforce in 33 European countries. It builds on three previous multi-country research inquiries published by the authors in 1996, 2010 and 2018 and is part of a growing body of workforce-focused studies across national systems of ECEC (Moss, 2006; Vandenbroeck, Urban & Peeters, 2016; Manning, Garvis & Fleming, 2017; OECD, 2019, 2020). Analysis is framed within a critical-comparative education and social policy perspective (Alexander, 2012; Labaree, 2017; Guevara, 2022). The research paradigm links to the concept of comparative education as a ‘science of difference’ rather than a ‘science of solution’ (Nóvoa, 2018; Sousa & Moss, 2022), to a contextualised approach of presenting workforce data rather than looking for any one ‘best model’. Thirty-three comprehensive reports by 50 national experts based on an agreed research specification and 33 key data reviews validated by the research partners draw on legislation, national and Eurostat data, policy documents and relevant research evidence. Sources are available in the public domain; ethical issues are confined to a rigorous selection. Findings presented focus on selected workforce issues in 2010, 2018 and 2023. These include shifts in ECEC system governance, qualification requirements, workforce composition and workplace conditions. In a current context of acute staff shortages across Europe, issues and challenges will be highlighted. The 33 ECEC Workforce Profiles, backed by key contextual data, provide a comprehensive referential framework for examining country-specific and cross-country policy implications related to workforce professionalisation and working conditions.

**ECEC workforce, professionalisation, working conditions, cross-national, Europe**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Deployment of high qualified staff in childcare: what are the systemic conditions to make it work?**

Jochen Devlieghere, Michel Vandenbroeck and Lobke Van Lombergen, Ghent University, Belgium

This two-year qualitative research project aims to reveal what the deployment of pedagogical coaches with a bachelor’s degree means for the quality of childcare as well as what systemic conditions are deemed necessary to make their deployment successful. In the end, research shows that high-quality childcare services have a positive effect on the development of children (European Commission, 2018, Fukking & Lonk, 2007) and that high-qualified staff plays an important role in this (Slot, Lerkkanen & Leseman, 2016; OECD, 2021). Therefore, the theoretical framework for this study draws upon theories of professionalization in early years settings (e.g. Peeters and Vandenbroeck, 2010; Fukkink et al, 2007; OECD, 2021). This qualitative study consists of 250 diaries of pedagogical coaches and 9 focus groups with pedagogical coaches, childcare managers, and professionals in public and private childcare centres. The data was analysed by means of a thematic analysis. All participants participated on the basis of a written informed consent, had the right to withdraw and were assured that the data collected would be pseudonymised. The study shows that the systemic conditions in which high-qualified staff is deployed are pivotal. Attention needs to be paid to the hierarchical relationship between pedagogical coaches and other staff members, as well as to their task description and the mandate they have (or have not) to intervene. This means that, when deploying high-qualified staff in childcare, we need to develop responsive systemic conditions in which they can work in co-existence and collaboration with professional ontologies.
Advocacy towards professional action and development of Early Childhood Educators (ECE) in Early Childhood Education BA Programmes
Mary Delany, Technological University of Dublin, Ireland

To explore perspectives from graduates, lecturers and experts on Higher Education’s advocacy role in the professional recognition of ECE. Professional status of ECE has received some research interest recently but little research has focused on the topic of advocacy or ECE as advocates for their own profession. ECEC is relational, political and uncertain (Urban, 2008) which impacts on the ECEC system and societal views of ECE as professionals. This presentation draws on Urban’s et al.’s - CoRe competencies (2011), Vanderbroeck (2021) and Roberts-Holmes and Moss (2021) ideas on advocacy, education, neoliberalism and the professionalisation of ECE. The conceptual framework draws on Mezirow’s Transformative Learning Theory (1978-2000) and Freire’s (1968-2000) critical education philosophy. This lens will explore tensions between the development of advocacy competency through the HE process and systematic barriers to advocacy from the increasing influence of neo-liberalism in HE and ECEC systems. This research uses a qualitative paradigm. Data from interviews and focus groups of a purposeful sample of policy and practice experts, graduates and lecturers were collected. Data was then analysed using thematic analysis drawn from Braun and Clarke (2006). Ethical approval was obtained through Queens University Belfast. Informed consent, confidentiality and anonymity of participants was ensured. Preliminary findings suggest a role for ECE and the HE’s but questions - whether EYE have the agency, voice, time, representation, status, education or means to advocate and shape the ECEC system as ‘babysitters’? (Hayes, 2010:89). Increased advocacy requires constant micro and macro political engagement (Moss & Urban, 2010).

advocacy, professionalisation, early childhood educators, higher education, political

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

E19
INTEGRATING CHANGE THROUGH CHILDREN’S VOICE
Chair: Maresa Duignan, Department of Education, Ireland

Listening to children’s voices through playful and creative data collection methods
Lynsey Burke and Divya Jindal-Snape, University of Dundee, United Kingdom

This study explores how children’s voices can be amplified through playful methods in the early stages of primary school. There is increasing recognition of child-centred approaches to listen to children’s voices and to enact Article 12 of the United Nations Convention on the Rights of the Child (UNCRC, 1989) (e.g., Clark, 2019; Rogers & Boyd, 2020). This increase is underpinned by theories proposing that the concept of ‘voice’ is multi-faceted and multi-layered (Mazzei, 2009), and that pedagogies to listen to children should align with developmentally appropriate methods in the early years, specifically play (e.g., Blaisdell, Arnott, Wall et al., 2019; Rinaldi, 2021). Using a participatory research approach (Groundwater-Smith, Dockett & Bottrell, 2015), forty-four children from the early stages of a primary school in Scotland chose to share their voices through either blocks, clay, percussion instruments or loose-parts. A reflexive thematic analysis was conducted (Braun & Clarke, 2019). After consent forms and information sheets were distributed to parents and carers, interactive ethics sessions were delivered using puppets, music and Makaton. On-going consent was sought through verbal and non-verbal communications. The findings will focus on the use of multi-sensory and creative methods which provided an opportunity to listen to children’s voices, and highlight the importance of children’s agency within this process. These findings will support educators to explore a range of creative methods when adopting listening pedagogies. More widely, it is hoped that this study will spotlight innovative approaches and their value when amplifying children’s voices in the early years.

children's voices, creative data collection methods, listening, playful, participatory
The role of education inspection in supporting children's voice and agency in early learning and care provision in Ireland
Maresa Duignan, Department of Education, Ireland

This paper presents an overview of the Department of Education (DE) Inspectorate initiative to promote children's voice and agency during inspection in preschools. The work builds on the work of Professor Laura Lundy (Lundy Model of Child Participation) that identifies that each of the four key concepts of space, voice, audience and influence must be addressed if children's engagement in inspection processes are to be meaningful. These concepts are synergistic with the DE Inspectorate's 'inspection for improvement' paradigm that promotes respectful engagement with all stakeholders including children and young people (Department of Education, 2022 https://www.gov.ie/en/publication/611873-chief-inspector-reports/) An extensive programme of research and consultation with children was undertaken to inform the development materials and processes to build children's understanding of inspection processes; their capacity to engage with inspectors and contribute their perspective to the evaluation and to receive feedback. Research followed guidance for developing ethical research projects involving children (Government of Ireland, 2012) Providing children with opportunity to exercise their voice in matters concerning them is a fundamental building block in supporting and promoting their agency in their own learning. The processes and materials described here are designed to ensure that inspectors and educators co-create such opportunity for children's voice and agency during inspection by building their capacity for meaningful engagement and ensuring that they can see their contributions reflected in the outcomes of evaluation processes. Early evidence reveals that taking deliberate action to promote children's voice and agency may also influence the quality of provision of early education.

children's voice, quality improvement, inspection, children's agency, reflective practice

Exploring children’s embodied cleanness practices in preschool: Ethical considerations balancing agency, integrity and the need for knowledge
Sofia Frankenberg, Stockholm University/ Dept. Child and Youth Studies, Sweden

The project “Children, Diapers and Bodily Care in Preschool” is a new research project focusing how young children, over time together with caregivers, learn to independently take responsibility for their cleanness in Swedish preschools. This paper will discuss ethical considerations when exploring how children’s perspectives, agency and integrity are balanced in relation to adult scaffolding towards children’s self-regulated independence. Bodily cleanliness practices form important contexts of early childhood development and learning (Douglas 1966). Recent discourses regarding children’s rights to integrity raise ethical dilemmas regarding adult guidance and control (Eidevald et al. 2018). A relational developmental systems(RDS) perspective (Mascolo& Fischer, 2015) is applied with a focus on affective practices (Wetherell 2012) and self-regulation (McClelland et al. 2015). A pragmatism paradigm based in RDS, using sensory ethnographic fieldwork (Pink, 2009) approaching the perspectives of young children (Johansson & Jayne 2011) will be applied in 6 preschools, involving children(1 - 4 years), preschool staff and caregivers. The project requires approval by the The Swedish Ethical Review Authority. In order to safeguard children's right to integrity only audio-recordings and field notes are used. Increased recognition of children’s right to integrity raises research ethical considerations and dilemmas (Alderson & Morrow, 2020) regarding the need for research informed practice and the best interest of the child, requiring specific sensitivity to children's communication during data collection and analysis. The research will inform early childhood education and care at the intersection of home and preschool with the goal of providing a sustainable pedagogy for societies’ youngest citizens.

embodiement, affective practices, bodily cleanness, scaffolding, ethical dilemmas

E20
CREATIVE THINKING AND CO-CREATION WITH CHILDREN
Chair: Anastasia Belolutskaya, Moscow City University, Russia
Creative thinking in preschoolers: the combination of problem-solving, dialectical thinking, formal intelligence and symbolization
Anastasia Belolutskaya, Moscow City University, Russia

The aim is to identify the relationship between the structural components of the creative process that are actualized when solving a problem-contradictory task. Previous research works are devoted to the assessment and development of preschoolers dialectical thinking (Veraksa, Belolutskaya, 2021). The ability to symbolize, formal intelligence and dialectical thinking are considered as structural components of creative process in preschool (Belolutskaya, Vorobieva, Siyan et al, 2021) Theoretical and conceptual framework is structural dialectical approach (Veraksa et all, 2013; Veraksa, Belolutskaya, 2021) and concept of symbolization (Veraksa, 2016). Interpretative paradigm. 102 preschoolers of 5-6 years old involved. Data was collected with oral interviews. The answers were interpreted by trained experts. Methods: “A Gift for All” (diagnosing the ability to solve contradictions); "Candle" (symbolization measurement); clinical conversation in line with the works of Jean Piaget; technique “What could be the opposite” (Dialectical mental actions measurement). Wilcoxon rank test was used to compare contrast groups. Informed consent was gained from children and their parents. Every child could withdraw at any time. The success of preschoolers in solving conflicting problem tasks is significantly associated with the level of dialectical thinking; the ability to symbolize; reversibility, as a key characteristic of formal-logical thinking in preschool age. The results of the study serve as an evidence base for the dissemination of a development program for preschoolers - "Transformation" based on a structural-dialectical approach

creative thinking, dialectical mental actions, symbolization, problems, contradictions

This application discusses a completed piece of research.

Children as co-creators - creative and interactive processes in the making of play spaces
Anette Sofie Bernsen (1) and Elin Thoresen (2), (1) NLA University College and USN University of South-Eastern Norway; (2) Western Norway University of Applied Sciences (HVL), Norway

This study investigates how children, through participation in a creative and interactive process, can actively co-create their own play-environments. The study is an extension and retesting of the Palette Model, developed in a previous pilot study (Bernsen, 2017), and inspired by the research model, The Mosaic approach (Clark & Moss, 2017). The intention is to refine and saturate the Palette model. Research on children as co-designers in and for play (Druin, 2002, Skovbjerg, et.al, 2022) has emerged in recent years. Research has shown that form and content of a play space has direct impact on the how children explore and participate in play spaces and with play materials (Nordtømme, 2019, Waterhouse, 2022). The theoretical framework draws upon Merleau-Ponty’s (1994) conceptual idea of pre-reflexivity, - that the child possesses more than what is verbally expressed. The study, within a sociomaterial paradigm, was conducted using qualitative design based research methodology. Methods used were participatory observation, photographs, and focus-group interviews with children and staff in two ECECs. The analysis was conducted through deductive qualitative thematic approach (Gilgun, 2019). The study was approved by the Norwegian Centre for Research Data. Written information and written consent were sought from all participants. The findings suggest that children as active contributors in the design of play spaces in ECEC are more able to exert influence on decision-making processes. The findings provide a child centered interactive approach to the play design research field and suggest an alternative relational approach to ECEC staff, where structures are more open.

creativity, co-creators, interaction, Palette Model, play space.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Exploring materiality as a driving component in the development of playworlds in co-creation with kindergarten children.
Hanne Wiseth, Queen Maud University Collage/Norwegian University of Science and Technology, Norway

This PhD-project aims to create new approaches for art pedagogical practices in kindergartens, by using strategies from theater to co-create playworlds together with children. Research has shown how playworlds contribute to a rich play practice, where the
interaction between children and adults generates deeper play (Lindqvist, 1997). Further, use of undefined materials in kindergartens makes room for the child’s imagination and exploration, both individually and collective (Waterhouse, 2021b, s. 254). The theoretical framework of this study draws upon current theories on children’s imaginative play (Corsaro, 2003; Guss, 2017), materiality (Tanggaard, 2010; Waterhouse, 2021a) and devising theater (Heddon & Milling, 2006). The study was conducted within a qualitative research paradigm (Leavy, 2020). Four exploratory workshops were carried out with a fixed group of children in a kindergarten in Norway. The analysis was conducted through multimodal analysis (Jewitt, 2017) within a phenomenological hermeneutical approach. On behalf of their child, parents/guardians consented to the child’s participation in the project. The children also consented to participate, including the workshops being recorded by film and photo. All participants were given the opportunity to withdraw from the study at any time. Participants are anonymized in both text and photos. The findings demonstrate how a material functions as a driving component in collective playworld creations where the children move from creating individually with the material, to co-create a story and further co-create with the material. These findings suggest implications for how art pedagogical practice can make use of theater techniques in the creation of playworlds.

arts pedagogy, playworld, imagination, materiality, co-creation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

E21
AND THEN THERE WAS US: PROFESSIONAL PEDAGOGIC REFLECTIONS ON UTILISING PARTICIPATIVE, PLAYFUL METHODOLOGIES TO EMPOWER CHILD VOICE
Self-organised Symposium
Chair: Jo Traunter, University of Hull, United Kingdom

An emergent paradigm of childhood recognizes children as active agents in their own lives, capable of expressing their own views and understandings, and, arguably, to a major cultural shift that places children in the position of fully participating members of society. For early childhood researchers, this paradigm shift means that research with children is replacing research on children, with a focus on children’s rights, voice, and participation. In recognition that young children can make rational decisions, there has been an increase in the popularity of data collection methods involving both verbal and visual data to overcome communication difficulties. These methods are often adopted within a paradigm of participatory research, to amplify the voice of those who might not usually have a platform. This symposium relates three researchers’ reflections on studies that involve young children with playful, participative methodologies, to better understand children’s understandings, perspectives, skills and feelings.

Exploring the use of participatory tools to understand young children’s engagement with immersive theatre production
Jo Traunter, University of Hull, United Kingdom

This project sought to explore the collective creation of a children’s theatre production, developed through research and practice with young children and a theatre company. The project’s main aim to explore: How children interact with and interpret stories in playful spaces. An emergent paradigm of childhood recognizes children as active agents in their own lives, capable of expressing their own views and wishes (Bolshaw and Josephidou, 2019). Research with children is replacing research on children, with a focus on ‘...rights, voice and participation’ (Nutbrown, 2018: 273). The study employed Barthes (1890) conceptual framework to consider the relationship between the viewer and the viewed, revealing the complex and multifaceted ways in which children make meaning. Utilising Barthe’s tools of the Studium and Punctum (1980), further revealed the cultural and personal meanings behind children’s photographic and visual representations. This qualitative study utilized a constructivist/interpretative design, aimed at building a dialogue with children using a participatory approach (Clarke & Statham, 2005), recognizing child’s voice, perspective and agency. Techniques employed included photographic elicitation and children’s drawings. Using the BERA (2018) and ECEERA ethical codes (Bertram et al. 2014), we obtained informed consent from settings, practitioners, and parents, and children’s provisional assent was constantly negotiated Multisensory experiences play an essential role in children’s theatre because young children predominantly make meaning through directly sensing and interacting with their world. Play and talking is fundamental in ascertaining children's funds of knowledge. Identifying these offers practitioners the opportunity to extend and appreciate children’s understanding and perspectives.
Letting the child’s voice be heard - The role of participatory research techniques to elicit young children’s perceptions and experiences of the policing of gendered norms in the preschool years
Cathy Kilburn, University of Hull, United Kingdom

This study aimed to identify the techniques that pre-school children use to police their peers gender exploration, and to understand their role. Much of the research about pre-school children’s knowledge and experiences either focuses on adult interpretations of what they have viewed or pays lip service to including the children’s voices (Nutbrown, 2018). This research draws on literature identifying the role that young children play in reinforcing gender stereotypes (Mayeza, 2018; Gelir, 2020). The theoretical framework for this study draws on Bronfenbrenner’s (1979) ecological model and identifies children as competent individuals who are the best people to share information about their own experiences (Clark et al., 2014). This qualitative research utilised a feminist ethnographic methodology designed to highlight the voices of silenced participants (Gobo, 2008). The methods used were observations, video stimulated conversations and an image elicitation activity. Ethical concerns identified included the use of video and digital voice recording. Children with parental consent took part in assent conversations where an information booklet was shared with them. Children’s assent was negotiated daily, and pseudonyms are used. The findings demonstrate that preschool children are competent participants who can participate in methods such as video stimulated conversations and share their understanding and analysis of their behaviour and interactions. All children have the right to have their voice heard in matters that affect them, and young children are no exception. By taking a methodological approach that values and respects the voices of young participants, researchers ensure the research focuses on the participants experiences.

Finding the balance: The choreography of participatory research with younger children
Patricia Shaw, University of Hull, United Kingdom

The paper presents a critique of conceptual tensions about participatory research (PR) with younger children. It uses an innovative heuristic framework that adults can use flexibly when seeking a balance between intervention and giving room for children's expression. PR assumes various forms and is still considered to be a complex and contested concept (Brown 2021). Participation can facilitate opportunities that critique power relations (Ginwright 2008); in practice, it is often difficult to strike a balance between adults offering more direction, and children taking centre-stage (James and Shaw 2022). Acknowledging the ‘messiness’ of PR (Fitzgerald et al. 2020), models of participation (Hart 1992; Treseder 1997) were expanded to create an heuristic framework using the choreography of dance metaphor to divert attention from hierarchical, ascending representations of PR. It recognises practice that warrants quick decision-making or immediate changes of direction. An interpretivist paradigm was used to create the heuristic framework. It was developed by analysing a qualitative study that employed photo-elicitation via a diamond ranking exercise (Rockett and Percival 2002) and children's drawings. Potential power imbalances were subject to critical examination; children displaying signs of dissent were able to exit immediately. Consent was sought from parents; anonymity and confidentiality were afforded. Drawing on dance literature, the framework proffers three easily-called-to-mind notions inspired by the choreography of dance for adults to engage with younger children’s voices: ‘stepping-in’; ‘stepping-out’, ‘stepping-on-toes’ The heuristic framework is intended to facilitate adults’ decision-making in PR by carefully constructing modes of direction, facilitation or non-intervention, to strengthen children’s engagement.
LEARNING STORY NARRATIVE ASSESSMENTS THAT STORY CHILDREN’S LIVED EXPERIENCES CONTRIBUTE TO CHILDREN’S LEARNING IDENTITIES AS LIFELONG LEARNERS. EXAMPLES FROM NEW ZEALAND AND SCOTLAND.

Self-organized Symposium
Chair: Lorraine Sands, Educational Leadership Project, New Zealand

Learning Story narrative assessments (Carr, 2001) because of their sociocultural theoretical framework have the capacity to understand how storying children’s lived experiences makes a meaningful difference to communities’ images of their children. The research studies discussed in this symposium are embedded in a narrative inquiry paradigm that sees reality as a socially mediated construction contained within stories that are told and retold across times, social contexts, and places. In this view, emotion, learning, culture and identity are entwined. As learning communities re-access lived experience through learning stories that enable children to act as co-constructors of their learning experiences and then track progress in dynamic, dialogic ways, children strengthen dispositional learning and the working theories that emerge as children explore possibility thinking (Carr & Lee, 2019). As a result, communities design learning environments in response to a rich, complex view of children as agentic, curious, joyful, creative, empathic social learners-in-action.

The image of the child: How it impacts on pedagogical documentation

Lynn McNair, University of Edinburgh, United Kingdom

The dominant discourse of standardisation and narrowing of early childhood education, has resulted in the ‘shaping’ and ‘testing’ of young children around the globe. This action research project sparked transformation regarding how early years practitioners documented children’s learning. This paper builds upon a small-scale action research project that challenged the standardised form of documentation, in one Scottish ECEC setting (McNair et al, 2021; Blaisdell, et al, 2021). This paper is informed by an emerging body of educational theory and practice known as revolutionary critical pedagogy (Kincheloe, 2008; Giroux, 2011; McLaren 2005; 2015). This study draws from pedagogical documentation, named: ‘lived stories’. The data used came from mixed qualitative methods which included one-on-one conversations with children, questionnaires for practitioners and parents, focus groups with practitioners and parents, and a group mind-mapping session with children. Ethical approval from Moray House School of Education was received. The ethical principles that underpinned this research included voluntary participation, informed consent, anonymity, confidentiality, potential for harm, and results communication. The terminology of ‘Lived Stories’ captured the more fluid and liberatory nature of what practitioners wished to document, documentation which illustrated a rich image of the child. The image of the child as a knowledge, identity, and culture producer; as innocent; as a labour market supply or as a co-constructor of knowledge, identity and culture (Dahlberg, et al, 2013), greatly impacts on children’s lived experiences.

image of the child, pedagogical documentation, professionalism, lived stories, critical pedagogy

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

How learning stories enable children to relive their experiences and stretch possibility thinking: A narrative inquiry

Lorraine Sands, Educational Leadership Project, New Zealand

I aim to show how sharing learning stories within a community of learners has the capacity to contribute to children’s learning identities and strengthen children’s views of themselves as curious, dispositional learners-in-action. My research builds on formative assessment (Cowie, 2008; Cooks et al., 2016), Learning Story narrative assessment (Carr, 2001, Carr & Lee, 2019) and research into ways in which dispositions and working theories (Hargraves, 2014, Hedges, 2021) nurture children’s learning identities (Claxton & Carr, 2004; Sands & McChesney, 2022). Narrative inquiry (Clandinin & Connelly, 2000) framed every aspect of this study as a way to generate iterative processes that valued the storied-lives of a community of learners (Lincoln & Guba, 2013; McAllum et al., 2019). Alternative paradigms (Moss, 2018), including posthuman concepts of relational living (Murriss, 2016) are explored. Participant reflections on Learning Stories (Carr & Lee, 2019) provided data to investigate community perceptions of the formation of learning identities (Carr & Lee, 2012). Explanatory letters outlined potential ethical issues and consent forms stated participants could withdraw for any reason. This study showed that dispositionally focused Learning Stories created a culture of dispositional language and working-theory-focused narratives. Consequentially, children’s working theories had momentum and an ever-increasing tilt
towards strengthening learning complexity. These working theories were situated in sociocultural contexts and contributed to a deeper sense of children’s learning identities. Learning Stories, embedded in children’s lived experiences, enabled learning communities to design meaningful learning environments that support children to be agentic learners-in-action (Gunn & Gasson, 2017).

narrative inquiry, learning stories, dispositional learning, working theories, agentic learners

This application discusses a completed piece of research.

What role does emotion have when considering the purposes and consequences, balancing acts and dimension of progress when writing Learning Stories

Wendy Lee, Educational Leadership Project, New Zealand

My objective is to show how documentation of formative assessment has the capacity to engage and strengthen emotional connections and enhance relationships in an early childhood setting. This paper builds on research-based exemplars (Kei Tua o te Pae: Carr, Lee and Jones 2005, 2007, 2009) neuroscience (Immordino-Yang 2018) and emotion (Goleman, 2021, 2005; Elder, 2020; Noddin 2003, 2010; Brackett, 2019; Hooks, 2003; Palmer, 1998). The research underpinning this paper used a teacher inquiry and action-research approach (McTaggart et al., 2017; Escamilla et al. 2021). Learning Stories (Carr & Lee, 2012, 2019) provides the platform to explore pedagogy and recognises that teaching is fundamentally inquiry in the domain of human attention and awareness (Mason 2002). Narrative inquiry (Clandinin, 2016) underpins this research. The New Zealand assessment practice of Learning Stories provides the platform to explore pedagogy (Carr, Lee, 2012, Lee et al. 2013). New data from teachers’ interviews, documented assessments and reflections are used. Consent forms and information sheets were provided to all participants. Informed consent was negotiated with all involved and participants could withdraw their data from the research at any time. Teachers’ reflections on both the children’s and teachers’ learning illustrate how inquiry and documentation makes a powerful contribution to both strengthening emotional connections and enhancing pedagogy. Workable strategies for teachers, developed from assessment data, can construct opportunities that recognise the emotional learning journeys of children, families and teachers. This creates cultural shifts that strengthen relational pedagogy as teams work collectively to examine and reflect on their practice.

learning stories, emotional connections, pedagogy, community of practice, inquiry

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

E23

DIGITAL CHILDOODS: CHILDREN'S AGENCY AND PARENTAL CHOICE

Chair: Niklas Pramling, University of Gothenburg, Sweden

Agency, participation and curiosity in very young children’s interactions with digital media in their homes in the UK

Julia Gillen (1), Rosie Flewitt (2), Sandra El Gemayel (2), Lorna Arnott (3), Janet Goodall (4), Katrina McLaughlin (5), Zinnia Mevawalla (3) and Karen Winter (5); (1) Lancaster University, (2) Manchester Metropolitan University, (3) University of Strathclyde, (4) Swansea University, (5) Queen’s University Belfast, United Kingdom

Toddlers, Tech and Talk (2022-2024) aims to investigate behaviours and attitudes towards digital media at home across diverse communities in the UK. Here, we focus on parental reports of their 0-3 year-old children’s participation in digital practices at home; curiosity and agentic use of diverse devices. First, we relate to previous and ongoing studies of young children’s interactions with digital media in the home learning environment, e.g. Chaudron et al (2018), Kumpulainen et al (2022), DigiLitEY COST Action, and ARC Centre for the Digital Child, identifying a need for research in this dynamic area. Second, we draw on a rich vein of investigations of the significance of agency, participation and curiosity to children’s play, learning and holistic wellbeing. Concepts such as the post-digital and sociomaterialism enable us to work towards novel understandings of the very young child’s participation in a “togetherness in an entangled moment” Kuby & Rucker, 2016: 17). Our mixed method research is constructed in three phases: 1) Survey of 1000+ parents and guardians; 2) Interviewing 40 parents and 20 ECEC-related professionals; 3) 40 Case studies with a “methods palette”. Our detailed ethical framework is constantly interrogated amongst the interdisciplinary team members to ensure that research is as respectful as possible of all participants, whatever their community or language (BERA 2018). We summarise
findings relating to parental reports of children’s participation, curiosity and agency in digital practices at home, paying close attention to entanglements in the moment. Findings will inform ECEC policy and practice on very young children's digital security and technology use.

**very young children, digital media, home learning environment, mixed methods, post-digital**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Parental Awareness of Finding High-Quality Digital Content for Young Children**
Burcu Izci (1) and Fatma Izci (2); (1) Florida Gulf Coast University, United States, (2) Ugur Schools, Turkey

This study aims to examine parental awareness of finding high-quality YouTube videos for young children. YouTube is a platform that children and families use for education and entertainment purposes (Radesky et al., 2020). Parents and researchers have concerns regarding finding high-quality videos and children's exposure to online advertising, inappropriate content, language, or violence (Authors, 2022; Tan et al., 2018). Given the popularity of YouTube in children's lives and the lack of research conducted with parents of young children, this study will shed light on a neglected field of research. Twenty parents will fill out an online survey, watch preselected videos (two types of unboxing videos and one educational video) in a different order, and share their perspectives about the videos during a semi-structured interview. Survey data will include participants' demographics and YouTube and video watching habits. Parental interviews will be audio and video recorded. Descriptive statistics and thematic analysis will be used to analyze research data. Participants will fill out an informed consent form before participating in the study, and verbal assent will be obtained before the interviews. Participants will have a right to withdraw from the study at any time. The study's findings will expand our knowledge of parental perspectives on young children's YouTube watching and possible factors affecting their perspectives. Research findings will contribute to our understanding of parental awareness of finding high-quality digital content for children. It will address possible gaps in the literature by suggesting implications for further research and family practices.

**youtube, unboxing videos, educational videos, digital content, parents**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Negotiating agency in teacher-children collaborative (re)storytelling**
Niklas Pramling, Jenny Myrendal and Sofije Shengjergji, University of Gothenburg, Sweden

The aim of this study is to generate new insight into how agency is mediated in digital storytelling activities in which children and teachers participate. How pairs of children with their teacher (i.e., in triads) (re)tell stories is analyzed. The participants are 10 children aged 4-5 years and their two preschool teachers. As Clarke et al. (2016) review, previous research has looked at either children’s sense of agency, i.e. whether children feel that they have agency in early childhood education and care (ECEC) or how they enact their agency. We approach the issue of agency from a point of view different from both these, through analyzing how agency, in the form of the authoring of the story being (re)told, is negotiated among participating children and teachers. The study builds on a sociocultural perspective (Vygotsky, 1998), and the mediation of activity and agency (Mäkitalo, 2016). The paradigm of this research is qualitative interpretive. The methodology is socioculturally-informed interaction analysis (SIA) (Wallerstedt et al., 2022), implying analyzing data, generated through the method of video observations, sequentially through participants’ responses. The study was approved by The Swedish Ethical Review Authority (case no. 2021-03687). All participants and settings are given pseudonyms. The findings are both empirical, showing how agency is (re)negotiated among participants during storytelling, and methodological, showing how new analytical tools are functional for studying the mediation of agency in ECEC. The study has implications for how to facilitate children's agency.

**agency, storytelling, retelling, sociocultural theory, mediation**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Perspectives of private ECE supervisors on the competences required by the task in Finland
Marja-Liisa Keski-Rauska (1) and Marjo Mäntyjärvi (2); (1) Regional State Administrative Agency, (2) University of Oulu, Finland

The supervision of private early childhood education and care (ECEC) aims to improve the quality of ECEC in Finland. The supervisory tasks require special expertise in municipalities which has not been previously identified. This study examines the perspectives of supervisors on their role and the competence required by it and tries to find out what kind of training supervisors need more to carry out their task. There have been no previous studies on the subject. The theoretical framework draws from research on public administration and management (Virtanen & Stenvall 2019) and on early childhood education management in Finnish municipalities (Akselin 2013). Autioniemi’s etc. (2021) research is used as a reference framework for structuring competencies. The data was collected using a survey based on discretionary sampling. The data-based analysis followed the traditions of content analysis. The analysis and classification of the material was based on the areas of competence presented in the theory. During the stages of collecting research data and storing the data, we have taken care of compliance with ethical principles and taken into account the anonymity of research participants. The results emphasise subjective competences such as knowledge base and interaction skills. The key perspectives to the work were standards-based and partner-oriented perspectives. In oversight, different perspectives and the competences required by them are seen as interconnected and continuously interacting with each other. The aim of the study was to support the development of the supervisory officer’s skills and to find out educational needs.

private early childhood education, supervision, administration, competence, management

This application discusses a completed piece of research.

Analysis of curriculum maps of pedagogy programs and early childhood education training courses offered by state-funded institutions in Brazil
Silvia Helena Vieira Cruz, Cristiane Amorim Martins and Maria de Jesus Araújo Ribeiro, Federal University of Ceará, Brazil

The present study aimed to probe into teacher training in Early Childhood Education by examining the curriculum maps of undergraduate-level Pedagogy courses provided by federal, state, and municipal institutions in Brazil. Previous large-scale research on teacher education (Gattí; Barretto, 2009) and Pedagogy (Linaneo, 2010; Pimenta et al, 2015) provided an overview of gaps in teacher training. This study builds on existing research on teacher training (Formosinho, 2009, Garcia, 2013) and its vital role in ensuring the quality of Early Childhood Education (Kramer, 2002; Oliveira-Formosinho, 2007, Zabalza, 1998). This research takes the form of a case study with an inherent interest (Stake, 1999) in a “contemporary phenomenon within its real-life context” (Yin, 2005, p. 32). The syllabi of 81 Pedagogy courses (20.9% of the total courses available) – largely obtained from the institutions' websites – were categorized. A proportional random sampling was employed based on the type of public institution and geographical location of the courses. The anonymity of the participants in the sample was also ensured. The findings revealed that the analyzed courses exhibit a high level of dispersion and are mostly inclined towards theoretical approaches, thereby failing to adequately address the professional demands of Early Childhood Education, especially in the context of teaching infants. These findings highlight the inadequate training for teaching work in preschools and nurseries and the consequences of excessively academic instruction at the post-secondary level (Formosinho, 2009). Therefore, these results are expected to inform ongoing discussions on the reformulation of Pedagogy courses in Brazil.

initial teacher training in early childhood education, training for early childhood educators;, Pedagogy courses in Brazil, curriculum maps of pedagogy courses, pedagogy course and early childhood education

This application discusses a completed piece of research.
We investigate whether The Mature Play Observation Tool (MPOT) (Germeroth et al., 2019) and Classroom Assessment Scoring System (CLASS) (Pianta et al., 2008) can complement each other to assess process quality in Norwegian preschools. Available measures of preschool quality typically focus on adult–child interactions and much less on peer-play quality (Germeroth et al., 2019). In contexts like Norway that emphasise free play, broader approaches to quality assessment are needed to provide insight into “children’s experiences, including peer experiences [and] child-level interactions…” (Cadima et al., 2020: 38). While CLASS measures adult–child interactions, MPOT assesses adult–child and peer interactions. We investigate whether a more comprehensive assessment of program quality can be achieved using both tools in free-play focused contexts. Vygotsky’s (1978) zone of proximal development within a sociocultural perspective is used, where learning through interactions is emphasised. From a post-positivist approach, this study includes observations using MPOT and CLASS in 125 groups serving children between three and five years. Quantitative data were analysed in Stata, producing descriptive statistics and correlation analyses of the tools. Consent letters were collected from staff before groups were assigned unique identifiers. Groups could withdraw any time. Correlation patterns revealed few significant correlations indicating that different aspects of quality are measured with these tools. This shows that MPOT and CLASS can be used to supplement each other. Using these tools together may provide richer, more holistic representations of quality in free-play focused contexts – producing more fine-grained views of children’s experiences in preschool.

peer play, adult support, mature play observation tool, classroom assessment scoring system, free play

This application discusses a completed piece of research.

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**E25**

**TEACHER’S ATTITUDES, TALK AND OBSERVATION ABOUT MATHEMATICS**

**Chair:** Christiane Benz, University of Education Karlsruhe, Germany

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**Preservice teachers’ attitudes towards mathematics**

Benita Berg and Pernilla Sundqvist, Mälardalen University, Sweden

Researchers emphasise the importance for early childhood teacher education (ECTE) to promote positive attitudes towards mathematics (Hollingsworth & Knight McKennas, 2018). The aim of this study is to investigate preservice teachers' attitudes towards mathematics, whether and how attitudes change during ECTE and what might cause the changes. Previous research shows that many preservice and early childhood teachers have low self-confidence and negative attitudes towards mathematics (Gresham & Burleigh, 2019; Hollingsworth & Knight McKenna, 2018; Linder & Simpson, 2018; Palmer, 2010). These negative attitudes influence their teaching of mathematics, which in turn affects children’s possibilities to learn (Geist, 2015; Knaus, 2017; Linder & Simpson; 2018; Youmans et al., 2018). We use the concept of attitude and adopt a multidimensional definition, where cognitive as well as affective and behavioral components are included (Wen & Dube, 2022). We will use a short form of Tapia and Marsh's (2004) Attitudes Towards Mathematics Inventory (ATMI) questionnaire, developed and tested by Lim and Chapman (2013), together with complementing open questions. Ethical considerations are made according to the guidelines of the Swedish Research Council (2017). Based on the results, we will describe preservice teachers' attitudes towards mathematics during different parts of their education, as well as what influences these and how ECTE can contribute to promoting positive attitudes. The study can provide knowledge about how ECTE can support the development of positive attitudes towards mathematics, with the ultimate aim to enable early childhood education teachers to teach mathematics using children’s curiosity and interest.

early childhood teacher education, mathematics, attitudes, preservice teacher, questionnaire

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**‘Mathematics – where do I begin?’ - Observing children’s mathematical competencies**

Christiane Benz, Friederike Reuter, Andrea Maier and Germany Zoellner, University of Education, Karlsruhe, Germany

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This application discusses an ongoing piece of research and findings may be preliminary/emerging.
The research aims at evaluating different observation tools for children’s mathematical competencies in terms of professional development. Perceiving and observing children’s competencies is a prerequisite for individually adequate interactions with children as well as for planning activities (Fosse, 2018). Therefore, observing is a facet in many professional competence models (Gasteiger & Benz, 2018), and in studies investigating professional competencies (Yang et al., 2019). On one side, diagnostic interviews or tests can be used for observing. But these are artificial 1:1-situations, sometimes with perceived pressure (Clarke et al., 2006). On the other hand, everyday observations are least structured (Bruns et al., 2020). Between these two poles, different situations can be designed for observing. In an in-service training, different tools for observing children’s number competencies were offered to professionals. First, 11 professionals assessed the tools’ practicability in a mixed methods online survey. Then, two synchronous virtual focus-group interviews (Stewart & Shamdesani, 2014) with respectively two participants were conducted. For analysis, qualitative content analysis (Kuckartz, 2018) was used. The professionals and the children took part voluntarily and for every recording permission was asked. Regarding professional development and organizational aspects, the 1:1-interview was assessed as highly adequate by the professionals. However, in one case it was perceived as a test-like situation, and professionals partially got insecure about giving neutral feedback to the children. We suggest that prescribed diagnostic guided play may offer a situation of reduced complexity for professional development and at the same time address children’s need for a safe and playful environment.

mathematics education, professional development, observing children’s competencies, documenting children’s competencies, number competencies of children

This application discusses a completed piece of research.

Preschool teachers’ and children’s mathematical talk when sharing picture books with and without explicit mathematical content
Eveline Wauters (1), Joke Torbeyns (1), Lieven Verschaffel (1) and Hilde Van Keer (2); (1) KU Leuven, (2) Ghent University, Belgium

We aimed to investigate preschool teachers’ and children’s mathematical talk when sharing picture books with and without explicit mathematical content. Shared picture book reading (SPBR) has been found effective for stimulating 3-6-year-olds’ literacy and mathematical development (Mol & Bus, 2011; Purpura et al., 2017). Contrasting literacy research, systematic analyses of teacher-child extra-textual talk during SPBR and its association with picture book features, are missing in mathematics research. The first studies on the topic indicate that explicit mathematical content elicits more teacher (Hojnoski et al., 2016) and child (Elia et al., 2010) extra-textual mathematical talk. This study built on the socio-cultural theory (Vygotsky, 1978), with mathematical talk as a way of co-constructing mathematical knowledge. Furthermore, we used a mixed methods research paradigm (Johnson & Onwuegbuzie, 2004). Two SPBR sessions were video-recorded in 38 preschool classrooms (4-5-year-olds) with picture books about repeating patterns. The first book contained patterns in the pictures only, the second not only in the pictures but also explicitly in the text. We transcribed and coded all video-recordings and conducted statistical analysis. Informed consent was obtained from all participants. Protecting their privacy, we only filmed the picture book and teachers’ hands and removed names from transcripts. Findings indicate that picture books with patterns explicitly in the text, elicit more teacher and children talk about patterns, and especially about recognizing patterns and naming the elements. These results highlight the importance of integrating mathematical content explicitly in the text to foster rich mathematical talk during SPBR, and, consequently, children’s mathematical development.

shared picture book reading, extra-textual talk, picture book features, early mathematics, repeating patterns

This application discusses a completed piece of research.

E26

YOUNG CHILDREN’S ENGAGINGS WITH THE ARTS
Chair: Marta Cabral, City University of New York (CUNY) College of Staten Island, United States

Developing principles for engaging with the arts in early childhood education and care – Ireland’s innovative participatory approach
Jane Heffernan, Department of Children, Equality, Disability, Integration and Youth, Ireland
This paper lays out the innovative fully participatory approach to policy development Ireland is undertaking to develop principles for engaging with the arts in ECEC. In 2019, under the Creative Ireland Programme, work began to develop key principles to underpin young children’s quality engagement with the arts in ECEC settings. Research was commissioned, a steering group was established and a consultation event with artists and early years educators was held. The Draft Principles for Engaging with the Arts in Early Learning and Care were published in October 2022. This work is informed by the theoretical framework of the Lundy model of participation (DCEDIY, 2021). A commitment was made to keep the principles in draft form until they could be tested using action research to gain feedback from educators, artists and children via an independently evaluated artist in residence pilot programme and wider public consultation processes. Ethical considerations include the safe guarding of children, educators and artists in the action research pilot and the integrity and honesty of the research and evaluation. Emerging findings indicate the potential for participatory approaches to ignite stakeholder interest in policy development and subject matter, and to foster collaborative connection across stakeholder groups, both essential to realising the policy objectives. Some challenges associated with operating in Ireland’s dual language system have also been highlighted. These and further findings will inform the finalised publication of the principles, the development of practice resources materials and the development of Continuing Professional Development training.

participation, arts, principles, innovation, action research

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Artistic inquiry, agency, and ownership of learning
Marta Cabral, City University of New York (CUNY) College of Staten Island, United States

This research aims to understand if/how exploring art materials can help children develop ownership of learning, and understandings of their role as makers and agents of change in the world. Based on Material Inquiry, New Materialisms, and child-centered approaches stemming from Duckworth, Pacini-Ketchabaw, and Recchia, this study showed how a teacher offers possibilities (materials, environments, explorations) and leaves it up to each child to take up (or not) her offers as they wish. This qualitative study was conducted over four years of teaching in a laboratory-school at a New York City university, using observations and interviews to understand if and how artmaking can foster curiosity, agency, and ownership of learning. Children’s participation was always voluntary and consented by families, who had access to data. The teacher’s role is to listen and respond to how the offer is received – even if that means it is rejected. This deflected and reflected discourse (Cabral, 2016) happens between individuals-materials, children-teacher, and peers engaged in common explorations. In these relationships direct participation is not the only acceptable choice: answers cannot be required and an active choice for disengagement should be a valid response. More than performing a dialogue in which a pre-determined style of participation is required, this discourse is created by all participants and its outcome is unknown to all. This is fundamental to how we train teachers to interact with their students as they offer artistic (or any other) activities, exploring ways to let children lead and take charge of their learning.

ownership, art making, materials, agency, inquiry

This application discusses a completed piece of research.

Developing early childhood teachers’ play skills through a drama professional development program
Anthia Michaelides and Eleni Loizou, University Of Cyprus, Cyprus

This study examines the development of early childhood teachers’ (ECTs) socio-dramatic and imaginary play skills through the implementation of a drama based professional development program (PDP). Drama and play have an undeniable connection since they share common skills (Dunn & Stinson, 2012). Research suggests drama as a means to support children’s and teachers’ play skills (Lobman, 2005). Teachers’ involvement in children’s’ play agrees with the concept of Vygotsky’s Zone of Proximal Development (ZPD), since their involvement can enhance children’s play (Bodrova, 2008). Drama and specifically improvisation fall within the ZPD (Graue, Whyte & Delaney, 2014) and PDPs that use drama develop teachers’ skills (Lobman, 2005). Thirteen in-service ECTs attended a 9-session drama PDP, aiming to develop sociodramatic play skills. Four of them provided the data of this study. Participants videotaped themselves and children during sociodramatic play (up to 5 videos) and reflected on each one. Additionally, two semi-structured interviews were conducted with each participant pre and post the PDP. Consent forms were given to all participants (teachers, children, staff), with the right to leave at any given time. All necessary permissions were obtained by the Centre of Educational Research and Evaluation. All participants exemplified development in their sociodramatic play skills specifically Role Enactment skill, Interactive Dialogue skill and Interactive dialogue with Role enactment skill while also employing drama techniques
during their involvement in children’s play. A drama PDP, is proposed, emphasizing on the role of the Drama Expert and the use of drama techniques as crucial in enhancing teacher play involvement.

**drama techniques, teacher play skills, drama professional development, professional development program characteristics, drama expert**

This application discusses a completed piece of research.

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**E27**

**INTEGRATING DIGITAL PRACTICES INTO DAILY ECEC LIFE**

**Chair:** Ingrid Gronsdal, Western Norway University of Applied Sciences, Norway

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**Linking everyday concepts and scientific concepts as means for children’s participation in preschool technology activities**

Sara Eliasson, Louise Peterson and Annika Lantz-Andersson, University of Gothenburg, Sweden

The study aims to explore how everyday concepts and scientific concepts of technology are linked in preschool teachers’ and children’s interaction. Technology education in ECE is an emerging field where research recurrently focus on preschool teachers’ perception of technology (Eliasson et al. 2022). This occasions further in situ studies of technology activities in preschool settings. Underpinned by sociocultural perspectives (Vygotsky, 1934/1987), technology activities were explored, regarding concept formation at two dialectically related levels. Everyday concepts create a potential for scientific concepts to develop, while scientific concepts structure everyday concepts, thus linking them strongly to one another (Vygotsky, 1934/1987). The empirical data encompass ten video-documented technology activities and involve eleven children aged 2-5 years and four preschool teachers in three Swedish preschool groups with a pronounced technology focus. To analyze data, Interaction Analysis (Derry et al., 2010) was used. In addition to following the ethical guidelines of The Swedish Research Council (2017), specific considerations were continuously made as the research involves young children (Dockett et al., 2009). These were e.g. continuous information of their choice to participate and the researcher wearing a signal vest when filming. Preliminary findings suggest the significance of enabling children’s initiatives and linking them to everyday and scientific concepts as means for supporting children’s engagement in concept formation in technology activities. The study contributes to the emerging research field of technology education in ECE, and with didactic knowledge of how technology activities can be organized to support young children’s participation and concept formation.

*early childhood education, socio-cultural perspectives, technology education, children’s participation, everyday and scientific concepts*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**Developing a model for investigation and initiating sustainable digital practices in kindergartens**

Ingrid Gronsdal, Western Norway University of Applied Sciences, Norway

This paper suggests a model for investigating and initiating sustainable digital practices in kindergarten, based on findings in a research project exploring the use of sensory-based digital technologies in eight naturalistic kindergarten settings. This paper is informed by the TPCK-model (Mishra & Koehler, 2006), but transforms it into focusing on practice. Research shows that the main barriers for staff to adopt new technology are structural constraints and perceived usefulness (Buchanan et al. 2013), but also perceived ease of use (Davis 1989). The concept of sustainable digital practices is approached using a socio-materialist theoretical lens (Orlikowski, 2017). The research methodology is positioned in the qualitative paradigm and is inspired by educational design research (McKenney & Reeves 2012). All participants were informed about the project, protection of data and signed a consent form. Analysis of the data material from the kindergartens forms the basis for developing a model for sustainable digital practices (SDP), which can be used both for investigating the sustainability of existing digital practices and as a tool for initiating new SDP’s. The SDP-model articulates our concept of digital sustainability as the merge of three intersecting educational objectives; 1) children’s need for bodily active experiences, 2) children’s need for high quality content, and 3) the materiality and complexity of technology implementation. The three intercepting objectives in the model will be explained and examples of using the model for
analysing digital practices will be presented. We believe the SDP-model can offer analytical perspectives on educational elements involved in sustainable digital practices.

sensory-based technology, sustainable digital practices, professional development, theory development, early childhood research

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Analyzing the use of a multilingual digital e-book application in Swedish preschools
Malin Nilsen, Department of Education, Communication and Learning, Sweden

This study focuses on a multilingual digital e-book application (Polyglutt). The aim was to gain knowledge on how the application was used in Swedish preschools with a focus on multilingualism and language development. Studies show that joint book reading supports children's oral language development and early literacy skills (Bus, 1995; Mol et al., 2008), but there are still few studies on digital e-book reading (Kucirkova, 2018; Wang et al., 2020), especially on the use of multilingual books in educational settings (Zaidi, 2019). The theoretical framework of the study is a social-cultural perspective on learning (Vygotsky, 1978; Wertsch, 1998) and mediation is the central analytical concept. The empirical material comprises interviews with 17 early childhood educators, and video observations of 25 children and six educators. Analysis was conducted through qualitative content analysis (Mayring, 2022) and interaction analysis (Derry et al., 2010). Both participants and parents of children were provided with information about the study, gave verbal and formal consent and were given the opportunity to withdraw at any time. Children's well-being and comfort was monitored by both teachers and researcher during filming and reading activities were age-appropriate for the participating children. Names of persons and preschools were replaced by pseudonyms. The study shows that that the participants enjoy using the app but that there is a missed potential regarding multilingual development. The findings have significance for an informed discussion on the use of multilingual digital book applications in early childhood settings and adds new knowledge to a developing research field.

digital technology, e-books, joint reading, multilingualism, socio-cultural perspective

This application discusses a completed piece of research.

E28
TEACHER PREPARATION ACTIONS AND INVOLVEMENT IN PLAY
Chair: Eleni Loizou, University of Cyprus, Cyprus

Constructive play: Exploring pre-service early childhood teachers’ play involvement
Eleni Loizou and Manto Olymbiou, University of Cyprus, Cyprus

This study examines the involvement of early childhood pre-service students in children's constructive play, and highlights how this involvement supported children's play skills towards advanced building behaviors. Research explores teachers' involvement in children's play. Park (2019) suggests provision of enough time, open-ended materials and stories while Trawick-Smith et. al. (2016) propose that specific questions and comments by teachers can help children think about what their construction represents and extend it increasing their building complexity. We support teacher play involvement acknowledging Vygotsky's ZPD, and draw from the work of Trawick-Smith, Cullis, and Koschel (2022) on children’s mature building play behaviors (e.g. representation, persistence in building), and Loizou’s (2019) teacher play involvement (e.g. direct or indirect involvement). This study follows an interpretivist paradigm, as it interprets teachers’ play involvement. It is a qualitative study that uses 12 videos (~20 minutes each), and reflective journals as data selection methods. The participants, pre-service teachers and children's parents sign a consent form, as part of the School Experience program, and in reporting the findings, the data was anonymized for teachers and children. To support children’s representation in building, pre-service teachers asked questions, posed challenges or concerns within the context of children's scenario, supporting their mature building play behaviors. Such specific involvement ways supported children's mature constructive play. Findings lead to a Zone of Proximal Action, referring to good fit involvement through guided play which can support early years' undergraduate and professional development programs to train teachers in enhancing children’s mature constructive play.
This application discusses a completed piece of research.

**Practice architecture of Norwegian preschool teachers’ actions in children’s play**
Hege Fimreite, Lillian Pedersen and Hilde Hofslundsengen, Western Norway University of Applied Sciences, Norway

The aim is to investigate preschool teachers’ interactions with children in play, based on the research question: what characterizes preschool teachers’ semantic, material, and social interactions in play with a group of children aged 2-3 years? Previous research states that toddlers need more supervision in their play and the preschool teachers’ role could be more actively participating inside the play than passively, observing and supporting from the outside. (Fler, 2015; Ivrendi, 2020). The theory of practice architecture (Kemmis et al., 2014) offers a holistic approach to the dynamic relationship between individuals in examining preschool teachers' interactions in children’s play, aimed at the sharing of experiences and perceptions in a community of experiences (Aspfors et al., 2021). The study was conducted within a qualitative research paradigm (Denzin & Lincoln, 2018) and contains data from video observations of groups of preschool teachers and children interacting in play. The data is analyzed in theory-driven coding (Brinkman & Tanggard, 2020). The study is approved by the Norwegian Centre for Research Data. Preschool teachers and children's parents consent to participate in one video observation. The data is anonymized. The data were analyzed using the theoretical frame of practice architecture (Kemmis et al., 2014), emphasizing the semantic, material, and social dimensions of the interactions among preschool teachers and children. The preliminary results show that the teachers seem to vary their interactions with elements of inclusion, creating connections, and regulations This study contributes to knowledge about how preschool teachers can facilitate, regulate and support young children’s play.

play, preschool, teachers' interactions, toddlers, practice architecture

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Is the initial training of Portuguese early childhood education and care professionals adequately preparing them to work with children aged 0-3?**
Janete Silva Moreira (1), Inês Gregório (1) (2), Ana Lúcia Aguiar (1), Ana Teresa Brito (1) (3), Joana Cadima (1) (4), Luisa Barros (1) (5); (1) ProChild CoLAB, (2) Catholic University of Portugal, (3) ISPA Instituto Universitário (Institute of Applied Psychology), (4) University of Porto, Portugal, (5) CICPSI University of Lisbon, Portugal

The ProFormação 0-3 project aims to characterize Portuguese early childhood education and care (ECEC) professionals’ initial training regarding children aged 0-3. Literature shows that ECEC professionals with specific training to work with children aged 0-3 have a more complex and multidimensional comprehension of their development and learning processes (Hu et al., 2019; Schaack et al., 2017). But further investigation is needed, specifically in Portugal (Gomes & Brito, 2022; Vasconcelos, 2011), to identify initial training key-elements (i.e., contents; practices) to potentiate ECEC quality (Eckhardt & Egert, 2018; Loizou & Recchia, 2018). To reach its goals, the project included 2 phases: a) documental analysis to identify all higher education and vocational programs available; b) focus groups with higher education lecturers of identified programs to understand their perceptions on how initial training prepares ECEC teachers to work with children aged 0-3, and with ECEC professionals to identify their training needs. The project was approved by the Ethics and Deontology Commission of the Faculty of Psychology of the University of Lisbon and complies with all ethical procedures. Results showed that contents related to work with children aged 0-3 are rarely included in initial programs, raising concerns regarding professionals’ preparation to work with infants/toddlers. Interviewees reported a greater focus on children under 3 is needed and expressed their perceptions on the most relevant changes needed. Gaps between contents of current programs and the training needs of ECEC professionals will be discussed, as well as recommendations for relevant complementary training offers.

early childhood education and care, early childhood education and care professionals, initial training, training needs, complementary training

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Challenges of kindergarten teachers working in collaboration with vulnerable parents
Anna Yik On Chan and Chrysa Pui Chi Keung, The Education University of Hong Kong, Hong Kong

This study seeks to understand the challenges encountered by kindergarten teachers in collaboration with vulnerable parents for children’s education and identify professional practices in responding to those conflict threats. The importance of parent-teacher collaboration in early childhood settings has been long recognized (Rouse & O’Brien, 2017; Vlasov & Hujala, 2017). However, there are gaps in the literature regarding how teachers perceive conflicts and develop corresponding resolution strategies (Bang et al., 2021). Drawing on a social constructionist framework, the study interpreted teachers’ experiences and responses to the challenges and tensions when interacting with vulnerable parents (Ellis et al., 2015; Ward, 2018). This qualitative study collected data through semi-structured interviews with 16 teachers from 4 kindergartens. Their descriptions of critical incident cases were analyzed inductively. Informed consent was obtained from the participants prior to the study. Participation was voluntary while they had the right to withdraw anytime. Data confidentiality and anonymity were addressed. This study has been endorsed by the university’s research ethics committee. This study identified four vignettes from critical incident cases reported by kindergarten teachers. Findings reflect that kindergarten teachers viewed those conflicts as an opportunity when working with vulnerable parents. They highlighted effective practices of parent-teacher collaboration that developed through reciprocal communication, trust building, empathic understanding, and non-judgmental listening. These are promising strategies for resolving potential conflicts and establishing collaborative interaction between parents and teachers. The study highlights the need to strengthen teachers’ professional development in exploring effective practices to deal with the conflict threats of parent-teacher collaboration.

parent-teacher collaboration, vulnerable parents, kindergarten teachers, conflict threat, critical incident cases

Perceived and Requested Participation of Parents in Day-Care Centers and Parental Perspectives on Harmful Behavior of Professionals
Ruth Büüllesbach (1), Rieke Hoffer (2), Jessica Ferber (1), Dörte Weltzien (3) and Maike Rönna-Böse (3); (1) Center for Childhood and Adolescence Research (ZfKJ), (2) University of Applied Sciences Koblenz, (3) Protestant University of Applied Sciences Freiburg, Germany

The research aims to make parents’ perspectives on harmful behavior by professionals in day care centers visible and to show how they perceive and request participation in this context. It is apparent that harmful behavior by professionals occurs in almost all daycare centers (Prengel 2019, Boll & Remsperger-Kehm 2021). This is where the research comes in and determines the parents’ perspective on this hurtful behavior. Some earlier studies on parental satisfaction or quality from the parents’ point of view were reviewed in support of this (Betz et al. 2017, El Nokali et al. 2021, Nentwig-Gesemann et al. 2020). The research is theoretically and conceptually embedded in the German Law, which prescribes both protection concepts and the participation of parents in day-care centers. As part of the research, parents were asked in qualitative interviews about their understanding of parental participation and educational partnerships in the context of harmful behavior of professionals. The interviews were analyzed in terms of content analysis and hermeneutics. The ethical concerns were related to the sensitivity of the topic. Before and during the interviews, the voluntary nature of answering the questions was pointed out. Anonymity and confidential handling of the data was guaranteed all time. Open and transparent communication is extremely important for parents to perceive the day-care center as a safe place. When this is the case, parents also feel less inhibited about raising observations of harmful behavior. The research is a contribution to safeguarding children’s rights and improving the educational mandate in early childhood education.

parental participation, parent’s perspective, educational partnership, day-care centers as "safe places", parental involvement in the solution of harmful behavior

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Responding to COVID-19: How early years settings supported children’s language and communication development and encouraged parental partnerships

Christine Jack (1), Elaine Ashton (1), Kate Conn (1), Carolyn Letts (1), Sean Pert (2), Emily Preston (1), Naomi Rose (1), Helen Stringer (1) and Cristina McKean (1); (1) Newcastle University, United Kingdom, (2) University of Manchester, United Kingdom

This study explores how a group of early years settings encouraged parental partnerships during COVID-19 restrictions. It provides recommendations for how other early years practitioners (EYPs) could be supported to implement additional strategies post-pandemic. The importance of parental partnerships, especially in the early years, is identified by research (Gorard and See, 2013) and highlighted in the UK EYFS curriculum (DfE, 2021; DfE, 2017) but little is known about how schools support parental engagement (Axford et al., 2019). While not originally considered by the research team, the ORIM framework (Hannon, 1995) emerged as a relevant and clearly specified model to understand parental engagement. This qualitative research involved interviews with EYPs from ten schools and one nursery in the North East of England. They were asked about changes to their practice and we identified common themes. We followed BERA ethical guidelines. All participants were given information sheets and signed consent forms, and all findings have been anonymised. COVID-19 affected all areas of children’s lives, with language and communication being of particular concern to teachers; many children now need support to catch up. The pandemic highlighted the importance of positive relationships between schools and parents. Our research highlighted the importance of supporting parents to understand how to support their children and why this is important, this supported their agency. Our research suggests there is a potential for a more explicit application of the ORIM framework to bring benefits to early years settings, parents/caregivers and children.

parental partnerships, language and communication, COVID-19, early years, agency

This application discusses a completed piece of research.

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SIG Gender Balance Self-organised Symposium

CHILDREN’S PERSPECTIVES OF THEIR MALE AND FEMALE EDUCATORS

Chair: David Brody, Orot Yisrael Academic College, Israel

This symposium is based on a collaborative international research endeavor focused on young children’s perspectives of their male and female educators. The project includes research teams from nine countries in the Global South and North. Each team is preparing a case study of one ECEC site in their country which features a male and female as co-teachers. Inspired by the Mosaic approach, the data collection includes various strategies for encouraging children to share their views on their teachers with a focus on gender. Our methodology will be presented, as well as findings from four of the countries: Norway, Brazil, Turkey, and South Africa. Each case study is contextualized on the meso and micro levels through interviews with teachers, parents, and center directors, as well as data on gender norms in the society to provide macro level.

Children’s perspectives on their male and female teachers in Brazil and Norway.

Kari Emilsen (1), Ricardo Goncalves (2), Birgitte Ljunggren (1), Sandro Vinícius Sales dos Santos (3); (1) Queen Maud University College of Early Childhood Education (QMUC), Norway, (2) Örebro University, Sweden, (3) Federal University of Minas Gerais, Brazil

This study aims to understand how cultural discourses in Norway and Brazil are represented in children’s views on their teachers as seen through a gendered lens. ECEC institutions are infused with local gender discourses represented by professional and parental beliefs. Nordic countries emphasize equality and gender sensitive practice (Edström & Brunila, 2016), while conservative forces in Brazil attempt to block educational policy focusing on gender and sexuality (Vianna & Bortolini, 2020). The theoretical framework posits gender as socially constructed performances (Butler 2004, Connell & Pearse, 2015) that are fluid and situational, cultural, political, and socially multi-leveled. In our case study methodology, data collection is modeled on the Mosaic Approach (Clark, 2017), using observation and open-ended interviews with children, and semi-structured interviews with mixed gender staff and parents. Thematic analysis using an abductive approach was conducted. Children gave assent to their participation, and adults gave informed consent. Data was anonymized. Ethical approval was obtained from National Centres for Research Data. Preliminary findings suggest that children in both settings value playfulness and kindness amongst the staff and are attracted towards staff with those
competencies. The Brazilian case exhibits a binary pattern where children see only male teachers with those qualities. In Norway it is harder to distinguish a gendered pattern. We relate these findings to local gender discourses, pedagogical traditions and organizational traits. This study shows how cultural contexts affect gender sensitive practices and challenge gender stereotypes by acknowledging children’s voices.

**gender discourses, children’s voices, educational policy, cultural contexts, international research**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Utopia and taboo: Israeli children’s suppression of gender talk in an outdoor kindergarten**

David Brody (1), Yael Dayan (2) and Daniel Gordon (2); (1) Orot Yisrael Academic College, (2) Hebrew University of Jerusalem, Israel

Aims include learning how children in a gender-balanced outdoor kindergarten view teachers from gender perspectives, using sociocultural contexts to understand children’s gender perspectives. Societal norms within educational settings suppress teacher and child talk about emotionally-laden topics (Jehng, 2022; Brody & Baum, 2007). This study examines how gender discourse became taboo for children. Freire’s (2005) critical pedagogy suggests educators’ providing objective views of society. Supporting children’s perspectives research, Pascal and Bertram (2009) placed young children at the center of scholarly inquiry. From these two viewpoints we constructed our theory on children’s silence about gender. The Mosaic Approach (Clark, 2005) inspired this case-study research. Picture-drawing and child-guided walks stimulated children’s narratives about teachers. Parents and teachers were interviewed using a semi-structured protocol. We analyzed data thematically using grounded theory. Participants were anonymized and identifying information was suppressed. Ethics Committee of the Hebrew University granted approval. Parents and teachers criticized societal gender norms, viewing the outdoor kindergarten as a gender-balanced utopia. However, kindergarten observations revealed traditional gender roles in daily practice. Children’s narratives regarding their teachers avoided gender explanations. This absence of gender references is explained by an unspoken taboo against gender discourse. Alternative explanation is children’s sensitivity to adult ambivalence regarding gaps between reality and their ideal regarding the kindergarten setting. Parents and practitioners should consider opening discourse around gender topics to enable children’s voices and to learn from children how to align gender realities with practice.

**gender, children’s perspectives, outdoor kindergartens, taboo, Mosaic approach**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**A cross-national collaborative project methodology aimed at understanding children’s perspectives of their male and female teachers in early learning settings**

Laetitia Coles (1), Yael Dayan (2), Mindi Reich-Shapiro (3) and Minyi Li (4); (1) The University of Queensland, Australia, (2) The Hebrew University of Jerusalem, Israel, (3) Borough of Manhattan Community College, United States, (4) Beijing Normal University, China

We present the data collection and analysis methodologies for nine case studies investigating young children’s perspectives of educators in ECEC within services across nine countries spanning the global north and south. Limiting assumptions about children’s abilities contravene United Nations Convention on the Rights of the Child (United Nations 1989, Article 12). Young children are meaning-makers (Clark & Statham 2005), thus, our research centers children’s perspectives (Dayan, 2008) on gender, which is essential as traditional gendered divisions are observed among educators (Brownhill, et al., 2014). We adopt a cross-cultural framework and examine multi-level contexts (Bronfenbrenner, 1979) that shape ECEC, recognizing that gender is a form of culture; it is dynamic, context-specific, and subject to change (Bray & Koo, 2004). A qualitative research paradigm underpins our Mosaic approach (Clark, 2017) to capture unique “languages of children” (Clark, 2011: p. 13). Diverse and flexible data collection activities generated rich conversations with children, and contextualising information from educators and parents. Data collection activities depended upon setting-appropriateness and local ethical requirements. We followed EECERA’s Ethical Code for Early Childhood Researchers (Bertram et al. 2015). Children were reminded they could withdraw assent at any time, and nonverbal signs of withdrawal were identified. We overcame the challenges of a cross-national project through diverse data collection activities and a collaborative research culture, to gain a comprehensive understanding of young children’s complex and dynamic experiences and perspectives. Policy and practice should prioritize children’s perspectives in decision-making processes for their education and care, creating inclusive environments that respect gender diversity.
This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Symposium Set F
Friday 1st September 2023, 13:50 – 15:10

F1
ASPECTS OF ASSESSMENT AND EVALUATION
Chair: Kristín Karlsdóttir, University of Iceland, Iceland

Reimagining the intercept of pedagogy and andragogy through an early years lens in a higher education institution with international initial teacher training students
Vikki Wynn, Alison McMaster and Sarah Simpson, University of Sunderland, United Kingdom

The academic IITT team sought to make assessment more authentic for students, moving away from simply reproducing knowledge, to providing a sense of personal engagement. Formative assessment strategies can make a significant difference to children’s progress in their ability to be confident, critical learners and in raising their self-esteem. The team aimed to replicate this holistic approach to teaching and learning in a HEI. External regulations often dictate assessment formats within HEI’s (Ball, 2013). Having an Early Years background and a strong pedagogical approach led to changes in the assessment format (Freire, 1970; Murphy, 2013) empowering all involved. An interpretivist paradigm allows for an improved understanding of the ‘world’ from the experiences of individuals. Embracing qualitative methods are emancipatory through the feminist lens (Cohen et al, 2018). The team employed a netnography design to reflect the nature of the online learning format and methods that could be conducted, including surveys and focus groups. No apologies are made for the fact this research is driven by qualitative data, advocated by Edwards (2004) as giving participants voice and most often used by practitioners seeking to improve their own practice. The range of methods will allow for anonymous contributions and all voices to be heard. It is evident from the lived experience of the academics that it is possible to adopt a pedagogical approach in a HEI. The findings will be disseminated across the HEI to begin changing the assessment formats and acknowledging the significance of a holistic approach to teaching and learning.

pedagogy, higher education institution, netnography, early years teaching, teacher training

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Assessment in preschool practice: How, what and who?
Kristín Karlsdóttir, Margrét Björnsdóttir, Sara Margrét Ölafsdóttir and Anna Magnea Hreinsdóttir, University of Iceland, Iceland

The aim was to explore educator’s use of preparation time to assess the practice and ECE activities; children’s participation, agency, and well-being. Icelandic laws emphasize democratic approach in children’s education (Parliament, 2008), where the planning and assessment of ECE activities takes place in educators, parents, and children’s collaboration. Children’s views can be indicative and should lead to increased understanding on what is important to them and even lead to changes (Borland et al., 1998; Clark et al., 2003). Preschool teachers’ professional development is partly seen as evaluation of practice in ECE, involving the organization, pedagogical practice, and assessment (Alvestad et al. 2015; Gotvasli, 2020). Furthermore, valuing assessment methods, like documentation, focusing on children’s strengths and agency (Biffi, 2020; Brooker, 2008; Carr, 2014). The data builds on qualitative methods; interviews with preschool teachers and head teachers in eight preschools in rural areas and the capital. The analysis was inspired by reflexive thematic analysis as developed by Braun and Clarke (2013). Participants gave their consent and were promised confidentiality. Pseudonyms were used for the preschools and participants involved in the interviews. The findings show preschool teachers’ needing to perform multiple and time-consuming assignments in their preparation time. Assessment measures, seeking for children’s particular skills were frequently used as a main assessment method but more child-friendly methods, like pedagogical documentation, were barely mentioned. Assessment was seldom conducted in collaboration with assistant educators, families, and children, even though Icelandic policy suggests this. Therefore, improving the participation of all parties in assessment practices is necessary.
This application discusses a completed piece of research.

**A framework for evaluating preschool learning materials: A systematic literature review**
Heily Leola, Merle Taimalu and Krista Uibu, University of Tartu, Estonia

Aim- to provide an overview of which criteria are important to choosing learning materials and to develop a framework based on them. There has been an increasing emphasis on learning materials in preschool education (aged 6-7 years) both in Europe (Patton & Winter, 2022) and in Estonia (Neudorf et al., 2017). Studies have shown that teachers choose materials intuitively and are not aware of what high-quality learning materials are (Reints & Wilkens, 2019). Selecting appropriate learning materials plays a crucial role in supporting teachers teaching and students learning. Several studies have shown that high-quality material has a positive effect on students' learning outcomes (e.g. Nemati, 2009). A systematic literature review was conducted using the EBSCOhost and Web of Science databases. Screening of abstracts and full texts resulted in the selection of 20 papers. Qualitative inductive content analysis was used. This is a literature review and ethical considerations have been made to ensure a fair representation of literature. Together with the research group, the search parameters, keywords and databases in which to search, and the criteria for including and excluding sources from the study were reviewed. Found four categories: didactical solutions, consideration of student individuality, developing general competences, external factors. These categories were used for developing a framework for evaluating preschool materials. Implementing the evaluation criteria of learning materials is important for teachers to make choice based on the principle that materials support pupils' development. The framework help preschool teachers to make a decision how to choose suitable learning material.

learning material, preschool education, evaluation framework, teacher professionalism, systematic literature review

This application discusses a completed piece of research.

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**F2**
**DIDACTICS, DIFFERENCE AND PEDAGOGY**
**Chair: Sofia Eriksson Bergström, Mid Sweden University, Sweden**

**Plan for the unplanned – about the creation of didactical places in preschool**
Sofia Eriksson Bergström, Mid Sweden University, Sweden

When concepts like teaching and quality measurement are used to describe ECEC, when the preschool practice more and more become a goaI-oriented practice, this presentation aims to discuss how to create playful didactic environments that balance affordances of creativity, curiosity, and agency. Creativity should not only be regarded as an interpersonal process, as a collaborative interaction between both individuals and between individuals and environments (Craft, 2003). The open-ended play is one of the biggest challenges to the measurement culture in ECEC today (Clark, 2022). The theory of affordances (Gibson, 1986) is used, though an underlying theoretical intention is the concept of agency (James, 2009). The study was conducted within a qualitative research paradigm and covers analysis from interviews and video observations from two different milieus especially planned for creativity. The principles from the Lean framework is based, such as accuracy in all research steps and methods, respect for all individuals, children and adults, involved in the project, relevance and meaningfulness for all involved, were taken into account in the project’s implementation and data collection. Educational institutions’ challenge today is to balance clearly formulated learning objects with children’s agency, to balance the roles of being a producer and/or a reproducer with didactic milieus that equally are planned for the unplanned (Eriksson-Bergström, 2021). If learning environments are to be able to meet the demands and expectations of the becoming creative generation, they need to be planned with awareness of how to balance the roles of being a producer and a reproducer

play, creativity, agency, place, didactic
Peer culture, curiosities, difference and protagonism of/with children: Brazil and Italy
Fabiana Canavieira (1), Franca Giuliana Maria Antonia Zuccoli (2) and Ana Lúcia Goulart de Faria (3); (1) Federal University of Maranhão, Brazil, (2) University Milano-Bicocca, Italy, (3) The State University of Campinas (UNICAMP), Brazil

To apprehend how early childhood education from 0-10 years old operates democratic practices which promote children's participation with eyes open to differences. Integrates into the articulation between art, politics and Pedagogy with emphasis on peer culture produced among children and among children and adults. It is based on the tension between Marxist and decolonial studies on Democracy and Education in Paulo Freire and Loris Malaguzzi, with an emphasis on Child Participation and Protagonism and on Critical and Emancipatory Childhood Pedagogy. Pluralist and multi-referential paradigm of the Social Sciences, with the intersectionality between gender, race, class and age, a theoretical-methodological tool proposed by the black feminism (Angela Davis). The conduction of the investigations meets both ethical and legal precepts with due authorization and documentation from the ethics committee. The participants involved have authorized the research. It shows that Child Participation manifests itself through multiple languages in the production of a social reality aware of the origin of inequality. Educational institutions from the ECEC onwards can be the locus of democratic experiences that accounts for children's curiosities and the diversity of the Italian population and the Brazilian people.

ECEC, intersectionality, child participation, difference, Childhood 0-10

The paper explores how re-visiting historical text from the formation of the danish kindergarten tradition might help revitalize pedagogical values and knowledges about Children’s Agency and Participation. The study contributes to a growing literature arguing for a need for educational languages that can critically inform and inspire questions of professional identity, purpose and good practice in ECEC (Biesta, 2009; Sæverot & Kristensen 2022). The paper draws on hermeneutic understandings of practice as embedded in cultural knowledges and values (Gadamer 1999, Manen 2017), discusses these as pedagogical and argues for the relevance of such insights for future foundations for ECEC. Distinguishing between ECEC as an institutionalized practice subject to political and governmental regulation and Pedagogy as a term designating the thoughtful and value-based practice of upbringing and education, we organized and taped a total of 18 professional circles where practitioners discussed texts articulating the pedagogical, democratic and social foundations for the Danish kindergarten (1890’es to 1960’es). A central interest has been to give voice to practices, knowledges and values of ECEC practitioners. All participant names are pseudonyms and none are recognizable by contextual details, complying to the EECERA Ethical Code. Knowledges of Children’s Agency and Participation have historically been central to the Danish kindergarten tradition and offers pedagogical orientations that challenge prevailing practices of learning, standardization and accountability. The project seeks to spur pedagogical languages of Children’s Agency and Participation that might support practitioners in a critical pedagogical practice characterized as what Foucault termed the care of the self (Foucault 1997).

childrens agency and participation, childhood pedagogy, ECEC professionalism and development, historical roots of pedagogy, the ethics of self-care

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

F3
HOME, TEACHER AND COMMUNITY CREATIVE STIMULANTS
Chair: Jaye Johnson Thiel, University of Alabama, United States
Implementing creative play in a preschool class: Actions taken by a preschool teacher
Evi Loizou and Eleni Loizou, University of Cyprus, Cyprus

This study aims to describe the actions taken by a preschool teacher for the implementation of creative play (CP). Researchers defined CP as an activity in nature involving imagination (Wilson, 2007) or children’s participation in a gallery’s experimental play activities (Piscitelli & Penfold, 2015). We acknowledge the importance of teacher’s role in children’s play (Loizou, Michaelides & Georgiou, 2019) and in enhancing children’s creativity (Leggett, 2017) and we concur with the definition of CP play ‘as a flow of actions’, were teachers and children ‘in the context of the arts’, participate ‘in the process of creation and creativity’ (Loizou & Loizou, K. 2022, p. 3–4). This is a qualitative research (Creswell, 2007), involving 16 children (4–6 years old) and their teacher. Data collected through video recordings from two play centres (‘Bakery’, ‘Toy Factory’), teacher’s reflective journal, lesson and play plans. Data were analyzed by uncovering and comparing the various actions and categorizing them to common themes. Children’s agreement for participation by their parents and their anonymity had to be ensured. Inform letters and consent forms with a withdraw option were signed and pseudonyms are used. Peer review and triangulation of data was used in order to mitigate possible risks/bias. Teacher’s actions carried out through ‘Play and creation’ phase emphasizing play skills and ‘Creativity and play’ phase enhancing creativity. In both phases the teacher employed free and structured CP using role playing, organizing materials while focusing on creativity elements (e.g. transformations) and implemented Preparatory and Creativity Enhancing Structured Activities, connecting them with CP experiences. Findings highlight teacher’s specific actions and ways to participate in children’s CP, which provide children activity strategies to employ and enhance their creativity.

creative play, teacher’s role, creativity, activity strategies, structured activities

This application discusses a completed piece of research.

Exploring children’s art making in community spaces as hopeful practice within a hyper-capitalist system: A story of use
Jaye Johnson Thiel, University of Alabama, United States

Situated in a six-year community research project, this paper examines everyday art practices of young children in a community atelier as a way to disrupt the affective forces of neoliberal capitalism in the United States educational system. Research has shown that neoliberalism (Harvey, 2007) has usurped United States education and effectively produces bodies as economic subjects (Davies & Bansel, 2007; Moss, 2014) that are viewed as commodities to an economic system and valued as useful for future-capital growth (Author, 2020). The theoretical framework for this study draws upon affect theory (Stewart, 2007; Berlant 2011) as well as Ahmed’s (2019) conception of the word “use” in relation to neoliberal childhoods (Author, 2021). The study employs a postqualitative approach (St. Pierre, 2021) to research. Data was curated using photographs, fieldnotes, and video in a community atelier over six years. Thinking-with-theory (Jackson & Mazzei, 2012) was used as an analytic tool. University internal review board guidelines were followed. Consent-assent were obtained from each family-child respectively in the study. Verbal permission to take photos, videos, and notes during each visit were obtained from children during each interaction regularly. Participants were given the opportunity to withdraw from the study at any time. Findings demonstrate that attuning to children’s everyday artmaking practices disrupts neoliberal pedagogies and helps to broaden our understandings of what it means to be of use (Ahmed, 2019). Findings suggest implications for how providing open-ended process art opportunities in educational spaces might shift neoliberal policies and practices found within early childhood educational settings.

children’s everyday artmaking, neoliberal childhoods, affect theory, postqualitative inquiry, community research

This application discusses a completed piece of research.

The ‘home’ dimension in alternative cares: exploring practitioners perspective with art-informed strategies
Lucia Carriera, University of Milan Bicocca, Italy

This contribution aims to present the first results of the doctoral project. The project aims to explore how professional educators use the material and imaginary space of a home in educating children in alternative care, focusing on residential settings. At the international (Council of Europe, 2012; UN General Assembly, 2009) and national level (Istituto degli Innocenti, 2017) guidelines and recommendations have been developed to ensure the full explication of the best interests of the child and to fight the risk of institutionalization (Eurochild, 2020). In educational practice, space and its configuration emerges as constituent elements that marks relationships, influencing the activities of a human beings (Dewey, 2004). The research followed the phenomenological-hermeneutic
method (Van Manen, 2016), Data gathering included interviews (N=12), focus groups (=4), art-informed and visual strategies, such as photography and map-making to explore the perspective of practitioners. The study was approved by the Milano-Bicocca University’s Ethical Board (prot. N. 695) and conducted in accordance with the Declaration of Helsinki and the Italian Society of Pedagogy’s ethical code (SIPED, 2020). (World Medical Association, 2001). Exploring 'everyday pedagogies' of practitioners also means observing all those objects that animate the educational setting. (Palmieri, 2008). Given the need to define standards - it is also crucial to explore the lived experience, meanings, practices and functions of the 'home' space in RCH to ensure adequate living conditions for children, promoting their physical and psychological well-being (Timar et Al, 2022) and the production of new life meanings and experiences (Massa, 1999).

children in alternative care, art-informed research, research with practitioners, physical environment and education, phenomenology

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

F4
STANDARDISATION, PHONEMES AND MORPHOLOGICAL AWARENESS ISSUES
Chair: Katie Crouch, University of the West of England, United Kingdom

Standardization of language practices in ECEC – An analysis of language learning tools used in Norwegian kindergartens
Åse Lund, University of South-Eastern Norway, Norway

The study provides a theoretical analysis of three language learning tools used in Norwegian kindergartens. The study’s background is the first published overview study showing the spread of standardized programs in Norwegian kindergartens (Lund et al. 2022). It shows that language tools seem to be particularly prevalent. There are a few Nordic studies focusing on the standardization in ECEC, for instance critical analyses of behavior management programs (Buus, 2019; Seland, 2020, Aabro 2016), and analyses of language assessment materials (Holm, 2017; 2019; 2020). Beyond Olsen’s (2020) description of four Norwegian language learning tools, there are no studies examining this topic. Theories on language policy (Spolsky, 2004), theoretical constructs of bilingualism and bilingual education (Garcia, 2009), and the distinction between structuralist and usage-based theories of language acquisition (e.g. Holm 2010; Tomasello, 2015) will be used in the analyses. The tools’ materials for use in activities with children and the tools’ manuals are analyzed qualitative through a mixed content analysis. There are few ethical concerns using public documents and materials. All the analyzed tools have their main focus on vocabulary skills, one of the most important factors in developing literacy. This can imply that certain language skills are prioritized considering school success (Holm, 2020). Because the tools can have an impact on what the teachers see as important in children’s language skills and in language teaching (cf. Holm, 2020, p. 88; Ministry of Education, 2011, p. 141), the study contributes with increased knowledge on the standardization of language practices in ECEC.

standardization, language development, language learning tools, bilingual education, vocabulary skills

This application discusses a completed piece of research.

Phonemes and phonics: An exploration with young children about their thought processes and meta-language when encountering new sound-symbolic experiences
Katie Crouch and Anna Piasecki, University of the West of England, United Kingdom

This study explored how children aged 24-72 months process and ‘de-code’ words based upon the sounds (phonemes) they consist of. Investigations into sound-symbolism have been prominent in psycholinguistic studies for several decades (Fort et al, 2018); people typically pair the word ‘kiki’ with a sharp item and ‘bobo’ with a rounded item. However, it is not yet fully understood what brings about these systematic associations. This study investigates if these associations are related to phonic development and individual funds of knowledge (Feist, 2013). Conceptual framework was influenced by the researcher’s experiences of supporting children’s language and early literacy. This professional heritage draws from the slow pedagogical approach and sociocultural theory (Vygotsky, 1978; Baron, 2014; Clark, 2022). The reconceptualist paradigm informed this praxeological methodology, making it distinct from previous studies in this field (Pascal and Bertram, 2018; Tuzo et al., 2011). Children were empowered as ‘co-
researchers’ and collaborative data creation was achieved through a series of modified sound-symbolism experiences and discussions. Children were championed as experts in their understanding (Donegan et al., 2022). Data generation followed institutional guidelines. Assent was valued as an on-going dynamic (BERA, 2019). An initial habituation period prior to data investigations, which encouraged physical and emotional safety (Bonino et al., 2019). Multi-sensory games and discussions generated an insight into children’s thinking around phonemes and phonics. These findings indicate significant interactions between age and gender upon children’s processing of sound-symbolism and phonemic learning. Children’s critical thinking, meta-language and literacy development can be scaffolded through an awareness of sound-symbolism.

sound-symbolism, phonics, cognition, language, pedagogy

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Early cognitive and linguistic predictors of morphological awareness skills in grades 1 and 2
Ioannis Grigorakis and George Manolitsis, University Of Crete, Greece

The purpose of this research was to examine longitudinally the kindergarten cognitive and linguistic predictors of different aspects of morphological awareness in grades 1 and 2. Despite much research attention on the relationship between morphological awareness and literacy, the developmental progression of inflectional, derivational, and compounding morphological awareness requires further examination (Diamanti et al., 2018). In fact, the precise nature of morphological awareness and the way in which it is related to cognitive and linguistic skills remains largely underspecified (Apel et al., 2013; Desrochers et al., 2018). Two hundred fifteen Greek children were assessed longitudinally on a variety of morphological awareness tasks at the end of kindergarten, grades 1 and 2. At the middle of kindergarten children were assessed on several cognitive and linguistic skills. Also, at the end of grade 1 children were assessed on word reading fluency. The research design was approved by the Research Ethics Committee of the University of Crete. Written consent from parents was also obtained. A series of stepwise multiple regression analyses were conducted. Phonological awareness, phonological short-term memory and receptive vocabulary in kindergarten predicted significantly morphological awareness in grade 1. Expressive vocabulary was the only kindergarten predictor which survived as independent predictor of morphological awareness in grade 2 even after controlling for the effects of word reading fluency and the autoregressive effects of morphological awareness in grade 1. This research adds to a growing body of literature that supports a close link between vocabulary skills and morphological awareness development.

morphological awareness development, cognitive predictors, linguistic predictors, preschool age, longitudinal research

This application discusses a completed piece of research.

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F5
RECONFIGURING CURIOSITY, INTERGENERATIONAL AND ENCHANTMENTS
Chair: Olga Fotakopoulou, Birmingham City University, United Kingdom

Troubles, enchantments, and ethical responsibilities in inter-creature relationships: Children and adults welcoming indigenous knowledges and care through curiosity and collective experimentation
Stefania Giamminuti (1), Sally-Anne Polson (2) and Natalie Jones (2); (1) Curtin University, (2) MLC Kindle Early Learning Centre, Australia

During this research, children aged 0-6 years experienced enchanting relations with non-human kin in Melbourne, Australia. Connections were hypothesised between pedagogical documentation (Fleet et al., 2017; Giamminuti et al., 2022; Rinaldi, 2021), post qualitative inquiry (St. Pierre, 2021), and “collective experimentation” (Manning, 2016). We welcomed concepts from the environmental humanities (Bird Rose, 2022; van Dooren, 2014) and matters of care (Puig de la Bellacasa, 2017). The research question 'What does making kin mean for young children?' emerged from collective reading of multispecies feminist theorist Donna Haraway (2016). This study was premised on the belief that adults and children are co-researchers and curious intellectuals. The research framework of pedagogical documentation resisted the “strictures of methodological ordering” (Manning, 2015, p. 52). Due consideration was afforded to EECERA Ethical Principles. Signed consent was obtained from all participants, who chose a pseudonym
or use of their name. Children’s assent was consistently sought. The study illuminates children’s and adults’ curiosity in “multispecies research”, conceptualising “inter-creature relationship” (Bird Rose, 2022), with a particular focus on “troubles” (Haraway, 2016) that emerged as the research team welcomed indigenous knowledges, co-researching with elder Murrundindi (Ngurungaeta of the Wurundjeri people). Adults and children cultivated “arts of attentiveness” (Bird Rose, 2022, p. 12), confronting ethical issues such as ephemeral encounters with “rain jewels” on banksias on winter mornings, and care for Yarra River and its “choir”. This documentation of enchanting encounters with more-than-human kin invites early childhood settings to attend to values of care, curiosity, and welcome towards more-than-human creatures.

**Curiosity and collective experimentation, inter-creature relationship, ethical responsibilities & care, indigenous knowledges, pedagogical documentation**

This application discusses a completed piece of research.

**Reconfiguring children’s curiosity in ECEC as sympoietic worlding**
Soern Finn Menning, University of Agder, Norway

This paper explores how mobilizing feminist philosopher Donna Haraway’s (2008,2016) concept of worlding will reconfigure curiosity in ECEC as a biological and political concept that allows justifications beyond learning, human exceptionalism or bodily desire. Curiosity has priorly often been explored to provide knowledge of how to support it. It is regularly described as a neutral trait/state or emotion connected to preconditions, such as complexity, novelty and uncertainty (Markey & Loewenstein, 2014). However, Haraway’s scholarship offers possibilities to explore curiosity differently. She contrasts an autopoietic system based on secluded agents, with her demand of living in coexistence within the world as sympoiesis, a worlding that counteracts ideas of individualist human will, agency and exceptionalism. Drawing on new materialist/posthumanist perspectives this postqualitative approach of a re-turning (Barad 2014) consists of a diffractive re-reading of several observations, which were part of extensive ethnographically informed fieldwork, through Haraway’s conceptual perspectives. Ethics approval was obtained according to national guidelines. In addition, relational and situational aspects were considered regarding children’s participation. Haraway’s demand for coexistence with the world invites exploring children’s acts of curiosity as complex, dynamic as well as historically, culturally and politically situated. This challenges habituated ideas of curiosity as predictable systems which can only be examined through categorizations and fragmentations. The alternative conceptualization suggested in this paper will create a possibility for integrating legitimizations of pedagogical practices around children’s curiosity beyond knowledge acquisition and instead as part of a pedagogy that is both biologically and ethically motivated.

**Curiosity, worlding, Barad, Haraway, sympoiesis**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**The uncommon playmate: Playful intergenerational relationships that invite curiosity and agency**
Cecilia Maron-Puntarelli, Indiana University, United States

Our research examines intergenerational facilities where a preschool and eldercare home share the same site. We are specifically interested in children’s curiosity and understanding of relationships with elder residents with whom they participate in intentional programming. Research calls for including the children’s voices to understand their meaning making (Jarrott & Bruno, 2007; Newman, 1997). Earlier works often center on elders’ benefits (Casp, 1984; Holmes, 2009) without examining children’s participation and their social understanding and agency in the process. Our theoretical lens is centered on ecological and environmental qualities of social engagement including social constructivism (Vygotsky, 1978), social cognitive theory (Bandura, 2005), and psychosocial development (Erikson,1950). Conceptually we recognize children’s existence as social beings (Heyman & Gutheil, 2008) with rights and responsibilities while fostering positive group interactions like those found in intergenerational programming. This qualitative case study values and considers the multimodal languages of children. Play-based interviews conducted within the classroom will use thematic analysis as a constant comparative analysis (Anfara, Brown, and Mangione, 2002). All participants or their guardians will be provided with consent forms and information sheets. Children will exercise agency by choosing to participate within their natural classroom setting. Pseudonyms replace the names of participants. The findings will expose children’s interpretation of the social relationships they form with elders with whom they interact in this unique preschool experience. Implications address challenges that professionals have when attempting to include the child’s point of view, a vantage point often omitted in intergenerational research (Jarrott & Bruno, 2007).
This application discusses an ongoing piece of research and findings may be preliminary/emerging.

F6
DIGITAL TOOLS AND TEACHING
Chair: Heidi Sandø, The Writing Centre at The Norwegian University of Science and Technology (NTNU), Norway

'Shall we google, fröken?': Teachers' conceptions of digital technology supported teaching in Swedish ECE settings
Olga Boksjö, Mälardalen University, Sweden

This study is aimed to gain insights in teachers' conceptions of digital technology supported teaching in Swedish ECE settings. Introduction of digitalization goals in curriculum obliges teachers to incorporate digital technologies into educational practices and calls for a relevant definition for digital technology supported teaching. Growing use of digital technologies in ECE settings offer educators both opportunities and challenges which requires a reflective discourse (Palaiologou, 2016). With this approach, technology integration in teaching practices is more likely to be pedagogically sound (Johnston, 2019). A phenomenographic approach was used as a research tool to identify and analyze teachers' conceptions (Marton & Booth, 2000). 11 half-structured interviews were audiorecorded at various, mainly municipal, settings, each taking about 1,5 hours. Teachers' utterances were then coded and categorised. An information and consent form was provided to all participants. To ensure their anonymity, a dataprocessing plan was followed throughout the study. As a result, several categories related to digital technology use were discerned in teachers' descriptions. Teaching situations were identified within both planned and spontaneous activities whilst activities for entertainment/leasure/personnel relief were referred to as mere ‘media consumption’. Tablets show to be most frequently used in spontaneous teaching, often outdoors or during mealtime, and demonstrate organic use of technology. Providing immediate answers on the screen, tablets enable to both capture children’s spontaneous questions and support teachers' educational intentions. The findings imply that situations originating from a spontaneous use of digital technology, particularly tablets, have an essential role to play in everyday teaching practices.

digital technology supported teaching, technology integration, teachers' belief, planned/spontaneous activities, tablet

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Digital tools as a pedagogical way of working in Norwegian kindergartens
Heidi Sandø, The Writing Centre at The Norwegian University of Science and Technology (NTNU), Norway

This study focuses on how kindergartens practitioners facilitate exploratory and inclusive practice using digital tools. The research question: What characterizes the digital practice in the kindergarten, and how do the staff perceive their own practice? The study emphasizes the importance of professional digital competence, where the understanding of what, when and how is necessary to develop a wise and good digital practice (Bølgan, 2018; Seger, 2020). The research was informed by sociocultural views where language and interaction are central elements in children’s learning (Vygotsky, 1978). Studying educators’ reflections and conducted a qualitative social constructivist participatory research study. We have 17 qualitative interviews. Our design positions educators as competent, capable and experts, inviting them to engage in reflexive practice in digital practice. Participants are strategically selected and represent kindergartens that use digital tools in their educational work with children. Informed consent, fictitious names and coded data were used to safeguard confidentiality. List with link between code and name is kept separately from other data. Informants could withdraw their consent at any time. The use of an audio recorder made it possible to reproduce statements. Reflexive thematic analysis was used as a categorization tool (Braun & Clarke, 2019). The preliminary analyzes show several interesting findings: the management’s role, the need for competence and security in the staff group and the opportunities for an exploratory approach to learning. Digital tools in kindergartens can have impact on including all children in the community and to support the work of leveling out differences in society.

digital tools, professional digital competence, professional learning, exploratory learning, digital play
**ECEC teachers' pedagogical experiences and development in partnership**

Kristin Grøsvik (1), (1) Francesca Granone (1), Camilla Normann Justnes (2) and Elin Reikerås (1); (1) University of Stavanger, Norway, (2) The Norwegian University of Science and Technology (NTNU), Norway

The aim of this study is to gain more knowledge about how to develop an equal partnership. In particular, it examines how ECEC teachers' leadership and reflections on their own pedagogical role especially with an emphasis on stimulating children’s curiosity and exploration of coding toys. Although digital technology is considered an important approach in Norwegian primary schools, research shows lack of competence among ECEC teachers in leading children playing with digital toys. More researchers require the development of special skills, which they refer to as professional digital competence in teachers. Researchers point out that partnership is moving from a known field of knowledge into a new and unknown area with a common ambition to integrate knowledge from ECEC practice and knowledge from research (Midthassel, 2017). Our study takes a closer look at how partnership facilitate learning areas to gain experiences of working methods, which safeguard ECEC teachers' experience-based knowledge of children's learning and play with coding toys and facilitate research-based knowledge (Bjørnsrud et.al. 2017). The data was collected using padlet with reflection questions and group discussions (Kvale 2007). Confidentiality for the participants was ensured, and consent was obtained. Researchers explained the purpose of participation in partnership. Preliminary results highlight opportunities and challenges of partnership. In particular, the results show that ECEC teachers, when playing with coding toys, is mostly focused on leading the children through open-ended questions, collaboration, give them freedom to be curious by trial and error. This study provides an example of how equal partnerships can be developed.

*partnership, early childhood and care, coding toys, digital technology, curiosity*

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**Municipalities use of digital systems when documenting special educational needs in early childhood education**

Hanna Vretblom, Umeå University, Sweden

This study focuses on how actors at the municipality level justify the use of digital systems for documenting special educational needs (SEN) in early childhood education (ECE). Digital systems are increasingly replacing the paper-based documentation in ECE (Cowan & Flewitt, 2021). However, little is known about if and how SEN documentation is included in these digital systems. Addressing that gap, this study investigates the occurrence of, and rationales for, digital SEN documentation in Swedish municipalities. Drawing on Argyris and Schön (1996), I view digital systems as environments for organisational knowledge. In this environment, templates and accesses create organisational maps that professionals must navigate. The study was conducted within the interpretive paradigm. First, I investigated if, and what, digital systems that were used for SEN documentation in all 290 municipalities in Sweden. Next, I interviewed a total of 18 key informants from six municipalities. A thematic approach was used to analyse the interviews (Cohen et. al 2011). Participants gave their written informed consent before the interviews. Data was anonymised and followed the ethical guidelines of the Swedish Research Council (SRC, 2017). The preliminary findings show that informants mainly use ‘security’ and ‘legislation’ as rationales for using digital systems. Moreover, it seems that the organisational maps created by the digital systems, outline how SEN documentation should be conducted, whereas the question of what to document is left to ECE professionals. The findings highlight a gap between what ECE professionals need and what the digital systems offer when it comes to SEN documentation.

*documentation, digital system, special educational needs, municipalities, organisational knowledge*

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This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Taking the family behavior support application (FBSApp) around the globe to support young children with disabilities and their families
Claire Winchester and Erin Barton, Vanderbilt University, United States

This multi-year, multi-study project seeks to evaluate the FBSApp as a tool for supporting diverse families of young children with challenging behaviors. CB presents a significant barrier to meaningful participation in home routines, community activities, and educational settings (Lucyshyn et al., 2007), which can cause parental stress and reductions in family quality of life (Joachim et al., 2010). The FBSApp is a mobile application designed to support parents in caring for their young children with disabilities and challenging behaviors (Barton et al., in review). Given the body of evidence supporting the family unit as the contributor to children’s success (Dempsey & Keen, 2008), identifying interventions for challenging behavior that can be effectively integrated into family life is imperative. Providing culturally-responsive intervention for diverse children and families, requires collaboration with family members and practitioners to draw upon a comprehensive set of experiences and values (DuBay et al., 2018). Effectiveness of parent interventions is highly associated with the implementation supports families receive (Forgatch et al., 2013). We used a robust mixed methods approach (i.e., fully mixed, exploratory sequential equal status design [Creswell & Plano-Clark, 2018]) and aggregated data from multiple perspectives across the globe. We carefully monitored data according to our institutional review board protocol. Our results are forthcoming and suggest the FBSApp supports parent implementation of strategies that reduce child challenging behavior. The FBSApp has strong potential to address critical gaps in providing ongoing support to parents to enhance their capacity to reduce their child’s challenging behaviors.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Appraising the expectations of the access and inclusion (AIM) model for scrutinising transitions from early years to primary education in Irish early childhood education
Laura Firth, The Technological University of the Shannon (TUS) Midwest, Ireland

This research will explore the transition between preschool and primary school in relation to the effectiveness of AIM in Ireland. AIM is a model of support to ensure that children with disabilities and additional needs can access preschool. Children with special educational needs require particular support when transitioning to primary school. This transition should be treated as a process rather than a once off event with parents, early years educators and primary school teachers working together (O’Kane, M. 2016). The theoretical framework draws upon existing inclusive practice (Ring, E. et al 2021) and early years educators partnering with parents and primary schools to support a child’s transition (Hayes, N. et al 2017) and learning within communities of practice (Wenger, 1998). The study will use a mixed methods approach (Denzin & Lincoln, 2018) of online questionnaires and semi-structured qualitative interviews with early years educators from the Munster region in Ireland. Information sheets and consent forms will be provided to participants. The data will be anonymous. Participants can withdraw at any time during the process. The data collection phases will seek out educators’ views on the main obstacles and opportunities when accessing AIM and identify the accessibility and usability issues in current inclusive practices. This research will impact the pedagogy of early childhood education, in relation to transitions and inclusive practice. This research will explore the development of a possible framework to guide a consistent standard of inclusive practice through building a community of practice for the early years profession in Ireland.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

F8
NATURAL SCIENCES AND PLAY ECO-SYSTEMS
Chair: Miriam Beloglovsky, Playful Transformation, LLC, United States
This review explores the existing research on natural science play-based learning pedagogies in ECEC. Views on play and learning in ECEC reflect child-centered or academic pedagogical approaches (Broström, 2017; Bubikova-Moan et al., 2019). Most studies related to scientific concepts have focus on academic play-based learning practices (Broström, 2017; Pyle et al., 2017). However, research exploring characteristics of play in understanding natural sciences, as well as the extent of teacher involvement in play is in shortage. ECEC teachers can interact with children’s learning in various ways. This reflects a continuum: a free play at the one end, and teacher-controlled play at the opposite end (Pyle & Daniels, 2017). Sustained shared thinking encourages adults to supervise children’s play environment (Adbo & Carulla, 2020). The research is a scoping review (Arksey & O’Malley, 2005) covering 32 qualitative and quantitative peer-reviewed studies published in English between 2010 and 2020, reporting on children up to the age of 6. Descriptive and content analyses were conducted by all authors independently, using five-stage framework (Arksey & O’Malley, 2005). Considerate coding methods and procedures were established and any uncertainty was discussed. Studies where ECEC teachers have planned children’s play dominate, as well as playing activities related to learning goals. In almost all studies, teachers do not participate in children’s play, having more passive roles as instructors or guides of play. This provides insights into how play-based learning of science looks in practice and promotes the importance of science education in free-play learning settings.

play, play-based learning, science education, ECEC, children

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Exploring how Scotland’s early learning and childcare environment supports children’s curiosity and agency through nature-based play and learning

Oliver Traynor, Anne Martin, Nai Chng and Paul McCrorie, University of Glasgow, United Kingdom

We investigated how the outdoor environment supports children’s play across different early learning and childcare (ELC) models. Play is integral to the healthy development of children’s wellbeing (Milteer et al., 2012). The outdoors, rich in natural affordances, provide children with a diversity of play opportunities that can promote agency and feed their curiosity; a hunger to obtain knowledge and experiences, often expressed through exploratory and imaginative play behaviour and risk-taking (Ernst & Burcak, 2019; Loebach & Cox, 2020; Johnstone et al., 2022). This study is based on the Theory of Affordances (Gibson, 1979), exploring how children interact with the outdoors. Framed within a qualitative research paradigm (Denzin & Lincoln, 2018), we piloted Loebach & Cox’s (2020) Tool for Observing Play Outdoors (TOPO). Five ELC settings in Glasgow with different exposures to nature from traditional to fully outdoors participated. Thirty-four children participated in the observations. Observations were collected over 3 days at each setting. A behaviour mapping protocol was followed to record play events using TOPO while children engaged in their usual play outdoors. Informed consent from the ELC staff and the children’s parents were collected, children were able to re-decide on their participation on each day the observations occurred. The results show that children in fully outdoor ELC settings perform more exploratory and imaginative play behaviours, risk-taking, and interaction with the natural environment compared with children in more traditional ELC settings. Findings suggest that curiosity and agency can be encouraged by improving the use of natural spaces for play.

play, nature, affordances, play observations, pilot

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Exploring how children enter into inquiry and the implications for the design and implementation of play ecosystems

Miriam Beloglovsky, Playful Transformation, LLC, United States

This research study explored how children enter the inquiry process and how environmental factors and educator responsiveness increase learning. Research demonstrates that play increases children’s abilities to engage in an inquiry process (Vygotsky, 1967). Identifying the variety of ways children enter into inquiry facilitates the design and implementation of inquiry investigations with young children (Dietze, B., Kashin, D. (2016), ch 9). The theoretical framework for this study incorporates developmental theories (Beloglovsky & Daly, 2014), as well as research on inquiry (Broderick & Hong, 2020) (Csikszentmihalyi, 1996), perspectives on
pedagogical documentation (Stacey, 2015) and learning stories (Carr & Lee, 2013), and the acquisition on intellectual and academic knowledge (Katz, 1999). This study used both a qualitative observation methodology (McKechnie, 2008) and document analysis as a qualitative research method (Bowen, 2009). The data was tabulated using a comparative analysis (Pickvance, 2001). Even though this study was conducted through a review of the literature, observation of videos, and documentation analysis, ethical considerations were given to ensure fair representation of diverse perspectives. Confidential information was protected, and consent forms were collected. The study identified sixteen specific ways children enter the inquiry process and how they can deepen educators' knowledge of how children learn. It highlighted the importance of identifying what is not being observed. These findings suggest that identifying how children enter into inquiry will facilitate the design of play ecosystems and educators' responsiveness to children's interests. Deepening educators' knowledge of how children learn will help them consider their role in promoting inquiry.

**inquiry process, play ecosystems, observation, design ecosystems, educators' responsiveness**

This application discusses a completed piece of research.

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**F9**

**MAKING MEANING THROUGH CHILDREN'S DRAWING AND STORY TELLING**

**Chair:** Kyunghwa Lee, University of Georgia, United States

This study examines how young children’s drawings of robots reveal their perspectives on the relationship between humans and nonhuman things. Recent studies have investigated robotics to teach young children about science, technology, engineering, and mathematics (e.g., Alimisis, 2013; Bers, 2017; Cjalmers, 2018; Elkin et al., 2018; Virnes, 2014). This study expands the research literature by exploring how robotics can engage children in ontological questions, critical to their understanding of the relationship between humans and technologies. The study draws on Haraway’s (1991) cyborg, Bennett’s (2010) vital materiality, and Latour’s (2005) actor-network-theory. This is qualitative research utilizing data generated during a summer robotics camp provided for 11 children, aged 4 to 7, at a community center located in the southeastern United States. The paper focuses on the analysis of these children’s drawings of robots. The research was conducted with the approval of the university’s Institutional Review Board, participating children’s assent, and their parent’s consent. Haraway’s (1991) cyborg was well reflected in children’s drawings, which combined organisms (e.g., a bird, a human-like body) with nonhuman things (e.g., swords, wheels). The functions of their robots reflected both reality and fantasy (e.g., a fighter robot that also helps clean a room). These drawings showed that children are more flexible than adults in their thinking about the relationships between humans and nonhumans. I propose inviting children to discuss some existential questions (e.g., Is a robot living or non-living?) to move beyond the current focus on computational thinking and the simple binary of living and nonliving things.

**children’s drawings, cyborg, posthumanism, robots, early childhood robotics education**

This application discusses a completed piece of research.

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**Affordances in public spaces: A study of children’s storytelling and digital documentations**

Anniqa Lagergren and Kalle Jonasson, Halmstad University, Sweden

The purpose of this paper is to understand and to support children’s stories of public spaces in an ECE setting. The question we address is, what stories are and could be told by and of children based on their displacements in and digital documentation of public spaces? Previous research show that movement and displacement with mobile digital technologies promote children’s knowledge about their surrounding cultural environment (Olsson, 2014; Tzima, Styliaras, Bassounas & Tzima, 2020). The theoretical steps of Ånggård (2015) from environmental psychology (Gibson, 1979) to posthumanism (Haraway, 2016) will be followed to conceptualize outdoors pedagogy in ECE. The empirical material consists of video-data produced with GoPro-cameras by mobile groups of preschool children in the surroundings of their institution. The combination of what is being said, seen, interacted with, and at what pace is understood as an environment-induced (affordances) storytelling from a post humanist perspective (Haraway, 2016).
Informed consent forms were distributed to participants. They were also given the opportunity to withdraw from the project at any time. The GoPro child is used when a child is filming and fictitious names when individuals are mentioned in the empirical data. Findings show that holes in different places were afforded by the children forming the material for the stories they dwelled upon. Didactic implications are the spatial possibilities of moving, exploring, and storytelling among the preschool children and the political potential of facilitating the emerging citizenry of the young.

children, moving, GoPro, affordances, storytelling

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

"Me in quarantine": Young children making meaning through drawings
Josephine Deguara, Josephine Milton, Rosienne Camilleri, Charmaine Bonello and Tania Muscat, University of Malta, Malta

This study aims to explore young children’s understanding of COVID-19 and how it impacted their lives as represented through their drawings and accompanying narratives. Building on previous research (Cornaggia, et al., 2022; Nikiforidou & Doni, 2022) this study analyses children’s meanings of the pandemic through their representations. Drawing on the theory of social semiotics (Kress, 2010), this study considers drawing as a metaphorical representation whereby children communicate thoughts, feelings and meanings (Ring, 2006). A qualitative interpretive research paradigm (Denzin & Lincoln, 2018) was used. Children aged 4-7 years old, were invited to draw something that reminded them of the pandemic. The drawings were photographed while the process of drawing and the accompanying narratives were video-recorded. Ethical consent was sought from educators and parents, while informed assent was negotiated with the children. Participants could withdraw from the study at any time. Findings show that children communicated their understanding of the coronavirus through four overarching themes: the characteristics of the coronavirus; the children’s pandemic experiences; the effects of the coronavirus on people’s health and lifestyles; the impact of the coronavirus on the environment. Giving space to young children to communicate their meanings to understand how they experienced the pandemic and the difficulties encountered, cannot be overstated. This study should help professionals value the importance of children’s agency and active participation through their drawings, their right to express how they feel, and use the information acquired to provide children with adequate educational support during challenging times and beyond.

children’s drawings, meaning-making, narratives, pandemic, participation

This application discusses a completed piece of research.

F10
PERCEPTIONS OF THE ROLE OF AGENCY AND SELF-DETERMINATION IN INCLUSION
Chair: Ailie Cleghorn, Concordia University, Canada

Nicole Bianquin and Mabel Giraldo, University of Bergamo, Italy

Starting from a preliminary analysis of the construct of self-determination-SD and its relevance in early childhood-ECEC concerning children with disabilities-CwD, this paper presents a comparative analysis of the main models and strategies for promoting it. SD is the person’s ability to act as a causal agent in his/her life (Wehmeyer1992). This construct is central in disability research and it has been identified as a crucial outcome in promoting high quality of life (Lachapelle2005), especially in the transition to adulthood. However, the opportunities to learn SD skills should be ensured from ECEC (Erwin2009). Even though SD is not explored in ECEC (Doll1996) and CwD cannot be fully self-determined early in life (Palmer2010), key developmental milestones in ECEC are strictly connected with some behavioral characteristics to become causal agents in their lives, such as self-regulation, expressing/making choices or solving problems (Palmer2013). Educators, teachers and parents should enhance and foster the development/acquisition of these skills/competences considered as the SD precursors by providing active, meaningful and highly personalized opportunities for interaction (Erwin&Brown2003). Adopting an ecosystem paradigm, the study used a narrative review to investigate models for developing AD in ECEC, and a comparative analysis of the strategies employed. The review adopt the ethical decision making guiding
principles proposed by Suri2014 Five models and related strategies were identified and presented in detail. Main findings: 1. need for professionals/parents to be aware/trained in SD and related ECEC models/strategies; 2. importance of coordinated design and interventions across early childhood settings. The research presented provides recommendations for ECEC/family context.

self-determination, children with disability, models/strategies, early childhood settings, co-design

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

The heart of inclusion: Learning from children who are deaf, hearing peers, and their teachers
Yoon Joo Lee (1), Jacqueline Simms (2) and SeungEun McDevitt (3); (1) Brooklyn College, City University of New York, United States (2) Cleary School for the Deaf, United States (3) St. John’s University, United States

This study shares the process of social inclusion of young children who are deaf or hard of hearing (D/HH) in an inclusive preschool classroom, manifested powerfully in their daily learning experiences with hearing peers and teachers. Children who are D/HH are able to receive benefits such as social interaction and contact with hearing children, and naturalistic access to the linguistic and behavioral models of hearing peers in inclusion settings (Eriks-Brophy et al., 2012). However, few studies have explored the process of social inclusion and its impact on their learning. High quality inclusion is about belonging and membership, positive social relationships and friendships, and development and learning, rather than simply a type of placement (Odom et al., 2011). Inclusion is a holistic way of thinking about and enacting being together (Recchia & Lee, 2016). Framed as a qualitative research study (Merriam & Tisdell, 2016), data (in-person and video observation of children’s daily learning experiences, teacher interviews, and classroom artifacts) were collected for 10 months. The research was approved by the school administrators. Informed consents were obtained from the participants. Pseudonyms were used for confidentiality. The children who are D/HH were able to become active agents, playing an active role in their social interactions and raising their own voices when their motivation, interests and skills were honored and supported by their peers and teachers. Implications focus on the importance of building an authentic inclusion community to cultivate children’s agency, curiosity, and belonging in their daily learning experiences regardless of their dis/abilities.

social relationships, social inclusion, children who are deaf or hard of hearing (D/HH), preschool inclusion, children’s agency

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Reflections on the meaning of inclusion: A case study of one child’s life-long disability
Ailie Cleghorn, Concordia University, Canada

The conference theme and EECERJ’s 2023 special issue about children with disabilities prompted these questions: “What practices and discourses hinder agency and participation over time?”; “What are the life-long experiences of the child and the primary caregiver?” My 30 + years of research in EC settings in Africa and Canada illustrated how diverse are the conceptions and aims of ECE (Cleghorn et al 2010; 2012; 2021a &b). Vargas-Baron et al 2019 study the caregiver’s role in long-term disability. Inclusion theory and disability studies support the child and caregivers but fall short in the face of reality -- limited agency and participation, negative attitudes, inadequate teacher education. Contradictions in ideology and practice join discourse that unintentionally excludes, resulting in social marginalization of the child. A sociological theoretical/methodological approach critiques the extent a child with a disability can really participate in society. The data include key observations, document analysis, psychologists’ and teacher reports, personal anecdotes and the caregiver’s autobiographical story. Canada’s Ethics Guidelines for Research with Humans confirmed the wisdom of anonymizing the 56-year-old participant’s name while not informing him of his role in a public presentation about his life-long disability. The caregiver/researcher struggled with her role in the life of the participant. Inclusion theory collides with reality, requiring fresh thinking. Ongoing research needs to interrogate oppressive policies, practices and thinking (EECERJ 2023; Goodley 2017). A disability does not end in early childhood – at age seven. Long-term planning is needed in addition to short-term interventions, diagnoses, and individualized teaching plans.

Autism spectrum, a-typical development, exclusion, life-long learning, caregiver’s autobiographical story

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
**CHILDREN’S PARTICIPATION AND ACCESS**

**Chair:** Carol-Ann O’Sioráin, Dublin City University, Ireland

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**Children’s participation in Norwegian and Ukrainian kindergartens**

Svitlana Holovchuk, NLA University College, Norway

The research aim to highlight different approaches to children’s participation in Norwegian and Ukrainian kindergartens based on a comparative analysis of ECE normative documents in both countries. The project is focused on the Norwegian (Bjørk et al., 2020; Ytterhus & Åmot, 2021; Ciren et al., 2022, etc.) and Ukrainian (Nadyukova & von Suchodoletz, 2022; Pasicznik, 2022; Loyola OpieIa, 2023, etc.) pedagogical literature around children’s participation in kindergarten from the last three years. The theoretical and conceptual framework is focused on the sociocultural theory by Vygotsky (1978) and the theory of child well-being by Pollard and Lee (2003). The data collection is based on comparative analysis of ECE normative documents in Norway (Framework Plan for Kindergartens, 2017) and Ukraine (The Basic Component of Early Childhood Education, 2021) with a hermeneutic approach. The study has been carried out in line with the Norwegian Guidelines for Research Ethics. The interpretation of normative documents will be done with an open, independent, truthful and critical approach, considering the trust, credibility and authenticity. Some expected findings: a success criterion for children’s participation is an individual approach to each child. If 1 adult is responsible for 15 children, it is challenging to involve all children in the process (for ex., in Ukraine are 15 children per adult, but in Norway - 6 children per adult). The comparative analysis of the ECE normative documents can give a new perspective on the ECE practice and policy (improvement and development of ECE systems in both countries).

**early childhood education, children’s participation, Norway, Ukraine, kindergarten environment**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**Young children’s participation in policy development processes**

Marie Gibbons(1) and John Canavan (2); (1) Tusla - Child and Family Agency, (2) University of Galway, Ireland

This Ph.D. studied the participation of young children in policy development in Ireland and examined how children autonomously construct and express their views during participatory processes. It further researched the understandings of educators and decision-makers, and explored approaches to young children’s participation. Research reflects the facilitation of children's participation at various levels of society (Lansdown, 2020), yet there are diverse perceptions of the nature of young children’s participation, and the extent to which it should be facilitated (Bae, 2009). Young children are recognised as ‘seldom heard’ in decision-making, and in policy matters at local, organisational or strategic levels (Horgan, 2017) The study was influenced by theories of participation and autonomy and underpinned by a social constructionist epistemology. A sequential multi-method participatory qualitative approach tracked a consultation process in the six early years sites. Participants included young children, Early Years Educators, and local policy decision-makers. Methods included focus group and individual interviews, observations, reflective activities, child conferencing, and documentary analysis. A hybrid model of data analysis was employed. Extensive ethical consideration was required due to the participation of young children. Ethical approval was sought and obtained from both the University of Galway and TUSLA Research Ethics Committees. Findings show that young children can participate in policy development when processes are organised to support their emerging autonomy, and that autonomy is a relational concept in participatory processes. The study highlights the ethical dimensions of young children’s participation and calls for attention to be paid to this by policymakers and educators.

**participation, agency, autonomy, policy, decision-making**

This application discusses a completed piece of research.

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**Curiosity in research on nursery school access? Evidence and review of the Chilean context**

Blanca Barco and Cynthia Adlerstein, The Pontifical Catholic University of Chile, Chile
The research sought to understand factors impacting on access to nursery in Chile between 2006 and 2022. In 2006, Chile began an emphasis on expanding access to nursery school level -children under 2 years of age- with public and state-funded private providers (Ministry of Education et al., 2005). This increase has been recognized as the largest in Latin America, although still below the average of OECD countries (Cárcamo, 2018; Bernard van Leer Foundation, 2017; Staab, 2017). Research has identified that access to nursery school is not equally distributed, to the detriment of disadvantaged families (Collombet, 2018; OECD, 2017; Van Lancker, 2013). In addition, reviews have identified factors that facilitate or harmful this access (Lazzari & Vandenbroeck, 2012; Li et al., 2017; Yerkes & Javornik, 2019). This research is within a qualitative paradigm, using a Systematic Literature Review (Sotos-Prieto et al., 2014) 92 research studies are analysed through a Metasynthesis, that seeks to deconstruct current ideas and arrive at a theoretical understanding of the phenomenon (Acosta-Silva, 2017). The Ethical Principles of EECERA were considered, adding to the transparency in the search processes and contribution to the field on preferences and access to Early Childhood Education. Incipient findings show research focused on characteristics of the centers or types of families, family perceptions, admission processes and, to a lesser extent, cultural adaptations between policies, centers and families. We identified a lack of curiosity in research on nursery access. We propose new lines that identify practices from centers and families to nurture access policies.

public policies, educational policy, access to education, nursery schools, Chile

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

F12
SEEKING YOUNGER CHILDREN'S PERSPECTIVES - RESEARCH INSPIRED BY THE MOSAIC APPROACH
Self-organised Symposium
Chair: Deirdre McGrath, Technological University Dublin, Ireland

This symposium is based on the perspective that younger age children have the right to be listened to and have their views considered. It brings together three papers to share innovative research from the UK and Ireland examining children's perspectives through engagement with methods drawn from the Mosaic Approach. Each presentation highlights how young children's perceptions can be captured, giving them agency within the research process. The first paper examines children's experiences of participation within pre-school settings in Ireland. The second presentation involves the experiences of four young children with disabilities in a mainstream primary school class. An ethically sensitive and reflexive approach to researching with children inspired by the Mosaic Approach helped to understand the children's perspectives. The third presentation involves an adaptation of the Mosaic approach to explore how children's perception on nature can be captured whilst giving them agency in the research process.

Routes to self-advocacy: Listening to young children with disabilities
Katherine Gulliver, Plymouth University, United Kingdom

My study aimed to explore the experiences of four children with a rare learning disability, age 5-6 years who attended four different mainstream primary schools in England. A wide range of policies including the 2014 Children and Families Act highlights children with disabilities' views, wishes and feelings, and the importance of their participation as fully as possible in decisions (DfE, 2014). Using a strength-based view of children, the Mosaic approach was developed to be inclusive and adaptable for researching with children (Clark et al., 2014). This research uses an adaption of The Mosaic approach (Clark and Moss, 2011) to enable children with learning disabilities to share their perceptions in their preferred communication style. The research uses a qualitative, interpretivist paradigm (Cohen et al, 2007). A variety of methods were combined to include children's own photographs, guided tours, observations and staff interviews. Photobooks were created to enable children to share the research process with others. Consent forms and information sheets were given to participants including accessible versions and informed consent gained from gatekeepers for participants to lead, guide or contribute to research. All names are replaced with pseudonyms. The study demonstrates that the Mosaic approach enables children with disabilities to be capable researchers of their own experiences. Children's input was shared through an ethically sensitive, reflective and dynamic process, resulting in examples of self-advocacy. Findings suggest how to include children with disabilities in research, as well as providing time, space and materials to promote children's participation in activities.

learning disabilities, participation, self-advocacy, mosaic approach, inclusive research
This application discusses a completed piece of research.

‘Flies don’t make honey’ - Exploring preschoolers’ feelings and actions towards nature and the use of a preschool garden
Kathrin Paal, University of Plymouth, United Kingdom

This project aims to explore how to do meaningful and age-appropriate research with young children about what they think, experience and learn about what is good or healthy for our planet. There is a trend to advocate research with children about environmental topics (Green, 2015), yet a lack of studies using methods that recognise that young children potentially articulate their thoughts and feelings about an environmental topic differently to older children and adults (Somerville and Williams, 2015). I aim to illustrate one way to empower children to make decisions on matters that affect them, such as environmental issues, but furthermore, the research they have been asked to take part in. I am drawing from Clark and Moss’ (2011) Mosaic approach. Children explore the terms I intended to use such as ‘garden’ and ‘environmentally friendly’. They are also data collectors and are involved in data interpretation and analysis. Finally, they will play an important role in the dissemination of findings. A consent form and information sheet were provided to all participants. I explained the research to the children in a sensitive and age-appropriate manner. Pseudonyms replaced the names of participants. All participants were given the opportunity to withdraw from the study at any time. The findings illustrate preschoolers’ perceptions towards nature and how these can be explored through co-research with them. The findings provide valuable information into the use of participatory methods and critically discuss the use of different methods to gain an insight into children’s perceptions towards nature.

preschool, participatory research, co-research with children, environmental sustainability, early childhood education for sustainability

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

‘They play with us and make rules’. Exploring young children’s agency in early years setting
Deirdre McGrath, Technological University Dublin, Ireland

Despite a clear policy commitment to listen to children (DCYA, 2015) and recognition of the important of engaging young children as participants in their everyday lives, to date no research has been carried out on the lived reality of children’s participation in early years settings in Ireland. This paper explores young children’s (aged 3-4) experiences of participation and agency in early childhood settings. This work is grounded in and influenced by the UNCRC, particularly Article 12 and the new sociology of childhood (Oswell 2013). Using data gathered as part of a PhD study that exploring participation in preschool settings, this paper draws on Leonard’s theory of generagency (Leonard, 2016) to explore children’s participation in a nuanced and critically reflective manner. Qualitative data was gathered with children through the participatory methods of tours, photo voice and draw/mark and tell influenced by the Mosaic approach (Clark and Moss, 2011). Preliminary analysis of this data will be presented. With regards to consent/assent, a process of “informed assent” was used for each child via the use of “narrative non-fiction” (Mayne et al., 2016) and the ongoing negotiation of informed assent. Names and all other identifying details of children and settings were changed prior to data analysis. Findings point to the ways in which children’s experiences of agency and participation within the settings were relational, contextual and shaped by the generational order. This has implications for the role of the educator in enhancing children’s participation in early childhood settings.

participation , children’s agency, , children’s voice,, children’s right to participate,, Mosaic approach

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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F13
MUSIC AND PLAY
Chair: Dimi Kaneva, University of Huddersfield, United Kingdom
Exploring the effect of musical improvisation by professional musicians connected to children’s experience with local historical handcraft; weaving
Grete Storbæk Eriksen, Queen Maud University College of Early Childhood Education, Norway

How can professional musicians by involving themselves in children’s experience of local history connected to weaving, strengthen the understanding of children’s citizenship in the local community and give musical experience? This reasearch took place in a kindergarten with 3- and 4-year-olds. Valberg (2008) emphasizes the relational through the use of the concept relational music aesthetics. Expressions such as “togetherness, vigilance, listening, intersubjectivity” are essensial. Theory about relational music aesthetics is essential in this research, (Valberg, T. 2008). Relational music aesthetic is used as an optic to understand local culture. Eikemo writes about the physical surroundings, the artifacts and the place as the bearers of stories about what has been. (Eikemo, M. 2015), This theory supports the understanding of the meaning of the use of the senses. The research is within the hermeneual paradigm and I choose a qualitative methodology. I carried out a qualitative research interview with an open interview guide, which could help the informant to elaborate on specific themes. The interviewees were anonymized during the transcription. The informants will be able to read the manuscript, described as member-check (Savin-Badew & Major, 2012). The voluntary participants can withdraw from the research any time. Music together with local handcraft seemed to make the experience more playful, engaging. It created a great connection over the generations. This project could be valuable knowledge for students and employees in kindergarten as a way to work creatively with local culture.

local traditions, relational musical aesthetic, improvising with children, music tecnology, local handcraft

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

To welcome the youngest with music
Lena Skjerdal (1) and Mari Engesæther (2); (1) Western Norway University of Applied Sciences, (2) Fosshagen Kindergarten, Norway

We aim to find ways to ease transition to kindergarten by examining how staff in a Norwegian kindergarten, with no special expertise in music, systematically can work at start-up for new one-year-olds with a song as a transitional object (Winnicott, 2003). Research show that levels of the stress hormone cortisol in small children in kindergarten, can be reduced by a good relationship and close connection with the kindergarten teacher (Badanes, Dmitrieva & Watamura, 2012). Music can also have the same effect (Shenfield, Trehub & Nakata, 2003). Furthermore, experiencing musical interaction can increase the production of the hormone oxytocin (Theorell, 2016). This study builds on theories of communicative musicality (Threewarten & Malloch,2002), transitional objects (Winnicott, 2003), affect attunement (Stern, 2003) and musicking (Small, 1987,1998). In this qualitative single case study (Yin, 2014), narratives from the praxis field, logs, welcome letters, fieldnotes and focus group interview made the empirically material for the study which was analyzed through a content analysis with a hermeneutical approach. A consent form and information sheet approved by Norwegian Centre for Research Data was provided to all participants in the project who also were given the opportunity to withdraw from the study at any time. The participants were anonymized. The findings show that the staff found that song had a reassuring, unifying and identity-creating effect for everyone involved. This suggest implications for how a regular public kindergarten can work to welcome small newcomers in the kindergarten.

one-year-old, starters, communicative musicality, song, transitional object

This application discusses a completed piece of research.

A case study of young children's musical play through a posthuman lens
Stefanie Williams, Birmingham City University / Centre for Research in Early Childhood (CREC), United Kingdom

Through a case study of a parent and toddler Forest School, the research explored young children’s self-initiated musical play, as part of their intra-action (Barad, 2007) with the environment. Young children’s musical play is varied and multi-modal, though under-researched (Young, 2003; Gluschankof, 2005; Marsh & Young, 2015; Countryman et al., 2016). This study explores musical play occurring in the relational, dynamic entanglement of children and the non-human (Lenz Taguchi, 2014; MacRae, 2019). Piaget’s theories of sensorimotor play (1951) are resonant, as children’s musical play was largely corporeal (Powell & Somerville, 2020); observations of play in this context were open-ended, not process-driven nor given particular meaning. Posthuman concepts (Deleuze & Guattari, 1987; Barad, 2007) informed the research, conducted within a qualitative interpretive paradigm, (Mukherji & Albon, 2012). Case study methodology provides a detailed snap-shot. Thematic analysis and coding of video and field notes, and a
This application discusses a completed piece of research.

F14
TRANSITIONS AND MULTI-LINGUALISM
Chair: Anja Pesch, Inland Norway University of Applied Sciences, Norway

Educational transitions from ECEC to school in the context of linguistic minoritization
Nadja Thoma (1) and Verena Platzgummer (2); (1) Innsbruck University, Austria, (2) Eurac Research, Italy

This paper aims to study the role of language in educational transitions from ECEC to school in a multilingual context and to uncover how normative framings and ideologies inform transitional practices. The crucial importance of the transition from ECEC to primary school has long been recognised. In the last two decades, language-related aspects of this transition have increasingly received scholarly attention. So far, such research has focused on contexts with one dominant language and has not explored the transition to school in contexts with the presence of recognized linguistic minorities. Yet, educational systems in such contexts are particularly revealing sites as they have to balance the protection of the minority group with the need for equitable education for all – including speakers of the majority language and speakers of languages of migration. This paper therefore combines critical educational and sociolinguistic theories to study the role of language in educational transitions in multilingual South Tyrol, Italy. We draw on ethnographic projects conducted in different German-language ECEC institutions and examine the ways in which language is made salient in transitional practices by different actors (teachers, children, parents) in and around these institutions. Aside from getting informed consent from participants, we were committed to ethical reflexivity throughout the entire research process. We show that the transition to school is a major issue of concern for both educators and parents, and identify different fields of tension. These analyses will be shared with policy-makers and drawn upon to improve transitional practices in the province.

educational transitions, linguistic minoritization, multilingualism, ethnography, critical educational theory

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Views on multilingualism in transition plans from ECEC to primary school
Anja Pesch, Inland Norway University of Applied Sciences, Norway

The study explores views on multilingualism in plans for the transition from ECEC to primary school in the context of Norway. The study connects to research pointing to diverging discourses in national policy documents, valorizing multilingualism on the one hand and putting strong emphasis on developing the majority language on the other hand (Palviainen & Curdt-Christiansen, 2020; Gjæver & Tkachenko, 2020). Moreover, it is based on research on transition to school emphasizing the importance of continuity and discussing the role of play (Hogsnes, 2019). The study applies theoretical concepts on multilingualism and language ideology (Garcia & Li Wei, 2014; Jørgensen, 2008), critical perspectives on linguistic diversity in educational contexts (Flores & Rosa, 2015) and important concepts from research on transition to school (Hogsnes, 2019). The core unit of our qualitative analysis are transition plans from two municipalities in Norway. Moreover, national documents on transition to school are analyzed as context for the municipality plans. Based on a nexus analytic approach (Scollon & Scollon, 2004), we study discourses on multilingualism involved in the plans. As this is a document analysis, there are no personal information protection concerns. Preliminary findings show that multilingualism is mentioned only a few times in the transition plans. Being monolingual in Norwegian emerges as an unmarked
stance, while being multilingual emerges as marked position. Findings are an important basis for discussion both views on, pedagogical practices with multilingual children and their families in the transition to school and the question how children’s multilingual language competence is understood.

**multilingual children, transition, ECEC, primary school, multilingual language competence**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Transition from preschool to primary school for diverse groups of children in Iceland. A praxeological study**

Friðborg Jónsdóttir (1), Jóhanna Einarsdóttir (1) and Sue Dockett (2); (1) University of Iceland, Iceland, (2) Charles Sturt University, Australia

This research was aimed at exploring educational practices and cooperation among teachers and intended to create continuity between one preschool and one primary school in Reykjavík. Earlier transition frameworks focused on children’s fixed sequence of development, recent frameworks focus more on social aspects of the transition. (Dockett and Perry 2021). Despite an increased awareness of influential social factors regarding transition, it is still common for schools to share information primarily on children’s academic status. This might indicate that ideas on school readiness are influential (Sigurðardóttir and Einarsdóttir 2022). The theoretical framework includes; educational transition and continuity (Dockett and Perry 2009), models of transition (Dunlop 2014), the social justice component of school transition (Perry 2014) and educators relationships (Rantavuori, Karila, and Kupila 2019) Our research is praxeological and critical in nature. We used interviews, observations and thematical analysis. The study was reported to the Data Protection Authority. The participants signed a pledge to maintain confidentiality and anonymity. EECERA ethical code guidelines were followed. Continuity between school levels could be characterized by a few joint events and the sharing of information on individual children. Participation in the project was helpful for the preschool teachers but may not increase continuity for CALD children in the way we had hoped. A stronger leadership in framing the cooperation between preschool and primary school is needed. There is a reason to respond better to the needs of children with a foreign background in Icelandic schools. Diverse approaches and increased teachers collaboration could help

**transition, school readiness, teacher cooperation, children with diverse cultural and linguistic background, multiculturalism**

This application discusses a completed piece of research.

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**F15**

**EARLY YEARS OUTDOORS IN AUSTRALIA: BOTH WITHIN AND BEYOND THE GATE**

Self-organised Symposium

**Chair:** Fran Hughes, University of New England, Australia

There has been exponential growth in early childhood immersive nature play programs (INPPs)/Forest Schools in Australia over the past decade. These approaches are mostly instigated by early years services with little uptake in the first year of formal schooling. Currently there is limited Australian research available to inform policy and practice or to identify the benefits, enablers and challenges for educators seeking to implement INPPs and outdoor learning. In this symposium the presenters will discuss different aspects of Australian early years INPPs and outdoor learning research and invite attendees to consider the potential for pedagogies and learning in Australian nature settings. Through three research studies, we share innovative approaches for teaching and learning within uniquely Australian outdoor environments. We challenge attendees to contemplate new possibilities for their own research and practice.

**Investigating the where, why and how of nature play programs in Australia**

Fran Hughes, Jo Bird and Sue Elliott, University of New England, Australia

The research aim was to examine the where, why and how of current early childhood immersive nature play programs (INPPs) in New South Wales, Australia. There is significant international research about INPPs, however in Australia there is limited research (Christiansen et al., 2018; Hughes et al., 2021). Contextually relevant research is needed to inform practice and policy. The
Theoretical framework of social constructionism (Crotty, 1998) informs the chosen methodology. A mixed methods approach (Creswell & Plano Clark, 2011) draws upon the strengths of both quantitative and qualitative research and considers several data types to inform the project. The intent was to employ an explanatory, sequential design where the quantitative survey data findings informed the qualitative focus group interviews and further analysis. Ethical protocols were followed including participant consent, an anonymous survey and self-nominated focus group participation. Participant Information Sheets outlined the research methods and data usage. Inclusion/exclusion criteria for focus group participants were followed and ethical approval granted by University of New England. The data verified anecdotal evidence that there are significant and increasing numbers of INPPs across NSW. Data revealed diverse service types implementing INPPs and a strong interest in developing new programs. Participants sought contextualised training and support, transport funding to promote access, and knowledge of establishing INPPs. Our intent is to offer evidence-based recommendations for policy and practice to foster this innovative approach to early childhood INPPs in NSW. Building knowledge around benefits and challenges of Australian INPPs that can support future programs.

**nature play, early childhood, Australia, outdoor learning, innovative**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Investigating the philosophies and pedagogies used by educators in the competitive market of privatised, Australian forest schools**

Amanda England, University of New England, Australia

This research study aims to investigate the philosophies and pedagogies of educators in privatised Australian Forest Schools (FSs) where market forces may influence philosophy and pedagogy. Alongside rapid growth in Australia (KINN, 2018), there is concern that philosophy and pedagogy may be lost as privatised programs start swiftly in a competitive market (Leather, 2018). Parents are likely driving uptake (Pyper et al., 2016) and may hold consumer expectations that devalue play and seek tangible outcomes (Breathnach et al., 2018; Parsons & Traunter, 2020). The theoretical framework for this study is social constructivism and social constructionism. Both emphasise that knowledge is constructed by humans; individually or in groups, based on experiences and social interactions (Crotty, 1998; Young & Colin, 2004), which aligns with my research paradigm. The qualitative interpretivist research paradigm (Creswell, 2009) informs the collective, multiple case study methodology (Stake, 2000). Data generation methods included focus groups, on-site observations, and individual interviews with educators. Information sheets and consent forms were provided to all participants (whose names were replaced with pseudonyms), stating their right to withdraw. Children gave verbal assent prior to the observation, and cues indicating dissent were responded to throughout. Preliminary findings indicate that relationships are integral to successful, privatised FS programs, challenging educators to mentor parents. As parental expectations change, children benefit through non-outcomes-based, slow, child-centered pedagogies which foster opportunities for agency and curiosity. This study has practice implications for FSs, inviting educators to reflect on alternative approaches to promote children’s agency and curiosity in nature.

**slow pedagogy, child-centered, forest school, nature play, relationships**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**‘Let us learn outside!’ Play-based outdoor learning in the first year of formal schooling**

Lisa Frances, University of New England, Australia

This research highlights the disjunct between play-based outdoor learning provision across the early years and explores how challenges can be surmounted to promote outdoor learning in the first year of formal schooling. Play-based outdoor learning in the first year of school can valuably increase opportunities for agency (Baker et al., 2021) and curiosity (Harwood et al., 2022), which also promote academic achievement (Anderson et al., 2019). Research accentuates the benefits of OL in the early years (Oberle et al., 2021) and a research gap regarding implementation in Australian schools (Lloyd et al., 2018). A sociocultural theoretical framework (Vygotsky, 1978) underpins this study, alongside theories central to outdoor learning espoused by Dewey, Froebel and others. This two-phase qualitative investigation is positioned within an interpretivist paradigm (Denzin & Lincoln, 2018), encompassing an in-depth case study (Merriam & Tisdell, 2016) and critical participatory action research (Kemmis et al., 2014) in two Australian primary schools. Individual teacher interviews, focus groups, document analysis and field observations generated the data. Confidentiality, integrity, informed consent, and children’s assent processes guide this study. Teacher participants received information sheets and opportunities to consent or assent for each study method, with the option of withdrawing anytime. Initial
findings reveal play-based outdoor learning is an innovative and under-utilised approach in the first year of school. When teachers recognise the benefits for students, any contextual and individual challenges can be surmounted. This study can potentially advance the pedagogical practices of teachers, school communities and educational systems.

outdoor learning, play-based, formal schooling, Australia, transition

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

F17

PROFESSIONAL DEVELOPMENT AND CHILD AGENCY
Chair: Nicol Russell, Teaching Strategies, United States

Prioritizing children’s agency: A study of a professional development intervention in K through 3 classrooms
Sharon Ryan, Rutgers University, United States

The aim of this paper is to explore why a year-long professional development focused on increasing student agency was taken up in some sites but not others. Most of the research on professional development in the early elementary grades focuses on specific subject matter interventions rather than on approaches to student learning. Studies that examine the implementation process tend to focus on fidelity rather than the complicated process linking teacher learning to change. Drawing on an enactment perspective, implementation is assumed to be a complicated network of relations with the movement from innovation to practice as multidirectional and deeply political (Datnow, 2006). The implementation process is influenced and shaped by many agents (from children to policymakers) with varying levels of power and influence (Braun, Maguire, & Ball, 2010). This study draws from an interpretivist paradigm and qualitative methodology. Interviews and observations of teachers after they had participated in the professional development along with interviews with school leaders were used to create descriptive portraits of teachers efforts to implement more child centered approaches and the challenges and supports that mediated their efforts. All research procedures went through institutional review. Teacher identifiers were changed to ensure confidentiality. Teachers could withdraw from participation at any time. Teachers may believe student agency is important but accountability policies prevent them from allowing children more autonomy. Professional development should focus simultaneously on teachers and their leaders if children are to be afforded more agency in the curriculum.

professional development, early grades, qualitative research, implementation, curriculum change

This application discusses a completed piece of research.

A comparative and critical perspective of children’s curiosity and agency as opportunities for leadership in Norwegian and South Africa ECCE curricula
Gjertrud Stordal (1), Amanda Lee (2) and Gry Mette D. Haugen (1); (1) Queen Maud University College, Norway, (2) STADIO School of Education, South Africa

Providing enabling spaces for participation and involvement is a key objective for leadership in ECCE (Murrey and Clark 2013). This study focuses on comparing the curricula of Norway and South Africa to identify similarities and differences related to children’s curiosity and agency. The aim is to discuss how the curriculum for pedagogical practice in the ECCE, embedded in various educational traditions, social factors, policy values and priorities, may provide opportunities for leadership enabling children’s curiosity and agency. Currently, there is a widespread interest in the importance of children’s agency in research on ECCE and in the field of education (Varpanen 2019). South Africa’s national curricula (South Africa 2015a&b) emphasize play-based learning and holistic development. In Norway, concepts of children’s agency and play are well established, however, this child-centred approach is contested and challenged because of structural and ideological changes (Tuastad et.al., 2019). The study draws on social constructivist paradigm. A comparative cross-cultural document analysis was undertaken framed by a critical approach. Ethical considerations ensured a cultural and context sensitive point of departure in order to avoid normative analytical assumptions and thinking (Weldemariam 2017). This was done by engaging in a community of practice with researchers from Norway and South Africa. The study provided opportunities for critical thinking that will benefit intercultural and global learning and leadership
education for student teachers in an ever changing world. An implication of the study will be to enhance the capacity to provide relevant high-quality education on leadership for ECCE teachers in multicultural societies.

cross national comparative research, curricula analysis, leadership, children’s curiosity and agency, community of practice

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Supporting adult curiosity and agency through online professional learning communities**
Nicol Russell, Teaching Strategies, United States

This two-year inquiry aims to uncover effective strategies for engaging early childhood (EC) educators in online learning communities (LCs) in ways that support their continued professional growth. The study is focused on new EC educators as they start teaching. Research says, “It is not simply learning that takes place within communities of practice, but—since knowing and being are intimately connected to one another—it is also identity formation itself” (Cochran-Smith & Lytle, 2002). Through community experiences, ECE practitioners develop and refine their professional identities. Constructivist theorist Lev Vygotsky talks about the important role of a “a more knowledgeable other” in the collection of scaffolding of supports for a learner (Gauvain, 2020). This study is based on adult learning theory, conceptualized by Malcolm Knowles (1984), Mezirow’s transformative learning (1994) and Kolb’s experiential learning theories (1984). This study is being conducted within a qualitative interpretive research paradigm (Denzin & Lincoln, 2018). Surveys have been completed by 76 individuals from early learning settings across the United States. The analysis is being conducted through a thematic and content analysis within a phenomenological approach. To protect the identities of survey respondents, all surveys were done anonymously. In the final research paper, no respondents will be identified by name. Thus far, findings indicate teachers are less frustrated with and more engaged in online LCs when they can explore or create posts about topics that are personally relevant These findings suggest opportunities to exercise agency encourages new teachers to participate in online professional learning communities.

adult learning, adult agency, professionalism, learning community, online community

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**F18**
**DEVELOPING EFFECTIVE INCLUSIVE PRACTICE**
Chair: Vera Coelho, University of Maia, Portugal

**Teacher training and Infant Education in Spain, Inclusion compromise and the ecosocial turn**
Noelia Ceballos López, Ángela Saiz Linares and Teresa Susinos Rada, Universidad de Cantabria, Spain

Identify the gaps in ECE teacher training in relation to their commitment to inclusion education conceived as an expression and instrument for eco-social justice. Eco-social justice, understood as eco-dependence and inter-dependence of human beings (Herrero, 2017). Also the paradigm of “critical ecology of the profession” (Arndt, et al., 2018; Ceballos, Saiz & Susinos, 2022). The scenario of ecological and social emergency requires to redefine a new teaching professionalism for inclusion and demands a "eco-inclusive" teacher training. This is what has already been defined as the ecosocial competence that has been well described for schools (González, Gómez Morán, 2022) and is also being proposed for university education (Dardelet, et al. 2021; González Reyes y Gómez Chuliá, 2022; The shift project, 2019). It is a crucial moment for Spain because of legislative changes in teacher training curriculum. Qualitative methodology (Flick, 2018), with participative orientation (Nind, 2014). Research strategies were: 6 semi-structured interviews with university teachers, 2 focus groups with infant student teachers and the analysis of the teaching guides of the inclusion courses. This work assumes the ethical principles defined by the ethics committee of the University of Cantabria (Spain): informed consent, anonymity and confidentiality. Specific 0-3 training needs to be expanded in ECE teacher training. Requests to establish more inter and intra faculty collaboration networks and with community associations. Need to analyze the curriculum of the ECE teacher training program and incorporate eco-social insight. Need to rethink teacher training processes from an eco-social perspective and with more emphasis on 0-3 education.
Prosocial behaviors in inclusive preschools: relations with types of play
Vera Coelho (1), Catarina Grande (2) and Julia Ferreira (3); (1) University of Maia, (2) Faculty of Psychology and Educational Sciences, University of Porto, Portugal

This study analyzes relations between children with and without disabilities’ time in associative or cooperative play and their prosocial behaviors. Children with disabilities often demonstrate lower levels of social competence (e.g., Guralnick et al., 2007). The amount of associative and cooperative play in preschools was identified as a key practice for promoting children without disabilities learning and social competence (Farran et al., 2017). Positive social behaviors are of extreme importance for development (e.g., Lane, et al., 2015) and, in educational settings, can be considered pivotal pieces for successful inclusion (e.g., Davis et al., 1996). This correlational study used a quantitative approach. Participants include 247 preschool-aged children (54 with disabilities). Pro-social behaviors were assessed with Strengths and Difficulties Questionnaire (Goodman, 2005), at two time-points. Time in associative and cooperative play was documented with the Child-Observation-in-Preschool (Farran & Anthony, 2014) at Time1. Written informed consent was obtained from schools, teachers, parents. If any child manifested not wanting to participate, his/her willingness was respected. National Data Protection Authority approved procedures. Results show that, when controlling for children’s initial pro-social behavior, age and gender, the proportion of time spent in cooperative activities was a positive predictor of pro-social behavior one year later (B=19.08, SE=9.24, p=.046, R^2 =.41) for children with disabilities, but not for children without disabilities. Results underline the importance of teachers intentionally increasing opportunities for children to engage in associative and cooperative play. This expands previous research (Farran et al., 2017), underlining the relevance of such practices for children with disabilities pro-social behaviors.

prosocial behavior, inclusive preschools, cooperative play, associative play, disabilities

Inclusive education in Indonesia: sharing practices, building partnerships, and supporting pre-service teachers
Zeta Williams-Brown (1), Komali Yenneti (1), Chris Pascal (2), Tony Bertram (2), Ioanna Palaiologou (3), Irfan Syaifuddin (4), Pratiwi Rahmah (4), Megan Lawton (1), Tunde Rozsahegyi (1) and Alan Hodkinson (5); (1) University of Wolverhampton, United Kingdom, (2) Centre for Research in Early Childhood (CREC), United Kingdom, (3) University of Bristol, United Kingdom, (4) UIN Raden Mas Said Surakarta Indonesia, Indonesia, (5) Liverpool Hope University, United Kingdom

The project aims to address the British Council’s Going Global Partnerships outcomes by collaborating through action research, observations and sharing practice to support the growth of inclusive education in Indonesia. It supports upskilling/reskilling pre-service teachers and their trainers on inclusive education and training pre-service teachers and teachers as inclusivity champions support enhancing student outcomes. Inclusive schools in Indonesia have experienced barriers that include lack of specialised teachers and the need for more training to educate disabled children (Junaidi and Junaidi, 2019; Riowati, Hendriana and Paramita, 2022). Inclusive education in many countries has been influenced by numerous international conventions and declarations in the past 30 years (Kisonji, 1998). Dominance of Global North concepts exclude older and richer knowledge bases and lack consideration to different cultural contexts (Hodkinson and Williams-Brown, 2022). Using a participatory approach, the project focuses on observations and sharing practice to support the growth of inclusive education in Indonesia. Video and photo data was recorded with consent from participants and parents. Ethical considerations was ongoing. In the five days of data collection meetings were held daily to reflect on any changes needed or concerns in data collection and collectively reflect on observed practice to support mitigating bias. Data collection was completed in March 2023. Findings will focus on how inclusive education can be developed, thoroughly considering the cultural, social, and historical context of Indonesia. Module and website development is between July and September 2023. Emerging findings and implications will be discussed during the presentation.

inclusion, disabled children, early childhood settings, inclusive schools, pre-service teachers

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Learning difficulties, learning and subjectivity at school
Sandra Santos and Cristina Massot Madeira-Coelho, Universidade de Brasilia, Brazil

The aim of this research is to present a bibliographic review on learning and learning difficulties, reflecting on the organization of pedagogical work and the performance of pedagogues in a public school in the context Federal District city, using the approach of Subjectivity elaborated by González Rey. The diversity of the classroom and learning processes are themes that arouse the interest of countless authors. Rossato (2009), Campolina (2012), Bezerra (2014, 2019) support the discussion on the concepts elaborated for the understanding of subjective processes in this study. This research is based on theoretical-epistemological assumptions that the psychology-education dialogue in the school environment and the pathologization of learning difficulties are aspects that contribute to a greater demand of students with school complaints. This demand is often linked to hegemonic paradigms that consider in learning only cognitive aspects and that disregard the subjectivity. To substantiate this discussion are used the Qualitative Epistemology. 48 professors and 2 pedagogues from EEAA collaborated with the research. It was possible to understand the configuration of the social subjectivity of that institution. All participants signed a free and informed consent form and data was anonymised. This paper reflects on how the psychological discourse present in daily school life can reinforce labels and stigmas by limiting the students’ expression and characterizing it pathologically. Reflections on the subjective aspects involved in school learning are also presented.

In conclusion, an alternative is presented for the organization pedagogical, giving protagonism to the pedagogue and his needs for an effective performance.

learning, subjectivity, bibliographic review, educators role, learning difficulties

This application discusses a completed piece of research.

Your child needs assistance: Inclusion of children with special educational needs in Icelandic preschools
Jonina Saemundsdottir, University of Iceland, Iceland

This research aims to explore the role/relevance of collaboration in implementation of inclusion of preschool children. Inclusive school/preschool is the official educational policy in Iceland. Municipalities are obliged to provide special services to preschools so children can be accommodated in the preschool guided by special education staff, like heads of special education, and more specialized personnel of institution outside preschool (Laws of preschool 90/2008). Collaboration is by many regarded as an important factor for successful education (e.g.) Epstein 2011 including children with special educational needs. It is a small qualitative study intended to explore the experiences and attitudes of the heads of special education in preschools in the Reykjavik area. Semi-structured interviews were taken with 6 heads of special education in different preschools in the Reykjavik area and analysed according to thematic analysis (Braun and Clarke 2013) and Bronfenbrenner’s ecological systems theory. All participants gave informed consent, were given pseudonyms and informed that they could quit the research at any time. Findings show that participants are aware of the importance of collaboration and make effort to be readily available to other members of preschool staff and provide support. However old attitudes still tend to linger as some staff members tend to see the needs of children with special educational needs as the responsibility of the special educational staff rather than the staff of the unit. This suggests that collaboration is a fundamental part of the implementation of inclusion in preschools which is in accordance with the official policy and recent legislation in Iceland.

children with special educational needs, preschool, heads of special education, collaboration, inclusion

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
The profile of inclusive educator: A co-designed continuing curriculum in early childhood education
Diego Di Masi, University of Turin, Italy

The research aims to articulate a comprehensive definition of the abilities needed for inclusive practices and to design a curriculum for pre-service and in-service ECE training. The presentation describes the process carried out with the collaboration of Early Childhood professionals in municipal ECE service in Turin to define the profile of inclusive educator by using the competence by design model (Van Melle, 2017). In many countries the ECE sector has undergone policy reforms producing a process of ECE professionalization (Nolan and Molla, 2018; Havnes, 2018). The (critical) discourse on professional standards has become an opportunity to introduce changes in professional learning experiences. Through the CanMEDS framework (Frank, 2015), the research applies a competence-based approach to identify the main roles of inclusive educators and the key-competences. The research adopts a qualitative methodology within a naturalistic paradigm. Critical incidents (Rous, 2015), collected by ECE professionals working with children with special rights, are analysed and discussed in group to identify knowledge (explicit, implicit), abilities (manifested, required), beliefs and attitudes to foster inclusion. All participants signed a consent form and information sheet. Personal and sensitive data are separately stored. Participants could withdraw at any time. Through the data analysis, the profile and main competences of the inclusive educator emerge. The research has been an opportunity to foster the collaboration between academic researchers and ECE professionals. The findings help to design the curriculum of pre-service inclusive education course and to develop a method for in-service training. Both results are preliminary steps for a continuing curriculum.

inclusion, critical incident, professional profile, competence by design, collaborative research

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

F20
THE ROLE OF PLAY IN REFLEXIVITY, TRANSITION AND RISK TAKING
Chair: Maria Øksnes, Norwegian University of Science and Technology, Norway

The role of curiosity and playfulness in transition pedagogy
Maria Øksnes, Einar Sundsøl and Tuva Schanke, Norwegian University of Science and Technology, Norway

This research is part of a larger innovation project exploring the transition from ECEC to school in a Norwegian municipality. The research aims to inform developing practices that can improve school start for children. The purpose of this study is to examine the role of curiosity and playfulness in the everyday life of the oldest children in kindergarten. Research has expressed concern that ECEC-institutions are subject to "schoolification" (Ackerfjord & Persson, 2019) and that children experience strictly regulated teaching situations that may conflict with children's curiosity and playfulness (Bjørnestad et al., 2022; Schanke, 2019). The theoretical framework for this study is cultural anthropology and psychology, and especially Peter Gray’s (2020) idea that children are biologically disposed to educate themselves through curiosity, playfulness, sociability, and planfulness. The data material is based on observations of and interviews with the oldest children in ECEC-institutions and retrospective interview with school children. Our analytical approach is hermeneutical (Moules et al. 2015). In research with children ethical challenges, such as informed consent, are enhanced. We have, e.g., paid attention to how we could adjust information to children and respecting their ways of expressing consent (Kampmann et al., 2017). Our findings suggest that children in ECEC-institutions experience that their curiosity and playfulness are vital to their well-being and sense of self-determination. Our research underline how pedagogical practices that aims for the well-being of children need to prioritize time and space for curiosity and play to flourish.

playfulness, curiosity, pedagogy, self-directed education, transition

This application discusses a completed piece of research.

The importance of curiosity and participation for developing positive risk-taking behaviour and ability in outdoor play
Sara Frödén, Örebro University, Sweden
The aim of this ethnographic study is to examine children’s risk-taking decisions and actions in exploratory and physical plays in green public playscapes. Although research shows that play that involves risk-taking elements and actions are essential for children’s development, adults hesitate to let children participate in such plays due to fear of injury (Brussoni et al. 2021, Sando et al. 2021). The study is drawing on John Dewey’s (1938) concepts of experience and growth and theories of risky play (Sandsæter et al. 2021). The methods used are participation observation and informal conversations with twenty-one children and three preschool teachers as a part of an ethnographic approach. The data consists of field notes, audio recordings and photographs. The data analysis is conducted as a theme analysis within the paradigm of childhood sociology. The children’s guardians gave their informed consent. The long field study contributed to the establishment of close relationships, and the researcher was often invited into the children’s play. Any sign of unwillingness to participate during observations, was fully respected. The participant’s names are replaced with pseudonyms. The results show that the preschool teachers allow children to explore potential risks in the outdoor environment and make independent decisions, rather than imposing rules to eliminate the exposure of risky situations. The children co-operate around risk-taking, supporting each other physically and emotionally to overcome fear and calculate risks. The study has implications for practice by demonstrating how children can develop responsible risk-managing behaviors when given the opportunity to face different challenges.

risky play, outdoor play, playground safety, risk management, children’s perspective

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Reflexivity in early childhood research: Exploring children’s play and contemplating issues of power
Nazeeha Khoja, N/A, Saudi Arabia

Drawing from an ethnographic doctoral study that explored children’s imaginary play in a preschool setting in Saudi Arabia (2020), the researcher argues for the effectiveness of adopting a reflexive approach in early childhood research. Critical reflective approaches have been shown to be imperative in contemplating issues of ethics, particularly in attending to power dynamics throughout the process of data construction and interpretation (Albin-Clark, 2018; Einarsdottii, 2005; James, 2007). Additionally, adopting a reflexive approach can enhance conscious engagement in the process of research and, therefore, enables researchers to address issues of representation and legitimation of ethnographic data (Burawoy, 2003; Lumsden, 2019). In this study, the researcher collected data through recording and transcribing children’s play narratives while writing and reflecting on her everyday experiences in the field. Reflexivity provided the researcher with routes to question the legitimacy of defining her experience within the dichotomies of outsider or insider to the research site. It enabled the researcher to share the many stories and voices and increase transparency in the process. The process of conducting research with young children is situated and relational. Writing and revisiting fieldnotes that are not only descriptive but also reflective can enhance researchers’ experiences in the field site and further heighten their awareness of knowledge production as they navigate power dynamics and validate ethnographic data. Reflexivity has shown to open spaces for early childhood researchers and practitioners to engage in questioning their own practices and beliefs about children’s ways of knowing, doing and saying.

ethnographic research, play, early childhood, ethical issues, fieldnotes

This application discusses a completed piece of research.

F21
YOUNG CHILDREN’S MUSEUMS AND ART GALLERIES
Chair: Zoe Lewis, Birmingham City University, United Kingdom

Meeting with ceramic artist: Preschoolers’ first-hand experiences in the museum
Kader Karadeniz Akdoğan (1), Rabia Turgut-Kurt (1), Nurtac Cakar (2) and Dilek Acer Cakar (1); (1) Ankara University, (2) Van Yüzüncü Yıl Universitly, Turkey

This study aims to explore how preschool children construct their knowledge by using the visual language of clay and the museum as a learning environment based on the life story of a ceramic artist. Children’s art makes a significant contribution to their
understanding of themselves and the world around them (Fox & Schirrmacher, 2014). Particularly, ceramic art allows them to freely develop their own understanding uniquely rooted in their personal experiences (Williams, 2007). This study draws from Dewey's (1986) constructivist approach, focusing on how children construct their own knowledge by interacting with the ceramic artworks of an internationally known ceramic artist. The study was conducted within a qualitative research paradigm including narrative research which makes use of various methodological approaches to analyzing stories (Riessman, 2007). The study is approved by the author’s University Ethical Board and follows special requirements for conducting research with young children. A consent form with detailed information was provided to all parents and children. Pseudonyms have replaced the names of children. Preliminary findings will be presented from a study in which 17 preschool children (M=52.2 months) were observed in three sessions as pre-museum, museum, and post-museum where researchers noted and video-recording children’s interests, reactions, movements, and expressions. The implications of the study are to contribute to the debate on how different settings can be used as a learning environment. This opens up a discussion on children’s agency and the construction of their own learning.

ceramic art, children’s narratives, construct of knowledge, children’s agency, early years

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Developing curiosity through children’s creative encounters
Zoe Lewis, Birmingham City University, United Kingdom

This doctoral research project aimed to explore young children’s creativity in an art gallery and forest school setting. Creativity is the means through which children understand the world, express themselves and act on their own curiosity. While creative innovation and new commercial products are highly valued, this should not be at the expense of sustainability (Craft, 2005) and connection to the natural world as a source of wellbeing (Moula, 2022). Therefore, creativity must be fostered alongside wisdom (Chappell et al., 2011). This research adopts a feminist materialist theoretical framework (Ringrose et al., 2020) as a means of conceptualising creativity with wisdom in early childhood education. Following the work of Barad (2007) and Haraway’s (2016) ‘response-ability’, the study provides an opportunity to think differently about creativity. A post-qualitative stance (Lather & St. Pierre, 2013) and sensory ethnographic approach (Pink, 2013) were adopted. Deep hanging out (Geertz, 1998), observation and photography were the methods of data collection. A research poster was displayed throughout the setting to ensure that the researcher’s role was made clear to all visitors. Photographs were framed to avoid children’s faces, or they were blurred on the rare occasions when this was not possible. The findings revealed creativity as a series of ‘creative encounters’, each of which has the potential to produce children as being creative through their sensory and affective interrelationships with the social and material world. The conclusions call for renewed attention to providing enabling environments for children where they can explore, be curious and develop their creativity.

creativity, sensory affect, feminist materialism, forest school, enabling environments

This application discusses a completed piece of research.

Exploring local culture and traditions through play and art activities in a children’s museum
Bente Karlsen, Maria Dardanou and Miriam Wiik, UiT The Arctic University of Norway, Norway

The aim of this study is to investigate how children’s museums can contribute to children’s play and their experience with local culture and traditions through art activities. Children’s agency is part of their way of exploring museums, framed as a cultural process within the society the child develops. This study builds on previous studies based on children’s experiences in museum spaces (Wallis & Noble, 2022; Dardanou, 2019; Hackett, 2016). The study draws on a sociocultural perspective (Nikolopoulou, 1993; Vygotsky, 1978). Theoretical aspects also build on ways children play and experience museum artefacts, affordances (Gibson, 1979), museum theatre (Jackson & Rees Leahy, 2005; Prendergast & Saxton, 2009) and drawing activities (Hopperstad, 2005; Frish, 2022). Qualitative methodology was employed using participatory observations at the museum to approach ways children interact and play in the museum with different artefacts. The project is guided by strict confidence and anonymity complied with EECERA ethical codes. The children and their parents were given an opportunity to withdraw from study at any point. This study suggests that children’s museums are an arena for children to connect with local culture and traditions through exploration, play and drawing with different materials. Cultural artefacts in this children’s museum invite children to act both through their play and communication and through their drawings, which create meanings and new artefacts, experiences and understandings. The findings might suggest new ways for local facilities to approach shaping children’s experiences and senses of belonging in the local community.
This application discusses a completed piece of research.

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**F22**

**ECOLOGICAL AWARENESS IN ECEC**

**Chair:** Fikile Nxumalo, University of Toronto, Canada

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**Environmental-ecological awareness in a university nursery school in Cyprus**

Areti Michail, Katerina Theodorou, Nasia Charalambous and Stamatina Charalambous, University of Cyprus, Cyprus

This study aims to investigate how the ecological program of a University Nursery School provides values, philosophy and ecological awareness. Kids need to be educated to create a healthier & safer environment by being able to tackle environmental problems. (Cohen, S., 1993). At pre-school education, ecological education is based on the important role in the formation of personality, at this age is lays the foundation for their interaction with nature, begins to arouse interest in social life (Lee, J., 2006).

The implications of these findings for ecological education and for advancing our knowledge of the development of ecological attitudes and behavior are discussed (Cohen, S., 1993). The evaluation shows that preschool children can be interested in non-human beings, can feel the need to protect them, and ascribe them intrinsic value (Xenitidou, S.C., 2017). The research follows qualitative methodological design. The sample of the survey includes 75 pupils and 6 teachers. The research tool is interview to all the sample, participant observations, photos and videos. Providing pseudonyms and blurring their faces on pictures. Ethical issues regarding access, informed consent, trust and power position between the researcher and the teachers and children. Due to ongoing piece of research, we can provide their trend to enjoy the experience of ecological exploration and seek their reflections in the natural realm. Now they are able to use appropriate tools and materials to take care and discover nature. Listening child's needs & developing a school policy suggests that teaching, learning should be a true exploration, meaningful experience for all. Providing different suggestions, how to support their voice within school, how to make a learning community "active" & "supportive" of everyone's learning.

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**Designing climate justice education with young children in a rural eSwatini community**

Fikile Nxumalo, University of Toronto, Canada

Climate change is one of the biggest threats facing children and future generations on a global scale. The vulnerabilities that are brought by climate change are highly disproportionately distributed between the Global North and South. However, perspectives, knowledges and activisms of young children from the Global South remain largely absent in both research and teaching that centers climate justice. This paper responds to this marginalization of Global South childhoods in climate change education research (Muzenda-Mudavanhu, 2016). This research is situated in Eswatini, where challenges faced by children in rural communities have been exacerbated by climate change, which has increased occurrence of drought and accompanying water and food insecurity. The research is grounded in critical place inquiry, which centers on anti-colonial conceptions of specific places, including the intrinsic connectedness between humans and the more-than-human world (Tuck & Habtom, 2019). I discuss the creative activism that emerged when young children in a rural eSwatini community were invited to visually story their perspectives on the impacts of climate change before and during walks in their community and after storytelling from elders. Consent forms and project information in Siswati was provided to all participants and informed consent negotiated during the research with children. The findings also illustrate the ways in which young children enact relationality and reciprocity in sharing knowledge about environmental precarity. I discuss the significance of the findings in relation to how interdisciplinary climate justice education can foreground the creative activism of children from marginalized communities.

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This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Pre-service teachers’ conceptions of climate change: A Maltese perspective
Jane Spiteri, University of Malta, Malta

Anthropogenic climate change (CC) has been identified as one of the greatest threats to humanity and the biosphere (IPCC, 2021). Environmental education, starting in early childhood education and care (ECEC), has been proposed as key strategy to enable individuals to gain CC literacy and enact behaviour change (Pramling Samuelsson & Kaga, 2008; Reid et al., 2021). Well-designed pre-service teacher training programmes in the science of CC are required to implement effective education programmes. Yet international research shows that pre-service teachers have limited knowledge of CC (Tolppanen et al., 2020). To date, climate change education (CCE) is underrepresented in the literature, and how Maltese pre-service early childhood (EC) teachers perceive CC is largely unknown. The theoretical framework for this qualitative case study draws on funds of knowledge and identity (Esteban-Guitart, 2022). This study investigated the conceptions of CC held by four Maltese pre-service EC teachers and how these came to be. Data were collected via classroom observations and interviews. Ethical approval from education authorities and voluntary consent from participants were sought. Findings revealed that participants had some understanding of CC, its causes, risks and negative impacts. Concerns over its short and long-term consequences, and barriers to taking action and to teaching about CC in ECEC were also discussed. Their (mis)conceptions were strongly influenced by context. Based on these findings, it is suggested that teacher training programmes develop pre-service teachers’ scientific literacy in relation to CC. The implications of the findings for future research, and for educational policy and practice are noted.

climate change education, early childhood education, education for sustainable development, pre-service teachers, teacher training

This application discusses a completed piece of research.

F23
CROSS-NATIONAL PERSPECTIVES ON ECEC
Chair: Alison Clark, University of South-eastern Norway, Norway

Contextual variation and pedagogical markers of excellence in six Countries
Sharon Lynn Kagan, Teachers College, Columbia University/ Child Study Center, Yale University, United States

The research aims to examine the differential impact of contextual variables on pedagogical markers of excellence. Drawing upon work by systems theorists (Bertram & Pascal, 2016; Midgley, 2008; Vargas-Baron, 2015), the study examines how the contextual variation of diverse ECEC systems contours pedagogy and development. Framed by a theory of change (Kagan, 2018) that analyzes socio-cultural and econo-political contexts, the study advances a fresh systems-oriented conceptual framework. Using desk reviews, interviews, and site visits, the study builds upon a theoretical-cultural systems model to discern practices that foster pedagogical advancement, effective transitions, and effective service delivery. Three-stage validation by external experts to assure cultural fidelity, avoidance of generalizations, and interviewee confidentiality were used. Formal approvals and all permissions were obtained prior to conducting the study. Focusing on contextual variations in six high-performing countries, the study (Kagan, 2019), identifies pedagogical markers of excellence including: (i) the nature, components, and importance of curricula frameworks; (ii) the role and challenges of pedagogical individualization; and (iii) the need for and distinguishing elements of transitions and alignment. Examining contextual variables across contexts elevates the discourse on cultural variation and the differential impacts of particularistic and universalistic quality determinants. Researchers, practitioners, and policymakers can consider with contextual fidelity the domains of inquiry that will advance effective and meaningful pedagogical practice and policy.

contextual variation, systems impacts, pedagogical markers, excellence, international

This application discusses a completed piece of research.

Challenging the politics of early education: An analysis of policy shaping the English reception year
Nathan Archer (1) and Julie Ovington (2); (1) Leeds Beckett University, (2) University of the West of Scotland, United Kingdom
This inquiry mapped recent curricular policy interventions in the Reception Year in English schools and considered the impact of these interventions on educator agency. The Reception Year (YR) is a contested space; both the first school year and a pre-statutory phase of education. YR has become a site of increased political intervention (Neaum, 2016), marked by curricular policy intensification (Kay 2021) and increased surveillance (Page 2017). This has created tensions for educators who are perceived as the ‘squeezed’. (Pascal et al., 2017). Using critical theory (Apple 2019) we considered how pedagogical policy prescription has accelerated, further entrenching the dominance of developmental and readiness discourses shaped by neoliberalism (Roberts-Holmes and Moss 2021) and Human Capital Theory (Campbell-Barr 2014). The study was conducted within a qualitative, interpretive paradigm (Denzin and Lincoln, 2018), as a critical inquiry undertaken through secondary data literature review and critical policy analysis. Independent literature searches by two researchers aimed to ensure a fair representation from a wide range of sources contributing to the robustness of the study. The volume and nature of policies impacting on YR suggests regulatory and operational demands on educators has intensified. Structural discourses of ‘gaps’ and ‘catch-up’ have been accompanied by increasingly centralised pedagogical prescription. Such developments risk limiting educator agency in developing contextual, responsive pedagogy. The extent of policy intervention warrants empirical study to consider the impact of these policies on the lived experiences of educators and children. Critical ethnographies of YR classrooms are proposed as a second phase of the study.

critical policy analysis, curricular policy, educator agency, English reception year, Human Capital Theory

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

*'What does ‘hurry’ mean to you? staying curious in cross national early childhood research*

Alison Clark (1), Kari Carlsten (1) and Mari Mori (2); (1) University of South-eastern Norway, Norway, (2) Kobe Shinwa University, Japan

This study ‘Taking time back’ seeks to examine how pedagogical documentation can be a slow practice to support young children’s curiosity and agency together with increasing the professional curiosity of educators. This builds on the earlier study 'Slow knowledge and the unhurried child' (Clark, 2023) that examined the relationship with time in ECEC and the European Inside Outside study (eg Carlsten and Clark, 2022). The theoretical and conceptual framework draws on discourses about slow pedagogies and slow knowledge (Clark, 2023) and pedagogical bilingualism (Engelman, 2020). This research is formed within a social constructivist paradigm and is qualitative in nature (Denzin and Lincoln, 2018). This is a cross- national study of two pre-schools in Norway and Japan during the teaching year 2022-2023. The data are constructed through observation, 1 to 1 interviews with educators and small group discussions of involved educators. Attention has been paid to EECERA ethical guidelines and following national protocol in Norway and in Japan including written informed consent from each setting. This presentation opens up discussion about what might be ‘lost in translation’ in cross-national research when working with taken for granted and 'imported' concepts about time in EEC? We will draw on examples from our research interviews in Norway and Japan and research team conversations conducted in English. This raises questions about the importance of listening and slow research when engaged in cross- national studies in order to begin to understand cultural & linguistic differences & for the sensitive translation & transposition of ideas.

cross-national, slow pedagogy, slow research, translation, time

This application discusses an ongoing piece of research and findings may be preliminary/emerging

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F24

PROFESSIONAL IDENTITY AND REFLECTIVE PRACTICE

Chair: Joanne Lehrer, University of Québec in Outaouais, Canada

Educator’s role in a group of children below three years of age

Isabella Di Giandomenico and Tullia Musatti, Institute of Cognitive Sciences and Technologies - National Research Council, Italy

The study is aimed at analysing the role of the educator in supporting cognitive and social processes and promoting the well-being of each and every child within a group of children aged between 18 and 36 months in an ECEC service. Previous research analysed the relationships between the educator’s sensitivity and attention and the child behaviour in group settings (Kalliala, 2011; Degotardi,
This study aimed to explore student teachers’ diverse ways of engaging with the reflective process and facilitating children’s agency in a university infant-toddler practicum course in the US. Reflective practice is a critical aspect of working with infants and toddlers and a catalyst for re-envisioning daily practice as how caregivers respond to children’s initiatives and agency are crucial elements in child-centered pedagogy (Elfer & Page, 2015; Sairanen et al., 2022). A social constructivist framework guided this study with a belief that learning is grounded in interpersonal interaction and discussion in a socially and culturally constructed setting (Prawat, 1992). Qualitative case study methodology was deemed a good fit for the exploratory, process-oriented, and interpretive nature of our work (Yin 2009). A series of dialogic reflective journals and final course evaluations were primary data sources, which were analyzed thematically. Ethical guidelines were followed in all aspects of the study. Participants provided written consent to access their course documents. The use of pseudonyms protected participants’ privacy. Findings uncovered the powerful role of reflective practice in transforming preservice teachers’ thinking and experience as they were challenged to rethink their ways of supporting children’s autonomy, agency, and exploration. Social dimensions of reflective practice clearly emerged as participants engaged in building collaborative communities of infant-toddler care. Implications for teaching and teacher education policy speak to the value of
university-community connections reflecting teaching and learning experiences that stimulate teachers' curiosity and agency, allowing them to respect, acknowledge, and place children's agency at the center of their work.

**reflective practice, preservice infant-toddler student teachers, infant practicum, early childhood education, children’s agency**

This application discusses a completed piece of research.

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**F25**

**ENHANCING TRANSITIONS**

*Chair: Sally Peters, University of Waikato, New Zealand*

**Constructing the space of transition in ECEC**

Raija Raittila, Mari Vuorisalo, Niina Rutanen, Kaisa Harju, Yaiza Lucas Revill and Jasemin Can, University of Jyväskylä, Finland

The aim is to explore how the space of transition is constructed in ECEC. The special aim is uncover how children use their resources and positions in process of co-construction of the space of transition. Previous studies have focused on children's adaptation and settling-in in the transition from home to ECEC (Dalli 2000; Datler et al. 2012) and exploring the changing contexts and the new demands the child faces (Boyle et al. 2018; Dockett & Perry 2015). This study approach transition as relational process (Prandi 2015) and with socio-spatial lenses. The space is understood a constantly constructed process (Soja 1996; Fuller & Löw 2017; Raittila 2021). The study is based on a qualitative paradigm. The ethnographic methods included observations and video recordings of everyday practices in kindergartens. The abductive analysis was data-driven. This study follows the guidelines on research ethics by the Finnish National Advisory Board on Research Ethics and has verified by the ethics committee of the university. A consent form and information sheet were provided to all participants. Informed consent was negotiated and re-negotiated with the children. Pseudonyms have used. Children's resources utilized in co-construction of the space of transition related to the children: age, existing skills, resiliency, curiosity, courage or ability to cope. Resources used situationally: active participation, freedom and adult’s support and encourage. The active use of resources of newcomers are positively embedded in the space of transition. This work enhances research based knowledge about young children's positive influence and agency in their first transition to ECEC.

**infants-toddlers, transitions in ECEC, space, qualitative research, relational sociology**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**‘It’s a job for the kids that know’: Co-constructing children’s working theories to re-imagine the transition to school**

Sally Peters, University of Waikato, New Zealand

Insights for practice were examined through analysing conversations with children about transitions. Building on the work of the forthcoming Bloomsbury Handbook of Early Childhood Transitions (Dunlop, Peters & Kagan, forthcoming) this paper explores ways in which ideas about transition to school were co-constructed to consider how we might recognise children’s curiosity (Carr & Claxton, 2002; Post & Walma van de Molen, 2018) and establish agentic and participatory approaches to this experience. Hedges (2021, p.36) described working theories as “an innovative and holistic outcome” of the NZ EC Curriculum Te Whāriki (Ministry of Education, 2017) that highlight the ways children make sense of and participate in their worlds. Taking a working theories lens allows us to analyse children’s understandings of their own experiences and how transitions might be enhanced for others. Located within an interpretive paradigm (Coe et al, 2017) and utilising a qualitative approach (Janesick, 2000), transcripts of conversational interviews where pairs or small groups of 5-year-old new-entrant children discussed transition with a familiar teacher were analysed. Photographs the children had taken around the school provided ‘something to talk about’. Parents/caregivers provided informed consent for the children’s participation and assent to participate was determined from children’s affirmative agreement to take part and by monitoring their willingness to contribute. Findings indicated the children’s interest in, and understandings about transitions. Children wanted to be agentic in supporting others. Looking closely at the co-construction of ideas provides insights for collaborative transition approaches that foreground children's participation and agency.

**transition, working theories, children’s voices, pedagogical approaches, agency**
Exploring our understanding of drop-off and pick-up in early childhood education and care contexts
Laetitia Coles, Charlotte Casey, Karen Thorpe, Sandy Houen, Zhaoxi Zheng and Sally Staton, University of Queensland, Australia

Drawing upon three sources of evidence – policy, practice, and empirical literature – we examine the understanding of drop-off and pick-up times in ECEC settings. Transitions have been identified as key indicators of quality (Thorpe et al., 2020). However, while drop-off and pick-up can be critical time points for exchange of information between services and families (Hummel et al., 2022), they are also times of increased stress (Ahnert et al., 2021). Indeed, attachment theory (Bowlby, 1982) posits that for young children, separations from parents can be particularly distressing. Grounded in a postpositivist paradigm, content analysis was used to examine Australia’s key policy documents related to assessment and rating of ECEC quality and the field notes of officers undertaking the rating process. A systematic literature search was conducted to assess the availability of empirical evidence related to drop-off and pick-up. Although this research comprises a review of source data, consideration was given to the accurate and fair reporting of all materials reviewed. While a review of Australia’s quality standard indicated that drop-off and pick-up are key times best suited for the assessment of quality, less than half of the officers tasked with quality assessment observed these times. Further, while policy documents emphasized the critical role educators play during these times, there was a significant lack of empirical evidence focused on educators. Findings suggest drop-off and pick-up times should be of focus in quality assessment and highlight the need for empirical work documenting the educator’s role in these important points of transition.

transitions, separation, reunion, drop-off, pick-up

This application discusses a completed piece of research.

DOCUMENTATION AND SHARED UNDERSTANDINGS
Chair: Kathryn Morris, Centre for Early Child Development, United Kingdom

The child's educational file: A tool for communicating the child's overall development and ensuring educational success
Nawel Hamidi, University of Québec in Montréal (UQAM), Canada

This research aims to examine the process of communication with parents to inform them of their child's development. Parents play a critical role in their child's education and neurodevelopment from the earliest years of life (Hertzman et al., 2011; Gustin, 2022). As the primary caregivers, parents need to be informed about their child's holistic development as well as the challenges they face (MF, 2021a; MEES, 2021). The French National Academy of Medicine has emphasized the importance of communication based on attentive listening between parents and various early childhood actors (Gustin, 2022). Communication between parents and educators is a key factor in the child’s development (Ivanova et al., 2020). To ensure educational success, the Quebec government has implemented an educational file that allows parents to follow their child's progress (MF, 2021b). The theoretical framework of this study is based on Elliott’s (2005) evolutionary model of communication which discusses these five levels: physical, social, affective, cognitive, self-actualization, and reciprocal engagement to promote meaningful partnerships between families and educators. This study is within an interpretive qualitative research paradigm and its design is the case study (Barlatier, 2018). Interviews that were conducted with parents and educators will highlight levels of communication associated with shared content. All participants were provided with information and consent letters. Their participation is confidential and they can withdraw from the project at any time. Preliminary results show that the educational record has strengthened monitoring of children through constructive exchanges on their overall development. This study promotes the parent-educator communication process.

the process of communication, holistic development, educational success, early childhood, the child's educational file

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

School readiness - A community wide approach to developing a common understanding and language
Kathryn Morris, Centre for Early Child Development, United Kingdom
By viewing school readiness as a socially constructed concept, unpicking it’s meaning with communities, developing a shared understanding and common language of school readiness children are able to maximise the learning opportunities available to them. Research (Siraj-Blatchford, 2002) shows strong links between children’s attainment and their parents’ attitude to learning. Children’s readiness for school is improved when parents and professionals negotiate the continuity of their experience. This study brings together school, setting and parents to formulate, design and test resources and practice to best understand and support the child’s school readiness journey. Inspired by dialogic theory (Wells, 1999) we are promoting learning communities (Wenger, 1991), where respectful and mutual exchanges of knowledge, methodologies and ideas enable community members to support children’s agency. This happens through reciprocal, attuned and responsive interactions (AECQA, 2018). Research uses qualitative and quantitative methods including focused discussion, case studies and questionnaires to design and test a suite of resources and provision, supporting schools, settings and parents to form a mutual understanding of supporting school readiness. A consent form was used and parents understand they have a right to withdraw without it impeding them accessing the sessions. Real names are replaced by pseudonyms. Preliminary findings demonstrate practitioners and parents working together to support the home learning environment is increasing confidence and supporting parents engaging in the process By developing a shared, localised meaning and approach to school readiness we can best support children’s agency (Pascal 2019) and ensure they are equipped for their lifelong learning journey.

**school readiness, home learning environment, collaboration and partnership, community approach, co-design**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Reading children’s participation through pedagogical documentation**
Marlene McCormack, Dublin City University (DCU), Ireland

This presentation enables children’s agency and participation to materialise through the documentation process. Documentation, educators, children and the environment are all part of an entangled assemblage (Barad, 2007) through which agency flows and children’s participation is enabled. Reading documentation through the lens of participation illustrates the complexities of what appears to be a straightforward concept. Participation is contingent on educator’s values and pedagogies, routines and schedules within the setting, alongside curriculum and policy requirements. Underpinning this study is a posthuman (Ferrando, 2012) and new materialist framework (Coole & Frost 2010) which acknowledge the vibrancy and interconnectedness of all matter, human and non-human. The research draws on a post qualitative methodology (St. Pierre, 2011), which uses concept or theory as method and is based upon a series of encounters between educators and documentation in two early childhood settings. Ethics is embedded through the study and are almost habits of mind (Tronto, 1993). Thinking and working within a new materialist paradigm argues for ethics in terms of responsibilities, relationships, situatedness, and otherness (Dahlberg & Moss, 2005) which extend beyond humans to encompass all matter. Plugging theory (of participation) into data (documentation) opens up new ways of thinking (Jackson & Mazzei, 2012) and of thinking differently about phenomena. In putting theory to work, our gaze is moved from the individual child to the intra-actions that are happening within the assemblage between human and non-human matter. Seeing the familiar differently has consequences for pedagogy.

**pedagogical documentation, participation, intra-action, new materialist, assemblage**

This application discusses a completed piece of research.

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**F27**

**BELONGING IN ECEC – CARE, PARTICIPATION, AND CHILDREN’S WELLBEING IN EARLY YEARS**
Self-organised Symposium
**Chair:** Yngve Rosell, University of Stavanger, Norway

This symposium is based on the ongoing research work of the research group "belonging and transitions" at the University of Stavanger. Belonging addresses assumptions about "feeling at home" in a community and how the setting/staff facilitate this (e.g. Yuval-Davis, 2011). The experience of belonging for the youngest children in ECEC is related to feeling secure, recognition, protecting children’s rights and meeting children’s different needs and forms of expressions. In this symposium, we will discuss various caring
approaches and propose a definition for care in the context of ethical theory. In addition, we will present an ongoing study on ECEC teachers understanding of toddlers’ participation and how the ECEC teachers facilitate this. Finally, we will present a study from the “Thrive by Three” project on how children’s shyness is negatively associated with their well-being in their first year in ECEC.

The youngest children’s conditions for participation in community in the ECEC
Marianne Ree and Yngve Rosell, University of Stavanger, Norway

The aim of this study is to contribute with knowledge about very young children's (1-3 years old) participation in ECEC with focus on a community perspective. The research question is: What conditions for participation appear through the ECEC teachers’ descriptions of participation in the ECEC community? Research about children’s participation in ECEC has increased in the last two decades, but this research highlights that participation often is restricted to an individualistic understanding (Emilson & Johanson, 2018). Theoretically, the study is based on Habermas’s (1995) social philosophical perspective and the way he views the world from both a lifeworld and a system perspective. The research question will be examined inside a hermeneutical paradigm, with the epistemological endeavor in trying to understand the meaning and to admit that human existence is based on interpretation (Alvesson & Sköldberg, 2008). The data consist of qualitative group interviews with six educators in three different Norwegian Early Childhood Education and Care (ECEC) institutions. The study is approved by the Norwegian Social Science Data Service (NSD). The data is handled with confidentiality, coded to be anonymous and securely stored. There is a need for rethinking children’s participation and focusing on how children’s connectedness to others and their autonomy are closely linked together. Studies with such a focus are still rare, in particular according to very young children in ECEC. Preliminary results will be presented and discussed at the conference in August-September 2023.

Examining the Longitudinal association between toddlers’ early shyness and their wellbeing during their first year in Norwegian early childhood education and care
Catharina van Trijp (1), Ratib Lekhal (2), May Britt Drugli (3), Veslemøy Rydland (2) and Elisabet Solheim Buøen (4); (1) University of Stavanger, (2) University of Oslo, (3) NTNU Trondheim, (4) R-BUP Oslo, Norway

This study examined the longitudinal association between toddlers’ early shyness and their well-being during their first year in Norwegian ECEC centers. Attending ECEC for the first time might be unsettling for young children (Ereky-Stevens et al., 2018), especially for shy children as they are more wary in novel situations (Coplan & Arbeau, 2008). A good transition from home to ECEC is important for children’s well-being (O’Connor, 2017). Longitudinal studies on older children found that shyness might be a predictor for later psychological and social-emotional difficulties (e.g., Karevold et al., 2012). However, research is lacking on if toddlers’ early shyness at the start predicts their well-being by the end of their first year in ECEC. This study belongs to the postpositivism paradigm and is part of the cluster RCT study, called Thrive by 3. Data from the preintervention and postintervention were used to follow 567 toddlers who just started in ECEC. Multilevel analyses were conducted in Mplus to examine the longitudinal association between toddlers’ shyness (using EAS; Buss & Plomin, 1984) and well-being in ECEC (using LICW-D; De Schipper et al., 2004). This study is approved by the Regional Committees for Medical and Health Research Ethics, and the Norwegian Centre for Research Data. Ethical guidelines were followed (e.g., participant’s written consent, data storage on a secured sone). Results showed a significant negative association between toddlers’ early shyness and their well-being. Extra attention should be paid to shy toddlers as they show less well-being during their first year in ECEC.

Defining care in ethical theory for ECEC
Gunnar Magnus Eidsvåg, University of Stavanger, Norway

This presentation discusses the concept “care” as a starting point for ethical theory. Care ethics has been used in pedagogical settings (Noddings, 1984; 2013), however, in the literature there is no agreement on how to define care (Held 2006, 29-43). Care is
understood as essential to ECEC, yet the concept has also been questioned because of its apparent ambiguity (Allmark, 1995; Ailwood, 2020). This presentation will provide examples of various definitions and their theoretical foundations. The presentation will draw on semiotic theory (Kjøll, 2013), specifically theories of definitions and semantic fields and use these to explain why definitions vary and how to evaluate strengths and weaknesses in their definitions. The presentation discusses several ethical theories, and emphasis will be laid on presenting and discussing proponents of these theories with respect and due understanding for the proponents’ own perspectives. This discussion will lead to a proposal for a definition which addresses the necessary and sufficient elements of "care", and make an argument for why this definition will work in the context of an ethical theory. A precise understanding of what care is, is an important step to ensure that care is part of ECEC practice.

ethical theory, care, semiotics, ECEC, ethics

This application discusses a completed piece of research.

F28

COMPARATIVE STUDIES ON EARLY CHILDHOOD TEACHER STUDENTS’ BELIEFS TOWARDS PLAYING AND PARTICIPATION IN KINDERGARTEN AND PRE-SCHOOL IN ESTONIA, GERMANY, AND RUSSIA
Self-organised Symposium
Chair: Anja Seifert, Justus Liebig University Giessen, Germany

To reflect on and foster children’s playing and participation is an important topic in many countries (cf. e.g. Brooker/Blaise/Edwards 2014, Feller 2021, Pramling et al. 2019), especially referring to the topic of children’s wellbeing and children’s rights. The Convention on the Rights of the Child emphasises the right of the child to play and to participate. During the pandemic, the possibilities of free play and participation have been restricted in many institutions and routines were changed. This comparative research focuses on similarities and differences of student teachers’ perspectives towards participation in ECE institutions in three different universities in Germany, Estonia, and Russia. Considering professional action and experiences of student teachers in ECE in different European countries, it is interesting to ask how the support of playing and participation does feature in the student’s answers in different countries and educational systems like Estonia, Germany, and Russia.

Participation and play in in the representation and practice of Russian early childhood teacher students
Igor Shiian, Irina Vorobyeva and Evgeniy Krasheninnikov-Khait, Moscow City University, Russia

The aim is to study how early childhood teacher students reflect and describe children’s participation and play, is there a correlation to their practice experiences. International comparative studies (Sandberg et al. 2015, Broström et al. 2014, Feller 2021, Pramling et al. 2019) show that there is no common view on children’s participation in cross-country comparisons on an international level. We understand play and participation, based on socio-constructivism (Vygotsky, 1978; Säljö, 2005; Carlgren & Marton, 2000; Damasio, 2004; Lave, 1993). The questionnaire about play and participation was proposed to students. Using quantitative and qualitative methods we compared their definitions of these concepts and their ability to provide relevant examples of supporting play and participation in their practice. All participants were informed about aims and content of the study and gave their consent to participate in it. The confidentiality and anonymity were guaranteed. We discovered quite a gap between values of child’s play and abilities to participate and practical dimension. For example, 77% of participants state that it is important for children to have a free access to material and 31% say that children have an influence on schedule. At the same time they had difficulty on giving examples and explaining how “active participation” looks like in their practice with kids (no answer, not relevant explanation, sliding from the concept of participation). The findings of the research can be used for improvement of Preschool teacher training in terms of mastering and implementing of theoretical concepts by students, organizing practical courses and activities.

play, children’s rights, participation, educational environment, ECEC teacher training

This application discusses a completed piece of research.

Exploring teacher students' perspectives on participation in ECEC in Germany
Christa Kieferle, State Institute for Early Education and Media Competence (IFP), Germany
This comparative study aims to explore the perspectives of teacher students in Estonia, Germany, and Russia on child participation in ECEC with an focus on (free) play. Previous studies focused on children's perspectives on learning (Sandberg et al. 2015), preschool and primary-school teachers' perspectives on children's learning (Broström et al. 2015), and heads of preschools' views on children's learning and participation (EECERA 2016). This study is based on teaching and learning concepts, investigated through a child-centred, participatory pedagogical approach (Rogoff 2008; Kangas 2016) and socio-cultural theory (Vygotsky, 1978). 38 part-time teacher students in Bavaria and Hesse completed an online questionnaire with both closed and open-ended questions on participation characteristics. Open-ended responses were analyzed qualitatively using Mayring's content analysis (2010), while closed-ended responses were imported into SPSS. The study was conducted with the voluntary participation of the teacher students. The authors informed the participants about the goals and contents of the study, as well as data protection, and obtained their consent. While German teacher students were familiar with the concept of participation from the literature and curricula, they struggled to provide examples of higher forms of participation and concrete implementation. The study highlights the complexity of the concept of participation and the need to implement it locally with regard to theory and legal references. The findings suggest the need for greater emphasis on practical experience and linking it to theoretical knowledge in teacher training. Additionally, the study highlights the importance of promoting child participation in ECEC and implementing participation rights.

participation, play and learning, teacher students beliefs, daily practice, comparative studies

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Participation in ECE institutions: The perspective of Estonian early childhood teacher students'
Maire Tuul and Aino Ugaste, Tallinn University, Estonia

The Estonian National Curriculum for Preschool Child Care Institutions considers children as active participants in the learning process, yet teachers' interpretations of participation vary. Therefore, this study aims to explore how early childhood teacher students understand and support children's participation in learning, and what changes in participation they have experienced during the spread of Covid-19. The research is a continuation of the prior international research on "Learning and participation" (Johansson & Sandberg, 2010) and the investigations of the same international research group, which explored the perspectives of preschool and primary teachers on children's learning and participation (2012, 2013, 2015, 2021, 2022). The theoretical framework of this research is founded on social-cultural theory, with references to the works of Dewey, Vygotsky, and Rogoff. In participation, providing children with opportunities to actively engage in decision-making is considered important (Sandberg & Eriksson, 2010). A mixed-methods research approach was used, involving a questionnaire with both open-ended and closed-ended questions. The questionnaire was completed in spring 2022 by 38 undergraduate and 10 graduate students. The Estonian Researchers' Code of Ethics was adhered to throughout the study, with voluntary participation, anonymity, and the right to withdraw from the research at any time. Our study showed that for students, self-expression, autonomy, motivation, independent thinking, involvement and freedom of choice were key factors in children's active participation. The students also identified various strategies to enhance children's participation. The findings provide valuable insights into diverse perspectives on children's participation, and hence, can help enhance teacher training.

participation, teacher students, kindergarten, play, learning

This application discusses a completed piece of research.

F29
ASPECTS OF SCIENCE AND MATHS IN ECEC
Chair: Priska Sprenger, University of Education Freiburg, Germany

“Looks like a normal four” – Individual structuring processes of 5-year-old children
Priska Sprenger, University of Education Freiburg, Germany
The present intervention study provides the basis for investigating structure-using strategies 5-year-old children use to determine the cardinality of a set and what perception of structures can precede these strategies. Numerous studies in this context show that structuring processes in number recognition are an important basis for learning arithmetic skills and thus for successful arithmetic learning in primary school (Lüken 2012; Mulligan & Mitchelmore 2013). To describe structuring processes, the study distinguishes between the process of perception and the process of determination (Benz 2014). The study was conducted in a mixed method design: First, the data were analyzed qualitatively using video and eye-tracking recordings. In a further evaluation process quantitative data could also be obtained. To investigate individual structuring processes 95 children were interviewed individually three times. The children's explanations serve as a basis for the analyses of the data. The children's participation was voluntary. The interview procedure was explained to them carefully. All parents gave their consent for the audio, photo, and video recordings and that these may be used anonymously for research purposes. The findings show that children use various structure-using strategies to determine the cardinality of sets as well as that the structure of a ten-field (presented as an egg carton) may have an influence on which strategies children use. This individual use of structures are valuable skills that can serve as a basis for the development of non-counting arithmetic strategies. For this reason, it seems reasonable to initiate and support structuring processes already in kindergarten.

**perceiving structures, structural use, individual structuring processes, cardinality, early mathematics education**

This application discusses a completed piece of research.

**Rhymes, play and early mathematics in China**
Lynne Zhang, Happy Future Connections Children & Family Academy, China

Our study aims to find the relations among the rhymes, play and children’s curiosity and agency in early mathematics learning in Chinese culture context, explore how children’s mathematics can emerge in different play situations. The study builds on the findings of previous researches: Chinese rhymes, poem and ECEC (2020), Chinese early ancient mathematics (2019), Chinese characters and cognitive development and the outcomes of Happy Future programmes "Playful Mathematics" and "I come" approach for improving parents and teachers ‘s better understanding children’s curiosity and agency in children’s perspective. This research draws on multi-disciplinary theoretical perspectives including Davood Gozli’s human agency, Vygotsky’s social-cultural theory, Piaget's theory on schema and cognitive development, Urie Bronfenbrenner ‘s Ecological Theory, Bishop, A.J. (1988a)’s cultural perspective on mathematics education, Hassler& Birbaumer (1998)’ spatial intelligence and music, neuroscience recently, etc. The methodology includes observation of two kindergartens and twenty families in Beijing, interviews, documentary qualitative analysis and national questionnaire online. The participants signed the consent documents voluntarily and could withdraw from the study at any time. Anonymity was preserved. The study shows that rhymes-based play can support children’s early mathematics senses, concepts, experiences and learning in a children loved form which helps arouse children’s curiosity and agency. This study has drawn more professionals and practitioners ‘ attention to accept innovative approach with culture materials in ECEC today.

**Chinese rhymes and maths, play-based curriculum, "I come" approach and children’s voice, children loved form and curiosity, neuroscience**

This application discusses a completed piece of research.

**Supporting concept learning and emergent science through dialogue**
Hege Myklebust, Western Norway University of Applied Sciences, Norway

This conversation analysis of a conversation between a Teacher Student (TS) and a three-year-old aims to display how the non-verbal elements of dialogue can support concept learning and emergent science. In previous research, intersubjectivity is mostly used on infants, but it can also be of use in research on children with higher language proficiency (Kuhl, 1998, p. 314). The theoretical framework for this study draws on theories of dialogism (Bakhtin, 1986; Linell, 2009), dialogic teaching (Alexander, 2020), sustained shared thinking (Siraj-Blatchford et al., 2002) and intersubjectivity (Trevarthen, 1998). This is a qualitative case study with data material that consists of a video clip selected as an extreme case (Flyvbjerg, 2010) from the complete material for a PhD, and the analysis method is conversation analysis (CA). A consent form and information sheet were provided to the teacher student and the parents of the children. Pseudonyms have replaced the names of participants, who had the opportunity to withdraw from the study at any time. The findings show that the genuine interest from the TS, and the non-verbal contributions to the conversation from both child and adult are central in keeping the focus and inquiry going through the noise and interference around the participants. The findings suggest that intersubjectivity and prolonged interest and focus despite minimal verbal contributions from
the child support the child’s emergent science and concept learning. Practicing dialogues with minimal verbal contributions from the child requires awareness and practice, and should be addressed in kindergarten teacher education.

intersubjectivity, sustained shared thinking, conversation analysis, non-verbal communication, emergent science

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

F30
Mathematics Birth to Eight Years SIG Self-organised Symposium

EARLY CHILDHOOD MATHEMATICS - CURiosITY, CREATIVITY AND PLAY WITH TECHNOLOGY
Chair: Anne Nakken, National Centre of Mathematics Education, Norway

The EECERA SIG ‘Mathematics Birth to Eight Years’ provides an academic and accurate forum to develop and disseminate high-quality research on early childhood mathematics education. In this symposium organized by the SIG, we present three separate research studies that in different ways focus on enriching and supporting children's play with technology. We will hear about children playing with coding toy, and children becoming an active part in video production process. Welcome to this symposium that combines ideas of creative and innovative mathematics where children explore, discover, and discuss their mathematical ideas to develop a deeper understanding and to experience mathematics as an exciting and joyful activity.

ViduKids - Movie making and mathematics in a playful and exploring mode
Signe Marie Hanssen, Queen Maud University College, Norway

In this research we look at the processes that are occurring when young children are given the possibility to create small movies, while playing both with the moviemaking process and the content of the movie. Previously Thiel et al. (2016) have shown that video production in primary school classrooms facilitates mathematical learning. Play is one of the characteristics of children’s activities (Corsaro 2017, Damon 1977). The learning processes can be seen as esthetic and sociocultural. The children can be self-directed and problem solving (Fredriksen 2013, Vygotsky 2013, Polya 1945). Regarding mathematics Bishops fundamental activities are used as framework (1988). The case study uses field notes written down after the movie making events, and uses an inductive method to find what characterizes the working process, and what mathematical content that may occur. Informed consent was signed by the parents and oral by the children. Participants could withdraw at any time. Todays children have digital skills. The children need some time to get to know the equipment and the applications and this part seems to happen in a playful mode. The teacher and the children act together in organizing the movie making. The mathematics occur both in the moviemaking processes and in the content making. During the process the children express joy and playfulness. We assume this research can have an impact on practice by showing that preschool children are capable of make videos, and that children have learning experiences connected to both use of digital media and mathematics.

early childhood mathematics, playful learning, movie making/ video production, exploration, problem solving

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

ECEC children playing with a coding toy: The role of mathematics, creativity and curiosity
Elin Reikerås (1), Francesca Granone (2) and Sami Konca (3); (1) University of Stavanger, Norway, (2) University of Stavanger, Norway, (3) Erciyes University, Turkey

The aim of the present study is to analyse what aspects of mathematics can be supported by teachers during play situations with a digital toy and what role can creativity and curiosity have. Digital play has been identified as a preferential channel for stimulating children’s skills and competencies (Pramling et al., 2019;) as reasoning and problem-solving skills (Çiftci & Bildiren, 2020; Granone & Reikerås, 2021). In the present study, conducted in the Norwegian ECEC context, the teachers support children’s play with a coding toy (Kubo) that they can programme collaboratively by giving logical messages to the robot through tactile arrows. Three groups of four children aged four or five and an ECEC teacher for each group, were videorecorded for approx. 30 minutes to understand how they could play with it. The theoretical framework is based on Bussi & Mariotti (2008) model where the digital toy is an artefact that
helps the teacher to mediate children’s learning. This exploratory study was conducted within a qualitative research paradigm. A phenomenological approach to data collection was used. A descriptive analysis of the video-recorded play was conducted using a multimodal approach. Informed consent was obtained from teachers and parents. The children was asked orally. Different aspects of mathematics were supported by teachers through play, including problem solving, logical reasoning, and spatial exploration. The importance of creativity and curiosity is discussed. The study has implication for practice concerning how preschool teachers’ role is fundamental for enriching the digital play to be a mathematical learning situation.

ECEC, coding toys, technology, mathematics, mediation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Ducks divide money – Problem-solving in ECEC
Anne Nakken (1) and Oliver Thiel (2); (1) National Centre of Mathematics Education, (2) Queen Maud University College, Norway

In this case study we explored how animation video production supports young children’s mathematical problem-solving. Previously Thiel et al. (2016) have shown that video production in primary school classrooms facilitates mathematics learning. A well-researched mathematical problem for kindergarten children is a distribution situation that can be varied easily. Two or three dolls shall share six or twelve biscuits (Davis & Pepper, 1992, p. 400). As a theoretical framework we use the six properties of mathematical problems for kindergarten children defined by Ramírez-Uclés et al. (2018, p. 577), and the three properties of games situations that promote the transition from concrete to abstract thinking found by Otsuka and Jay (2017, p. 998). This study is part of the action design research project ViduKids founded by the European Erasmus+ Programme. The research was conducted as a quasi experimental case study with video recordings and field notes. The professional relationship between parents, teacher and children ensured ethical, accurate and authentic representation of children’s ideas. Informed consent was negotiated and given. Participants could withdraw at any time. Our observations clearly show that making videos allows children to engage with the same problem several times naturally and playfully when solving the problem, filming, adding sound, and watching the video. In each phase, the children can have new experiences, recognise other possible solutions, and gain deeper insights. The case study’s result help to develop an innovative pedagogy that foster creative use of digital media, a positive attitude towards mathematics, and varied digital and creative problem solving skills.

video production, problem solving, mathematical thinking, varied representations of division, edutainment

This application discusses a completed piece of research.
Symposium Set G  
Friday 1st September 2023, 16:00 – 17:20

G1  
INHIBITIVE CONTROLS, PEACE AND CONFLICT RESOLUTION  
Chair: Julia Atiles, East Tennessee State University, United States

Touched by care: Life stories of sharing understanding, respect, peace, and compassion, with young children  
Julia Atiles (1), Cecilia Maron-Puntarelli (2), Mary McMullen (2) and Mila Costa (3); (1) East Tennessee State University, (2) Indiana University, (3) Bank Street College, United States

Nelson Mandela famously said, “People learn to hate; they can be taught to love.” But when, where, and how are important life-lessons to care and love one another learned? Presenters look at four such ‘touchpoints,’ focusing on specific ‘care lessons' learned and places/spaces this occurred, including: Understanding—infant-toddler childcare; Respect—translanguaging in preschool/kindergarten classrooms; Peace—trauma-informed care in an indigenous preschool; and Compassion—in an intergenerational program with elders and young children. Based upon qualitative research done by the presenters, grounded in theory and scholarship on: infants/toddlers (McMullen, 2022); translanguaging (Garcia et al., 2016); arts-based methods with Indigenous Native American preschoolers; and relationships and roles (Costa, 2022); intergenerational preschool programs (Maron-Puntarelli, 2023). Our philosophical perspectives are relationship- and social-justice oriented, including: child’s rights (honoring children’s voices and choices); Noddings feminist care (reciprocity in relationships between one caring/cared for); Garcia’s translanguaging perspective (Social-emotional learning, identity formation and funds of knowledge); and Bandura social learning (observational learning and modeling). Our method is to share our stories of understanding, respect, peace, and compassion from our own lived experiences and scholarship. Participants will be asked to consider their own stories in which young children were ‘touched by care.’ The work shared is not based upon one study but from presenters’ human subjects- and tribal-authorities-sanctioned research. Rights of all participants were respected, honored, and celebrated throughout. Our protection of children’s rights will be spoken of as another way children experienced being ‘touched by care.’ Implications for the role of ECEC educators in care transactions are considered.

infant-toddler care and education, preschool, trauma-informed care, translanguaging, intergenerational programs

This application discusses a completed piece of research.

Investigating chairs of conflict resolution... ‘I can understand you now!’  
Eleni Moschovaki and Sevasti Paidha, Hellenic Open University, Greece

This study aims to investigate the strategies kindergarten children use to resolve their conflicts when being trained to “Chairs of Conflict Resolution” (CoCR), a process which teaches them to discuss conflicts, express emotions and develop active listening (Chetkow-Yanoov, 1996; Paidha, 2010). Children normally use simple strategies when dealing with conflicts, which result in win-lose outcomes but when they explain and attempt to compromise, a resolution is more likely to be achieved (Thornberg, 2006). Some preschool teachers view conflicts negatively and intervene to restore peace instead of encouraging conflict resolution discussion (Chen, 2003). Therefore, children’s training in using elaborative strategies is important for successful conflict resolution. Based on peace education and critical pedagogy children’s training in conflict resolution emancipates them from teacher’s authority, enabling them to become independent problem solvers, able to regulate successfully their peer relationships (Georgopoulos et al., 2009). Data collection took place in Greece and 48 sessions of CoCR were recorded. The study adopts a social constructivism paradigm. A mixed methodology of discourse analysis focusing on interaction was applied. Parents were aware of the particular research and gave permission for the recordings. Children used CoCR only when both parties agreed. Findings suggest that children explain their actions, blame each other, accept their behavior or deny it, express emotions and propose a resolution, while teacher facilitated the interaction.

The current study substantiated that children are able to resolve conflicts constructively. Therefore, preschool programs should emphasize on conflict resolution training as an important area for children’s social and emotional development.
This application discusses a completed piece of research.

The influence of continuing education on the implementation of playful learning situations related to inhibitory control in preschool 5-years-olds through teaching practices
Océanne Ethier (1), Isabelle Deshaies (1) and Emmanuelle Soucy (2); (1) University of Quebec at Trois-Rivières, (2) University of Québec Abitibi-Témiscamingue, Canada

The objective of this paper is to present the influence of a continuous training focused on playful learning situations (PLS) supporting the development of inhibitory control (IC) on the adjustment of practices among teachers at the preschool 5-year-olds. Rooted in a perspective supporting child achievement, the development of cognitive skills in preschoolers, particularly those related to IC, contribute to their overall development and success in the transition to school (Diamond, 2009). The quality of the educational environment offered to the child is a factor conducive to the development of the IC (Duval, 2015). In this sense, proposing PLS, soliciting reflection and the presence of skills related to the child’s IC, is promising (Deshaies and Boily, 2021). A quasi-experimental type of research (Fortin and Gagnon, 2016), lasting six months, took place with six teachers working at the preschool level (5-year-olds). It was through a qualitative analysis carried out using questionnaires and interviews that it was possible to observe adjustments in practices related to a more accurate understanding of the manifestations of IC. In addition, this research takes into account ethical considerations (free and informed consent, anonymity and data confidentiality). Our results lead us to discuss the adjustment of practices that followed a continuous training focused on PLS supporting the development of IC. This is a reflection that should be used in practice settings to provide support for the importance of developing IC, since it is a factor linked to success.

preschool 5-year-olds, continuous training, inhibitory control, teacher’s practices, playful learning situations

This application discusses a completed piece of research.

G2
READ ALOUD, MAKERSPACE AND THEORY OF MIND AS LITERACY ISSUES
Chair: Suzanna Wong, University of Alberta, Canada

Supporting theory of mind through story writing early in primary school
Sofia Guimaraes, University of Roehampton, United Kingdom

The aim of the present study is to investigate young children’s written narratives as contexts for supporting Theory of Mind (ToM). Mastering writing requires diverse skills linked to the transcription process but also the ability to consider others’ perspectives (Hughes & Devine, 2015). ToM, the ability to understand that we are mental beings, with thoughts, feelings, and intentions, is crucial to children’s pro-social development (Kidd & Castano, 2017) and, has been linked to academic achievement including reading comprehension (Lecce & Devine., 2021). Storytelling is a central feature of children’s cultural experiences from a very young age (Hibbin, 2016). This study, explores the impact that the introduction of fictional writing as part of regular classroom activities has on levels of TOM (cognitive and affective). Two Year 2 classes (6-to-7- year-olds) in an English primary school are taking part in the study. The investigation is based on an interventional study design with TOM skills assessed pre- and post-intervention. The study adheres to the BERA’s (2018) ethical guidelines: the respect for all involved and their rights, including voluntary participation, the right to withdraw and confidential nature of the data. Data is still being collected but preliminary results indicate that story writing promotes perspective taking early in primary school. The study’s results have important implications for our understanding of how regular story writing can support the development of key literacy skills early in primary school but also children’s understandings of others’ perspectives, their thoughts, motivations and emotions.

theory of mind, early literacy, story writing, narratives, primary school

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
A pilot study of young children’s literacy learning in a Makerspace Club
Suzanna Wong and Linda Laidlaw, University of Alberta, Canada

Our study explored how young children’s experiences with ‘making’, using digital and non-digital technologies in a Makerspace club, can develop ‘maker literacies’. Maker literacies (Wohlwend et al., 2015) are practices supporting creation of texts and artifacts through playful work with technologies and materials. Participants ages 5 - 7 participated in a ten-week study focused on examining the kinds of literacy skills and creative competencies children developed within their participation in the makerspace club. The Maker Movement embraces the notion of ‘do-it-yourself’ creation within a range of fields including textile crafts, electronics, traditional “making” activities, and more (Peppler, Halverson, & Kafai, 2016). The notion of making has always been a focal practice in early childhood education (ECE) and recent studies (e.g., Marsh, et al., 2017) suggest that makerspaces in ECE have high potential value for children, particularly literacy learning. Our study addresses the gap in the literature of such experiences during the COVID-19 pandemic. Data collection include observations, photographs, and field notes which were thematically coded and analyzed with Green’s (1988) three-dimensions of literacy model (i.e., the operational, cultural, and critical elements). As well as follow-up interviews with several participants after ethics approval was acquired both institutionally and from all participants. Our findings suggest that ‘making’ requires time and space without constraints for creativity; and that maker literacies involved Green’s (1988) operational, cultural, and critical dimensions of literacy. We note some of the constraints of ‘maker space’ activities as impacted by the pandemic, and consider options for the future.

makerspace literacies, early literacy, digital devices, literacy development, play

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Professional read-aloud in preschool: Preschool teachers’ reasoning about a contemporary didactisation
Niklas Pramling (1), Maria Simonsson (2) and Cecilia Lindström (2), (1) Göteborgs Universitet, (2) Linköping University, Sweden

The purpose is to contribute with new knowledge on how preschool teachers remediate professional read-alouds in preschool. In the curriculum for the Swedish preschool, working for promoting language development for children through reading aloud has been specified and the teaching task of preschool has been clarified (Skolverket, 2018). Previous studies (Damber, 2015; Simonsson, 2004) show that reading aloud rarely has a didactic function in preschools. The study is theoretically based upon the sociocultural perspective (Vygotsky, 1978). From the theoretical premise that teachers’ professional knowing are in a process of remediation, in this study we therefore analyze how they remediate this practice. The empirical data in this qualitative study consist of four focus-group conversations with preschool teachers. A consent form and information sheet was provided to all participants, who were given the opportunity to withdraw from the study at any time. The ethical approval was granted by the Swedish Ethical Review Authority. The results show how the preschool teachers remediate professional reading aloud through contrasting and renegotiating the meanings of, the conditions for, and participation in this practice. The preschool teachers’ reasoning implies their collective development of a wider repertoire where older practices co-exist with new ones, and with some shifting in terms of figure and background. The implications of the findings are discussed along with a theoretical reflection on how remediation, as still rare in research, offers a conceptual tool for analyzing practices in-the-making, i.e. processes of change as they take place through dynamic negotiation, not yet established as tradition.

preschool, collegial dialogue, remediation, professional read-aloud, pedagogic practices

This application discusses a completed piece of research.

G3
EXECUTIVE FUNCTIONS, PHILOSOPHY AND INTELLECTUAL EXPERIENCES
Chair: Caroline Cohrssen, University of New England, Australia

Supporting infants’ emerging executive functions
Caroline Cohrssen (1) and Parian Madanipour (2); (1) University of New England, (2) Griffith University, Australia
This research aimed to reveal interactional phenomena that support antecedent executive functions within a spontaneously recorded adult-infant dyad singing/talking episode. Executive functions emerge with maturation and rehearsal, and research has shown that executive functions can be learned (Blair, 2016). Maternal sensitivity, mind-mindedness, and autonomy support (Bernier et al., 2010) are related to a child's working memory, inhibitory control and cognitive flexibility (Diamond & Ling, 2016). This study is framed by bioecological theory (Bronfenbrenner & Morris, 2016): bidirectional interactions between the developing child and people and objects within their proximal environment influence learning and development over time. Conducted within a qualitative research paradigm, the study applies conversation analysis (CA) as both methodology and method (Sacks, Schegloff, & Jefferson, 1974) to reveal adult supports for intersubjectivity within the sequence of interactions. Adult behaviours that lead to infant EF-type responses are highlighted. University ethics approval was obtained. Thereafter, the mother received information regarding the proposed study, and her right to withdraw at any time was explained. The mother provided consent for herself and on behalf of her infant. Pseudonyms are used to anonymise both participants. Specific adult behaviours are observed to support the infant’s antecedent executive functions. These behaviours are replicable by educators to support the learning and development of children in their care. Interactional phenomena are observable and should be intentionally replicated by early childhood educators. Teaching specific interactions that support the learning and development of infants should be a priority in initial teacher preparation courses.

**antecedent executive functions, attention, adult-infant intersubjectivity, interactional phenomena, educator interactions**

This application discusses a completed piece of research.

**Do animals communicate with each other? - Encouraging children's philosophical curiosity and agency**
Sarah Girlich and Robert Jurleta, LakoS - Institute of Language Promotion Saxony | Landeskompetenzzentrum zur sprachlichen Bildung und Sprachförderung an Kindertageseinrichtungen in Sachsen, Germany

Encouraging children’s curiosity and agency in play and learning can be achieved by providing opportunities for exploration, discovery, and problem-solving, while also supporting their interests. This includes open-ended materials and environments, fostering questions, and valuing their ideas. We developed a tool for philosophizing with children, suitable for early childhood education centers. Philosophizing with children or sustained-shared-thinking supports their cognitive, linguistic, social, and emotional development. This approach has been researched and applied in Germany (Hildebrandt, 2014) and globally (Siraj-Blatchford, 2005). Philosophizing with children is a form of language education that allows exploration of various phenomena through "collaborative" thinking. It fosters children's communication and linguistic competencies, and encourages them to express ideas and develop them further in conversation with others. The aim is not to find a definitive truth, but to support conversation and language development (Jurleta & Girlich, 2022). Our card set includes open-ended questions and follow-up prompts to encourage children's critical thinking skills, social and emotional competencies, reasoning abilities, and language development. This versatile tool fosters curiosity, agency, and participation. We will present the tool’s development process and successful implementation examples in diverse educational settings. EECERAs ethical-code and each partner’s ethical code were followed and discussed in multiple meetings. Philosophizing with children generates high engagement by incorporating their thoughts and knowledge. It aligns with children's interests and creates inclusive and meaningful learning environments that support diverse needs. We discuss its implications for professional development in early childhood education our findings and experiences have implications for future projects and practical implementations of new material.

**philosophizing with children, material development, language promotion, curiosity, professionalization**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Building intellectual experiences in early childhood classrooms: A framework**
Zeynep Isik-Ercan, Rowan University, United States

This study explores the question: How do early childhood educators engage young children in intellectual experiences? Young learners are well capable of cognitively coping with the demands of school, and need to feel that their cognitive gifts are fully accepted and utilized in schools (Malaguzzi, 2005; Csikszentmihalyi, 2014). In the words of Bruner, “We may take as perhaps the most general objective of education that it cultivates excellence; but it should be clear... It refers not only to schooling the better student, but also to helping each student achieve his optimum intellectual development (1963, p.9).” The theoretical framework includes Dewey's concept of educative experiences, Csikszentmihalyi's concept of flow (2014) and Malaguzzi's philosophy of Reggio Emilia approach (2005). Interpretive and constructivist paradigms underpin the study. Using a qualitative case study, the methods
included interviews with six early childhood educators implementing constructivist project-based pedagogies in Canada and the US. Full disclosure and details, optional participation, and member check were utilized for ethical considerations. Through the analysis of the data collected and extant literature, the results indicate four characteristics of teaching and learning interactions to build intellectual experiences in early childhood classrooms: a) cognitively challenging and nurturing, b) fostering autonomy and self-leadership, c) bearing creativity and industry, and d) socially and emotionally engaging. These will be explored in the Framework of Teaching for Intellectual Experiences in P-3 Learning Environments. The findings and the framework have potential to guide educators and systems towards teaching for intellectual experience with a specific framework to follow.

intellectual experiences, intellectual growth, constructivist pedagogies, frameworks of teaching, early learning

This application discusses a completed piece of research.

G4

FOSTERING STUDENTS’ PROFESSIONAL DEVELOPMENT BY RESEARCH ENHANCED TEACHING IN HIGHER EDUCATION
Self-organised Symposium
Chair: Nadine Madeira Firmino, Hochschule Bielefeld – University of Applied Sciences and Arts (HSBI), Germany

Enabling students to challenge and document children’s curiosity
Helen Knauf and Juliane Gerland, Hochschule Bielefeld – University of Applied Sciences and Arts (HSBI), Germany

The presentation introduces a conceptual approach for the training of early childhood pedagogues. The aim is to sensitise students to children’s curiosity by working with empirical data. The paper builds on our previous research using video recordings of children’s musical activities (Gerland & Stange 2022, Gerland 2022) and learning stories (Knauf 2017). Research-based learning has so far been used mainly in the training of teachers for schools (e.g. Brew & Saunders 2020), but hardly in training of pedagogues for ECE. The theoretical framework of our concept is provided by Bourdieu’s (1974) habitus theory, which is further developed as a research habitus (Cloos & Lochner 2021). We exemplify how the research habitus can be fostered by the work with video recordings and learning stories about children’s musical activities derive principles for research-oriented learning. Our research follows the rules of good scientific practice of the German Society for Educational Science (DGfE 2005, especially §4). Central to this is the principle of voluntariness and informed consent, ensuring anonymity and confidentiality and avoiding harm to the children, their families and the pedagogues. Our concept illustrates, firstly, that the analysis of film sequences of children’s musical activities can increase students’ perceptual capacity for curiosity. Secondly, we show that the analysis of learning stories can be used to express appreciation for children’s curiosity. Our contribution offers concrete impulses for the training and further education of early childhood educators. From this we derive general conclusions for the professionalisation of the sector.

eece teaching, research-oriented teaching, video analysis, music, learning stories

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Why questions and children’s curiosity: Logical structure from epistemic emotions
Alexander Scheidt, Hochschule Bielefeld – University of Applied Sciences and Arts (HSBI), Germany

In this paper, I analyze conversational examples of children’s why-questions to show how certain logical types of explanation emerge from epistemic feelings of curiosity. According to research in cognitive development, why questions are critical in promoting concept acquisition and theory building during early childhood (Callanan & Oakes, 1992; Carey, 1985a; Chouinard, 2007; Frazier et al., 2009; Gopnik, 1998; Isaacs, 1930; Liquin & Lombrozo, 2020). The theoretical framework for this study is based on the concept of sustained shared thinking in early childhood education (Crowley et al., 2001; Siraj-Blatchford et al., 2002) as well as studies in the philosophy of science, such as Hempel and Oppenheim’s (1948) logical-deductive explanatory model and recent theoretical work on abductive reasoning (Lombrozo, 2012). The study follows the paradigm of logical empiricism (Hempel, 1965; Mach, 1906). It investigates the logical-causal structures that children evoke with why questions via logico-semantic analysis within an interrogative approach (Hintikka & Halonen, 1995). All conversation examples and original why-questions were taken from the existing literature. This was done for methodological and ethical reasons to spare children a lengthy, time-consuming data collection process. The results of the
study show that for a certain type of why questions, children adopt a mental attitude that necessitates logical-justifying thought processes on the part of the addressee of the question. For the practice of sustained shared thinking in early childhood education, these findings suggest that educators should strive for logically rigorous and high-quality responses in dialogue with children.

curiosity, why questions, sustained shared thinking, cognitive development, scientific explanation

This application discusses a completed piece of research.

**Transcription as a methodological challenge in videography. Proposals for a movement-oriented perspective on interpersonal interactions for research in childhood education.**
Nadine Madeira Firmino, Hochschule Bielefeld – University of Applied Sciences and Arts (HSBI), Germany

The paper presents a transcription grid that analyses video recordings from a psychomotor holistic perspective. The video sequences, which come from an intercultural family project, were analysed in collaboration with ECE-students. One goal of the research-based teaching is to demonstrate the various forms of communication between toddlers, parents and educators. Videography is a frequently used method to visualize interaction processes in early childhood settings (Weltzien et al. 2017; Madeira Firmino & Hofmann, 2023). The theoretical framework is based on a holistic psychomotor perspective of early development and forms of expression and interaction (Lapière & Aucouturier, 2002; Zimmer, 2019). The analysis builds on current study results on the quality of interaction, as well as on research that considers a movement-based approach in ECE (Weltzien, 2014; Madeira Firmino & Zimmer, 2019). The transcription grid combines the clarity of the field score with the sharpness of detail of ethnographic descriptions and gives space to the visuality of the videography. The project adheres to the ethical code regulations of good scientific practice by the German Educational Research Association (GERA/DGfE, 2010). The empirical data was collected with the informed consent and anonymized for teaching purposes. The transcription grid makes it possible to show the convergence of various interactions as well as possible clues for (holistic) communicative negotiation processes between children, parents and educators in different early childhood settings. The empirical findings can be fed back into pedagogical practice in order to increase ECE-students' perceptual capacity for different modes of interactions.

videography, interaction, transcription, non-verbal communication, movement-based approach

This application discusses a completed piece of research.

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**G5**

**TIME, SPACE AND GROUPINGS: THE ORGANISATION OF EARLY CHILDHOOD ENVIRONMENTS**

Chair: Julia Gillen, Lancaster University, United Kingdom

**Space as the third teacher in preschools in Iceland and obstacles in overcrowding**

Hörður Svavarsson, Kenning, Iceland

The object of the research is to shed light on the amount and features of space that children have for play in preschools of the capital area. The principal research question is: How much and what kind of space do children have in preschools? Environmental psychologist Gibson’s theory of affordance states the environment affects people’s behavior (Gibson, 2014). There were no studies on the subject in Iceland. Theoretical relates to psychologist Gibson’s theory of affordance states that the environment affects people’s behavior (Gibson, 2014). And the framework is based on the hypothesis of kindergarten teachers that the space is too small. The space was measured an. The departments were photographed, to investigate how the space was organized, Thirdly, interviews were conducted with the managers of the part of the departments. The researcher is a preschool director and has worked in preschools for about two decades in a career of about forty years. The author’s attitude and knowledge of the field undoubtedly influenced the choice of this research topic. The main results show that each child’s play space is from 2.4 square meters down to 1.37. The teachers are constantly trying to divide up the large group of children in this small space, so there may be little room to create a learning environment that encourages the children’s curiosity and desire to explore their surroundings The results are statistically significant and conclusions can be drawn based on them. The government must keep them in mind when new rules are set.
the space as the third teacher, congestion and lack of space, conditions of children in preschools in Iceland, guidelines and rules for space in preschools, the teachers powerlessness

This application discusses a completed piece of research.

**Time and routines in early childhood education and care contexts**

Mónica Pereira, Lourdes Mata and Ana Teresa Brito, Instituto Universitário (Institute of Applied Psychology - ISPA), Portugal

We aim to characterize time and routines organization in early childhood education and care (ECEC) contexts and understand the reasons underlying this organization. Evidence supports the importance of a balanced approach to time management of free and guided activities and routines, improving the quality of learning opportunities and experiences provided for children (Early et al., 2010; Fuligni et al., 2012; Vitiello, 2012). Quality in ECEC contexts research sustains the importance for child development and well-being (Bertram & Pascal, 2016; Burchinal, 2018; Pianta et al., 2005). A balanced management of activity settings and daily routines provides diverse experiences and opportunities for learning (Fuligni et al., 2012). A qualitative approach was used, within an interpretative paradigm, and data was collected from four Focus groups (Amado, 2014; Stake, 2010). Each group integrated participants with different roles within ECEC contexts (kindergarten teachers, coordinators, supervisors). A consent form was provided to participants and audio recordings were destroyed after being transcribed anonymously. Results highlight that time organization and routines were established and managed by adults, considering adults’ agendas (teachers, families). Diverse fragmented extracurricular activities occur, usually during the morning without considering the children’s interests. It is difficult for Pedagogical coordinators to respond to families’ requests, and simultaneously provide space for kindergarten teachers to create consistent opportunities that meet children’s needs and interests. Findings also suggest that kindergarten teachers have little intentionality in organizing time and routines. Results point that support, training, and supervision are needed to help developing professionals’ organization and management of time and routines, contributing to quality contexts.

**quality, time management, routines, kindergarten, teachers**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Same-age and mixed-age grouping in ECEC: A systematic literature review**

Lobke Van Lombergen, Michel Vandenbroeck and Jochen Devlieghere, Ghent University, Belgium

This PhD aims to analyse consequences of same-age (SA) and mixed-age (MA) groups in ECEC-services. Research has shown that group composition affects meaningful interactions between professionals and children (OECD, 2021), nevertheless research does not provide a unified picture of the consequences of MA and SA groups (Ansari, 2019; Diebold & Perren, 2020; Guo et al., 2014). The main perspectives in the existing body of research, are a developmental psychological and educational view. A (social-)pedagogical lens is lacking. Therefore, this study implements such a lens to look at the literature with regard to grouping in ECEC. The study is conducted within a qualitative approach, by using a systematic literature review. A search-protocol was drawn up beforehand (based on PRISMA-method). Both a narrative synthesis and a discourse analysis were used to analyse the items found. Only secondary data were used in this literature review. Nevertheless, ethical considerations are addressed to make sure the representation of existing literature is truthful. Every source is correctly referred to and funding sources are identified in order to avoid bias. Research on group composition is not unequivocal and points to both positive and negative implications. MA-groups require certain conditions (qualifying professional, high quality, meaningful interactions, group size ...) to ensure a positive impact. Interestingly, MA-groups are rather narrowly conceived and do not go beyond the structures of split systems. This literature review provides insights into the existing body of research concerning group composition and contributes to identifying conditions for group compositions that support integration and quality.

**group composition, same age groups, cross age groups, mixed age groups, integration**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
GROUP SIZE, SPACE AND INTEGRATION
Chair: Sharon Skehill, National Council for Curriculum and Assessment (NCCA), Ireland

Educare: Integrating care and education in preschool
Anders Skriver Jensen, University College Copenhagen, Denmark

Considering recent discussions about a care crisis in Denmark and beyond, this inquiry aims to develop the concept of educare for integrating care and education in pedagogical practice in Danish preschools. Research consistently points to the importance of high-quality interactions between the preschool teacher and child (Christoffersen, et al., 2014; OECD, 2018). Gains in the child’s learning are somewhat easier measured, and are often the driving argument, but the child’s well-being (and thus the preschool teacher’s care) remains a fundamental component. The theoretical framework for this study draws upon theories of Didaktik (Broström 2014; Klafki, 2000), learning (Vygotsky 1978) and care (Winther-Lindqvist, 2021) in early years settings, and continues Broström’s (2006) work on developing a practice-relevant paradigm which unifies care and education (Jensen, 2018). The study is undertaken within the qualitative research paradigm (Denzin, 2008). It reviews and synthesizes existing empirical research and theoretical work. Ethical consideration has been given to ensure a fair representation of literature from multiple sources. The study includes empirical data from a recent study (Jensen & Jæger, 2022), where considerations regarding informed consent were observed with preschool teachers (the primary participants), and children and parents were informed as well. The findings point to the relevance of practicing and evaluating pedagogical work based on the educare concept. The study suggests that practitioners, policymakers, and other stakeholders should respond to recent tensions in the Danish/Nordic ECEC field with a firm belief in care AND learning, rather than pitting the two concepts against each other.

care, education, learning, interaction, educare

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Day care centre as a space in the construction of emotions in relations
Elmiina Tahkola, University of Oulu, Finland

This study aims to 1) to deepen the understanding of day care centre as a space for emotions, and 2) to develop practices for holistic pedagogy, in which space including places and material environment, are understood to construct meanings for emotions. Several studies highlight the importance of space and material environment in the construction of emotions (Paju 2013). However, there is still little research about that. Research has previously taken a psychological perspective. This study leans on studies of emotions, relations and embodiment in the context of educational space (Merleau-Ponty, 2002; Zembylas, 2007). Emotions are constructed always in the space, and the space creates meaning for the emotions and relations (Roald et al., 2018). The study employs narrative approach, according to which relations in the environment are constructed through different narratives (Bruner, 1996). The research material consists of video and observation material, which was produced in two Finnish day care centres in groups of 3-5 years aged children in 2020–2021. Before the data collection I received research permissions from the municipality, educators, children and parents. The anonymity of participants is guaranteed. The research illustrates that space enables construction of emotions in relations between children and educators, and also prevents them to construct. We need deeper understanding about space in the construction of emotions for develop holistic pedagogy. Thinking pedagogy by holistic way emotions are better considered in natural everyday situations, not only in the organized educational moments, for example. Space, place and material environment create always meanings for emotions.

day care centre, embodiment, space, narrative research, relations

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

The implications of group size for children’s agency and participation in child communities
Cristtina Munck and Anja Marschall, University College Copenhagen, Denmark

This four-year study aims to explore how group size in Danish early childhood institutions has an impact on the quality of the pedagogical work and on children’s agency. Several studies have pointed out how the most important factor for children’s well-
being is found in the quality of adult-child interactions based on emotional presence, sensitivity, and responsiveness (Shin, 2015). Pedagogues play an important role for how children interact with each other (Bjørnestad & Samuelsen 2012) as well as children play an important role for each other (Rogoff 2003). The study draws upon theories inspired by Danish/German critical psychology and social practice theory (Dreier, 2008; Holzkamp, 2013; Lave, 2019). The study explores young children's agency and participation in early childhood institutions as part of the pedagogical arrangements (Munck, 2017; Stanek, 2011) influenced by contradictory agendas of preventative interventions. The inquiry draws on qualitative research methods: ethnographical fieldwork, participant observations (Gulløv & Højlund, 2010), semi-structured qualitative interviews (Tanggaard & Brinkmann, 2010), and workshops with pedagogues. A consent form and information sheet were provided to all participants. Informed consent was negotiated with the children involved. Pseudonyms have replaced the names of participants. The findings demonstrate how young children's agency and participation in child communities are connected to group size. It is necessary to combine group size with a pedagogical principle based on interactions that are characterized by emotional presence and responsiveness. These findings suggest that group size is essential for children's agency when it works as a pedagogical principle and not only as an organizing principle.

This application discusses a completed piece of research.

G7
ENHANCING PRACTICE THROUGH PARTICIPATORY RESEARCH METHODS
Chair: Sofia Frankenberg, Stockholm University/ Dept. Child and Youth Studies, Sweden

Powerful Projects – Embedding a sustainable approach that encapsulates the child’s voice: Reframing the planning process.
Alison McMaster (1), Sarah Dixon-Jones (2) and Kathryn Nichols (2); (1) University of Sunderland, (2) Houghton Community Nursery, United Kingdom

Inspired by Reggio Emilia project work, there was a drive to explore the use of projects, embracing the idea of the ‘relaunch’ to encourage longevity. This would empower the children, ensuring their voice was being captured through a range of languages and encourage the practitioners to embrace the complexities of this approach. The use of project work has been trialed previously within the setting though has not sustained the child’s (or the practitioners) momentum. Following a study week in Reggio Emilia the understanding of project work changed considerably. The team recognised their shared values and underpinning ethos aligned with children being protagonists of their own learning and wanted this to be reflected in the planning processes too. Through practitioner enquiry it was possible to gather practice-based evidence to use as CPD for the whole team. Ongoing development of the project work and subsequent practitioner reflections would form the basis of the practitioner enquiry, allowing for further analysis with the wider team, dissemination and reflexivity. There was an acute awareness of the need to follow the child’s lead with the project and embrace being co-researchers during the process, reducing the power imbalance that can exist in teaching and learning. Exploring the use of project work following highly reflective CPD led to insightful practitioner enquiry that is informing current practice. The manner in which the projects are now developed showcases the child’s voice effectively while also demonstrating how this can inform planning and lead to ongoing reflexivity in practice.

practitioner-enquiry, projects, reflexivity, child’s voice, complexity

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

How should we use circle-time activities?: Exploring methodologies for a smooth transition from ECEC to CSE
Yuji Fujimori (1), Yoshiko Shirakawa (2) and Hideki Mogami (3); (1) Bunkyo University, (2) Kyoritsu Women's University, (3) ChaCha Children & Co., Japan

In many kindergartens and schools, Circle-Time activities are organised. It has been pointed out that these activities promote the development of children’s social independence, self-expression and listening attitudes, etc. However, in terms of a smooth transition from ECEC to CSE, few previous studies have observed Circle-Time over a long period of time in collaboration with teachers. This study aims to clarify how teachers and children who were inexperienced in such activities transformed over a year, and to explore effective methodologies for the Smooth Transition. Fujimori, Shirakawa, Mogami (EECERA, 2022) compared between experienced and inexperienced Circle-Time groups and investigated the difference of the quality between both groups. Our study draws on the
theories of Vygotsky and Bakhtin, Mindset (Dweck, 2017) and Play-Based Learning. As a qualitative study, this is based on Action Research in collaboration with teachers, including interviews and field observations. Participants were provided with a consent form prior to the start of the study and were also offered the opportunity to withdraw from the study at any time. Pseudonyms were used in all presentations. The following questions are discussed and explored in this study: 1) How have teachers' strategies for managing Circle-Time developed over a year?; 2) What improvements after a year have been observed in children who were previously inexperienced in Circle-Time?; 3) For the Smooth Transition, what are the key considerations for teachers in organising Circle-Time effectively? This study contributes to the clarification of effects of the morphological features of Circle-Time, and developments of the methodologies for the Smooth Transition.

circle-time activities, smooth transition from ECEC to CSE, action research in collaboration with teachers, morphological features, transformational process of children and teachers

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Exploring educators’ outdoor nature-based practices with infants and toddlers: The influence of curiosity, collaboration and collective agency on achieving and sustaining change**
Jayne Kinley, University of New England, Australia

This 12-month study aimed to explore influences on educators' nature-based practices with children birth-15months, and encourage critical collective reflection on ideological constraints and pedagogical impediments. The research demonstrates while contextual professional learning is important to successful outcomes (Hadley et al., 2015), critically reflective approaches empower participants' practice changes (Kemmis et al., 2015) and facilitate new understandings (Davidson & Edwards-Groves, 2020). Thus, this study's critical-socioconstructivist frame is based on importance of co-constructed knowledge (Bronfenbrenner, 1979), ethics of social justice and emancipation (Freire, 1996) and, empowerment to critique owned knowledges and practices (Kincheloe, 2012). A qualitative research paradigm (Cohen et al., 2018) guided Critical Participatory Action Research (CPAR) methodology (Kemmis et al., 2013), inviting participants' contributions in group and individual interviews, researcher observations and participant journals. Thematic analysis supported data cross-referencing to identify and make sense of meanings (Braun & Clarke, 2012). Participants' information is stored according to the Australian Code for Responsible Conduct of Research (NHMRC, 2019) and UNE Code of Conduct for Research Rule (2015). Consent forms and information sheets offered participants essential information including replacement of names with pseudonyms and withdrawal at any time. CPAR offered interactive and pedagogic links between influences on present-day and future practices. While CPAR aroused educators' practice curiosities, and collective agency enabled identified outcomes, such characteristics must be nurtured to sustain change. Findings demonstrate value in meaningful professional experiences for constructing relevant knowledge and importance of collective and collaborative work to achieve and sustain change, particularly when change strengthens young children's connections with nature.

eyearly childhood, outdoor nature-based practice, critical participatory action research, birth to under three, collective agency

This application discusses a completed piece of research.

**G8 CURRICULUM CONTENT, MODELS AND DEVELOPMENT**
Chair: Agnė Brandišauskienė, Vytautas Magnus University, Lithuania

**Analysing curriculum orientations of ECEC curriculum in Lithuania**
Agnė Brandišauskienė and Milda Bredikyte, Vytautas Magnus University, Lithuania

In Lithuania, each early childhood education institution can develop its own curriculum. This study seeks to clarify the theoretical foundations of ECEC curricula. Research shows that ECEC curricula are based on certain theoretical ideas (Mak et al., 2018; Wood and Hedges, 2016), but often this theoretical basis can be eclectic (Brooker et al., 2014). Despite the relevance of various discourses in the field of ECEC, many tensions remain around notions of play-based learning, curriculum and pedagogy, debates about the role of practitioners, the perspectives of parents, the efficacy of play as a means of achieving curriculum goals and ensuring school
This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**The introduction of the emergent curriculum in a Maltese ECEC context (0-7 years): seven case studies**
Charmaine Bonello (1), Carmen Dalli (2) and Anna Baldacchino (1); (1) University of Malta, Malta, (2) University of Wellington, New Zealand

This paper discusses how a policy shift from a prescriptive curriculum to a curriculum co-constructed and co-owned by the educator and the child was experienced by seven educators working in Maltese early years settings (0-7 years). It traces the rise of a new curriculum discourse and recounts experiences of pedagogical transformation. This paper draws on global literature advocating for child-centred early years pedagogy, such as the use of an ‘emergent curriculum’ (Stacey, 2018), the ‘Reggio Emilia approach’ (Malaguzzi, 1996) and ‘the Project Approach’ (Katz & Chard, 2000). Social constructivist theory provided the theoretical framework to collaboratively capture the educators’ narratives and accounts as they lived through and enacted the curricular change. The researchers collaborated with educators to co-construct a methodological framework to document and critically reflect on their understanding of the new curriculum approach, how they implemented it, and how they perceived its impact on children’s learning. Using qualitative narrative inquiry, data comprised the educators’ reflective accounts and transcripts of subsequent focus group discussions and individual interviews. The research received ethical approval from the University of Malta. The preliminary findings discuss early themes from thematic analysis (Braun & Clarke, 2019) of the textual data, including how the educators’ implementation of the emergent curriculum approach transformed their views of learning, leading to new interpretations of learning in Maltese early years settings that featured children’s curiosity and agency. The implications of the new curriculum approach in contributing to the development of curiosity and agency in educators and young children will be highlighted.

emergent curriculum, early childhood education, pedagogical transformation, children’s curiosity, children’s agency

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Opportunities and obstacles - Teaching about a content area**
Ingela Friberg and Laila Gustavsson, Kristianstad University, Sweden

The study aims to analyze and describe how ECE teachers talk about different curricular content with a focus on learning for the future. Arfwedson (2003) stresses that teachers should be able to justify the content. Preschool teachers may also need competence development that increases their ability to teach a specific subject (Lee, 2017). Variation theory is used here as a framework for analysis as well as for preschool teachers’ planning. The theory is developed based on a phenomenographic approach. The outcome space of categories can be described as qualitatively different ways of distinguishing what a learning object can be and then planning based on the learning object (Marton, 2014). This research is inspired by action research, an approach with participatory, collaborative, and cyclical ways of producing knowledge and change, teachers are seen as developers (Mc Niff, 2014; Rönnerman, 2004). Interview was used for data collection. There is a focus on the teacher’s ability to talk about a specific curricular content. The teachers were informed about research objectives, method, process and consent was collected from all participants. Ethical guidelines from the Swedish Research Council (2016) and Gustavsson, Hermerén & Pettersson (2011). The goal was to change the perspective from talking about the doing to talking about the content of the learning and then choose a method. Based on the closing group discussions with the teachers, it can be stated that these aspects were not distinguished. The project can impact how ECE teacher become more awareness when they plan teaching.

content area, learning object, teaching, preschool class, the variation theory
This application discusses an ongoing piece of research and findings may be preliminary/emerging.

G9
RAISING QUALITY THROUGH DEVELOPING WORKFORCE COMPETENCE AND SUSTAINABLE GOVERNANCE
Chair: Janniina Vlasov, Finnish Education Evaluation Centre, Finland

Ensuring nationally high-quality ECEC by sustainable governance in Finland
Janniina Vlasov (1) and Marja-Liisa Keski-Rauska (2); (1) Finnish Education Evaluation Centre, (2) Regional State Administrative Agency, Finland

The aim of this presentation is to clarify the responsibilities for monitoring and evaluation of ECEC through studies carried out by two government actors: Regional State Administrative Agency (AVI) and Finnish Education Evaluation center (FINEEC). In Finland, the national steering system offers ECEC organisers broad autonomy, yet great responsibility for providing access to quality services for all children. However, organisers need support in their self-evaluation in meeting the objectives set for ECEC (Repo et.al, 2019). Theoretical foundations of Finnish evaluations are based on the principle of enhancement-led evaluation (Patton, 1997), which stresses principles of interaction and impact. FINEEC’s evaluations emphasise trust between the evaluator and those participating in the process. Similarly, AVI must carry out supervision primarily by providing guidance and counseling. Multiple datasets are used to increase validity of results. AVI collected data during its national monitoring program by guidance visits, notification procedure, and development of self-monitoring procedures. FINEEC collected survey data while piloting a national evaluation system. Ethical requirements were carefully considered during the program and pilot. Anonymity of informants was assured during data collection and dissemination of results. Results show that the Act is well respected, and ECEC organisers comply well with it. Structural factors, such as adequate staffing and group size, are well respected and provide strong basis for pedagogical activities. The findings have significant political implications. Continuous quality development of ECEC requires that steering goes beyond monitoring structural factors. Therefore, co-operation of government actors must be strengthened, and new forms of support must be invented.

ECEC quality, self-monitoring, enhancement-led evaluation, guidance and counselling, governance of ECEC

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Developing a shared approach to care and education between early childhood educators and pre-school teachers
Mariacristina Picchio and Susanna Mayer, Institute of Cognitive Sciences and Technologies National Research Council, Italy

The study illustrates how to develop a shared coherent approach to care and education in ECEC settings between early childhood educators and pre-school teachers. Previous research showed the importance of ensuring continuity in children’s experience and smooth transitions from day-care centre to pre-school (Balduzzi, et al., 2019). In Italy, this issue is highly relevant because of the reform (Law 107/2015) that established the Integrated System of Education from birth up to six years. Documentation is a powerful tool for making visible children’s experience in ECEC services and promoting professionals’ shared reflexivity (Picchio, et al., 2014). The study is based on the analysis of the practitioners’ discussions of the documentation they collected systematically on children’s exploration activities within the ECEC context. The discussions were held within 11 CPD meetings that involved early childhood educators of 4 nidi and pre-school teachers of 5 municipal and 3 state scuole dell’infanzia in Pistoia, Italy. Discussions were recorded and transcribed with professionals’ consent. According to GDPR, data was kept in a secure location and anonymity of participants were guaranteed. Collegial discussions of documentation provided the professionals with the opportunity of understanding children’s social and cognitive potentialities and competences throughout the period 0 to 6 years and of grasping elements of continuity. The results show that CPD initiatives shared by professionals working in different ECEC services empower their professional competences, improve their daily practices and enhance the qualification of the whole local ECEC system.

continuity, continuous professional development, documentation, collegiality, practices improvement

This application discusses a completed piece of research.
Building competence from the inside
Charlotte U. Johannessen and Ellen Os, Oslo Metropolitan University, Norway

This project examined how teachers, in collaboration with researchers, worked to enhance quality in staff’s interactions with children. The objective was to create sensitive and warm relationships in toddlers’ everyday life. Children’s curiosity is highlighted as a part of interaction quality. This paper builds on interactional studies as core aspects of quality in ECEC (Ahnert 2020; Os, 2019), and curiosity. Nurturing children’s curiosity includes relational aspects as interpersonal relationships and a sense of togetherness in the group (Menning, 2019). Theoretical framework is based on children’s wellbeing, play and learning and teachers’ responsibilities for warm relationships and curiosity in group-settings. Video-based reflection is used in developing educational practice through action-based research (Levine, 2010; Gottvassli, 2016, 2019; Peleman et al., 2018). This project is based on qualitative research and a social cultural paradigm (Pramling et al., 2017). Seven teachers in a Norwegian ECEC institution participated. Data was collected through group interviews and analyzed by collective qualitative analysis (Eggebø, 2020). Participating teachers and children’s parents, signed letters of consent, and were informed that they could withdraw from the study at any time. Results show that the teachers experienced participation and flexibility being involved in the action-based research in collaboration with the University. They expressed that their ability to create a warm atmosphere and rich interactions involving mutual curiosity, was strengthened. Action-based research involving practitioners and researchers has a potential for professional development and improvement in ECEC, and can inform policy and the practical field.

interaction, curiosity, action-based research, quality, professional development

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

G10
PREDICTING COGNITIVE DEVELOPMENT AND SOCIAL COMPETENCE OUTCOMES FROM ITERS-R AND ECERS-R
Self-organized Symposium
Chair: Joakim Hansen, University of Stavanger, Norway

In this symposium we wish to present three papers using data from the Infant/Toddler Environment Rating Scale – Revised (Harms et al. 2006) and Early Childhood Environment Rating Scale - Revised (Harms et al. 2005) quality measurement. Two papers model new latent quality factors; cognitive stimulation and social competence. The latent factors are used to predict cognitive development and social competence, respectively. The latent factors were developed by leading experts on the field of developmental and educational psychology, substantively exploring the indicator variables from ITERS-R/ ECERS data. One paper uses standard total scores from the ECERS-R subscales to predict cognitive development and exploring gender differences. All three papers use data from the longitudinal Norwegian research project Better Provision for Norway’s children in ECEC (BePro/GoBaN) investigating quality of care in approximately 95 Norwegian ECEC centers, and measuring cognitive and social competence outcomes in approximately 1200 children.

ECEC quality and social competence in toddlerhood
Maren Hegna (1), Joakim E Hansen (2), Erik Eliassen (3), Elisabeth Bjørnestad (1); (1) OsloMet, (2) University of Stavanger, (3) Norwegian Institute of Public Health, Norway

The paper aim to investigate the association between quality of Norwegian ECEC settings and social competence outcomes using extraction of data from the quality assessment Infant Toddler Rating Scale System – Revised (Harms et al. 2006) and the Lamer Social Competence in Preschool Scale (Lamer, 2006; Zachrisson et al. 2019). The sample consists of 882 children from Norwegian ECEC-centers, and the paper is part of Better Provision for Children in Norway (BePro/GoBaN www.goban.no) project on quality of ECEC care. Early development of social competence is an important indicator for children’s academic achievements and success in life (OECD 2021). Social competence is viewed in educational research as interacting outcome of family home learning environment and educational system starting from ECEC settings (Arnold 2012). This research is placed within the post-positivist paradigm, employing an investigative methodology within quantitative research method. The analysis is conducted using R-programming language (R core team 2016) and packages from R Archive Network (CRAN, 2012). Data is collected within the GoBaN project, approved by the Norwegian Data Protection Authority (Datatilsynet) and for the current project approval is given by the Norwegian Centre for Research Data (NSD). The initial findings indicate that quality of ECEC matters for children’s social competence and that aspects of
the social competence quality factor within ECEC centers is important in social development, especially for girls. This research underpins the need for knowledge on how ECEC contribute to children’s social development, in terms of both structural and processual characteristics eg. Physical environment, interaction and learning environment.

*early education and care, ECEC quality, social competence, social and emotional competence, quality measurement*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**The effects of early childhood education and care quality on verbal and non-verbal cognitive skills among toddlers, with gender differences**
Magdalena Elnes (1), Ove Edvard Hatlevik (1) and Elin Reikeraas (2); (1) OsloMet, (2) University of Stavanger, Norway

The aim of the current paper was to investigate the effect of early childhood education and care (ECEC) quality on verbal and non-verbal cognitive development among toddlers, while exploring gender differences. Providing children with high ECEC quality is of great importance for development (Chan, 2019), but various aspects of childcare quality may affect boys and girls differently (Havnes & Mogstad, 2011; Magnuson et al., 2016). Infant Toddler Rating Scale System – Revised, ITERS-R (Harms et al., 2006) was used to assess quality, and British Ability Scales III (Elliot & Smith, 2011) subscales “Naming Vocabulary” and “Picture Similarities” were used to measure verbal and non-verbal cognitive skills in children aged three. The study is quantitative, placed within the positivistic paradigm, and serves as a part of the “GoBaN” project. The sample included 1153 participants, (51.8% males). All analyses were performed in STATA 17.0 (StataCorp, 2021), using linear and non-linear modelling with gender as moderator, based on results from previous studies (e.g. Setodji, Le, & Schaak, 2013, Eliassen, Zachrisson, & Melhuish, 2017). The study was approved by the Norwegian Center for Research Data and the Norwegian Data Protection Authority. The initial results indicated that the effect of ECEC quality on vocabulary skills were non-linear within the female group. No significant relationships between ECEC quality and non-verbal cognitive skills were found. ITERS-R subscales were also investigated with both significant and insignificant findings, as well as gender differences. The study shows the importance of investigating gender differences in early childhood development.

*early childhood education and care, ITERS-R, cognitive development, gender differences, non-linearity*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Using ECEC quality rating scales to predict cognitive development**
Joakim Hansen (1), Erik Eliassen (2), Elisabeth Bjørnestad (3), Edward Melhuish (4) and Jaqueline Barnes (4) (5); (1) University of Stavanger, (2) Norwegian Institute of Public Health, (3) Oslo Metropolitan University, Norway, (4) University of Oxford, (5) University of London United Kingdom

The aim is to investigate associations between newly developed quality of care scales, in terms of cognitive stimulation, and cognitive development in a universally accessible ECEC system in toddler/preschool groups. Although there is agreement on the influence of quality on child development, and particularly process rather than structural factors, there is a need for a refinement of quality measures related to gains in specific developmental outcomes (Burchinal et al., 2021; Melhuish et al., 2015). Recent studies on the predictive ability of the quality rating scales have used quality factors based on information at the item level, and few studies operationalizing domain-specific quality factors from information at the indicator level (Gordon et al., 2015; Mayer & Beckh 2016). The participants were from the BePro/ GoBaN research project. Data from ITERS-R/ ECERS-R from were used to model latent quality factors, and these were used to predict cognitive development. Participants were 1096 children from 93 centers enrolled in 206 toddler- and 205 preschool-groups. The study was approved by Norwegian Centre for Research Data, in accordance with national ethical guidelines. The parents provided written informed consent of participation on behalf of their children. Findings indicated that the ITERS-R cognitive stimulation factor was associated with verbal and non-verbal cognitive development at three years, and the ECERS-R cognitive stimulation factor was associated with verbal and non-verbal cognitive development at age five. These findings suggest that the new factors represent a useful additional way to document and understand ECEC quality and its relation to children’s cognitive development.

*ECEC quality, cognitive development, ITERS-R, ECERS-R, BePro/ GoBaN*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
SHINING A TRANSITIONS RESEARCH LIGHT ON CHILDREN’S CURiosity, AGENCY AND PARTICIPATION

Self-organised Symposium

Chair: Marion Burns, University of Strathclyde, Scotland, United Kingdom

In this self-organised symposium we consider three Scottish transitions studies and their informing methodological approaches. We shine a light on how children in transition in Scotland may or may not have opportunities to exercise agency and have a meaningful participation in the transition to school processes. The presenters draw on their different studies to show how thematic analysis (Burns, 2023), an ecological approach (Dunlop, 2023) and ethnography (McNair, 2023) reveal the challenges and benefits for children and their communities in sustaining agentic curiosity while participating in early childhood transitions.

Moving between two curriculum traditions: Creating opportunities for children starting school to be curious and exercise agency or not?
Marion Burns, University of Strathclyde, Scotland, United Kingdom

The study aims to show how thematic analysis can illuminate key themes for discussion, that starting school is a time of change for children. Data are drawn from the author’s previous transition's study (Burns, 2019) informed by (Dunlop, 2021 and McNair, 2017). Previous research shows that children starting school experience changes in identity, agency and participation (Einarsdottir, 2021). The theoretical framework utilises components of socio-cultural (Bourdieu, 1983) and bioecological theories (Bronfenbrenner and Morris, 1998) to explore children’s agency and power in ecological contexts. The study adopted a qualitative exploratory interpretive paradigm which drove methodology and methods; data from observations and interviews were analysed using thematic analysis. (Braun & Clark, 2013). Ethical considerations were informed by BERA’s (2018) ethical guidelines. Measures included being aware of the importance of power relationships for the researcher with regard to positionality and reflexivity to ensure they didn't intrude (Holmes, 2020). Data were treated confidentially and pseudonyms were used for participants, settings and schools. Thematic analysis was successful in determining that children starting school in Scotland move between two ‘early level’ curriculum traditions. As a result, children experience contested and unified pedagogical practices creating a tension for their agency and participation. By connecting the two 'early level' traditions, it should be possible to open up a third space that allows for children’s agency, participation and curiosity to be realised. The research findings informed the content of the Scottish Government’s national practice guidance for early years in Scotland, Realising the Ambition: Being me (Education Scotland, 2020).

This application discusses a completed piece of research.

Framing transitions ecologically to focus on agency, curiosity and wellbeing
Aline-Wendy Dunlop, University of Strathclyde, Scotland, United Kingdom

The study aimed to identify features of a good transition by focusing on wellbeing and attainment over time. It draws primarily on the author’s study ‘Navigating Educational Journeys – Scottish Educational Transitions over Time’ (Dunlop, 2003), informed by Bruner (1996), Freire (1995), Elder (2015) and Bourdieu (1997)’s thinking. A hybridisation (Dunlop, 2023) of Bronfenbrenner’s mature process-person-context-time ecological model (Bronfenbrenner and Evans 2000), develops both research method and an integrative framework. This mixed-method longitudinal exploratory-interpretive study focuses on wellbeing, attainment, agency (Charteris and Smardon, 2018) and curiosity. It draws on a varied data set, including observation, self-report and classroom discourse to understand children’s trajectories through education. It was essential to employ an ethical radar (Skånfors, 2009) over time: formal ethical approvals were repeated on four occasions in the fourteen years of the study. Individual agency in transitions is linked to both wellbeing and attainment which mutually enable participation and the pursuit of curiosities. Agency in turn is influenced by proximal processes, personal characteristics such as motivation, curiosity, persistence and responsiveness to others, and educational and family contexts over time. Our Scottish education system could benefit from focusing on individual engagement and children’s culture at times of transition in order to foster friendships, child-adult proximal processes, participation and agency. A strong evolving conceptual frame is needed to realise longitudinal transitions research. Findings suggest that by combining
‘transitions know-how’ and ‘transitions capital’ through supportive ‘transitions networks’ produces ‘transitions ease’ which lies at the heart of experiencing a good transition.

longitudinal framework, navigating education, enhancing transitions, agency, curiosity

This application discusses a completed piece of research.

‘Come let us learn with our children: An ethnographical approach to carrying out transition research with young children.
Lynn McNair, University of Edinburgh, Scotland, United Kingdom

This ethnographic study aimed to explore the perspectives of young children as they transitioned from an early years setting to primary school. This presentation emerged from a doctoral study (McNair, 2023; McNair, et al., 2021). The study was underpinned by reflexivity and the concept of power (Rose, 1999; McLaren, 2015). This ethnographic study used qualitative methods for collecting data. Data was collected from empirical methods, participant observations, mind mapping session and interviews, which were used to draw conclusions about how the children processed transition practices. Ethical approval from Moray House School of Education was received. An analysis of the data showed that power is a central concept in understanding transitions. Children are expected to become acquiescent, adjusting to coercive practices used in the school institution. The voices of children, and their families, were often silenced by policy-makers, bureaucrats and professionals during the process, or overshadowed and undermined by mainstream procedures. However, the findings also show that some children find ways to creatively resist organisation.

ethnography, reflexivity, insider/outside research, early childhood, power

This application discusses a completed piece of research.

G12
CULTURALLY RESPONSIVE PRACTICE IN ECEC SETTINGS
Chair: Merete Nornes-Nymark, Western Norway University of Applied Sciences, Norway

Beyond resilience: Developing and evaluating a culturally responsive ECE professional development tool to support children of color
Flora Harmon, Tina Ryznar, Ann-Marie Faria and Danielle Riser, American Institutes for Research, United States

This project has two aims: 1) design Ready Set Succeed (RSS), a culturally responsive kindergarten transition intervention and 2) conduct an randomized experiment to test the impact of RSS on children’s school readiness, positive racial identity, family advocacy, self-efficacy, and culturally competent instruction. Educators are not always prepared to provide equitable education (Neumann, 2010). This manifests in lower student success among children of Color; often referred to as the achievement gap but better described as an opportunity and access gap (Arnett, 2019). RSS intervenes at the family, teacher, classroom, and school levels, following ecological systems theory (Bronfenbrenner, 1979), which states that child development is informed by multiple contexts. The study uses a randomized controlled trial with random assignment at the classroom level (n = 36 classrooms) and ~400 students. Child assessments, family/teacher surveys, and classrooms observations will be used to measure outcomes. Analyses include multilevel modeling, contrasting outcomes for the treatment and control classrooms, families, and students. Only families who give informed consent are included in the study. Participation is voluntary and families can withdraw at any time. This presentation will share preliminary findings from the RSS design process and describe methodological considerations for the forthcoming evaluation. The presentation will describe the importance of community feedback during intervention development, tips on building strong relationships with community partners, best practices in culturally responsive design and assessment. This presentation will describe the challenges and successes of adopting new and innovative kindergarten transition practices and policies in a mid-sized US city.

culturally competent instruction, preschool, transitions, children of Color, professional development

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Multicultural practice towards meeting migration related challenges in four Norwegian kindergartens
Merete Nornes-Nymark and Ane Bergersen, Western Norway University of Applied Sciences, Norway

The purpose of our research is to understand kindergarten teachers and leader’s attitude to cultural diversity and their knowledge and understanding of children's challenges and behavior related to migration. Our research question is: How do four kindergartens build a learning environment that prevent migration-related challenges? Previous Norwegian research finds limited intercultural competences in Norwegian kindergarten where contents and learning environment are mainly based on the Norwegian majority culture (Bergersen, 2017; Bakken, 2016; Zachrisen, 2015; Javo, 2015). Norwegian legislation and the framework plan for the kindergarten (Ministry of Knowledge, 2017) emphasize that kindergarten must promote all children's individual need, cultural interests and emphasize prevention. Our research has a phenomenological approach based on Mixed Method Design; Sequential Explanatory Design (Creswell, 2009). Empirical data for this presentation consist of 62 Questionnaires answered by all employees in four kindergartens, followed up with individual interviews with four kindergartens leaders and focus group interviews with 15 kindergarten teachers. How the four kindergartens differ in their intercultural approach, has been published (Nornes-Nymark & Bergersen, 2021). All kindergartens and findings are anonymized. In this paper we emphasis on leader’s role and agency to build a learning environment that prevent migration-related challenges, and how the daily practice in kindergarten have an impact for children's development. The importance of intercultural competence to identify different challenges is also emphasised. Knowledge and leadership skills to prioritise are essential to address challenges which might be caused by special needs or/and migration.

kindergarten, migration, learning environment, challenges, prevention

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Children as citizens of their faith communities
Anna Hartman, Jewish United Fund, United States

This study explores the role of early childhood centers in fostering children’s participation in their communities. The research is in dialogue with notions of participation and placemaking (Alderson, 2008; Hackett, 2014; Matthews, 2006; Tsevreni et al., 2022; Tsevreni & Panayotatos, 2011; Wyness, 2018). In its theoretical framework, the study utilizes perspectives from neuroscience (Gopnik, 2009, 2010; Miller, 2015) as well as sociocultural (Cole, 1985, 1998; Rogoff 2003), social-constructivist (Dahlberg et al., 1999; Edwards et al., 1993; Vygotsky, 1978), and ecological systems (Bronfenbrenner, 1979; Lave, 1997; Weisner, 2002) theory. Methodologically, this study relies on semi-structured interviews and pedagogical documentation (Edwards et al., 1993; Giudici et al., 2011; Rinaldi, 2004). Teachers submitted to the researcher documentation (transcripts from class discussions, work samples, and curriculum notes) from past learning investigations, and then analysis involved open coding of interview transcripts and select documentation, as well as grounded theory. Ethical accommodations included consent forms and pseudonyms. The paper will demonstrate how American Jewish early childhood centers acculturate children into Jewish communal life and practices through a process of co-constructing a curriculum that revolves around issues and topics that are live for the children. This process instills in the children the theory (Dahlberg et al., 1999; Moss & Petrie, 2002; Siegler et al., 2011) that rather than being passive inheritors of a tradition, they can make their mark on their culture. The study demonstrates the power of the Reggio Emilia Approach in catalyzing meaningful learning experiences wherein children are co-protagonists in investigating and investing in their culture.

religion, social-constructivism, participation, community, culture

This application discusses a completed piece of research.

G13
EARLY CHILDHOOD WORKFORCE STRESS AND WELLBEING
Chair: Diarmuid Creedon, Irish National Teachers’ Organisation (INTO), Ireland

The impact of quality of leadership, perceived stress and participation on turnover intentions in ECEC
Cecilia Heilala, Marina Lundkvistand Mirjam Kalland, University of Helsinki, Finland
The aim is to explore how the quality of leadership, perceived stressful situations and participation relate to turnover intentions. A work climate in which staff strengths and skills are utilized and participation plays an important role has a positive effect on the well-being of the staff and their possibilities for agency (Heilala et al., 2022; Thorpe et al., 2020). However, the division of labor in a multi-professional work group can be unclear and there is uncertainty about what is expected from different professional groups, e.g. practical nurses feel that their role is unclear ( Repo et al., 2020). The research is based on the Job Demands-Resources model (Bakker & Demerouti, 2007). According to the model work engagement is influenced by job demands and job resources. The study is situated within a quantitative paradigm. Data was collected by anonymous survey (n=332). SPSS was used to analyze the data. The study follows the ethical standards by the Finnish Advisory Board on Research Integrity (2012). The results show that ECEC staff seem to be doing relatively well on average. However, practical nurses report significantly lower values throughout compared to teachers and leaders. According to the results, participation, responsible leadership, and job satisfaction support intentions to stay. On the other hand, stressful situations, low salary, and lack of time were significantly related to turnover intentions. Our research contributes to knowledge on risk factors for turnover intentions, especially stressful situations, and can lead to development of working conditions.

leadership, participation, stressful situations, turnover intentions, resources

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Work engagement of novice ECEC teachers
Erja Rautamies, University of Jyväskylä, Finland

This study produces new understanding of the work engagement of novice ECEC teachers during the first years of their work career examined from the perspectives of professional agency and related narrated emotions. This study is based on the scientific discussion concerning the relationship between work engagement, professional agency and emotions (see Hökkä et al., 2022; Lipscomb et al., 2022). The role of leadership and the support of the other teachers has shown to be crucial for the novice teacher survival in primary school context (Eteläpelto et al., 2015). Work engagement is seen as situational and refers to work vigor, dedication, and absorption (Schaufeli et al., 2002). Professional agency refers to the teachers’ “exerting influence in ways that affect their work and/or their professional identities” (Eteläpelto, et al., 2015, p. 663). Emotions are defined as responses to specific work events, situations, relationships and interactions (Sieben & Wettergren, 2010). This study utilized semi-structured interviews with 7 novice Finnish ECEC teachers and the data was analyzed by narrative methods (Riessman, 2008). Participation in the study was voluntary. The participants signed informed consent and they will not be identified in the reports of this study. This study identified a) strong work engagement with developing relational agency and b) weak work engagement with embarrassment, stress and struggling individual agency. The results of this study can be utilized in pre-service and in-service training of the ECEC teachers, and in developing means to support novice ECEC teachers during the first years of their work career.

novice ECEC teacher, work engagement, professional agency, emotions, narrative research

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Teacher workload: Irish National Teachers' Organisation (INTO) Research Report 2022
Diarmuid Creedon and Máirín Ní Chéileachair, Irish National Teachers' Organisation (INTO), Ireland

This report highlights the heightened demands on Irish primary teacher workload which is increasing the complexity and unsustainability of teaching and school leadership. Teacher workload is an INTO priority as it is closely aligned to teachers’ job satisfaction, morale, the quality of teaching & learning and wellbeing. The extent to which teachers feel their workload is manageable significantly factors into their job satisfaction (Lynch, et al., 2016; Sims, 2017) and is one of the key factors associated with teacher retention (Bamford & Worth, 2017). The Theory of Reasoned Action (Ajzen & Fishbein, 1980) enables the examination of how teachers’ attitudes and teaching specific social pressures affects their workload management and job satisfaction. Over four phases, this project uses a mixed-methods approach (Brewer & Hunter, 1989) to integrate qualitative and quantitative data and a combination of thematic analysis and statistical analysis to identify outcomes and build recommendations. Participants were fully informed and express consent was sought throughout. The report highlights the urgent need for action to address unsustainable workload issues including, demands for increased standards and accountability, school culture and climate, lack of administrative support and reduced teacher agency. Addressing primary teacher workload will require a fundamental review of Irish primary school governance, investment in administrative systems and infrastructural support. By reviewing and improving these structures
principals and teachers should be better able to engage with teaching and learning and, in turn, improve the school going experience of their pupils.

*teacher workload, teacher agency, school governance, burnout, teacher wellbeing*

This application discusses a completed piece of research.

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**G14**

**GENDER DIVERSITY AND DEGENDERING RESEARCH AND PRACTICE**  
**Chair:** Emma Cooke, The University of Queensland, Australia

**Scientific co-education as a tool for quality teaching in early childhood education**  
Rosario Mérida Serrano, Elena González Alfaya, Julia Rodríguez Carrillo, Miguel Muñoz Moya and María de los Ángeles Olivares García, University of Córdoba, Spain

The research presented here aims to assess the impact of the co-educational programme INFACIENCIA on the professional development of ECEC teachers. Science is influenced by sexist values, stereotypes and roles. This image of science is transmitted to children, and as a result, girls at the age of 6 already considered themselves as less qualified for this field than their male peers (Bian et al., 2017; Mérida et al., 2023), leading to a distancing that separates women from scientific leadership. This trend must be subverted from an early age through a co-educational school that promotes equal rights for girls and boys (Günther-Hanssen et al., 2019). With this intention in mind, the INFACIENCIA co-educational programme was created, which is in its fifth edition. The biographies of female scientists are studied in order to offer female references to children and teachers. Within a qualitative framework, the research is based on semi-structured interviews with the teachers involved in the programme. Ethical considerations such as voluntary participation, informed consent and anonymity have been acknowledged. Using the discourse analysis technique, their narratives are analysed and the following conclusions are drawn: (1) The programme provides them with an image of a capable child; (2) It allows them to take advantage of children’s curiosity as a stimulus to develop participatory learning situations; and (3) It helps them to understand their limitations and the need for further training in scientific co-education. INFACIENCIA works in a network with three institutions: schools, the Teacher Training Centre and the university.

*co-education, collaboration, female scientists, participation, professional development*

This application discusses a completed piece of research.

**A performance of discarded data: an Ahmedian engagement with young children’s gendered accounts of violence and power**  
Emma Cooke (1), Laetitia Coles, (1) Andrew Clarke (2), Karen Thorpe (1) and Sally Staton (1); (1) The University of Queensland, (2) The University of New South Wales, Australia

We examine children’s gendered accounts of violence and power that unexpectedly arose during interviews about relaxation in Early Childhood Education and Care (ECEC). There is some research on how young children perform gender roles in ECEC (Callahan and Nicholas, 2019), yet none of these studies focus on children’s interpretations of gendered violence. We employ a feminist theoretical framework and Sara Ahmed’s (2017) conceptualisation of power as ‘directionality’ to critique how children are directed towards gendered futures. Ahmed’s theory is ideally suited to this inquiry as her words resemble the children’s data: prompting affective and visceral responses. Situated within a postqualitative inquiry paradigm, we utilise a data engagement methodology (Ellingson & Sotirin, 2020) and zig-zagged analysis methods (Taylor, 2013) to examine excerpts from drawing-prompted interviews with 46 children aged 3-5 years-old in ECEC in Australia. We sought written parental consent and verbal child assent. Semi-structured interviews were conducted in groups and with child-centric drawing prompts to minimise adult-child power imbalances. Ethics informed analysis of ‘unsaturated’ accounts of violence. We find that children are rapidly learning gendered understandings of violence and power. Children perceive boys as having more agency than girls as they participate in – and respond to – violence. Boys police other boys’ gender by teasing ‘babyish’ behaviour. Such troubling experiences are being smoothed over with band-aids, coins, and fairy tales. We echo calls for the de-gendering of play equipment and spaces in ECEC and argue that researchers should not allow their inquiry to be constrained by ‘data saturation’ norms.
This application discusses a completed piece of research.

**Tools for co-research with young children: From ethics to graphic fieldnotes, and stops inbetween**  
J Skelton, University of Regina, Canada

GlaNT children (Gender Independent, and Nonbinary, Trans) are often talked about, but seldom directly engaged about their wants and desires in education. This co-research project asked GlaNT children to imagine education that would meet their needs. Based in a commitment to children’s capacity (Lundy, 2007), my work foregrounded a children’s rights model (Dockett & Perry, 2011, O’Neill 2012). I embraced disruption and not being in control (Yardley, 2011). Queer theory allowed me to dissect normative gender narratives (Blaise & Taylor). Trans theory allowed me to “theorize transsexual and transgender experience on its own terms.” (Rubin, 1998, 279). My elementary co-researcher and I conducted semi-structured interviews. We what children described as “visual fieldnotes”, we asked participants to draw, and compared drawings as a method of member checking, and we referred our visual fieldnotes during analysis. We developed a three part ethic of care, addressing my ethical responsibilities as a researcher, parent, and community member, attending overlaps. I worked to negate my adultism. GlaNT children desire learning spaces that are ready for them, affirm their self-assigned genders and understand that people define their own genders. They wanted to be believed as who they say they are. They wanted safe access to bathrooms, for schools to be communities. Children need epistemic justice (Steele, & Nicholson, 2020) and access to words and language about gender diversity. Children are capable researchers, already engaged in research, who when given supports, and appropriate tools can lead research processes, and share researcher roles with adults.

**G15**  
**PERCEPTIONS ON PEDAGOGICAL LEADERSHIP**  
Chair: Sandra Frisch, University of Applied Sciences Merseburg, Germany

Children’s participation in conceptualisations of early years leadership  
Sara Bonetti (1), Kayla Halls (2) and Mona Sakr (2); (1) Education Policy Institute, (2) Middlesex University, United Kingdom

Amidst growing focus on the potential for leadership development to improve children’s outcomes in early childhood education and care (ECEC; Douglass, 2019; Melhuish & Gardner, 2019), the sector must examine the philosophies driving leadership and evaluations of leadership development programmes (Sakr et al., 2022). Our research aims to scrutinize the extent to which children are party to how we conceptualise leadership in ECEC and our measurements of leadership. This research builds on Douglass’ OECD review (2019) on ECEC leadership development and literature on children’s voice and participation in ECEC (Lawrence, 2022; Rodriguez-Carrillo et al., 2020). The research is framed by conceptualisations of leadership that emphasise leadership for social justice (Nicholson et al., 2020) and the relationship between children’s participation and school leadership (Jones & Bubb, 2021).

Using the pragmatist tradition (King, 2022), we conducted a global systemic review of 29 articles published in the last decade on ECEC leadership development by following EPPI Centre guidance and consulting with an advisory panel of ECEC leaders and researchers. We analysed the results via thematic analysis (Braun & Clarke, 2019). We utilized three reputable databases with a variety of journals to ensure a democratic and representative spread of voices within the review. The findings provide examples of children’s participation in ECEC leadership and reveal potential to shift the current focus from child outcomes to child participation by expanding on adult-child interactions. We suggest practical ways children’s participation can be drawn into current dialogues about ECEC leadership through new programmes such as the NPQEYL.
What ECEC teachers and leaders learn in PD training in Japan?

Junko Minowa (1), Takako Noguchi (2), Kiyomi Akita (3), Riyo Kadota (4), Masatoshi Suzuki (5), Fuminori Nakatsu (6), Harutom Ueda (7), Yumi Yodogawa (8) and Yoshiyuki Mukuta (9); (1) Musashino University, (2) Tokyo Kasei University, (3) Gakushuin University, (4) Seinan Gakuin University, (5) Hyogo University of Teacher Education, (6) Hiroshima University, (7) Nagoya City University, (8) Chiba University, (9) Kansai University of International Studies, Japan

This study aims to find what ECEC practitioners and leaders are learning and finding challenges in professional development on-site training in Japan. On-site training is an opportunity to develop professional skills and solve problems for childcare teachers (Wakabayashi and Sugimura, 2005). However, the needs and challenges of on-site training differ between leaders and practitioners; leaders feel that practitioners should be eager to participate in discussions with their opinions, and practitioners like to learn about a hands-on approach to understanding children’s development (Suzuki et al., 2019). Sato (1997) posits “learning” as an enduring process of “re-contextualization,” in which “action” through encounter and dialogue with objects, “collaboration” through encounter and dialogue with others, and “reflection” through encounter and dialogue with oneself are carried out in a trinity. This study focuses on ECEC teachers’ learning through dialogue with topics others and ourselves. We did a questionnaire survey for 325 practitioners and 54 leaders in 15 Japanese ECEC centers participating in in-service professional development training at their own ECEC center. We explained the purpose and content of the study and asked only those who agreed to cooperate to fill out the questionnaire. We also told them that it is possible to withdraw their consent later. Many practitioners and leaders described getting new perspectives about practice in on-site training. Practitioners also expressed that they reflected on their practices through discussion. The leaders described that they learned approaches to effective training and discussion. Leaders can design more effective on-site training by understanding the differences between practitioner and leader learning and needs.

ECEC in Japan, professional development, on the job training, on-site training, practitioner

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Pedagogical leadership as practice in a changed early childhood education settings in Swedish-speaking parts of Finland

Pia Nordin (1), Mikaela Svanbäck-Laaksonen (1) and Mia Heikkilä (1) (2); (1) Åbo Akademi University, Finland, (2) Stockholm University, Sweden

The aim of the study is to analyze ECE directors’ descriptions of what pedagogical leadership (PL) includes and how it is carried out in ECE in Swedish-speaking parts of Finland. Previous research (Fonsén et al., 2022, 91-92; Heikka, 2020 et al., 8) and national evaluation (Siippainen et al., 2021, 135) show that the content of PL needs to be clarified. Fonsén’s (2014, 35-61 ) study shows five sub-factors for PL; values, context, organizational culture, the leader’s professionalism and knowledge of the subject. Parrila (2011, 84-87) has identified four different operational roles for PL which are showing the direction, coaching, supporting and evaluating. The study’s theoretical framework is based on the theory of practice architecture (Kemmis, 2005), which focus on what is said, done and related in a practice (Rönneman, 2018). In this study, PL constitutes the practice. The study has a qualitative method with an abductive approach as it aims to illuminate the statements of directors regarding what PL entails. Semi-structured interviews have been conducted with 13 directors. The data analysis took place through content analysis. All respondents were informed about the purpose of the study and data collection. Participation was voluntary and the respondents gave written permission to participate. Research permission was obtained from all municipalities. The results describe how the actions in PL appear. The results are described in terms of what PL is, how PL is done and how PL relates. The results can contribute to strengthening PL and find new working methods in the practice.

pedagogical leadership, ECE director, the theory of practice architecture, practice based research, early childhood education

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Exploring new practices for early childhood language education, while playing outdoor in nature-based environments

Jannette Prins (1), Janneke Hagenaar (2), Marieke van Ierschot (2); (1) Thomas More Hogeschool, (2) University of Applied Sciences, The Netherlands

In this study Dutch ECE-professionals developed new practices around language education, using nature-based environments as concept rich language learning environments. Previous research indicated that play activities in nature-based environments impact language use of young children (Prins et al. 2022). While playing in nature, children used language, rich in concepts and semantically layered. The possibilities of nature-based environments for language education were explored, using communities of practice (Wenger, 1998): A cop supports formal and informal interaction between experts and novices, focused on learning and sharing knowledge in a community. For this study a qualitative interpretative approach was chosen. Across five ECE-teams, fifty-four people (teachers, school-leaders and ECE-experts together) participated in thirty cop-meetings. The cop-meetings were audio-recorded and transcribed verbatim. The transcripts were coded via thematic content analysis with open coding in Atlas-ti-9. All participants in this study filled out an information and consent form. Equal contribution of all participants was negotiated. Participants were given the opportunity to withdraw from the study at any time. The names of the participants were replaced by pseudonyms. Findings show that the cops served as a safe, efficient way of developing new practices. Participants learned to replace the focus on their own (decontextualized) language input by following the child’s lead in attention and curiosity towards complex concepts found in nature, such as gravity or blooming while adding language to it. Using outdoor play for intentional language teaching and not only for relaxation and motor development, there will be more time for good quality language teaching.

early childhood education, language education, nature-based play environment, nature play, community of practice

This application discusses a completed piece of research.

Nature play in the forest for early science education

Marjanca Kos (1), Luka Praprotnik (1), Sue Dale Tunnicliffe (2) and Gregor Torkar (1); (1) University of Ljubljana, Faculty of Education, Slovenia, (2) University College London, United Kingdom

The aim of this research was to investigate the potential of nature play for learning science in early childhood. Play is a fundamental avenue for early childhood learning and is deeply rooted in early childhood education as the primary way to meet children's developmental needs (Rushton et al., 2010). Nature play is defined as freely chosen, unstructured interactions with and in nature (Erickson & Ernst, 2011). Previous studies have shown many benefits of children’s engagement in nature play (Ernst & Burcak, 2019). Yet, there is little research on the potential of nature play for learning early science (Beery & Jørgensen, 2018). 21 four- to-six-year-old children from a preschool in Slovenia participated in the study. They were told to play in the forest. Their play was observed over four consecutive days, with each session lasting one hour and a half. Three randomly selected children were equipped each time with small video cameras attached to their heads to automatically record sound and images from their perspective. The recordings were transcribed and edited, independently reviewed and analysed. The ethical rules of voluntary participation, confidentiality, information and autonomy were followed. Informed consent was obtained from the parents and teachers. Children had the opportunity to decline participation. The results indicate children’s progress in the topics: experience of living beings, environmental awareness, species diversity, design thinking, sensory engagement and nature of science. We conclude that nature play is an activity of high pedagogical value and suggest the potential contribution of this activity in early science education.

outdoor play and learning, early science, nature play, unstructured play, preschool children

This application discusses a completed piece of research.

Playing in the forest: Children’s engagement with nature and land-based learning

Jodi Streelasky and Meredith Lemon, University of Victoria, Canada

In this study, we examined toddlers' and preschoolers' engagement with their outdoor environment situated on Coast Salish Indigenous territory. At the conclusion of the research, the children shared their views on their special places/forest experiences. The objective of the study was to examine the ways children acquired an understanding of land and place-based knowledge during their weekly visits to the forest. Land based education recognizes that land is the foundation for cultural and traditional teachings
(Bowra et al., 2021), and place-based education is an immersive approach to teaching (Stickney, 2020) that focuses on the local community, history, and environment. This research is also framed by the work in eco-cultural literacies which has the potential to foster children’s empathy for our planet, and for other humans and more-than-human kin (e.g., mountains, rivers, forests, animals) (Ritchie, 2017), and multimodality that focuses on using different communicative modes to share meaning (Stein, 2008). Providing a space where children can share their perspectives on their experiences was a significant methodological focus, and aligns with the children’s participation movement. Data collection methods included observations, drawings, and conversations. Acquiring consent from the families and assent from the children was an ongoing process that required being attentive to their responses. Key findings revealed the children’s developing understanding of their environment and local Indigenous knowledge. The knowledge acquired from the children in this research will contribute to advancing reconciliation in Canada, and provide insight on how children can be introduced to Indigenous knowledge in meaningful ways.

land-based learning, eco-cultural literacies, toddlers, preschoolers, indigenous knowledge

This application discusses a completed piece of research.

G18
ACCESSING CHILDREN’S VOICE
Chair: Carol McNulty, University of North Carolina Wilmington, United States

Children’s COVID-19 drawings as a means of participatory research
Carol McNulty and Meredith Jones, University of North Carolina Wilmington, United States

We explore children’s drawings/dictations as a means to empower young students to express their perceptions of environmental complexities, specifically about the COVID-19 virus, following the lockdown period when school activities resumed. While related research has been conducted in Spain (Mondragon et al., 2022), Italy (Cornaggia et al., 2021), France (Martinerie et al., 2021), South Africa (Haffejee & Levine, 2020), and Sweden (Rydström et al., 2022), far less has been conducted in the U.S. that relies on student voice to document the adverse effects of the pandemic. This qualitative study is framed by six elements of the Mosaic Approach (Clark & Moss, 2001), allowing us to position child participants as experts in making meaning of their experiences and empowering them to shape their environments. Students served as participatory researchers. Using the draw-and-write technique (Pridmore & Bendelow, 1995), we asked students aged (4-10) to draw their ideas of COVID-19, and conducted a content analysis of data (Merriman & Guerin, 2006). We consulted our Institutional Review Board prior to conducting research. Participant names and genders were never collected. Parental consent was implied by providing their children's drawings for this voluntary activity, which was not connected to any course assignment/evaluation. Four themes resulted from our analysis of the artwork: COVID-19 symptoms; psychological responses depicting emotions and anthropomorphic features; internalized messages of COVID-19 health and safety precautions; and the molecular representation of the COVID-19 virus. We assert children’s drawings as a powerful tool to amplify student voice, create connections, and potentially reduce anxieties in general.

methodology, children’s drawings, children as participants, Mosaic approach, Covid-19

This application discusses a completed piece of research.

The specialist for the children's perspective (FaKiB), committed by law
Andy Schieler, University of Applied Science, Germany

On behalf of the ministry of education in Rhineland-Palatinate (Germany), we are evaluating the committee named Kita-Beirat as a participatory and democratic part of the new law for kindergartens (KiTaG). We focus on the specialist for the children's perspective (FaKiB), committed by law, who professionally defend the children's perspective. Other studies aimed at the Change & Utopias in Early Childhood Education (Moss 2014) or UNCRC (Lundy 2018, Nentwig-Geseman 2021). Additionally, we focussed on investigating the development of the legally required child perspective in the Kita-Beirat, in each Kindergarten in RLP. To challenge theories about early childhood (Honig 2009, Bollig 2020, Schäfer 2013) and agency (Betz et al. 2017, Emirbayer & Mische 2017) we discuss them in an explorative way. The study was conducted within a mixed quantitative research paradigm, designed in a Collaborative-Action-
Research (Sigurdardottir & Puroila 2020). Questionnaires were filled out online by 255 ‘carrier-representatives’ and 100 FaKiB in RLP. The analyses consisted of descriptive and inferential statistics. The online-survey followed the university’s ethical guidelines and was anonymous, thus, a tracing of participants’ personal information is not possible. Participants were given the opportunity to withdraw from the survey at any time. The results show an effect with regard to the consideration of the children’s perspective in committees as soon as the perspective is introduced by an explicit person and is not considered by all adults. When the children have their own representation in a political discussion (in this case, an adult expert), their perspective is potentiality included?

*early childhood policy making, participation, UNCRC, potentiality, online-survey*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Methodology used for consulting with babies and young children**
Fiona Kelleher, Early Childhood Ireland, Ireland

To share the methodologies used for ‘Consultation with Babies, Toddlers and Young Children to inform the updating of Aistear, the Irish Early Childhood Curriculum Framework (NCCA, 2009) Research demonstrates a growing move nationally and internationally towards greater consultation with babies and children in research, policy and practice (Wall, 2017) As rights-holders, children are entitled to engage in research, placing a duty on adults to facilitate such engagement (Lundy and McEvoy, 2012) The theoretical framework draws on the Lundy participation model (Lundy, 2007). Research demonstrates the growing critique of consultation processes as being largely superficial and tokenistic in style (Lundy and McEvoy, 2012; Palaiologou, 2014; Wall, 2017), particularly when engaging with the youngest children (Wall et al., 2019). The project was conducted within a qualitative interpretive research paradigm (Denzin & Lincoln, 2018) The methodology consisted of Participant Action Research (PAR). A targeted sample of Early childhood educators were ‘interpreters of the hundred languages of children’ collecting data on children’s experiences of Aistear. Information and informed consent were highlighted to participants. Ethical concerns, data protection and anonymity were addressed. Permission was received for use of data in all reports. The main findings of the methodology indicated educators were crucial to the success of this research. Their expertise in interpreting children’s voices confirmed children’s right and ability to be consulted with. Initial findings suggest that PAR is an effective tool for consultation with babies and young children. The methodology ensured children’s views were not only listened to, but also heard and acted upon.

*children’s rights, participation, consultation, co-construction, partnership*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**G19**
**QUESTIONS OF CULTURE IN ECEC**
**Chair:** Åsa Delblanc, Malmö University, Sweden

**Play, games and toys: A hidden cultural curriculum in early childhood education?**
Marco Antonio Delgado-Fuentes, University of Derby, United Kingdom

The study aims to analyse the historical output of ethnographic research into play, games and toys and to reflect on the implications of their use in current ECEC within multicultural societies. Four works formed the starting point for the review and historical analysis. Two take a philosophical approach, prioritising structuralism, phenomenology and hermeneutics (Fink, 2016; Enriz, 2011). Castillo-Gallardo (2015, 2015a) a poststructuralist approach in her historical study on the analysis of toys in Chile. The English speaking literature has paid little attention to other people's perspectives on play, games and toys. The literature of other countries, particularly those of Latin America and France, shows different ways of understanding play. The theoretical framework comes from the poststructuralist study of ethnography focusing on the ethnography of play, games and toys. Paradigm: socio-constructivist, it assumes the social construction of reality and ethnography. Methods: a literature review was conducted in English, Spanish and Frech, and second, a poststructuralist historical analysis was conducted following Vidyeh & Lyman’s (2000) results. Methodology: a postmodern analysis. Suri (2019) highlights an ethical issue in this method: making the missing perspectives visible. The review considered Spanish, French and Italian papers, particularly those of indigenous populations contrasting Western notions. The
current conception of play, games, and toys has been constructed with a western perspective. Uninformed use of play in educational settings spreads western and capitalist views. We need to decolonise the use of play, games and toys and promote a more inclusive approach, useful to non-western countries.

play, games and toys, deconstruction, non-western countries, colonising practices, early childhood education

This application discusses a completed piece of research.

Importance of building a culturally safe workplace for early childhood teachers to promote curiosity and agency in ECE
Sene Gide, Boundary Lane Children's Centre, Australia

This study aimed to explore the roles and agency of Early Childhood Teachers and what they require to promote children’s agency in early childhood services. On January 2023, Australian government approved updates to national approved learning framework, the Belonging, Being and Becoming: The Early Years Learning Framework (V2.0 EYLF). The EYLF V2.0 includes several updates from the planning cycle and collaborative leadership to critical reflection and sustainability. There is a huge focus on cultural responsiveness as a culturally safe space increases attendance and family participation in learning. The constructivist paradigm which emphasises inductive and interpretive methods assumes reality is socially constructed (Merten, 2005), and there are multiple realities available (Punch & Oancea, 2014) was used as the theoretical framework for this study. For this case study, four early childhood teachers from Culturally and Linguistically Diverse (CALD) backgrounds were interviewed. Confidentiality, privacy, and rights of participants were explained verbally and in writing. The transcription of interviews and then summary of the result provided to all participants for their review to mitigate any risk/bias. Promoting the agency of CALD educators, supporting their professional development, and providing a culturally responsive and inclusive work environment were identified as some of the support required by teachers. Brown et al. (2020) states that inclusive workplaces retain quality staff with higher job satisfaction, and higher clients' satisfaction compared to non-inclusive workplaces. Attention to supporting the CALD workforce is needed if we are to expect educators and teachers to promote agency of children in early childhood services.

culturally and linguistically diverse, early childhood services, early childhood teachers, promoting agency, cultural responsiveness

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Preschool teachers' understandings of intercultural education
Åsa Delblanc (1) (2) and Laurence Delacour (2); (1) Childhood Education Society, (2) Malmö University, Sweden

The Swedish preschool education is characterised by cultural and linguistic diversity. According to the Swedish curriculum for preschool (The Swedish National Agency for Education, 2018), the preschool is "a social and cultural meeting place that should promote children’s understanding of the value of diversity". However, the curriculum does not come with suggestions on how to promote diversity. Therefore the aim of this study is to investigate teachers' interpretation of the concept of "intercultural education" (Coulby, 2006). Lunneblad (2017) and Åkerblom and Harju (2019) argue that the practices may differ and good intentions of inclusion may lead to exclusion. According to Perlman et al. (2017), teachers’ ways of organizing the educational practice is of great importance for quality. We use curriculum theory (Linde, 2006) to investigate the transformation and realisation of the curriculum goals. We use the hermeneutic approach which describes the study of interpretation and investigates the meaning of human intentions, beliefs and actions. Qualitative research interview with focus groups, semi structured with open questions. Semi structured interviews can be appropriate when investigating this particular topic (Bryman 2011). The guidelines from The European Code of Conduct for Research Integrity were used. All teachers have been informed of the aim of the study and their right to withdraw from the study. The teachers were all anonymized. Preschool teachers' view on intercultural education defers from the generally accepted definition and shows a diversity of interpretations. Contributes to increased knowledge on inclusion and exclusion processes.

preschool, cultural diversity, intercultural pedagogy, inclusion, exclusion

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Investigating the reflective skills of prospective early childhood teachers: An intervention program for mathematics in the context of the school experience program
Marianna Efstathiadou, European University Cyprus, Cyprus

The aim of this research was to investigate how the learning of prospective ECET can be fostered, to help them build on the experiences they gain from university courses. Specifically, support the transition from their role as learners to their role as teachers in the subject area of mathematics, by strengthening their reflection. The teacher, as a researcher, needs support in being able to perceive the benefits of returning to their practice, to reflect and critically analyze their own practice. As Avgitidou (2014) states, "the teacher as researcher should possess a series of practical, research and critical skills" (p. 39). Teacher education models (Kennedy, 2014) and the training processes needed for initial teacher education were explored. According to Lampert (2010), it is important to take into account how prospective teachers learn teaching and not how they learn to teach and by extension what is important to learn. An interpretive approach was adopted while an intervention program was designed and implemented during the School Experience Program, in which the fabric of learning and the themes that emerged in the reflections of seven prospective ECTs were investigated, in relation to learning approach on mathematics in kindergarten. Data collected included prospective ECT’s reflections, video recordings and semi-structured interviews. Pseudonyms and written consents from prospective ECT are ensured securing anonymity and confidentiality. Accepted withdrawal from the study at any time. The results highlighted the importance of "coaching" and reflection for prospective ECT’s. It seems that a) the targeted intervention program supported prospective ECT’s reflections and b) there are several indications of a shift in their beliefs about what “teaching” mathematics means.

reflection, intervention program, school experience program, prospective early childhood teachers, initial teacher training

Norway and Cyprus in dialogue: Play and mathematics as concepts in student-teachers’ reflections
Elena Severina (1), Marianna Efstathiadou (2), Chrystalla Papademetri-Kachrimani (2) and Magni Hope Lossius (1); (1) Western Norway University of Applied Science, Norway, (2) European University Cyprus, Cyprus

This research investigates how student-teachers constructed meaning of play and mathematics during an early stage of their studies in Norway and Cyprus. Play is one of the fundamental mathematical activities (Bishop, 1988) in all cultures, however when preschool teachers define play, very few situations are open for mathematics (Pramling et al., 2019). Defining play within education seems challenging since many of the characteristics of play (freedom, exuberance, fun, ownership) are hard to handle (Abbott, 1994) while respectively, the educational approach to mathematics seems to deprive from the subject its epistemological identity specified by the same characteristics as play (Whitton, 2021). This realization might be crucial for addressing the aforementioned difficulty. Participants are student-teachers following the first course in mathematics during kindergarten training program in Norway (25 first-year students) and student-teachers participating in the initial phase of the school experience program in Cyprus (10 second-year students). We used thematic analysis to study the answers to a questionnaire (the start and the end of the semester), reflections during teaching and audio records of joined reflection workshop (inspired by Ødegaard et al., 2022) with educators. The project is completed in correspondence with the requirements of NCRD and GDPR. Despite many differences in education systems, preliminary results show certain similarities in challenges students have when elaborating of relationship between play and mathematics. Understanding of common challenges as well as individual success across different cultures can bring light on how teacher training could be adjusted in the future to support play in mathematics.

play, mathematics, student-teacher, reflections, (kindergarten) teacher education

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Enjoyment, confidence and experience of teaching mathematics to the under-fives: Reports from students of early childhood studies
Leanne Gray, Anglia Ruskin University (ARU), United Kingdom

This study aims to examine students' enjoyment, confidence and experience of teaching mathematics to the under-fives in comparison to the other areas of learning in the EYFS and to explore any reasons behind differences which arise from this comparison. Research with early years teachers has found that they bring their own values, beliefs and understanding into practice (Aubrey and Durmaz, 2012). However, in terms of early years practitioners, Anders and Rossbach (2015) note that the mathematical subject knowledge, pedagogical beliefs, and emotional attitude towards mathematics is an understudied area. The theoretical framework for this study draws upon Bronfenbrenner's Ecological Theory (1979). Conducted within a qualitative interpretive research paradigm (Denzin & Lincoln, 2018), this two-phase study was undertaken with online questionnaires completed by 51 students, and virtual semi-structured interviews completed with 11 students. An information sheet was provided and a consent form completed by all participants. Informed consent was also sought at the start of each interview. Pseudonyms have replaced the names of participants. Participants were given the opportunity to withdraw from the study at any time. The findings demonstrate that students' confidence and enjoyment of teaching mathematics was lower than other areas of the curriculum. Students revealed that their own experiences of mathematics at school had shaped their confidence and enjoyment of teaching mathematics. This has implications for the support and training in the teaching of mathematics of those in the early years workforce and for the course content of Early Childhood Studies degrees.

eyearly mathematics, practitioners' views, early childhood students, under-fives, teaching mathematics

This application discusses a completed piece of research.

G21
EMPATHY, EMOTIONAL AVAILABILITY AND EYE CONTACT OF EARLY YEARS EDUCATORS
Chair: Angela Hodgkins, University of Worcester, United Kingdom

This research aims to uncover the variance in early childhood education professional's (ECEP) emotional availability and its significance for toddler's socio-emotional development. Research has shown that emotionally available ECEPs improve child's responsiveness and increases attachment security in ECEC settings (Biringen et al., 2012) The study is based on the theory of emotional availability (EA). The theoretical framework for this study draws from the original attachment theory (Bowlby, 1969, 1973) and the concept of sensitivity (Ainsworth et al., 1978). This study highlights the emotional interaction qualities in ECEP-child relationships (Biringen & Easterbrooks, 2012) This ethnographic mixed-method study was to explore child-adult interaction in ECEC settings by video observation. The data was gathered in 8 ECE toddler groups in Southwest Finland. The quality of interaction was analyzed from the video data with Emotional Availability (EA) Scales (Biringen, 2008). The study was introduced before data collection, and consent forms were provided to all participants. Ethical issues were carefully considered when videotaping children. Participants were given an opportunity to retreat from research at any time. Preliminary findings show moderating variance in ECEP's sensitivity during emotional interaction between ECEPs and different situations. However, highly sensitive ECEPs maintain reciprocal interaction with toddlers in varying situations. These findings produce information on ECEP's emotional awareness and availability to improve the quality of emotional interaction in the ECEC setting and secure the toddler's socio-emotional development.

eyearly childhood education, emotional availability, early childhood education professional-child interaction, toddler, support socio-emotional development

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Exploring early childhood practitioners’ perceptions of empathic interactions with children and families
Angela Hodgkins, University of Worcester, United Kingdom

This research investigates the ways that ECEC practitioners perceive empathy within their practice. Types of empathy are identified, and the impact of empathic interactions investigated. Published research into emotion within ECEC practice over the last decade (Taggart, 2016; Elfer and Page, 2018), has highlighted significant stress. Cognitive and affective empathy are investigated in this study, and the effects of related empathic distress (Hoffman, 2012) on practitioners' wellbeing. The study draws on theories of empathy (Rogers, 1959) and the requirements of ECEC practitioners to demonstrate empathy in their practice (Peck, 2015). The impact of empathic interactions is well reported in nursing (Konow Lund, 2018) and social work research (Ruch, 2018) but seldom in ECEC. Concepts of empathic distress (Hoffman, 2012) and compassion fatigue (Elfer, 2018) are examined. The study was conducted within a qualitative and feminist paradigm (McGuiness, 2009) using a constructivist epistemology (Cresswell, 2003). Reflective diaries were completed by 11 practitioners in the UK, followed by semi-structured interviews. Data analysis was conducted using an IPA approach (Smith et al, 2022). Consent forms and information sheets were provided for all participants. Pseudonyms have replaced real names, and participants given the opportunity to withdraw at any time. The study was underpinned by a robust University ethics application process. Examples of close empathic relationships with children indicate a degree of emotional labour (Hochschild, 2012) which has the potential to cause stress and burnout. The findings of the project call for improved supervision for practitioners who report an impact upon their own wellbeing daily.

empathy, emotion, practitioner, emotional labour, stress

This application discusses a completed piece of research.

Exploring early childhood education and care teachers gaze in toddlers’ groups
Susanna Isotalo (1), Tuulikki Ukkonen-Mikkola (1), Joni Lämsä (2) and Niina Rutanen (1); (1) University of Jyväskylä, (2) University of Oulu, Finland

The aim of the study is to investigate early childhood education and care (ECEC) teachers’ gaze during pedagogical episodes on teacher–child interaction in toddler groups. The stage of teaching or what a teacher wants to express have an effect on gaze (Haataja et al., 2020, p 64; McIntyre et.al., 2020, p. 426). Interaction is part of ECEC teachers’ pedagogical expertise (Ukkonen-Mikkola & Fonsén, 2018). Teacher-child interaction considers emotional and instructional support, and classroom organization (Pianta et al. 2008). At these levels, a teacher can impact the development of child’s social and emotional functioning (Hamre et al., 2013), learning motivation and self-regulation skills (Salminen et al., 2021). The study relies on constructivism, combining both quantitative and qualitative methods. Two datasets were collected with eye-tracking glasses from every teacher, one from play and one from teacher-guided activities. Data was coded and analyzed using Tobii Pro Lab and episodes were identified visually. An ethics review by the ethical board of the university was applied. Consent form and information sheet were provided to teachers and children’s parents. Informed consent was negotiated with children and participants could withdraw from the study at any time. Pseudonyms were used on participants. Findings demonstrate that during different pedagogical episodes the duration and focus of teacher’s gaze vary. Also, engagement in dialogical interaction impacts on teachers focus of a gaze towards children. Findings suggest that examining interaction through gaze in pedagogical episodes we can bring knowledge about teacher’s actions. Eye-tracking can be a method to evaluate and support interaction.

interaction, ecec teacher, gaze, eye tracking, toddlers

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

G22
DIGITAL ACTIVITIES IN PLAY AND LEARNING
Chair: Susan Grieshaber, La Trobe University, Australia

Children’s movements in a virtual playground task
This study explores children’s gross motor competence in a virtual playground task. Virtual reality (VR) has previously been used in health-related research towards rehabilitation and physical/psychological disabilities (Bortone et al., 2018; Ravi et al., 2017; Snider et al., 2010). In ecological dynamics, perception and action are intertwined processes between the individual and the environment (Davids et al., 2012; Renshaw et al., 2022). Controlled movements in a specific task can emerge by reducing the possibilities of skill performance to the minimum number required, known as freezing degrees of freedom (Bernstein, 1967). Seventeen sensors from the Xsens motion system were used to collect whole-body animations and movement data from each body segment. Forty children aged 7-8 years old participated. Guardian’s and children’s informed consent were obtained. A researcher was always walking beside to make the child safer and give the possibility to withdraw immediately. Motor competence is complex and gets stimulated through challenging tasks where children must maintain balance based on the individuals proficiency (Bardid et al., 2019; Niemistö et al., 2020). Findings show a variation between movements in the upper and lower extremities, and multiple movement strategies related to freezing/freeing degrees of freedom. Emergent motor behavior in the VR playground is spontaneous, unpredictable, and self-generated and captures some of the dispositional characteristics of play. This is an important feature not previously considered in gross motor measures. Data on freezing/freeing movements can be applied to the analysis of whole-body movements to provide a complete understanding of children’s motor repertoire in specific tasks.

**glossary**
- gross motor competence
- virtual reality
- motion caption
- ecological dynamics
- freezing degrees of freedom

This study aims to explore events that can occur when preschool teachers use digital technology in activities with children in two Swedish preschools. Previous research (Marsh et al., 2016) has shown that children integrate use of digital technologies with non-digital play. Children interact with digital technologies in various and often unpredictable ways (Arnott, 2016). This study was conducted with a sociomaterial perspective (Fenwick et al. 2011) and the concepts materiality and entanglements. It has a qualitative approach and practice-based research methods (Gunnarsson, 2018). The data was constructed with preschool teachers using dialogic conversations based on their observations and filmed activities with children aged two to five. Deleuze and Guattari’s (1987) concepts of rhizome and cartography were used to analyse data. The EECERA ethical code (2015) was followed with voluntary and informed consent from all participants. The children were given consent by their guardians. All participants were given the opportunity to withdraw from the study at any time. Pseudonyms have replaced the names of participants. Findings show that entanglements of multiple materialities create unexpected activities in children’s exploration and play with digital images and digital books. Sometimes children’s exploration and play go beyond the digital aspect of an activity with digital technologies. Children’s opportunities to make their own choices and include non-digital material in activities with digital books and images increase their exploration with them. Findings suggest that a sociomaterial perspective and cartography can be useful for researchers’ and preschool teachers’ understanding of how digital technologies participate in activities with children.

**Understanding children’s activities with digital technology in preschool using rhizomatic thinking**

Tove del Gaiso, Malardalen University, Sweden

This application discusses a completed piece of research.

**Media as a portal to support children’s play and learning**

Susan Grieshaber(1), Susan Edwards (2), Kate Highfield (2) and Jane Caughey (2); (1) La Trobe University, (2) Australian Catholic University, Australia

The research supports children’s interests in media, popular culture, and digital technologies to enhance learning. The slow uptake of media and digital technologies indicates that children’s interests in these areas are yet to be supported in similar ways to ‘traditional’ play and emergent curricula (Edwards et al., 2020; Wood et al., 2020). Capitalising on children’s interests in media and digital technologies can be powerful ways to enhance children’s learning (Grieshaber et al., 2021). The project integrates practice theory (Nicolini, 2012) and critical theory of technology (Feenberg, 2002). Practices are shared actions and interactions amongst people that over time create the society they inhabit. To Feenberg (2002), technologies are invented and used according to human
values, which shape the enactment and sharing of practices amongst people in digital society. Data from semi-structured interviews, video observations, and workshops with nine Australian educators are drawn from a case study (Stake, 1995) and analysed thematically. Relational ethics (Ellis 2007) identified issues beforehand, and ongoing critical reflection and consultation with participants addressed emergent matters. Findings reflect five ideas that show how media can work as a portal to assist educators to enhance children’s learning with digital technologies: moving onto the portal; peering through the portal; experiencing the portal; the portal as a transitioning agent, and a portal as a transformative agent. Using media as a portal can produce knowledge differently, making it valuable professional learning. A portal enabled educators to create new analytical questions and for something different from the known to emerge.

media, portal, professional learning, change, children’s learning

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

G23
ADVANCING CREATIVE METHODOLOGIES AND METHODS TO ENHANCE OUR UNDERSTANDING
Chair: Lindsey Watson, The University of Huddersfield, United Kingdom

Visualising younger children’s curiosity and their ethical decision-making during research
Lindsey Watson, The University of Huddersfield, United Kingdom

This paper draws on findings from a PhD, Visualising Younger Children’s Perspectives on Digital Technology and Ethical Decision-Making, which adopted a multimodal, storytelling research design, exploring nine five-year-olds experiences of digital technology and ethical decision-making within research. Previous research has recognised younger children as valuable contributors to the ethical decision-making process (Murray, 2019; Palaiologou, 2014), yet there appears to be a void of literature representing younger children’s ongoing ethical decision-making throughout the research process. Underpinned by Goffman’s (1959) concept of Impression Management, this research explored children’s ‘different languages’ (Clark & Moss, 2017) to further understand their perspectives on ethical decision-making within research. Adopting a phenomenological perspective, video-based conversation analysis of 20 video-recorded storytelling sessions recognised and explored younger children’s curiosity, sense-making, and agency as research participants. The study was underpinned by EECERA Ethical Code for Early Childhood Researchers (Bertram et al., 2015). Ethical considerations and findings are presented through comic strip visualisations, revealing the complexities of children’s ethical decision-making around informed assent and dissent within research. Findings suggest younger children are curious about their role in research and do make ongoing ethical decisions about their participation, building on research that does not problematise younger children’s role within research (Hackett, 2017). Findings demonstrate that a multimodal approach which is focused on children as active contributors to the ethical decision-making process, both supports and makes visible younger children’s role within research.

children’s ethical decision-making, multimodality, video-based research, storytelling, agency

This application discusses a completed piece of research.

Observation as activism: From educator as a spectator to a weaver of entangled relations
Iris Berger (1) and Nancy van Groll (2); (2) The University of British Columbia (UBC), (2) Capilano University, Canada

This paper reconceptualizes child observation by grounding observation in relational ethics that propel paying attention to interdependencies and temporalities that exist beyond a child-centric lens and catalyze responses to current socio-ecological concerns. Traditional child observation methods are critiqued as perpetuating an epistemological stance which assumes that observation represents objective reality and that the knower (educator) can be separated from the known (child) (Blaise & Hamm, 2019; Lenz Taguchi, 2013). Contemporary scholarship proposes experimenting with observation to expose the complexity and fragility of the entangled nature of the multiple relations that sustain and nourish children’s lives (Taylor, 2017). The paper employs new materialism and anti-colonial theories (Rosiek et al., 2020; St. Pierre et al, 2016) that disrupt human centricism and hierarchical binary thinking with a view of agency as distributed in complex networks of human and nonhuman relations (Donald, 2016). This
postqualitative inquiry involves conceptual and embodied experimentation (visualisation, art making, storying-speculating) as methods to engage with the question: What becomes possible when observation is constituted as curiosity for lively relationalities beyond the individual I/Eye (Sullivan, 2012)? Ethical concerns entail researchers’ positionality as White settlers and is addressed through transparency and reflexivity. Grounding observation in relational ethics heightens educators’ curiosity and awareness to children’s embeddedness in multiplicity of agentic relations and encounters that reciprocally affect children’s becomings. Educators’ subjectivities transform from spectators/observers of children’s behaviour to co-weavers of the tapestries of children’s lifeworld. The paper proposes tools to engage with the practice of observation in experimental, relational ways.

observation, activism, agency, new materialisms, relational ethics

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Through the eye of new materialist needle: Stitching practitioner perspectives using the Froebelian occupation of sewing**

Catriona Gill and Jane Whinnett, Edinburgh Froebel Network, United Kingdom

This study explores ways in which a creative research methodology can provide rich insights into Froebelian educators views of childhood, using the Froebelian Occupation of sewing to create embodied artefacts which intra-act with created discourses. Drawing on Barad’s (2006, p. 3) belief that ‘matter and meaning are not separate’, posthuman and new materialist theories situate meaning and matter as inextricably linked enabling the intra-actions between humans and material artefacts to have the ‘force and power to transform our thinking’ (Lenz Taguchi, 2010, p. 4). Froebelian pedagogy values educators who engage in their own learning and believe in principled and reflective practice. Froebel pioneered a theory of materials. Exploring educators’ views through sewing makes sense. This post-qualitative study is based on the concept of entanglement of human and non-human drawing on posthuman and new materialist perspectives. Participants brought a piece of sewing, explained its personal meaning, created sewn textiles and annotated sketches based on their concept of childhood. Participants were invited, gave consent, will be updated on progress and may withdraw at any point. Data was anonymised. The multi-layered assemblages were then explored in a holistic way to draw out the material-discursive interconnections and intra-actions. Creative research methods enable richer and deeper understandings of practice. ‘The concept of materials as active and generative’ (Albin-Clark, 2019), enables new knowledge and different ways of seeing.

Froebel, new materialism, posthumanism, sewing, educators

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**G24**

**CRAFTING (AS) RESEARCH AND EDUCATIONAL PRACTICE**

Self-organised Symposium

**Chair:** Mona Nicolaysen, University of South-Eastern Norway, Norway

The language of hands is more than writing. In this symposium we present parts of our artistic works that explore the potential of crafting (as) research and educational practice: “Colors of Gaza” (plant dyeing together with young children in Gaza), "The wind-kite-me" (kite building, stories and intimate correspondences) and "The Throws of Occupation" (knitted throws, showing annual statistics of people being killed in Palestine and Israel). As researchers and educators in the field of early childhood education and care, we acknowledge that the embodied making and learning must take place in more than theory. The artistic works are curiosity driven as ways of playing and examine the often invisible threadings between research, pedagogy, politics and ethics. Important questions might be how bodily making awakens the awareness of otherly becomings and the affective dimensions of research and educational practices.

**Throws of Occupation: The affective potential of knitting statistics**

Mona Nicolaysen, University of South-Eastern Norway, Norway
This study explores how crafting numbers and statistics create reflection and other understandings of the field of early childhood research in Gaza/Palestine (Nicolaysen, 2023). Sjøberg & Porko-Hudd (2019) show how knitting provides people with wellbeing, but knitting as activism/craftivism is different. Knitting blankets with annual statistics of temperatures is common by knitters, but what happens when the statistic represents people being killed by someone from the other side in Palestine and Israel? Massumi (2015) gives access to transversal time, relational networks and micropolitics as re-connections to self-validating and ongoing processes in times of despair. Knitted field notes (Andersen et al. 2020) in a post qualitative study (Gunnarson & Bodén, 2021) navigated with post human theories (Barad, 2007; Haraway, 2016) constructs other methodological makings. Barad (2007) argues that research entangles with ethics and justice in the world and that the illusion on doing research with clean hands are gone (Barad, 2017). Even if statistics are public information, the geopolitical situation makes the knitting political and stirs up the ethical landscape. When a situation becomes affective, it also becomes ethical (Massumi, 2015). Knitting statistics creates a concrete space where reality makes its way into research and educational practices in more-than-wordly ways. This opens a discussion on the value of crafting/making for the crafter/maker (children and adults) in wider aspects than knitting statistics. Exploring crafting/making as research methodology/pedagogical resource might strengthen the educators curiosity for more-than-wordly practices together with children. Through embodied making and learning processes the question of matter and meaning might change.

**explorative pedagogy, knitting statistics, activism/craftivism, politics of affect, methodology**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**The wind-kite-me. Crafting and making with nature**

Kari Carlsen, University of South-Eastern Norway, Norway

The art of kite building and the act of kite flying belong to the fields of craft and play. The concepts of crafting with nature are examined through constructing and flying experiences with kites. The title reflects the holistic experience ofstanding on a beach, feeling the forces of the wind, made possible with the kite. At the same time, the question is posed about the significance of the `self` in this context; where the boundaries between the individual human being and the surrounding nature both are blurred and intensified. I work in a tradition of Craft Research in a Nordic context, last presented by Fredriksen & Groth (ed.) (2022). The research group EMAL- Embodied Making and Learning support a range of connected research themes. The presentation is based on a post-human neo-materialist understanding (Barad, 2007, 2008; Ingold, 2013), and expands into an intimate correspondence with the materials, the crafting, the place and the wind. As artist and a r-t-ographer the knowledge gained through making is essential. The cultural setting of kite flying differs dramatically from playful activity in many countries, to a manifestation against children's limited life conditions in Gaza. In this way the art of kite making and flying has ethical implications due to the social context, and in an educational practice to ecological awareness through a line from the hand to the wind. The outcome will emerge in the collective activity. The crafting with nature give participants an insight that changes their awareness of the environment.

**crafting, kite, embodied, nature, correspondences**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Colours of Gaza: Land crafting with natural dye in a kindergarten**

Marie Skeie, University of South Eastern Norway, Norway

Colours of Gaza examines how children are part of aesthetical processes by working with the surrounding landscape and textiles in a kindergarten in Gaza. It is only recently, in 2017, that the Ministry of Education and Higher Education (MOEHE) in Palestine announced a framework for kindergarten curriculum and a Kindergarten Teacher's manual, and there are few studies done in the early childhood field in Palestine. The main theoretical framework of this research is built on new materialism (Coole & Frost, 2010) and positioned within the posthuman paradigm (Barad, 2007). This study is creative practice ethnography (Hjorth et al., 2019), where I bring in my artistic practice as an a-r-t-o-grapher (Waterhouse, 2022). Ethics cannot be separated from ontology and epistemology (Barad, 2007), as there is no outside world or position. This study follows the ethical guideline on research with children in Norway and Palestine; information is provided and consent is given, with attention to children's non-verbal consent. In land crafting with plant dye, we are crafting-with the neighbouring environment. This study contributes to awareness of children's natural surroundings through crafting-with in pedagogical and collaborative settings. It adds to knowledge on bringing artistic practices into the kindergarten and ecological awareness through embodied knowledge crafting in and with our surroundings.
G25
INDIGENOUS KNOWLEDGE SUPPORTS CULTURALLY SUSTAINING LEADERSHIP, TEACHING AND LEARNING; EXAMPLES FROM AOTEAROA NEW ZEALAND.
Self-organised Symposium
Chair: Emma Parangi, Educational Leadership Project, New Zealand

Indigenous knowledges have been drawn upon to enrich education across the globe (Smith, 2012). In Aotearoa New Zealand, bicultural curricula and educational leadership which integrate Māori knowledge are the national aspiration. The research shared in this symposium engage Kaupapa Māori (foundational) conceptual frameworks to explore specific examples of the integration of Māori knowledge into ECE. The common thread of the Māori ontological tools of Wānanga (generative discussion) and Pūrākau (cosmogony through storytelling), illustrates the transformative and democratizing power of sharing story. Māori epistemology, as with many Indigenous cultures, has been created and shaped through these oral traditions (Hemara, 2000). The research communities involved provide insights into the potential outcomes for children, teachers and families, when Indigenous knowledge and methodologies are implemented from the foundations of pedagogy and practice. Teachers who know themselves deeply, and seek supported access to Māori knowledges, can provide culturally sustaining learning opportunities for all children.

Exploring the weave of indigenous wisdom and narrative assessment - The power of story to reclaim, honour and transform. Stories from Aotearoa/ New Zealand.
Maria Sydney, Educational Leadership Project, New Zealand

This research inquiry aims to support teachers to better understand Indigenous knowledge systems and to strengthen the application of this knowledge in learning stories in ways that affirm Māori identities. Research has shown the barriers that exist for teachers implementing Indigenous knowledge in practice which include teachers' connection to their own cultural identity and cultural responsiveness. (Hohepa et al., 2010; Macfarlane et al., 2014; Lave and Wenger, 1991; MSD, 2016) and (Mahuika, Berryman, & Bishop, 2011). This research uses a Kaupapa Māori framework defined as research by, with and for Māori (Walker, et. al., 2006). Learning stories (Carr & Lee, 2012) and waananga (Mahuika & Mahuika, 2020), a traditional method of Māori knowledge transmission, will be the primary methodologies used to gather data from the research community. Consent forms and information sheets were provided to all participants. Consent was negotiated with the children involved and participants could withdraw from the research at any time. Participants and I co-operatively created a shared kawa (set of protocols) of which guided the ethics of our engagement together. The findings evidence the need for teachers to engage in critical reflection to strengthen the application of Indigenous knowledge. As a result, learning stories can be used to affirm children's identity and uniqueness. The normalisation of Māori ways of being, doing and knowing contribute to the participation and success of Māori learners. This coupled with Learning stories can be used to capture these moments and highlight future pathways for transforming communities through the power of story.

indigenous knowledge, cultural awareness, learning stories, identity, empowerment

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Modern Mātauranga; Ancestral wisdom applied to pedagogical leadership in early childhood education in Aotearoa.
Emma Parangi, Educational Leadership Project, New Zealand

This paper examines Indigenous conceptualisations and embodiments of leadership through elevating the voices and stories of Indigenous women leading in ECE. Research exploring Māori leadership has been woven into education through curricula and regulations (Spiller 2012; Barnett & Te Wiata, 2020; Hohepa, 2013). Indigenous models have been implemented in ECE however these are often designed and delivered in a top down approach. This research sits in the gap of leadership models created by Indigenous leaders currently leading. This research uses a Kaupapa Māori framework, defined as by, with and for Māori (Walker,
2006) where the researcher and research community are Tangata Whenua or Tangata Moana (have ancestry of Aotearoa or the Pacific Ocean). Māori ontological methodologies are integral within Kaupapa Māori frameworks. Wānanga will be used both to generate and gather data from the research community. Wānanga, a complex inter-relational discussion method, consists of inherited traditions, centered on local ways of knowledge transmission and creation (Mahuika & Mahuika, 2020). Informed consent is negotiated and recorded throughout the process of Wānanga, as whanaungatanga (establishing and maintaining relationships) is central to all Kaupapa Māori research (Williams, 2015). This study is ongoing. Current findings will share autoethnographic data from the researcher’s own experience as an Indigenous leader in ECE (Parangi, 2019). Knowledges shared in this research will expand on the understandings of complex ideas and realities for Indigenous educators, including the relationship of Indigenous practitioners to the colonial education system, and how to better center, recognise and compensate their contributions to ECE.

indigenous knowledge, leadership, co-creation, community, heritage methodologies

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Trissessment: Learners & families leading assessment
Roberta Skeoch, Educational Leadership Project, New Zealand

This research investigated how the Trissessment approach, modelled on traditional Maori knowledge, can be used to amplify the voices of children and their families in the assessment for learning process. Data was drawn from a pilot project (Cown, Werry & Skeoch, 2016) and research completed as part of a two-year NZ Ministry of Education Teacher-Lead Innovation Fund project completed in 2018. (Cown, Werry, Hollis & Skeoch, 2018) The Trissessment approach underpins this research and includes Tautuutu, a traditional Māori framework used to enhance ‘mana’ - a core value of the Māori world and of central importance to Te Whāriki (ECE curriculum, NZ) Trissessment includes children, family and teachers in the assessment process. An action research approach was used. Interviews and thematic analysis of children’s narrative contributions were completed. Informed consent was gained from families and teachers with special attention given to gaining children’s consent. Ethical approval was granted by the Toi Ohomai Institute of Technology Research Committee. Teachers reported significant shifts in their practice including deeper listening and talking more to children about their thinking and learning. The order of the process saw parents contributing to- rather than just commenting on, assessment for learning. Teachers felt they gained a richer understanding of children and their families and parents felt included and empowered by the process. The Trissessment approach can be used as an effective tool to build relationship between teachers, children and parents to support belonging and agency and enable all to contribute to learning.

indigenous knowledge, assessment for learning, agency, empowerment - mana, collaboration

This application discusses a completed piece of research.

G26
RESISTING NEOLIBERAL AND NEO-COLONIAL DISCOURSES IN EARLY CHILDHOOD EDUCATION
Slef-organised Symposium
Chair: Marek Tesar, The University of Auckland, New Zealand

The neoliberal and neo-colonial discourses that pervade early childhood education perpetuate harmful and oppressive practices. This symposium centers the voices and experiences of marginalized communities, including children, in order to disrupt these dominant discourses and work towards a more equitable and just education system. In this session we challenge neoliberal discourses that often prioritize the marketization of education, addressing possibilities of working towards a more accessible and equitable system. We also decolonise western curriculum that can perpetuate harmful stereotypes and biases about non-Western cultures and ways of knowing, and argue for incorporating diverse perspectives and ways of knowing and challenge the dominance of Western knowledge systems. Finally, we critically examine and challenge power dynamics in the sector, which can lead to more equitable and just education system that centers the needs and experiences of all learners, and build powerful partnerships and coalitions.

Early childhood teacher activism, ‘minor politics’ and refusal of neoliberal discourses
Olivera Kamenarac, University of Waikato, New Zealand
This presentation problematises a neoliberal framing of early childhood education (ECE), teacher work and agency in New Zealand, exploring spaces for refusal of neoliberal discourses through teacher activism. A body of research in New Zealand and internationally has acknowledged the profound impact of neoliberalism on ECE (Press et al., 2018; Roberts-Holmes, & Moss, 2021; Simon et al., 2022; UWU, 2021), including tensions, resentments and hierarchies in the sector, a loss of cross-sector dialogue and collective advocacy (Arndt et al., 2021; Gould et al., 2023). Building on the existing literature, this research examines how teachers might disrupt neoliberal narratives by engaging with ‘minor politics’ (Moss, 2017) and refusing to take up dominant discourses. By utilising a post-structural theoretical lens (Baxter, 2016; Foucault, 2000), the research closely examines constructions of teacher subject and subjectivity within neoliberal ECE spaces. It uses a discourse analysis approach (Bacci, 1999; Gee, 1999) to examine key New Zealand ECE policies and interviews with ECE teachers and managers and analyse how teachers negotiate discourses constraining their work and agency. A consent form and information sheet were provided to all participants, and pseudonyms were used to replace their names. Participants were allowed to withdraw from the study at any time. Findings illustrate constructions of teacher work and agency through neoliberal discourses, and the power of teacher activism and engagement with ‘minor politics’ to question the status quo. These findings have implications for strengthening the sector’s collective activism and refusing the neoliberal dictatorship in ECE.

early childhood education, neoliberalism, teacher activism, ‘minor politics’, politics of refusal

This application discusses a completed piece of research.

Childhood undergrounds; Power and Resistance
Marek Tesar, The University of Auckland, New Zealand

This presentation argues that neoliberal ideology, through policy and governance of children in early childhood settings has a very strong influence on young children, and on the way they grow up, play, learn, and perform their resistance and agency in the places and space of their education and care. As argued elsewhere (Foucault, 1980; Havel, 1985), every hegemonic discourse is challenged by an equally powerful resistance, and that every dominant childhood culture, in any ideology, is challenged also by a resistant childhood underground, punctuated by specific children’s private stories and play (Ailwood, 2013; Tesar, 2016). Theories of discourse and power (Foucault, 1991); rhyzomes (Deleuze and Guattari, 1995), subject positions (Havel, 1985) and new materialism (Barad, 2005) are providing the theoretical and conceptual outlook. This research study used post-structural paradigm, qualitative methodologies and ethnographic methods, including in-depth interviews. Foucault’s power/knowledge framework informed the data analysis. This research was approved by the research ethics committee, and the data collection followed the approved protocol, upholding principles of protection, participation & partnership. When adults loosen control and visibility of children in early years centre, trust children’s voices and play, and allow them to have their ‘secret’ places and spaces, children develop their own subcultures. The paper argues that having secret play and games is and an essential part of child development, when adults allow young children to learn from one another without their presence, supervision or control. This study has a potential impact on shaping centres’ policies on play, curriculum and child development scholarship.

young children, childhood studies, New Zealand, power, resistance

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Resisting the neoliberal agenda of school readiness: Teachers’ turning around to children’s curiosity to co-construct meaningful curriculum and pedagogy
Jamie Sisson, University of South Australia, Australia

This presentation challenges neoliberal agendas of school readiness that promote narrow views of learning, raising the question, ‘what does scientifically proven curriculum matter if children don’t engage?’ Building from Kamler and Comber’s (2005) turn-around pedagogy, this research demonstrates how early childhood teachers’ critical action research ‘turned-around’ their pedagogy and practice to co-construct meaningful learning with children, drawing on children’s funds of identities (Esteban-Guitart & Moll, 2014). Deleuze and Guattari’s (2000) notion of assemblage supports the exploration of how knowledge, actors, expressions and experiences intra-acted to constitute the reciprocal mattering of children’s play digital worlds and teachers planning and pedagogy. Situated within the post-structuralist paradigm, this qualitative research used semi-structured interviews and researcher fieldnotes to explore participants critical action research (Carr & Kemmis, 2009). Data analysis consisted of ‘plugging in theory’ (Jackson & Mazzei, 2013) while reading transcripts and field notes to identify assemblages that informed participants culturally responsive
pedagogies. Participants were provided with an information and consent forms which were signed. Pseudonyms were used in place of all names. Participation was voluntary and participants were able to leave the project at any time. Findings shed light how on the loud discourse of school readiness distracted teachers from connecting with children’s curiosities; and the role of critical action research and culturally responsive pedagogies to support teachers’ agency with children to engage in shared curiosity through meaningful learning experiences. These findings have implications for how teachers can reimagine their repertoires, identities and agency with children to co-construct meaningful learning.

$culturally\ responsive\ pedagogies,$ $funds\ of\ identity,$ $co-constructed\ agency,$ $critical\ action\ research,$ $intra-action$

This application discusses a completed piece of research.

G27

TRANSITION AND BELONGING - FROM HOME TO ECEC
Self-organised Symposium
Chair: Yngve Rosell, University of Stavanger, Norway

This symposium is based on the ongoing research work of the research group "belonging and transitions" at the University of Stavanger. In a context based on the Nordic ECEC model, but also worldwide, transitions can be understood as critical and decisive moments in a child’s life (Pianta, 1988). In this symposium, we will direct questions on the transition between home and ECEC, and how organization and pedagogical work can support the experience of belonging to ECEC. Belonging addresses assumptions about "feeling at home" in a community and how the setting/ECEC teachers facilitate this (e.g. Yuval-Davis, 2011). We will present an (ongoing?) systematic literature review on transition from home to ECEC in Nordic countries, how transitions in groups can contribute to children and parents belonging and how parents experience transition between settings in Norwegian ECEC centers.

Transition from home to ECEC – A systematic literature review
Mariella Asikanius, Yngve Rosell, Gunnar Magnus Eidsvåg, Catharina van Trijp, Marianne Ree, Sara Esmaeeli and Tove Erna Belland, University of Stavanger, Norway

This ongoing study aims to gain knowledge about transition from home to ECEC in both Nordic and other countries. The transition to ECEC can be a challenging moment in a child’s life (Drugli, 2020; Pianta, 1998). Contributing to all children getting a good start is the most important investment we can make as a society (KD, 2017). ECEC can contribute to a good childhood characterized by well-being, friendship and play. ECEC’s have a responsibility to meet the individual’s needs for security, belonging and recognition and to ensure that everyone can take part in and contribute to the community (Johansson & Rosell, 2021). Transition from home to ECEC has been studied in various contexts but the field needs a comprehensive review that would gather the main findings. The theoretical fundament is based on Pianta's (1999) descriptions of collaboration between child, peers, parents, ECEC teachers, and the local community as active agents for the quality and experience of the transition. Different searches in most relevant databases have been collected and systematically reviewed in Rayyan based on various inclusion and exclusion criteria (Booth et al., 2021). Ethical considerations have been important to take to guarantee transparency, and that the studies included represent high academic quality and have been accepted by ethical committees in respective contexts (Forsberg & Wengström 2008). A preliminary overview of transition practices to be used in ECEC units and/or needs for further research will be provided. We will present preliminary results from the ongoing systematic literature review.

$ECEC,$ $Nordic\ countries,$ $transition,$ $literature\ review,$ $wellbeing$

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

The transition from home to early childhood education and care in Norway: From an individual perspective to a feeling of continuity and belonging in a group perspective
Tove Erna Belland and Yngve Rosell, University of Stavanger, Norway
The aim is to achieve continuity in the transition from home to ECEC by examining teachers’ knowledge about how to include parents in this transition, and how small groups of children might contribute to children’s belonging. This transition is for many children in Norway, their first time away from their parents. Cooperation between teachers and parents is of importance to create continuity during transition and to support children’s well-being (Abrahamsen, 2015, Drugli, 2020). This study is based on Pianta’s systems theoretical thinking (Pianta, 1988), Bollnow’s description of continuity and discontinuity (Bollnow 1969) and descriptions of belonging and politics of belonging (Yuval-Davis, 2006). Two focus groups were conducted consisting of 4 and 6 teachers. They were asked about their perception of the transition model: Jåttåmodellen, which is used in Norwegian ECEC. The aim of the model is to build a good collaboration between parents and teachers to promote child-peer relationships prior to parents leaving the child in ECEC. The study is approved by the Norwegian Social Science Data Service (NSD). Ethical guidelines were followed, for example participant’s written consent and data was anonymized. Preliminary results that can promote a close relationship with parents, and a feeling of safety, belonging and continuity within a small group of children, in the transition from home to ECEC, will be presented. The Jåttåmodell may contribute to teachers’ knowledge about leadership (systematic and structured work) in order to support children’s belonging and continuity from home to ECEC.

ECEC, Norway, transition, parents’ active involvement, belonging

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

ECEC transition: Parents experiences and their expectations
Sara Esmaeeli (1), Yngve Rosell (1) and Tina Tellefsen (2); (1) University of Stavanger, (2) Skattekisten kulturbarnehage AS / ECEC setting, Norway

The main aim is to describe a practical transition routine based on Bronfenbrenner’s ecological systems theory. A transition is briefly explained as going from one setting to another one, and children may experience many transitions before they reach the age of five. Stress and insecure attachment as the results of non-smooth transitions can have a great impact on the child’s emotional health, as well as cognitive and intellectual development (O’Connor, 2013). Attachment is a persistent quality that changes very slowly as time passes (Bowlby, 1979). Therefore, developing a steady secure attachment between the children and the ECEC teachers, is an important step towards a safe and smooth transition. According to Bronfenbrenner’s (1979) ecological systems framework, the transition from a familiar unit to an unfamiliar unite can be facilitated by collaboration between parents and the ECEC setting. We discuss how ECEC can make good routines and practice for transition based on Bronfenbrenner’s (1979) framework. The method is qualitative, using semi-structured interview with three parents. We followed Norwegian ethical guidelines such as voluntariness of the consent and participation, confidentiality and anonymity of the data and reporting of the results. Our participants discussed about how they had been informed about the transition beforehand and how this helped them to cope with the situation. In addition, what kind of practice they needed, which might be beneficial to make the transition more convenience for both them and their children. Our proposed transition routine can be used as a collaboration plan between parents and any ECEC setting.

collaboration between parent and ecec, ECEC transition, attachment in ecec transition, Bronfenbrenner’s (1979) ecological systems theory, parents’ experience and expectation

This application discusses a completed piece of research.

G28

STUDENT TEACHERS LEARNING EXPERIENCES; CHALLENGES AND NEEDS
Chair: Jannike Lyngtun, University of Stavanger, Norway

Missed opportunities: student teachers experiences of learning through internship in kindergartens
Jannike Lyngtun and Margrethe Jernes, University of Stavanger, Norway

The research aim is to explore teacher student’s experiences of learning within internship in kindergartens in Norway. Research question: What emerges as significant in kindergarten teacher student’s experiences of their supervised internship? Previous studies shows that internship provides students with valuable learning experiences (Bjerkestrand et al., 2017; Lafton & Furu, 2019),
although there still is challenges due to internship (Bjerkestrand et al., 2017; Matengu et al., 2021). In general, there is little research in this area (Munthe et al., 2020), especially the student’s impression of supervision in their practical training (Worum & Bjørnstad, 2018). The theoretical framework is within a socio-cultural thinking, where reflections (Schön, 2016), and theories about learning through dialogue (Bakhtin, 1987; Linell, 2006) are central. Sfard’s (1998) concept of acquisition and participation will be used to illuminate the concept of master teaching. The study was conducted within a qualitative paradigm (Cresswell, 2014), using an abductive approach (Alvesson & Schöldberg, 2017). Observation during internship and group interviews with 14 students were analysed through a hermeneutical-phenomenological approach. In line with EECERA’s ethical code for researchers, the contributing participants have provided their written informed consent, they were informed about their right to withdraw, and about anonymity. The study is approved by SIKT. Preliminary findings indicate that internship students highlight the importance of observation and imitation in their learning process, but they miss more in-depth conversations/dialogue with their supervisors. Implications for practice or policy may involve challenging the concept of supervision in both management documents and in internship.

**early childhood teacher education, internship, preservice teacher student, master teaching, supervision**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Nature-based education teacher’s trainings in Spain: Challenges and needs**
Katia Hueso, Asociación GJNSaltamontes, Spain

Nature-based education is a recent pedagogical approach, that is gaining popularity among practitioners and schools. However, there is a lack of adequate teacher training that allows efficient implementation. This contribution aims at identifying challenges and gaps in teacher’s nature-education training in Spain. The need for teacher’s training in this field was highlighted by Wolf (et al., 2022), challenging the perception that educating in nature is simply doing activities outdoors (Hawxwell 2019). One of the key aspects is the connection between nature, the teacher, and the student (Martin 2008, Neville et al. 2022). This contribution analyses the main nature-based education trainings offered in Spain, identifying the mismatches between them and the practical needs of practitioners providing nature kindergarten and outdoor sessions in schools. The analysis is based on in depth interviews with four experts and pioneer trainers in Spain and includes the author’s personal experience, as one of the first trainers in Spain (with over a decade of experience in the informal sector as in academia). The interviewees have agreed to the use the information provided for the purposes of scientific dissemination. Training opportunities are offered by many different entities, with a significant diversity in approaches, content, depth, duration, and practical application. Practitioners often lack the information and/or knowledge to choose the right training for their needs. This mismatch constitutes a waste of time and resources that can be solved by providing trainings that offer teachers the knowledge, confidence and expertise needed, so that they can make an informed choice.

**teacher’s training, nature-based education, challenges, Spain, efficiency**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Media impacts on ECEC student teachers’ experiences of the ECEC field in Finland, Faroe Islands, and Iceland**
Samuli Ranta (1), Ingibjorg Sigurdardottir (2), Svava Mörk (3), Sara Sintonen (4), Annika Antoniussen (5) and Sigrid Vesturgard (5); (1) University of Eastern Finland, Finland, (2) University of Iceland, Iceland (3) University of Akureyri, Iceland, (4) University of Turku, Finland, (5) University of Faroe Islands, Denmark

This study explores the experiences of Early Childhood Education and Care (ECEC) student teachers from Finland, the Faroe Islands, and Iceland regarding media news about ECEC. Prior research suggests that the media can shape people’s perceptions, opinions, and attitudes, as well as foster public discourse (e.g. Bowd, 2016; McCombs & Shaw, 1972). The study framework draws upon prior research that examines the media’s emphasis on particular subject areas (e.g. Johnson, 2008; McCombs & Shaw, 1972), its effects on public opinion (e.g. Kosho, 2016; Sanborn & Harris, 2019), and explores its implications for ECEC student teachers. Data was gathered with an online survey questionnaire with open-ended questions to collect qualitative data from a large group of ECEC student teachers. The data collection method allows for examining the participants’ experiences and emotions related to media news. The study considers ethical considerations in collecting and analysing data from participants, including obtaining informed consent and protecting their privacy and confidentiality. The study’s preliminary results suggest that negative news about ECEC is emphasized in media coverage. However, students consider it beneficial for addressing the industry’s challenges and problems. However, media coverage has also caused them to worry about their future profession and consider changing fields. The study contributes to understanding the impact of media news on the perceptions and attitudes of ECEC student teachers.
It highlights the need for a balanced and accurate representation of the ECEC field in media coverage to prevent adverse effects on the profession’s image.

**ECEC student teacher, media, nordic collaboration, public opinion, profession’s image**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**G29**

**EARLY CHILDHOOD EDUCATION DURING A GLOBAL PANDEMIC: PERSPECTIVES FROM PORTUGAL, QUEBEC, AND SWITZERLAND**

Self-organised Symposium

**Chair:** Stéphanie Duval, Laval University, Canada

This symposium presents the results of two research projects focused on how early childhood educational contexts adapted to the restrictions imposed during the covid-19 pandemic. The first presentation explores associations of health measures with pedagogical practices and children’s well-being, in settings for 0 to 3-year-olds in Portugal. The two following presentations explore parent and teacher perspectives on the transition to the preschool (4- and 5-year-olds) in Autumn, 2020, in Switzerland and Quebec, respectively. These presentations will explore how participants in different contexts, with different cultural traditions around the early childhood education services, the role of parents in the educational system, and the pandemic restrictions in place at the time, define the challenges they experienced and the creative solutions they put in place to meet children’s, parents’, and teacher’s needs.

**Parent and preschool teachers’ perceptions of the transition to school during the COVID-19 pandemic in Québec**

Joanne Lehrer (1) and Stéphanie Duval (2)* (1) University of Québec in Outaouais, (2) Laval University, Canada

This presentation describes results of a study on the transition to preschool (kindergarten) in Autumn, 2020, in Québec (Canada). Previous research on the transition has identified challenges related to communication between teachers and families (Perry et al., 2017). Research on the transition during the pandemic has identified additional challenges related to supporting children (Bakopoulou, 2022). The project uses Rimm-Kaufmann & Pianta’s (2000) Ecological and Dynamic Model of Transition and Griebel & Nielsen’s (2013) Co-construction Model to understand relationships during the transition process and acknowledge the expertise of all actors. This mixed methods project involved online questionnaires regarding relationships, perceived facilitators, and challenges that were completed by 295 parents (13 fathers) and 110 kindergarten teachers. Quantitative data were analyzed descriptively, and qualitative data were coded for themes. Both analyses were abductive (Anadón & Guillemette, 2006). All standard ethical procedures (e.g., university ethics review board approval) were followed. Participants accessed the questionnaire by following a hyperlink. The completion of the questionnaire led to implicit consent. All questions were answered anonymously and voluntarily. For most parents, the relationship and interactions experienced with their child (and their child's teacher) during the transition were positive. For the majority of the teachers, their relationships with children and parents had to be modified during this transition due to health measures. Challenges mentioned by participants include communication difficulties, insufficient information, and limited opportunities for discussion. While results echo pre-pandemic research findings, adaptations during the pandemic can contribute to improving transition practices and parent-teacher communication post-pandemic.

**transition, pandemic, parents and families, preschool teachers, kindergarten**

This application discusses a completed piece of research.

**Challenges and facilitators of the transition to preschool in the context of a pandemic: Perceptions of Swiss parents and teachers**

Gabriel Kappeler (1) and Xavier Conus (2); (1) University of Teacher Education Vaud, (2) University of Fribourg, Switzerland

This paper aims to present a comparison of parents' and teachers' perceptions of the challenges and facilitators of the child's transition to school in the context of the pandemic. Transition practices, often referred to as entry into pre-school, represent a major challenge for families and teachers. This period is often characterised by instability and disruption (Curchod-Ruedi & Chessex-Viguet, 2012). In the context of a pandemic, the challenges are greater because of social distancing, but it is also an opportunity to
rethink the transition (Duval & al., 2021). In general, parents and teachers want the transition to preschool to be harmonious (Pianta & Kraft-Sayre, 2003). Good transition practices have been shown to have a positive effect on children’s future school success (Schulting et al. 2005). Too often, schools tend to offer transition practices that come late, just before school entry (Pinta & al., 1999; Dockett, 2014). The data are based on the perceptions of N=40 teachers and N=36 parents in the French-speaking Swiss context.

Based on the keywords to the responses, challenges and facilitators to the transition have emerged from the analyses. The questionnaires were completed on a voluntary basis. The data are processed anonymously. Few challenges and facilitators are directly related to Covid. Parents and teachers focus on the child’s well-being. Parents focus more on their child’s adaptation to the rhythm imposed by the school structure, while teachers are concerned with the social integration of children into the class. The action points are used to prepare the new school year with teachers.

Covid-19, transition practices, teachers’ perceptions, parents’ perceptions, facilitator and challenges

This application discusses a completed piece of research.

Reopening centre-based services for children under-three amidst the pandemic: Health measures, pedagogical practices and children’s wellbeing
Sara Barros Araújo (1), Sílvia Barros (1), Ana Silva (1) and Rafaela Rosário (2); (1) inED, Escola Superior da Educação, Polytechnical Institute of Porto, (2) University of Minho, Portugal

In Portugal, early childhood education and care (ECEC) services for children under-three were the first educational services to reopen after periods of lockdown. As a result, Covid-19 prevention and control measures (PCMs) had to be implemented nationwide, but no monitoring mechanisms for their impact were implemented. This study seeks to map the implementation of Covid-19 PCMs and examine associations among PCMs, perceived changes to pedagogical practices and children’s well-being. It is part of a larger research project aimed at analysing the perceived impact of the Covid-19 pandemic on centre-based services for children under-three (Araújo et al., 2021). The study’s theoretical underpinnings are the bioecological theory of human development (Bronfenbrenner & Evans, 2000) and the Experiential Education approach (Laever, 2000; Laever et al., 2013). One thousand ninety-eight ECEC professionals from all districts completed an online survey. The study was approved by the Ethics Commission of the research centre. All participants completed an informed written consent form. Results indicated that PCMs were widely implemented. Moreover, ECEC professionals who stated to implement PCMs more frequently were more likely to perceive a reinforcement of their pedagogical practices at the level of adult-child interaction, emotional climate and interaction with families. These professionals also reported higher levels of children’s well-being. Findings highlight the potential protective role of pedagogical practices in mitigating the effects of Covid-19. Also, they support the ongoing debate around the need to reinforce the investment in the pedagogical qualification for the under three sector, not only during but also beyond critical times.

centre-based services for children under-three, Covid-19 prevention and control measures, pedagogical practices, children’s wellbeing, early childhood education and care

This application discusses a completed piece of research.

G30
Transitions SIG Self-organised Symposium
EVALUATING TRANSITION TO SCHOOL PROGRAMS
Chair: Bob Perry, Charles Sturt University and Peridot Education Pty Ltd, Australia
Discussant: Mirja Kekeritz, University Osnabrück, Germany

This symposium derives from the international publication "Evaluating Transition to School Programs", generated by the EECERA Transition SIG, and published in 2022. Transition to school represents a time of change and continuity for all involved. Many transition to school programs have been developed to support positive transitions to school. While these programs have involved complex planning and implementation, often they have not been evaluated in rigorous or systematic ways. The symposium offers research- and practice-based approaches to evaluating transition to school programs from Australia, Germany and Sweden. It considers how the perspectives of children, families, educators, and community members might be included and analysed in evaluation strategies. Important themes include collaboration, respectful and trusting relationships, practitioner-driven inquiry,
strengths-based approaches, and responsiveness to context. There will be three presentations, followed by a Discussant, and ample time for comments and questions from participants.

**Evaluation of transition to school programs – Current emphases**
Sue Dockett and Bob Perry, Charles Sturt University and Peridot Education, Australia

The research aims to enhance evaluation of transition-to-school programs through research- and practice-based approaches involving all stakeholders. This presentation is based on Evaluation of Transition to School Programs (Dockett & Perry, 2022), a synthesis of research undertaken over a period of 25 years by numerous researchers. Transitions are times when “individuals change their role in their community’s structure (Rogoff, 2003, p. 150). We utilise bioecological (Bronfenbrenner & Morris, 2006), socio-cultural (Corsaro, 2011), sociology of childhood (James, Jenks, & Prout, 1998), critical (Petriwskyj, 2014), anthropological (van Gennep, 1960), and psychological (Zittoun, 2016) frameworks. Evaluation is “an applied inquiry process for collecting and synthesizing evidence that culminates in conclusions” (Fournier, 2011, p. 140) about merit and worth (Mertens, 2015). The presentation reviews 35 local, national and international peer-reviewed and published examples of evaluations of effectiveness in transition-to-school programs. The diversity of paradigms, methodologies, issues and trends is examined. This presentation is a synthesis of studies, all of which ensured that informed consent with adult and child participants was negotiated during the research. In all of the studies, participants (including child participants) were given the opportunity to withdraw at any time. Evaluation processes used across sectors ranged from external, formal processes to localised, informal processes. The importance of robust, rigorous, and relevant evaluations at all levels is emphasised, as is the importance of involving all stakeholders. Evaluations of transition-to-school programs are important to support individual children and families and to examine the overall impact and outcomes of the programs.

*transition-to-school, evaluation, frameworks, data, analysis*

This application discusses a completed piece of research.

**To be or not to be (a school child in transition)**
Helena Ackesjö, Linnaeus University, Sweden

How do Swedish education policies from 1940-2017 describe education for six year old children and its function? The study considers visions of the educated person contained in Swedish education policies. Policies are political rhetoric, contributing terminology, interpretation, norms and (new) premises for education (Lund and Sundberg, 2012). They are expressions and instruments for change in relation to ongoing societal development. Theoretically, policies are seen as narratives about progress and about shaping new citizens through schooling, subjectification and qualification (Biesta, 2009; Lindblad and Popkewitz, 2004). Through policies, authorities strive to achieve change, which makes policies suitable means for governing and modernizing education (Braun et al., 2010). The study is based in a qualitative paradigm through discourse analysis of Swedish policy documents concerning six-year-olds from the 1940s to 2017 using Biesta’s (2009) concepts of subjectification and qualification. Informed consent is not required for document analysis. Interpretive bias was addressed through independent coding by the two authors and joint moderation. The results show shifts in descriptions; from the immature six-year-old to the school-obliged six-year-old pupil and from a national to a global discourse about the child at school start age. Aspects of learnification and the individual performative school culture are overarching themes. These discourses legitimize a schoolarisation process in policy. The child becomes an economic subject when policy considers future costs for children who don’t succeed in school. This discourse about value for money has resulted in increased assessments of younger children’s abilities.

*policy, schoolarisation, learnification, subjectification, qualification*

This application discusses a completed piece of research.

**Paderborner Qualitätsstern (PQ³): A self-evaluation instrument for ECEC and school educators to reflect collaboration in transition processes. Current findings**
Petra Bueker (1), Julia Hoeke (2) and Jana Herding (1); (1) University of Paderborn, (2) Catholic University of Applied Science NRW, Germany

The research aims to enhance evaluation of transition-to-school programs through research- and practice-based approaches involving all stakeholders. This presentation is based on Evaluation of Transition to School Programs (Dockett & Perry, 2022), a synthesis of research undertaken over a period of 25 years by numerous researchers. Transitions are times when “individuals change their role in their community’s structure (Rogoff, 2003, p. 150). We utilise bioecological (Bronfenbrenner & Morris, 2006), socio-cultural (Corsaro, 2011), sociology of childhood (James, Jenks, & Prout, 1998), critical (Petriwskyj, 2014), anthropological (van Gennep, 1960), and psychological (Zittoun, 2016) frameworks. Evaluation is “an applied inquiry process for collecting and synthesizing evidence that culminates in conclusions” (Fournier, 2011, p. 140) about merit and worth (Mertens, 2015). The presentation reviews 35 local, national and international peer-reviewed and published examples of evaluations of effectiveness in transition-to-school programs. The diversity of paradigms, methodologies, issues and trends is examined. This presentation is a synthesis of studies, all of which ensured that informed consent with adult and child participants was negotiated during the research. In all of the studies, participants (including child participants) were given the opportunity to withdraw at any time. Evaluation processes used across sectors ranged from external, formal processes to localised, informal processes. The importance of robust, rigorous, and relevant evaluations at all levels is emphasised, as is the importance of involving all stakeholders. Evaluations of transition-to-school programs are important to support individual children and families and to examine the overall impact and outcomes of the programs.

*transition-to-school, evaluation, frameworks, data, analysis*

This application discusses a completed piece of research.

**To be or not to be (a school child in transition)**
Helena Ackesjö, Linnaeus University, Sweden

How do Swedish education policies from 1940-2017 describe education for six year old children and its function? The study considers visions of the educated person contained in Swedish education policies. Policies are political rhetoric, contributing terminology, interpretation, norms and (new) premises for education (Lund and Sundberg, 2012). They are expressions and instruments for change in relation to ongoing societal development. Theoretically, policies are seen as narratives about progress and about shaping new citizens through schooling, subjectification and qualification (Biesta, 2009; Lindblad and Popkewitz, 2004). Through policies, authorities strive to achieve change, which makes policies suitable means for governing and modernizing education (Braun et al., 2010). The study is based in a qualitative paradigm through discourse analysis of Swedish policy documents concerning six-year-olds from the 1940s to 2017 using Biesta’s (2009) concepts of subjectification and qualification. Informed consent is not required for document analysis. Interpretive bias was addressed through independent coding by the two authors and joint moderation. The results show shifts in descriptions; from the immature six-year-old to the school-obliged six-year-old pupil and from a national to a global discourse about the child at school start age. Aspects of learnification and the individual performative school culture are overarching themes. These discourses legitimize a schoolarisation process in policy. The child becomes an economic subject when policy considers future costs for children who don’t succeed in school. This discourse about value for money has resulted in increased assessments of younger children’s abilities.

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**Paderborner Qualitätsstern (PQ³): A self-evaluation instrument for ECEC and school educators to reflect collaboration in transition processes. Current findings**
Petra Bueker (1), Julia Hoeke (2) and Jana Herding (1); (1) University of Paderborn, (2) Catholic University of Applied Science NRW, Germany
PQ³, developed at University of Paderborn, is an item-based self-evaluation instrument to examine the quality of equal and participatory collaboration of ECE and school educators implementing transition to school programs (Büker/Höke/Ogrodowski 2022). For several years, a formative evaluation based on observations and questionnaires aims to proof, whether the instrument is suitable to stimulate professional cooperation in improving the quality of transition for children. The contribution reports results from current observation of the working processes of participants from two primary schools and 10 kindergartens using the PQ³. PQ³ is based on results from three model projects on optimizing transitions (Büker 2015/2019; Höke 2013). Results on the use of the instrument are available (Büker/Höke/Ogrodowski 2021). Professional cooperation must reach high level to obtain positive impacts for children’s transitions (Dockett/Perry 2022). This affords criteria and strategies for self-evaluation. Within the PQ³, these are framed by co-constructivist, bioecological approaches (Griebel/Niesel 2011, Perry/Dockett 2018). PQ³ is characterized as process-orientated, formative self-evaluation (Bortz/Döring 2015). The data reported are derived from participant observation and semi-standardized questionnaires. Results based on qualitative content analysis (Mayring 2015). According to EECERA research ethics code (Bertram et al 2015) transparency, voluntariness and opportunity to withdraw were given at any time. Results from current observation confirm the applicability and relevance of the PQ³ for reviving a structured collaboration after the pandemic period. PQ³ encourages even large multi-professional teams to make problems explicit and to adopt a meta-perspective on collaboration. Systematic self-evaluation of collaboration in transition needs to become a standard of professionalization.

transition, self-evaluation, multi-professional collaboration, professionalization, participation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
I 1

Exploring preschool teachers' positive emotions of finding children's perspectives and its role in the construction of teacher professional identity

Yuling Su, University of Taipei, Taiwan

In this study, we conducted semi-structured interviews with seven beginning preschool teachers to explore their emotional experiences resulting from children's perspectives and their relationship with their professional identity. Drawing on Day's (2018) research, we acknowledged that teacher professional identity plays a crucial role in shaping the transition experiences of beginning teachers from pre-service to in-service teaching. We also recognized teacher professional identity is not limited to their understanding of their roles, but also encompasses emotional responses to educational environment (Chaaban, Al-Thani, & Du, 2021). Emotions play a crucial role in teaching (Hargreaves, 1998), and they evolve throughout a teacher’s career (Chen et al., 2020). Drawing on a sociocultural perspective, we defined identity as a self-understanding that one is emotionally attached to and that informs one’s behavior and interpretations (Holland & Lachicotte, 2007, p. 104). We followed Kavle’s (2006) suggested sequence of interview questions and analyzed the data using a qualitative and interpretive paradigm (Miles & Huberman, 1994). We obtained informed consent from the participants, used pseudonyms to protect them, and adhered to the EECERA ethical code throughout the research. Our analysis revealed six themes of the teachers’ positive emotions resulting from children’s perspectives. These perspectives shaped the teachers' identities as learners, scaffolders, advocators, regulators, and disseminators of caring values. Our study adds to the existing body of research by providing detailed descriptive accounts of the relationships between teachers' emotional experiences, children’s perspectives, and their professional identity.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

I 2

Making the invisible visible in the ECTE

Margareth Eilifsen, Aihua Hu and Liv Torunn, Western Norway University of Applied Sciences, Norway

The study aims to uncover established and taken-for-granted practices, as they are displayed by individuals working for early childhood teacher education (ECTE). Through this we gain insight into the complexity, challenges, and conditions necessary to enhance the quality of teacher education. The study draws on a systematic study of developing body of research and series of structured discussions and exchange of practice-based experiences with teacher educator development among the community of International Forum for Teacher-Educator development (Vanderlinde at.al. 2021, p-17-18). Different aspects, positions, and contexts of the work of teacher educators involve consideration of individual actions within their ‘activity systems’ within the daily work, as well as within systems for teacher education (Engstrom, 1999; Wilson, 2006). The overall methodology is close to a collaborative auto-ethnographical approach (Chang, et al, 2013), taking a departure from personally involved activities, by a ‘slice-protocol’. All participating educators have been informed about the research and are willing to participate. An application for approval has been submitted to the national ethical review. Pay respect for each other’s role to understand slices from the involved persons' perspective. Students, in-service teachers, and managers as well as teacher educators, are seen as teacher educators. A glimpse into practices performed by different roles in teacher education depicts conflicting and overlapping practices. A broader understanding of the work and thinking of ECTE staff can inspire better policies and practices in terms of the means to support staff in fulfilling their respective roles as well as their collaboration in educating future teachers.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
How do preschool teachers and preschool support teachers work together and structure a shared frame
Takahiro Sakurai, Aichi University of Education, Japan

This study clarifies the frames in which Preschool-Teachers and Supporting -Preschool-Teachers (henceforth PT and SPT respectively) assess their problems and consequently construct shared frames in classes with children with disabilities. In previous research (Toda 2008), sharing different values cultivated through long experience was shown to be difficult; my research shows the necessity of identifying various new ways of collaboration to overcome differences. Using Schön's (1987) concept of “frame,” Sakurai (2021) found that the frames of PTs and SPTs differ. This lack of a shared frame underlie the difficulty in collaboration, making clarification of the process of constructing a shared frame necessary for collaboration. This study was conducted within a qualitative research paradigm and with semi-structured-interviews with PTs and PSTs. The analysis was conducted through qualitative data analysis (Sato 2008). Written Informed Consent was obtained following a written explanation of the purpose of the study, no use of audio recordings other than for this study, not answering any or all of the questions, cancellation of collaboration at any time. To protect their identities, instead of initials, only capital letters . The results made clear that a shared frame is established when both the PTs and SPTs are involved in the same problem situation. These suggest one way in which cooperation is possible even when values differ among caregivers and applications for collaboration with specialized agencies can be expected.

shared frame, reframe, values, reflection, preschool support teacher

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Increasing play complexity in young children with disabilities
Claire Winchester and Erin Barton, Vanderbilt University, United States

We will present data from single case research studies on play interventions to identify practices that promote complexity. Play is a critical early developmental milestone that contributes to the learning and wellbeing of children. Play is essential to the wellbeing of young children, helps children learn to be independent and develop and learn increasingly complex social skills, and is particularly important for children with disabilities as they learn important skills within playful interactions and contexts with their peers (Barton et al., 2020; Lifter, Barton, & Mason, 2011). Early childhood settings should create multiple opportunities with supports that ensure children engage in sustained play of increasing complexity, including promoting meaningful interactions across people and contexts. Reviews of the play intervention research have consistently concluded that modeling and prompting are related to increased play behaviors. We used single-case research methodology in inclusive preschool settings using child-focused, behavioral interventions (paradigm). We followed IRB protocols and guidelines for ethical practices. We obtained child consent and assent and monitored data closely. The results support the use of the systematic prompting and reinforcement for teaching play. Complex play skills might be a behavioral cusp affording children multiple opportunities to practice other important skills to advance their social, communication, and motor learning and development. Policy and practice should support high quality play instruction for young children who have delays in play. Play should be a primary goal for children with disabilities who play less often and demonstrate fewer complex and diverse pretend play behaviors than their peers.

play, interventions, play diversity, single case research, inclusion

This application discusses a completed piece of research.

How two-year-old children develop peer relationships in nursery school with the aid of their teachers?: A six-month longitudinal observation study of peer interaction.
Masafumi Ohnishi (1), Kaoru Onishi (2); University of Fukui, (1), Gifu Shotoku Gakuen University Junior College (2), Japan

The purpose of this study was to clarify two-year-old children’s peer relationships throughout 6 months longitudinal observation. Among 2nd year of life, there is a significant transition from a focus on activities to a focus on the social relationship itself (Mueller & Silverman, 1989). Although such developmental change was identified through observing social interaction of 12 to 42 months
This study was based on the socio-cultural theory (Vygotsky, 1978) and the ecological systems theory (Bronfenbrenner, 1987) which emphasize the interaction between child and socio-cultural factors in human development. An ethnographic investigation of 6 two-year-old children and their teachers, informed by social constructionism, was conducted in Japanese nursery school for 6 months (3 times). Participant observation in free play situation were used. A consent form and information sheet was provided to parents and teachers. The following things were explained; the purpose and procedure of the study, pseudonyms have replaced the names of participants, and they were given the opportunity to withdraw from the study at any time. Then we obtained informed consent. The findings demonstrate that children developed their relationships; from just stay together as a same age playmate to peer which they share theme and same emotion in play so that they can continue and expand their play without adults. From our findings, peer relationships has dramatic change in the end of the second year of life.

peer relationships, two-year-old children, nursery school, free play situation, longitudinal observation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**Children’s wonder and curiosity in nature**

Hilde Merete Amundsen and Hjørdis Helene Krosshøl Bakke, Queen Maud’s College of Early Childhood Education, Norway

The aim is to find out how practitioners can help children maintain curiosity and wonder towards nature in kindergarten. Children’s play in nature have positive effects on learning (Prince et.al, 2022) and give a deeper understanding of relationships in nature and the natural environment (Wilson, R., 2018). The theoretical framework is inspired from the philosophy of Martin Heidegger and his hermeneutics on being-in-the-world (Heidegger, 1927). Further we include Rachel Carson’s work ‘The Sense of wonder’ (1926). Our project is an ongoing piece of qualitative research project within the hermeneutic paradigm. The methods in our fieldwork in kindergarten are observations, video-observations, photography, field-notes and dialogues with children. We use Thematic Analysis (Braun & Clarke, 2021). Due to the Norwegian Agency for Shared Services in Education and Research, who has accepted, we provided participants with consent forms. Our findings show that it is of great importance that children have adults who can participate in their wonder and fascination with nature, help them find answers and ask new questions. We point to the need of following the children’s wonder and curiosity in their own terms. How to promote curiosity and learning by being active participants in children’s experiences must be clearly communicated in kindergarten teacher training. This can be done by getting this knowledge into the curricula. Our research points to a strong need for articulating children's way of being-in-nature in kindergartens in their own playful ways.

wonder, curiosity, nature, learning, play

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**Differences in musical expression “richness” perceptions among early childhood and elementary school teachers: Using multi-vocal visual ethnography methods**

Yurina Watanabe, Aichi Gakuen University, Japan

This study focused on the “richness” of musical expression during the transition from early childhood education to early elementary school, and explored elements for smooth collaboration from the perspectives of music, expression, and development. Differences in music expression education values have been found between early childhood and elementary school teachers (Nisikawa,2021); this makes mutual understanding and dialogue difficult (Noguchi,2007) and hinders continuing education. Based on the theory of "bridging programs" linking early childhood and elementary education in Japan, this study was conceived from the solution of the problem that in music expression education, collaboration across teacher affiliations is difficult (Mimura,2004), and smooth and fulfilling education is not realized (Sakai,2011). Relying on the multi-vocal visual ethnography method developed by Tobin (1989), edited videos of children’s musical expression at each educational site were watched, and both sets of teachers conducted group debates on the perspective of “richness.” A qualitative coding approach conceptualized participants’ values and developmental views of musical expression. Ethical considerations, such as participants’ consent and ensuring anonymity, were made for in accordance with the code of ethics of the affiliated university. The results revealed that differences in developmental "richness" and "musical values" between early childhood educators and elementary school teachers were factors that inhibited smooth
collaboration. A basic theoretical framework for the creation of musical expression education programs with continuity and consistency to connect early childhood and elementary school education was proposed.

connection between early childhood education and elementary school education, expression section, music classes, musical expression, teacher’s perception of

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Children's participation in oral storytelling in early childhood education and care
Agneta Pihl, University of Gothenburg, Sweden

The aim of this research is to generate insight into preschool children’s oral storytelling, with a focus on the processes of sense-making in children’s participation in oral retelling activities. Previous research has recognized oral storytelling as having significant benefits for children’s education and various important features of their development such as literacy, identity, and empathy (Hibbin, 2016). However, it has been a lack of focus in education as well as in research on the processes and the interactional aspects of storytelling in children’s everyday conversation (Theobald, 2016). This research takes its departure in a sociocultural perspective on communicating, learning and narrating grounded by Vygotsky (1896-1934) and developed by Neo-Vygotskians (c.f. Bruner, 1986; Säljö, 2000; Wertsch; 2007) This qualitative research is positioned in the field of Early childhood education and care. 15 preschool children’s (aged 3-5) oral retellings have been videodocumented in situ and analyzed according to interaction analysis. This research follows the ethical guidelines of the Swedish Research Council (2017). All caregivers have been informed and have given permissions for their children to participate. Preschool children who participate in storytelling activities become competent storytellers, responding to the listener’s and the psychology of stories. They remember details from stories and use gestures and sound symbolism to make sense of stories. The study illustrates ECEC as an arena with a holistic ambition. Allowing children to participate in reciprocal storytelling activities using all their communicative resources is essential and crucial to a preschool striving towards social justice.

participation, oral storytelling, early childhood education and care (ECEC), children, social justice

This application discusses a completed piece of research.

Drama in education (DIE) made the science visible
Chiu-Hsia Huang (1), Ya-Ling Chen (1), Holger Haas (2); (1) National Pingtung University, Taiwan, (2) Helleum Children Research Center, Germany

The investigation aimed to explore the experiencing satisfaction of sixty-three participants who participated in Drama in Education (DIE) integrating into doing science with practices. Post-Anderson (2008) claimed that DIE allowed learners immerse into free, enjoyable learning environment without conflict. Weisberg et al., (2016) encouraged learners to explore science-playing by predictions, observations, practices and validations. Chen and Huang (2022) stated that pre-service teachers’ reflections on implementing DIE to motivate learner’s science-play. Main theoretical concepts were based on Howell, et al., (2023), Austin and Sullivan (2019), and Lin’s (2019) perspectives. Implementing the online questionnaire with anonymous for collecting and dealing with data by descriptive statistics analysis. Pseudonyms have replaced the names of participants. To overcome the challenges by English, all participants tried to use bilingual instructions through learning process. Results incorporated that most of sixty-three participants strongly agreed (75%), 20.73% agreed, 2.09% represented commonly, 2.18% disagreed and none strongly disagreed with the experiencing satisfaction about DIE integrating into doing science with practices. Of 34.92% participants were lacking of opportunities in experiencing with improvisation and disconnecting with similar DIE integrating into doing science with practices. Due to the promising results, DIE integrating into doing science with practices could be an alternative strategy to stimulate the learners’ interests, attitudes, skills in science, even other science-related subjects. It could provide young children more similar activities to promote their learning efficiencies in science. Therefore, it is very necessary and important to make the science visible by DIE.

improvisation, science, drama in education, STEAM, pre-service teacher
Supporting early childhood teachers’ wellbeing through positive psychology in Greece*
Vasilis Grammatikopoulos, Anastasios Markou and Anastasia Vatou, International Hellenic University, Greece

This study investigated the effects of a positive psychology’s (PosPsy) intervention program - PERMA model - on early educators’ burnout and job-satisfaction levels in Greece. The association between early educators’ psychological empowerment and need for managing psychological burden is seldom explored (Buettner et al., 2016; Whitaker et al., 2015). Relevant references are also missing from official education policy worldwide (Cumming et al., 2020). Teachers’ ability to cope with stressful working conditions is related to their ability to balance work demands and available resources (McCarthy, 2019). PosPsy interventions aim to empower & support teachers through the development of effective socio-emotional competencies (Buettner et al., 2016). Teachers received training on PERMA model (Seligman, 2011), which is a PosPsy’s framework aiming to teachers’ wellbeing (Falecki & Mann, 2021; Vatou et al., 2021). A sample of 91 teachers participated in this study and filled in MBI-ES (Maslach et al., 1996) and ESI (Koustelios & Bagiatis, 1997) questionnaires before and after the intervention. This study followed the principles outlined in the current European legislation on the educational research and it was approved by the Research Ethics Committee of the International Hellenic University. All participants were informed about the purpose of the study and provided written consent. Results showed statistically significant differences of personal accomplishment and working conditions for the experimental group. Implementation of PosPsy interventions could improve educators’ wellbeing and educational systems as well (Cadima et al., 2021; Charalambous et al., 2021; Dreer, 2020).

*This study was partially supported by a European Commission’s Grant (626146-EPP-1-2020-2-EL-EPPKA3-PI-POLICY)

positive psychology, burnout, job satisfaction, preschool teachers, teachers’ wellbeing

Higher education qualifications for early childhood development (birth to four) educators: Investigating the conditions needed for successful policy implementation
Keshni Bipath and Francinah Masola, University of Pretoria, South Africa

This study investigated whether the Policy on Minimum Requirements for Programmes leading to Qualifications in Higher Education for Early Childhood Development Educators, developed by the South African Education Department in 2017 was a measure needed in order to improve the quality of ECD programmes. In South Africa, vast majority of ECD educators (47%) and assistant educators (87%), responsible for delivering ECD programmes for early learning, care and stimulation of babies, toddlers and young children do not have any qualifications in ECD (DBE, 2018). Complexity theory provides a framework of analytical concepts which enable a coherent understanding of “what conditions need to be in place for sustainable, positive, system-wide change and development in education” (Mason, 2014:2). A pragmatic paradigm, using an explanatory sequential mixed method research design is used. A mixed methods approach using a questionnaire, an open-ended questionnaire and interviews were used. Ethical principles, namely, voluntary participation, privacy, anonymity and confidentiality and no harm to participants, were adhered to. The poster discusses how the theoretical principles, concepts, and tenets of complexity theory construct an understanding of how the identified gaps and challenges for successful implementation of the policy can be addressed. Policy recommendations for ECD could be bottom up, rather than top down. Standardized qualifications from reputable Institutions, with the assurance of employment, decent salaries and infrastructure development of ECD centres would prove that this policy is not just another false promise that ECD, the great equalizer, is an unreachable goal.

new policy in South Africa, early childhood development teacher qualifications, complexity theory, mixed methods study, qualification or care

Visualization of understanding children by caregivers and parents in Japan
This study identifies differences in the way caregivers and parents perceive the children and examines factors that promote their mutual understanding. In previous studies, it has been pointed out that differences in the perceptions of caregivers and parents can cause communication difficulties (Katsuura & Ueda, 2021, Chang & Mashimo, 2017), and one of these differences is the need to examine how they each perceive the children. This study approaches the question of whether the theoretical concept of "understanding children," which is considered the essence of childcare expertise, can function as a core framework for mutual understanding with parents. This study targeted a group of caregivers and a group of parents. Each group watched a video of children playing and then conducted a discussion on the video. This study utilized the method of Multi-vocal Visual Ethnography. This is a research methodology for exploring what is difficult to visualize. The narratives obtained through the discussions were analyzed with SCAT (Steps for Coding and Theorization). Participants were informed of and consented to the anonymity and were given the opportunity to withdraw from the study at any time. While caregivers perceive children based on their knowledge and experience, parents perceive children based on the image of their own children. Only caregivers were able to perceive individual children in the context of their relationships with other children. Parents need opportunities to learn about the expertise of the caregivers, and caregivers and parents need to be willing to recognize differences in their understanding children.

understanding children, childcare expertise, mutual understanding, family support, qualitative study

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

A longitudinal study on gender balance and gender role represented in Japanese educational children’s television series
Kozue Matsuda, Musashino University, Japan

This study aims to clarify the gender balance and gender roles represented in Japanese educational children’s TV series through video analysis. Young children acquire stereotype-based gender role consciousness through play in ECEC and media such as television program content (Meland 2017, Witt 2000, Lamer et al.2020. The theoretical framework of this study is that children have the agency to construct gender role consciousness according to the social context surrounding them (Fujita 2015). This study used qualitative research methods to analyze program videos, a television series broadcast in Japan for over 60 years since 1959. This study focuses on 30 program videos broadcast from 1992-2021, and the presenters’ gender balance and representation of the program content are discussed. This study is based on video material from public broadcasting. Ethical procedures, including portrayal rights, were followed. The findings suggest that in this program, the presenters have been one male and one female, thereby maintaining gender balance. This pairing may have contributed to the perception of the image of men taking care of young children. However, male presenters often spoke first and made significant content statements more often than female presenters. In addition, presenters tended to wear clothing in colors and designs biased by gender. These elements were reproduced in children's play in ECEC. Young children watch TV programs and reproduce their features through their own agency in their ECEC play. These findings indicate that non-verbal messages about gender roles need to be considered in children’s TV programs.

gender balance, gender role, children’s TV program, Japan, children’s agency

This application discusses a completed piece of research.

A gap and needs analysis report for early childhood and care courses in Palestinian higher education institutions
Maria Ampartzaki (1), Michail Kalogiannakis (1), Eyad Abu Baker(2), Bayan Shobaki (2), Samar Abu Shamat (3); (1) University of Crete, Greece, (2) Al-Quds Open University, Palestine, (3) Al-Rawdah University College, Palestine

Our poster presents part of a gap and needs analysis for providing Early Childhood Education and Care courses in Palestinian Higher Education Institutions (HEIs). Research indicated that the teachers' educational qualification was linked to providing a quality preschool learning environment in the Palestinian ECEC settings (Jawabreh, Danju, & Salha, 2020), a finding also confirmed by international studies (Manning et al., 2017; Pianta et al., 2016; Basok et al., 2013). The "Enhancing Early Childhood Education and Care in Palestine" project (Abbreviation: CARE project) conducted a gap and needs analysis for the Palestinian HEIs that reviews the
needs of the Palestinian universities offering ECEC courses, the role of the Government and the staff needs in Palestinian ECEC institutions. This analysis is an inter-paradigm study as it adopts a mixed-methods approach. It triangulates data collected by questionnaires, focus group interviews, document analyses, small local surveys, and case studies. The quantitative data underwent statistical analysis, and the qualitative data were subjected to qualitative analysis. Research participants were provided with a) information about the scope of the research and data protection procedures, and b) guarantees of anonymity to give written consent. The results highlighted the need for up-to-date professional or degree courses focusing on children’s rights, contemporary issues and innovative approaches that embrace children’s and staff’s agency in ECEC, among others. They also brought up the need for adaptations tailored to Palestinian culture and Palestinian children’s challenges. This analysis contributes insights valuable to developing ECEC Higher Education courses and ECEC policies in Palestine.

Advantages and challenges of forest kindergarten teachers in the U.S.

Ji Youn Shin (1), Jean Lomino (2), Carlton Swafford (3); (1) Sahmyook University, South Korea; (2) Forest School Teacher Institute & Nature Kin Pocket Forest Schools, United States; (3) Southern Adventist University, United States

The purpose of the study is to describe the advantages and challenges of Forest Kindergarten teachers in the U.S. Studies concerning the effects of Forest Kindergarten on children (Orr & Dorfberger, 2022) have been conducted, but few are available concerning the advantages and challenges of being FK teachers. Research manifested that teachers are the most important factor in quality education (Egert, Dederer & Fukkink, 2020). It is necessary to identify the characteristics of quality FK teachers to increase the positive perception of Forest Kindergarten. Qualitative data were collected from 8 FK teachers, using semi-structured interviews, observations, and document analyses. Data were analyzed based on thematic analysis about the advantages and challenges of teaching in FK. A consent form and information sheet were given to each teacher, with an option to withdraw from the study. Advantages for teaching in FK: 1) not test-driven 2) better relationships with children, 3) children’s excitement to be outside, 4) with lower stress children’s behavior was more positive, 5) nature provided the teaching tools, 6) more individual time with children, 7) physical exercise, 8) teachers were facilitators, co-learners. Challenges: 1) covering curriculum, time constraints (public school), 2) children improperly dressed, 3) safety issues, 4) impact on the land, 5) facilitators vs. teachers, 6) more support from administration 7) ongoing training. This research will contribute to promoting and energizing Forest Kindergarten in the United States by confirming teachers’ perceptions of greater joy and satisfaction when teaching children in FK.

Daily lives of young children from socially disadvantaged class in the COVID-19 pandemic

Hwewon Kim, Yeungnam University, South Korea

The purpose of this study is to identify the lives of children from socially disadvantaged class in the COVID-19 pandemic and analyze structural causes. Through the research results of previous studies, it can be seen COVID-19 is having a negative impact on children's psychology, body, and daily life (Lee, 2020; UN, 2020). However, most of the focus is on elementary and secondary school students, so there is a limit to understanding the impact and situation of vulnerable children. Sociocultural theories describe learning and development as being embedded within social events and occurring as a learner interacts with other people, objects, and events in the collaborative environment (Vygotsky, 1978). Sociocultural theories are based on the social constructivist paradigm. This study was based on phenomenology, which is a qualitative research design to highlight experiences of young children. The participants of this study were 7 children aged 3-5 years from socially disadvantaged class. I visited classrooms and observed them during 3 months. Also I interviewed their parents and teachers. After obtaining IRB approval, a consent form with a cover letter was sent to the children’s primary caregivers. The cover letter included information about the purpose and procedures of the study and requested written permission to allow their child to participate. The children have had fewer opportunities to engage in outdoor activities and have diverse experiences. They were spending more time playing games on smartphones at home. Support for providing diverse activities for children from socially disadvantaged class is needed to supplement the role of parents.
This application discusses a completed piece of research.

I 17

**A case study on preschool children's interactions with AI voice assistants**
Hae Young Kim, Kyungbok University, South Korea

This research project aims to explore the interactions between children and AI voice assistants and suggest their educational meanings. Voice interfaces following the development of artificial intelligence technology affect human-computer interaction in how children use and perceive information (Lovato & Piper, 2019). Child-computer interaction involves specific types of technology, language exchange, and social context (Read & Markopoulos, 2013). The encounter between human and non-human actors creates new meaning through a discontinuous sequence of complicated networks and events (Latour, 2005). Qualitative methods were used in this study. The research method used in this study is case study research (Creswell, 2013). During free play time, interactions between children and AI voice assistants were observed, and data were collected through interviews and field notes. Consent was obtained from the children, parents, teachers, and directors, and pseudonyms were created to ensure anonymity. An expedited review was approved by the Institutional Bioethics Committee of Duksung Women’s University, and consent was obtained from the children themselves, as well as their parents, teachers, and directors. The collected data were analyzed through open coding and the following three broad categories were constructed: Believability of AI voice assistants in conversation, Phono Sapiens meet AI voice assistants, and Play with AI voice assistants. In interactions with children, AI voice assistants have shown believability in embodying particular personalities through anthropomorphization. The concept of ‘Phono Sapiens’ represents an individualized imagination of AI voice assistants through words and pictures, and encompasses various forms of play and affordances with nonhuman entities.

digital play, voice user interface, AI voice assistant, child-computer interaction, qualitative study

This application discusses a completed piece of research.

I 18

**Curious and happy children**
Hörður Svavarsson, Kenning, Iceland

This study aims to analyse the content of emails that teachers of one preschool class sent to the children's parents over a school year and analyse the content. Constructive teacher-parent communication has been recognised as part of an important teacher-parent-partnership (Kuusimäki et al., 2019). Including sharing information about educational methods (Barnett et al., 2020). Digital communication between teachers and parents is under-researched (Erdreich, 2021). Theoretical background relates to theories the school as a system of communication and interactive between three protagonists, children, teacher’s, and families (Cagliari and Giudici, 2001) as well as theories on STEAM (Wahyuningsih, et al., 2020). The method is based on content analyses as well as action research (Hatch, 2007). The data consists of a weekly emails to parents, with documentation of the children’s learning and daily life. Those emails were systematically analysed and interpreted to identify patterns, themes, and relationships from the perspective of STEAM education and play. All parents sign an informed consent on how to use the data, if the preschool doesn’t get consent from a parent, photos with her/his child is not included in emails. Children are aware of teachers photographing and can refuse to be photographed. It is common for children and teachers interpretate documentation together. Findings indicate that children used the materials creatively, cooperated, and were curious, focused, and happy during their time. Findings are a platform to discuss use of digital communication with parents and the profession.

preschool, STEAM, Reggio Emilia, children’s participation, democracy

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

I 19

**Affecting moments in joint play: An attempt to approach children's worlds of experience**
Theresa Hauck, Universität Wien, Austria

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
The PhD study explores the question of how children experience joint play with ECEC teachers. In the past, it has often been discussed whether adults are able to comprehend the child’s approach to the world at all (Stieve, 2011; Meyer-Drawe & Waldenfels, 1988) or whether they should minimise their influence on the child’s free play due to the threat of misunderstandings. (Avenstrup & Hudecek, 2019; Pack, 2016) The focus of the described study is not the achievement of the educational goals set by pedagogues for play, but the child’s sensory and pre-reflexive world of experience (Schäfer, 2011; Lippitz, 1983). The study follows a phenomenological paradigm, according to which the subject is assumed to be a corporeal and affectable being. In addition to the work with phenomenological vignettes as exemplary descriptions of experiences, the explicit and implicit (experiential) knowledge about play of interviewed children and teachers will be reconstructed with the documentary method (Bohnsack, 2014). Children are seen as voluntary co-researchers who, alongside their parents, give their informed consent to research conversations about play-experiences, can stop conversations at any time, and decide in which areas of kindergarten observations should take place. In order to be able to support children in their play and discovery, not only their actions and learning progress should be investigated, but also what appeals to, surprises and moves them in which manner. The study is intended to open up a discussion space for professionalisation options that can provide professionals insight and understanding of children’s worlds of experience.

children’s worlds of experience, joint play, affectable being, phenomenological vignettes, documentary method

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

I 20

Insights: Quality in early education - Learning from inspection for improvement in Ireland
Maresa Duignan, Department of Education, Ireland

This poster presents an overview of the Insights – Quality in Early Years Education webinars that were developed by the Inspectorate of the Department of Education (DE), Ireland in 2020 to make visible effective practice in early childhood education. The webinars are embedded in the inspection for improvement paradigm that underpins the DE Inspectorate’s approach. They espouse co-professional dialogue and respectful engagement as foundations for quality improvement in education settings (DE Inspectorate, 2022, Ehren, 2016) They are grounded in Experiential Learning Theory (ELT) which emphasizes the importance of experience and its role in the learning process (Kolb, 1984). Each webinar harnesses expertise and experience of educators to support internal and external evaluation and a ‘quality improvement spiral’. The research paradigm combined grounded theory, where inspectors observations of practice and professional discussions on the topic were recorded with heuristic research methods involving iterative thematic analysis of data arising from inspection. The findings of these processes were then combined with relevant national and international research evidence, references and resources to generate webinar content to engage the audience with the topic. All materials and content in the webinars are screened for adherence to relevant ethical and data protection guidance. To date over 100 publications have been completed https://www.gov.ie/en/publication/c71c0-insights/#introduction covering 16 distinct topics. Monitoring of engagement with these publications shows that they have successfully engaged the target audiences; parents and educators and have the potential to impact positively on capacity building for quality improvement across all early education settings.

quality, collaborative practice, professionalism, innovation, inspection for improvement

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

I 21

When Tommy wore a tutu: Investigating early childhood educator perspectives on supporting children’s career aspirations
Suzanne Grissell, Southern Cross University, Australia

This research investigated children’s career experiences in early childhood (EC) services in Australia from educator perspectives. Young children demonstrate awareness of adult careers learned within their socio-cultural context. Educators play an integral role in expanding career discourse, thus developing children’s broader understanding of, and ‘literacy’ around the world-of-work and potential career aspirations. Are educators expanding children’s career understanding often based on familial role-models and gender-appropriateness (OECD, 2020)? This research adds evidence how EC educators enhance young children’s career awareness. Children’s career development research has focused predominantly on teenagers, with limited studies under 8-year-olds (Watson et al., 2015), however children as young as 3-years confidently identify suitable career choices (Gottfredson, 1981). Systems theory was used as the theoretical framework (Bronfenbrenner, 1977; McMahon & Patton, 1995) to explain the critical role educators play as
one of children’s first external societal influences. Underpinned by a social constructivist paradigm, three EC services in regional Australia participated, with data collected utilising the mosaic approach (Clark & Moss, 2017). Data collected included educator interviews, an audit of service resources, books, program examples and photos. Participants were given University approved "Information sheets" outlining research conditions, risks involved and confidential treatment of their participation. "Consent forms" were signed showing their choice to participate. Initial findings highlight educator’s view their role as positive agents for social change and are inspired to introduce equitable, diverse 21st century aspirational career choices. This research supports Australia’s Blueprint for Career Development framework, affirming children’s career development begins in EC (Commonwealth of Australia, 2022).

children’s career awareness, educator roles, career aspirations, equitable career development, mosaic approach

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

I 22

Why is there a need for psychological education of prospective pre-service teachers for pre-primary education?

Zlatica Zacharová and Miroslava Lemešová, Comenius University in Bratislava, Slovakia

The aim of this paper is to highlight the need for psychological training of ECEC teachers, especially in the area of personality development and social psychological competencies. Working in ECEC is challenging. Therefore, there is a need to increase the psychological literacy of prospective teachers. Part of Psychological Literacy is the capacity for insight and reflection on behavior (McGovern et al., 2010) and the adaptive use of psychological knowledge (Cranney&Dunn, 2011). The APA considers the development of psychological literacy to be a key goal of psychology education, not only for psychology majors, which is goal of the KEGA035UK-4-2022 project. A 7-item Likert scale focusing on the perceived benefits of studying psychology (Sokolova, 2013) was completed by 243 female preservice education students. Using exploratory factor analysis, 4 factors of perceived benefit were extracted: 1) for the ECEC work domain; 2) personal development; 3) development of social-psychological competencies; and 4) development of scientific thinking. Students participated in the data collection voluntarily, they did not provide information that could be used to reveal their identity. Using exploratory factor analysis, 4 factors of perceived benefit were extracted: 1) for the ECEC work domain; 2) personal development; 3) development of social-psychological competencies; and 4) development of scientific thinking. It seems that prospective teachers are aware of the need for psychological knowledge for working in ECEC and need to be provided with quality opportunities not only for scientific thinking but also for personal development and an open mind for scientific curiosity in the teaching process.

psychological training, scientific curiosity, Psychological Literacy, ECEC teachers, teachers for pre-primary education

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

I 23

Effects of a professional development program on early childhood educators’ instructional support in nature-based education

Anne-Sophie Parent, Caroline Bouchard, Christine Hamel and Michèle Leboeuf, Laval University, Canada

This study evaluates the effects of a professional development (PD) program based on activity theory on early childhood educators’ instructional support (IS) in nature-based education. IS represents a challenge considering its low quality within group interactions (Lemay et al., 2017). Multiple PD programs target to enhance IS quality, but their effects appear moderate. Participants in most of those are told what to change, instead of reflecting on their IS practices, an effective program characteristic (Markussen-Brown et al., 2017). In this study, a PD program was implanted based on Collaborative Video Learning Laboratory (Lussi-Borer and Muller, 2016) in which educators’ analysis of their own and peers’ practices lead to transformation. It occurred in nature-based education which promotes child-centered practices (Bjørgen, 2015). Those are positively associated with higher IS quality (Hu et al., 2017). An explanatory sequential mixed method design was used in this pragmatic study. Sixteen educators were divided in experimental and control groups. Each participant was observed with the CLASS (Pianta et al., 2008) to assess IS quality before and after the program. Educators and children were briefed before each video recording of interactions between themselves during a typical morning. Children’s parents previously accepted the use of those videos within the PD program. According to ANOVA, IS quality in both groups was not statistically different before it, but they were after. Explicitation interviews (Vermersch, 2007) with three educators will be analysed to understand PD regarding IS. Results promote a better understanding of favourable programs aspects to IS in nature-based education.
This application discusses an ongoing piece of research and findings may be preliminary/emerging.

**Nature-based early childhood education, a fertile ground for instructional support in Quebec early childhood centers? Yes, but...**
Caroline Bouchard (1), Anne-Sophie Parent (1), Michèle Leboeuf (1), Lise Lemay (2), Nathalie Bigras (2), Martine Asselin (1); (1) Laval University, Canada, (2) University of Quebec in Montreal, Canada

The purpose is to investigate the Instructional Support (IS) offered by early childhood educators who work in nature-based education (NBE; e.g., woodland, field). The quality level of IS tends to be low, so much so that it does not provide a significant influence on young children’s learning (Burchinal et al., 2010, 2016). However, NBE could provide fertile ground for the quality of IS in young children, because of the principles that frame it (e.g. loose parts, child-centered approach). The Teaching through Interactions model (Hamre et al., 2013) underlines the conception of IS. As part of a pragmatic paradigm and by using an embedded research design, the quality of IS (scores) was observed in 20 groups of 3-5 years-old children from 8 early childhood centers in Quebec (Canada), with the CLASS (Pianta et al., 2008). Afterwards, a semi-structured interview was also conducted with the educators of these groups. Their words were analyzed considering the indicators of the IS (e.g., open-ended questions). All participants (educators and parents) signed a consent form. The children gave their verbal consent to their educator before proceeding with the observations. Preliminary results indicate that 6/20 of the educators stand out with the IS score that is above the recommended threshold of 3,25/7. Their comments shed light on how NBE is conducive to IS for early childhood centers. These results will be discussed in relation to the contribution of the pedagogical principles of nature-based education to IS, for the purpose of orienting policies in education, public health, etc.

**What emerges when the youngest children in kindergarten get to explore the sensory technology Makey Makey and micro:bit?**
Hannah Belsvik Hansen and Liv Ingrid Fjellanger, Western Norway University of Applied Sciences, Norway

This poster presents findings from a study that examines what happens when the youngest children in kindergarten (0-3 years) get to explore the sensory technology MakeyMakey and Micro:bit, in various sensory objects. Research shows that the most important barriers for staff to adopt technology are structural limitations and perceived usefulness (Buchanan et al. 2013), but also perceived ease of use (Davis 1989). Some staff argue that digital tools are incompatible with the child’s world of play (Kvinge et al. 2010). Research highlights the importance of time to practice new technological skills (Parette et al. 2013). The concept of digital practices is approached with a socio-materialist lens (Orlikowski, 2017). The research explores both children’s exploration of technology, and children’s reactions to the sensory objects they encounter. The study is qualitative (Postholm & Jacobsen, 2018), and analysis of video observations, interviews and reports from the staff in the kindergarten form the basis for the findings. The etical considerations has been to study the children through naturalistic observation methods in their everyday social and cultural context (Tudge & Hogan,2005). The results show that the objects stimulated exploration. The objects created a sensory and literacy environment (Gjems, 2019; Høgård, 2019). The objects stimulated social play where toddlers actively contribute to their own process of socialization (Løkken, 1996; Sandvik, 2000; Johannesen, 2002; Kjørholtog Os, 2019) Implications for practice and policy suggest strategies to include digital practices in kindergartens need to consider their value in relation to childrens play.

**How did 5-year-old children read picture books during their free time in different types of ECEC institutions of Japan?**
Xiaoyun LU, Teikyo University, Japan
The aim of the study was to analyze how 5-year-old children in different types of ECEC institutions read picture books in their free time. While some studies have investigated children in Japanese kindergartens reading books in free time between activities, and in free time after an activity or after lunch (Hyakutake, 2021; Yokoyama, 2006), there are still few studies focusing on nursery schools and comparing them. This study was in referred to the informal learning theories (Crowley et al., 2014). As we observed the children’s reading during their free time, their reading was considered informal. The participants were 5-year-old children from two classes. Class A was from a public kindergarten in Tokyo, and class B was from a nursery school in Kanagawa, Japan. Participant observation was conducted once a week, and a video camera was used to record the children’s reading. The analysis focused on the children’s reading acts as a way of informal learning. Permission for the observation, recording and the use of data was acquired from the ECEC institutions and the parents. The privacy of the children was strictly protected, and the data was allowed to be used in research only. The results indicated that children’s reading acts were similar between the two ECEC institutions. However, the children in the nursery school had more time to read during the late afternoon. It demonstrated that both teachers from different ECEC institutions and primary schools need to understand the importance of the reading environment during children’s free time.

**Preschool quality assessment and child outcomes in Norwegian toddler groups**

Lisa Karlsen (1), Ratib Lekhal (1), Siri Steffensen Bratlie (1), Veslemy Rydland (1), Elisabet Solheim Buøen (2), Deborah Lowe Vandell (3); (1) University of Oslo, Norway, (2) Regional Center for Child and Adolescent Mental Health, Norway, (3) University of California, Irvine, United States

Using The Classroom Assessment Scoring System (CLASS) Toddler, we investigate whether preschool quality predicts changes in toddlers’ vocabulary and self-regulation skills. As one of few using CLASS-Toddler, this study answers calls for the assessment of outcomes aligned with CLASS (e.g., Pianta et al., 2020), and builds on past studies (e.g., Thorpe et al., 2020) by observing the same activities across groups. Doing this, our study represents a wider breadth of the preschool day and a more comparable assessment of quality than many previous studies. Adult support for learning and development, from a sociocultural perspective is used. With a post-positivist approach, 88 toddler groups were observed using CLASS-Toddler. During this timepoint, children (N = 315) in these groups were assessed on their vocabulary and self-regulation skills. These outcomes were tested again seven months later. Using Stata, mixed effect linear regression analyses evaluated whether preschool quality measured with CLASS-Toddler predicts changes in children’s vocabulary and self-regulation skills. Consent was granted by staff and parents on behalf of their children before data collection. Research assistants were trained to assess toddlers’ willingness to participate during data collection. Consent and participation was discussed with each child. All participants were assigned unique numeric identifiers. We found good variation in scores across groups and a significant positive relationship between preschool quality and vocabulary skills. Preschool quality was unrelated to self-regulation. These mixed findings indicate a need for more research with toddler groups. Our findings have implications for the alignment of CLASS-Toddler with child outcomes.

**What is possible to learn in preschool in mathematics?**

Selma Music, University of Gothenburg, Sweden

The purpose of the study is to identify mathematical learning opportunities in planned activities in preschool. The planned activities have been designed with problem solving as a starting point. Problem solving in this study is defined as tasks that are open and possible to solve in several different ways. Clements and Sarama (2004) conclude that children participating in problem solving activities may facilitate mathematics learning, the development of cognitive processes, and increased motivation, but may also facilitate social and cultural knowledge. Variation theory is used as a theoretical basis in the study, and it enables the identification of children’s experience of the mathematical content and detects which aspects of learning objects children distinguish. The design study as a research method has been applied to investigate people’s experiences of the environment found in the research activity
(Johannesson & Perjons, 2012). Video observations were carried out at a preschool, which were analyzed using variation theory. Guardians of the children have received oral and written information about the study as well as information on how the collected data will be processed during and after the course of the study. Guardians gave their written consent for children's participation in the study, but children were also asked if they wanted to participate. The preliminary results show that planned teaching can create opportunities for mathematics learning in preschool and show which aspects of mathematics appear during the activities. This knowledge can contribute to purposeful teaching in mathematics that prepares children for further education and everyday life.

**mathematics, preschool, problem solving, Variation Theory, children's education**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**Reconsidering cultural perspectives on early childhood education and care in Japan through reading of episodic records**

Tomoko Hashimoto-Higashimura, Sakiko Sagawa and Matsuka Koga, Kyoto University of Education, Japan

This study aims to clarify cultural perspectives on ECEC in Japan through a Swedish researcher’s reading of an episodic record written by a Japanese kindergarten teacher. Although the importance of “play as learning” (Nilsson et al., 2018) in ECEC is widely recognized, there seems to be something unique about the Japanese perspectives on it. This study is based on “the discourse of meaning making” (Dahlberg et al., 2013) as a theoretical framework, focusing on how Japanese teachers collaboratively create cultural meaning. In this study, we followed the method of video-cued multivocal ethnography (Tobin et al., 2009), although we used episodic records instead of videos. In Japan, episodic records are generally utilized for teachers’ reflection and training. We asked a Swedish researcher to narrate her reading of an episode written by a teacher and compared it to the readings of the writer’s colleagues. The consent of all the participants was obtained. In the episodic record, the child’s actions (e.g., touching the objects) were collectively described with the word “playing”. The Swedish researcher suggested using words such as “exploring” and “experimenting” instead of “playing”, but the Japanese readers asked for a detailed description of the behavior, including how the child was touching. While the Swedish researcher equated play with exploration, the Japanese teachers believed that it was important to return to the sense of the writer who was feeling the child’s physical sensations. Putting implicit cultural values into words leads to reevaluation of local practices while placing them in a global context.

**cultural perspectives, ECEC in Japan, play and learning, episodic records, teachers’ reflection**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**Exploring the role of imagination in thinking, learning, playing and making of young children in early childhood education**

Hanneke Saaltink (1) (2), Barend van Heusden (1), Marijn van Dijk (1), Annerieke Boland (3); (1) University of Groningen, (2) IKC de Vindplaats Amsterdam Children Centre, (3) University iPabo, Amsterdam, Netherlands

This research aims to investigate how ECE can take into account the imaginative thinking in artifacts which is characteristic for young children. Building on the culture theory of van Heusden (Dorsten, 2015; van Heusden & Gielen, 2015), imagination considered a basic cognitive skill that plays an important role in the development of young children. The thinking of young children is imaginative, rooted in experience and connected to action (Bodrova & Leong, 2019; Nelson, 2009). The images, sounds, gestures, etc. that constitute imaginative thinking are conceptualized as artifacts (Dorsten, 2015; Kress, 1997). Following up on an exploratory literature search (Saaltink et al. 2022), the research presented is a scoping review, according to the PRISMA-ScR format, of the literature on children’s development of imaginative thinking in ECE, and teachers’ support of this development. The literature on the extent, range and nature of imaginative thinking in ECE will be systematically examined. Thus, justice is done to the variety and diversity of children’s voices and perspectives. Various studies describe approaches corresponding to artifact-thinking, e.g., child-created props (Germeroth et al., 2019) multimodal literacy (Pahl, 2017), the impression-expression cycle (Laevers, 2019), playing with open ended materials (Kiewra & Veselack, 2016) and the ‘hundred languages of Reggio Emilia’. Imagination seems to increasingly structure thinking and learning of children in ECE (Fleer, 2021; Nilsson et al., 2018). The findings suggest that imaginative thinking in artifacts can be a bridge toward stages of abstract thinking. Teachers who learn to support artifacts-thinking recognize the added value of imagination for development.

**imaginative thinking, artifacts, multimodal making, imaginative play, learning by imagination**
This application discusses an ongoing piece of research and findings may be preliminary/emerging.

I 31

Effective management strategies perceived by daycare center directors: exploration of dialogues and wellbeing

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This study focused on the management strategies of nursery directors who were perceived as ‘efficient’. In Japan, concerns about the shortage and turnover of teachers have been increasing (MHLW, 2021). Improvement of ECCE quality and well-being for children and staff are key issues. Noguchi, et al (2023) have revealed the management strategies and made comparisons between kindergarten and nursery directors, and differences regarding directors’ experience, license, and careers. Our study was inspired by the ideas in the study ‘Effective and Caring Leadership in the Early Years’ (Siraj & Hallet, 2014), which focused on the process of team development. We devised a questionnaire that consisted of three parts, including a sheet where participants detailed their facilities’ characteristics, including the director’s years of experience and license held, and items asking them to rate their perceptions of the director’s management efficiency. Participants also completed a free writing section about strategies to manage professional development. Daycare centers were randomly sampled and data were collected from 835 facilities. I have followed the University’s ethical guidelines of co-researcher in conducting this research. Responses to the questionnaire were voluntary and anonymous. Many directors emphasized the importance of dialogues, created various opportunities using multiple strategies, including management of teacher assignments, timetables, and budgetary allowances. Their perspective was that children’s and teachers’ wellbeing are inextricably linked. The need for professional development training for directors and a support network for less experienced directors was suggested.

daycare center, director, management strategies, dialogue, wellbeing

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

I 32

Quality of emotional support and 5-years-old child’s inhibition in complex trauma situation

Stéphanie Duval and Elsa Tremblay, Laval University, Canada

Executive functions (EF), who are rapidly developing between 3-5 years-old, represent a predictor of development (Ribner et al., 2017). Inhibition, important EF’s component, enable to direct attention/thoughts/actions towards achieving a goal. It seems necessary to support inhibition in kindergarten, especially in children experiencing complex trauma (CT), because they have more EF challenges (Cowell et al., 2015). Consequently, it seems essential to focus on emotional support (ES) in classroom, a key component of the quality of interactions. This presentation will deepen knowledge on ES-focused practices that promote inhibition in CT situation. Duval et al. (2016) shown a link between the quality of ES in kindergarten and children’s EF. However, few studies documented link between ES-focused practices and children’ inhibition with CT. EF include working memory, inhibition, and cognitive flexibility. Different indicators are associated to ES (e.g., teacher sensitivity) (Pianta et al., 2008). CT can serve as a conceptual framework to understand the sequelae observed among children (Godbout et al., 2018). This presentation is theoretical. No ethical procedures were performed. Pears et al. (2010) suggest to focusing on children’EF with CT, due to the challenges in the first school years. To support the inhibition skills, interesting perspectives could be considered, such as the quality of caregiving (e.g., ES). In classroom, the quality of teacher’s support would be considered as a mediator between children’EF with CT and subsequent cognitive development (Blair & Raver, 2012). This project lays the groundwork on the ES practices that promote preschoolers’ inhibition with CT, to support their development.

effective functions (inhibition skills), preschool-aged children (3-6 years old), complex trauma, quality of emotional support, teaching practices

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Emotional conversations of the mothers and children in low-income and middle-income families
Pei-Ling Wang, University of Taipei, Taiwan

This study examined the emotion words, narrative styles and contents of 39 pairs of mothers and their children in low-income and middle-income families respectively. Family conversations about emotions are a critical channel by which children form their theory of emotions (Wang, 2001). Mothers in low-income families encounter continuous economic and social stressors (Garner et al., 2000). The children will not only imitate but also be affected by the emotional expression of their mothers (Hurrell et al., 2015). Emotion socialization may differ for low-income versus middle-income families. Vygotsky (1978) proposed that language is a thinking mechanism that serves as a pivotal bridge connecting an individual’s internal life with external society. Post-positivism guided the study. Mothers were instructed to talk to their children at home four events in which their children experienced happiness, sadness, fear, and anger respectively. The conversations were audio-recorded, transcribed and analyzed. The study had been approved by IRB of University of Taipei on May, 13th, 2016. All of the names mentioned were pseudo-names in this report. First, middle-income mothers and their children used more emotion words than low-income mothers and children. Second, middle-income mothers provided more repetition and elaboration for their children’s emotions across the four events. Third, most of the mothers in the two kinds of families rarely provided solutions for their children to regulate their negative emotions. More resources should be provided for mothers to learn to make suggestions for their children to confront and regulate their negative emotions.

emotion conversation, low-income mother, middle-income mother, narrative style, narrative content

Adaptation of parents with children transitioning to elementary school: Impact due to COVID-19
Sayuri Nishizaka (1), Yasuko Murakami (1) and Suzuko Ayano (2); (1) Kyoritsu Women’s University, (2) Komazawa Women’s Junior College, Japan

The purpose of this study was to examine the impact of the COVID-19 pandemic on the consciousness of parents with preschoolers, such as their expectations and concerns during the transition to elementary school, through pre-COVID and post-COVID comparison. Previous studies have revealed that the parents’ consciousness was based on three factors: "Worries about child’s school life," "Expectation towards a new lifestyle," and "Confidence to become a parent of a schoolchild." These factors were found to be influenced by whether the child was a first-born or later-born (Nishizaka et.al, 2018 ). Wildgruber et. al (2011) established a theoretical model of the parents’ consciousness during the transition in 3 distinct levels. In this study, the questionnaire was created by referencing the theoretical model. The questionnaire consisted of 65 items, including items regarding parents’ consciousness. 174 mothers of preschoolers were surveyed during the preschool years. Results were compared with data from the pre-COVID (2017 and 2018) studies. All participants were informed of the purpose of the study, guaranteed anonymity, and given the option to decline. "Expectation towards a new lifestyle" was higher in pre-COVID period than post-COVID period, and higher among parents with a later-born child. No differences were found in "Worries about child’s school life" and "Confidence to become a parent of a schoolchild" between pre- and post-COVID periods. The relationship between parents' difficulty in anticipating new lifestyle expectations, their children's adjustment during transition, and parental wellbeing needs to be examined.

parents’ adaptation, children’s school transition, COVID-19, mother’s consciousness, elementary school

The development and effects of early childhood democratic citizen education program based on project
YungEui Yoo, Sun Hee Yang and Mijeong Song, Soonchunhyang University, South Korea

The study aims to develop an early childhood education program that promotes democratic citizenship using a project-based approach, and to determine its suitability and effectiveness in early childhood education settings. Early childhood education
programs can play an important role in preparing young children to become democratic citizens and develop democratic values and attitudes, starting from infancy, according to Seefeldt (1997). Many scholars have emphasized the 5th revised early childhood education curriculum starting in 1992, including Kim Sook-ja, Ko Jeong-ri, Kim Young-ok, Choi Mi-sook, and Kim Yong-suk. There is an emphasis on democratic citizenship education in early childhood education. Therefore, a program has been developed to apply a social democracy citizen education program in early childhood education, and its composition system has been established through verification. As research participants, 5-year-old children and teachers from A Kindergarten were identified anonymously instead of using their real names. Participants, including the young ones, had the option to withdraw from the study at any time. Consent forms were obtained from parents and teachers. In addition to preparing young children to become members of democratic citizens, there is a need to focus on programs that guide them to live as democratic citizens in their daily lives and consistently apply them in early childhood education settings. Early childhood education experts’ efforts to provide young children with rich democratic experiences in their lives are expected to contribute to their growth as democratic citizens and ultimately realize the desirable vision of human beings pursued in the revised Nuri curriculum.

**democratic citizen education, project-based, young children, program development, program effect**

This application discusses a completed piece of research.

I 36

**Structural model verification of self-esteem, emotional labour, and happiness in early childhood teachers: The moderated mediating effects of serious leisure**

YunHo Jang, YungEui Yoo and MiLyang Kim, Soonchunhyang University, South Korea

This study examined several factors affecting early childhood teachers’ happiness, by analyzing the mediating effect of emotional labor and the moderating effect of serious leisure on the relationship between their self-esteem and happiness. The importance of happiness for early childhood teachers is further emphasized in that early childhood teachers must have a correct understanding of happiness in order to provide children with a correct perception and experience of happiness (Eunju Lee, 2010). The research on the relationship between self-esteem and happiness (Hwang, Tak, & Hong, 2013), the relationship between emotional labor and happiness (Cha & Lee, 2015), and the relationship between serious leisure and happiness (Cheng & Pegg, 2016) serve as theoretical evidence. The subjects include 316 early childhood teachers working in kindergartens and child care centers located at Chungcheongnam-do, Republic of Korea. It analyzed the data collected, by using SPSS PROCESS macro ver 4.1, model 59 (Hayes, 2017). The purpose of the study was explained to and a survey was conducted targeting teachers who expressed their willingness to participate in the research. The serious leisure moderated the relationship between self-esteem and emotional labor and between emotional labor and happiness. However, serious leisure did not modulate the relationship between self-esteem and happiness. This study is differentiated from the previous studies, in that it elucidated the moderated mediating effect of the serious leisure on the relationship among early childhood teachers’ self-esteem, emotional labor and happiness and is expected to be used as a theoretical ground for supporting programs.

**self-esteem, emotional labour, serious leisure, happiness, moderated mediating effect**

This application discusses a completed piece of research.

I 37

**Embodiment of the “non” of noncognitive skills in early childhood:Focusing on developmental characteristics in physical play**

Yuko Suzuki, Aichi University of Education, Japan

This study focused on early childhood physical play to embody the “non” of noncognitive skills from the perspective of age differences and development at ages 3, 4, and 5. The OECD (Organisation for Economic Co-operation and Development) and other organizations have reported that the development of noncognitive skills is influenced by the quality of childcare and play. However, there is little evidence regarding the determinants in the development process of such skills, or the mechanisms that lead to their acquisition; moreover, there are no materials contributing to educational interventions. This study was conceived considering the ambiguity of “non” in research and practice, where “non” is considered “a generic term for unquantifiable skills,” resulting in conceptual overlap and semantic vacuums. First, items considered “non” cognitive skills were compiled and selected. Then, a questionnaire survey listing these items was conducted among 1,724 randomly selected young children with proxy ratings by 862 kindergarten and day nursery teachers. Finally, exploratory factor analysis, simultaneous multi-population analysis, and covariance
structure analysis were performed for validation. This study was approved by the Research Ethics Committee, and consent was obtained from the target teachers for the protection of their personal information, anonymity, and guarantee of freedom to participate or withdraw from the research. The results revealed a factor structure of “non” cognitive skills and age differences, explaining the structure of transformation through divergence and convergence of “non” with age. These findings suggest that there are determinants in the development of "non" cognitive skills in early childhood.

noncognitive skills, social and emotional skills, factor analysis, simultaneous multi-population analysis, developmental characteristics

This application discusses a completed piece of research.

I 38

The PARTICIPA project: Professional development tools to support participation rights in early childhood education and care
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(1) CIS-IUL, University Institute of Lisbon (ISCTE), Portugal, (2) University Institute of Lisbon (ISCTE), Portugal, (3) InED, Escola Superior de Educação, Polytechnic Institute of Porto, Portugal, (4) University of West Attica, Greece, (5) Association of Childhood Education Professionals (APEI), Portugal, (6) University of Applied Sciences, Belgium, (7) University of Warsaw, Poland, (8) Democritus University of Thrace, Greece, (9) Hellenic Open University, Greece, (10) University of Maia, Portugal

This paper describes a professional development (PD) approach aiming to promote children’s participation in early childhood education and care (ECEC), through a massive open online course and self-assessment tools for ECEC professionals. The promotion of children’s participation rights in ECEC is essential to a democratic society, in addition to being an important criterion of ECEC quality (Sheridan, 2007). Children have the right to participate in all matters affecting them, freely expressing their views and having them considered (United Nations, 1989). Nonetheless, the effective implementation of children’s participation remains a challenge to ECE professionals, who are considered gatekeepers of participation (Gal, 2017). Therefore, PARTICIPA aimed to support professionals’ knowledge, attitudes, and practices towards the promotion of children’s participation. We describe the participatory process underlying the development of the tools which involved focus groups, interviews, and pilot studies with ECEC professionals from Portugal, Belgium, Poland, and Greece. We also share a study examining the feasibility of this PD approach. PARTICIPA committed to the principles of voluntary participation, informed consent, anonymity, confidentiality, potential for harm, and findings communication. The resources developed within the project and the participative process adopted are described in detail. Preliminary findings from the feasibility study, suggesting that this approach (a) positively influenced ECEC professionals’ beliefs, attitudes, and participation practices, and (b) may contribute to mitigate seasonal variations in process quality during the school year, are discussed. This PD approach is expected to influence participation practices and experiences in ECEC, leading to long-term improvements in children’s engagement and wellbeing.

participation rights, early childhood education and care, ECEC professionals, professional development, children's rights

This application discusses a completed piece of research.

I 39

Parent-child play & coping: Experiences of parents and young children during the pandemic
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Our case study explored young children’s play and emotions, as well as children’s and parents’ coping strategies during the time of the nationwide lockdown (March-May 2020) in Turkey. Play creates a safe environment for children to escape from worries and uncertainties, self-regulate emotions, and show empathy towards others (Chatterjee, 2018; Yogman et al., 2018). Children use toys or materials to express their emotions, even though they cannot verbalize them (Landreth et al., 2006). Our study is guided by Vygotsky’s Socio-Cultural Theory (1978) and the work of Sutton-Smith’s (2017) on approaches to children’s play. Five children and mothers were recruited, and the following instruments were used for data collection, including 1) Parent Play Preferences Questionnaire (PPPQ), 2) a semi-structured interview, and 3) recordings of mother-child tasks: a play-related storytelling task and a reminiscence task. The mothers filled out an informed consent form for themselves and their children, and the children’s verbal
assent was obtained. Mothers sought their permission for the audio recordings and photographs. To protect children’s privacy, we requested audio recordings of the conversations and at least one photograph of children’s play. Findings showed young children’s daily activities and play have changed, and both mothers and children experienced various emotions. Children were aware of the precautions taken to protect themselves from COVID-19, and they attempted to keep the play characters safe in their play. Our study highlights the importance of parent-child conversations and plays to cope with unexpected events in children’s lives and capture children’s voices in research studies.

children’s play, parents, coping, emotions, pandemic

This application discusses a completed piece of research.

I 40

The home visitor’s role in early intervention and prevention services for families with young children in Ireland: Exploring the importance of the family relationship

Sinead Matson, Maynooth University, Ireland

The overarching aim of UNITES research study is to profile & review all Home Visiting programmes in Ireland. The objective of this initial exploratory exercise was to understand how the professionals working within Home Visiting defined themselves, their roles, and who they worked in partnership with. Home visiting programmes, as early intervention initiatives, have been found to improve enhance parenting skills, strengthen parent-child relationships, and improve parenting mental health and wellbeing, these effects are particularly evident in families with very young children (Doyle et al., 2015; Eckenrode et al., 2017). They have also been found to improve infant and child physical, cognitive, and linguistic development (Duffee et al., 2017). The broader study draws on Bronfenbrenner’s bioecological systems theory, postcolonial theory, and children’s rights theory. Employing an interpretivist paradigm, a group of approximately 80 Home Visiting Management and Home Visiting Practitioners (HVPs) across Ireland to part in a hybrid workshop. Five questions were presented to which groups (of four) submitted written answers. Answers were thematically analysed (Braun and Clarke, 2006) using MAXQDA. The exploratory workshop was considered a low-risk ethical exercise. One initial finding found that the HVP’s had completed a lot of training courses, particularly in ECEC. However, the delegates indicated that the ability of the HVP’s to form quality relationships with parents and children may outweigh the requirement for any formal degree qualification. This has implications for any impending policies that may address quality of Home Visiting Services, and for the professional development and identity of Home Visitor Practitioners.

early intervention, home visiting, education and training, relationships, qualifications

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

I 41

Toddlers, tech and talk: Developing and disseminating a UK-wide online survey for parents of 0-3-year-old children across diverse socio-economic and ethnic communities

Sandra El Gemayel (1), Rosie Flewitt (1), Karen Winter (2), Katrina McLaughlin (2), Lorna Arnott (3), Julia Gillen (4), Janet Goodall (5), Zinnia Mevawalla (3); (1) Manchester Metropolitan University, (2) Queen’s University Belfast, (3) University of Strathclyde, (4) Lancaster University, (5) Swansea University, United Kingdom

This UKRI-funded project explores how the lives of 0-3-year-old children intersect with digital technologies in homes across the UK, and parents’ attitudes towards them. Here, we present project Phase 1, a multilingual online questionnaire distributed to 1000+ parents of 0-3-year-olds. Although children today digital media from birth (Chaudron et al., 2017), there remain gaps in knowledge about 0-3-year-olds’ engagement with digital media and how parents mediate language and literacy learning with digital technologies (Kumpulainen & Gillen, 2019). We draw on post-digital theory (Jandrić & Hayes, 2020) and conceptualise the home learning environment as a digitally networked space (Flewitt & Clark, 2020). Late 2022, we launched a UK-wide survey to investigate what digital devices are present in 0-3-year-old children’s homes, how adults and children use them, and parents’ attitudes towards them, including new measures of parental attitudes, confidence and concerns about 0-3-year-olds’ digital device use. In a strategic attempt to include the voices of hard-to-reach communities, the survey was translated into 12 languages, including minority UK populations who identified as unconfident speakers of English in the 2011/2021 census (ONS), recent refugee populations and Welsh. We recruited via social media platforms, project team networks and organisations working with disadvantaged and minority populations. This paper addresses the challenges (e.g. difficulty reaching hard-to-reach populations despite targeted efforts) and
Parenting support in ECEC services: Parents’ views on a model implemented in the Irish context
Catarina Leitão, Childhood Development Initiative, Ireland

This study aimed to collect the views of parents about a parenting support model within ECEC services. This model involves placing a dedicated Facilitator in ECEC services working with parents to identify needs, offer support, and coordinate with other services. Supporting parents can promote positive outcomes for children (EC, 2013). However, research on parents’ experiences of interventions tailored to their needs has been scarce (Osman et al., 2019). The parenting support model under study aims to positive interactions between the children and their environments, in line with Bronfenbrenner’s bio-ecological theory of human development (e.g., Bronfenbrenner & Morris, 2006). This study follows a qualitative research paradigm. Twenty-seven parents were interviewed with the support of peer researchers. Data were analysed using thematic analysis (Braun & Clarke, 2006). Ethics approval was obtained from the Irish Child and Family Agency’s Research and Ethics Committee. Participants’ consent was collected. Data were anonymised. The activities organised by the Facilitators included one-to-one meetings and group work. Two main themes emerged from parents’ responses using thematic analysis: what parents valued regarding the Facilitators’ work; and perceived outcomes. Valued aspects included Facilitators showing high interest in their work, being approachable and responsive to parents’ needs, and constituting a central point of contact. Outcomes for parents included a better understanding of their children’s needs, and socio-emotional benefits. Outcomes for children included developmental and socio-emotional benefits. The findings can contribute to informing the development of supports aiming to promote parents’ wellbeing.

parents, parenting support, early childhood, intervention, qualitative research

This application discusses a completed piece of research.

Quality of interactions offered to infants, toddlers and preschoolers in home-based childcares: an exploratory study
Lise Lemay (1), Julie Lemire (1), Nathalie Bigras (1), Caroline Bouchard (2), Alexandra Paquette (1), Karine Laverdière (1); (1) University of Quebec in Montreal, (2) Laval University, Canada

This study explores the variation in quality of interactions offered to infants, toddlers and preschoolers in home-based childcare (HBC). While high quality interactions promote children’s development, the quality levels offered to 0–3-year-olds appear lower then those offered to groups of children aged 3-5 years (Lahiti, 2015; Vermeer, 2016). Yet, little is known about the nature of quality of interactions in HBC, a multiage context (Ang et al., 2016). Quality of interactions is conceptualized with the Teaching through framework (Hamre et al., 2013) about important interactions for children’s development and learning. This quantitative study concerns 10 HBC in Montreal (Quebec, Canada). Interactions in each childcare were videotaped for 3 hours during a single visit and were later scored using the CLASS tool. Observers completed 6 observation cycles, alternating between versions of the tool - Infant, Toddler, PreK. All providers and the children’s parents were informed about the project and signed a consent form. T-test showed significantly lower levels of quality on the CLASS Infant as compared with the CLASS Pre-K (t(9)= -3.93, p = .003), as well as significantly lower levels of quality on the CLASS Toddler as compared with the CLASS Pre-K (t(9)= -3.68, p = .005). The scores of the CLASS Infant and Toddler were not significantly different. Providers’ training should address even more interactions that support infant and toddler’ development, the multiage context, as well as dimensions related to educational support. Quality monitoring systems should target quality of interactions offer to infants and toddlers, especially in HBC.

early childhood education, home-based childcare, quality of interactions, quality assessment, Classroom Assessment Scoring System

This application discusses a completed piece of research.
Investigating the benefits of and challenges to child participation in the assessment of his/her learning
Sarah Hayes, Mary Immaculate College, Ireland

This PhD investigates whether assessment within early childhood pedagogy is evolving in tandem with concepts of high-quality learning and teaching. Frequently incorporating the language of assessment and actively including the child in learning, extends understanding of self as a learner (Ring 2022) and fosters independence and curiosity (O’Kane 2016; Ring and O’Sullivan 2018a). Concepts of quality in early childhood education internationally (ACECQA 2018; DES 2018; Ofsted 2019a) and theory of assessment within pedagogy (Wiliam et al. 2010) provide the theoretical framework. A multiple case study (Yin 2003), combining a naturalistic and instrumental approach (Abma and Stake 2014), is adopted. Conversations, class observations, environment walks and document analysis, at five schools across Ireland and Dubai, triangulate data collection and analysis (Cohen et al. 2018). Collaborative interpretation, coupled with evaluation frameworks, ensure qualitative and quantitative analysis (Yin 2017). A child-friendly narrative explains research participation and an age-appropriate document seeks child assent. Police vetting is assured. Information letters inform adult participants and consent for each element of the research is sought. Right to withdrawal, without explanation, is explicit. Emerging findings suggest that assessment purposes and practices are far behind the understanding of high-quality education. The Standards and Accountability Movement (Stuckart 2022) has narrowed curricula and assessment, reduced agency and fails to stimulate the child’s interests and curiosity as a learner (Ávila et al. 2022). Implications include cultivating a shared concept of the child as central, capable and competent, while prioritising child curiosity, reflection and resilience (Dewey 1916; Ávila et al. 2022).

Making kin: An exploration of human, more-than-human and inter-creature relationships propelled by children’s curiosity embedded in indigenous learning
Stefania Giamminuti (1), Sally-Anne Polson (2), Natalie Jones (2); (1) Curtin University, (2) MLC Kindle Early Learning Centre, Australia

Extending beyond formulaic curriculum, this research re-imagined the concept of community, recognising young children’s agency through relationships of curiosity and wonder with the more-than-human world. Classroom projects centred on the concept of making kin (Haraway, 2016). Teachers’ questions and curiosities were ignited in an endeavour to learn more, honouring children’s full participation. Co-researchers engaged with literature expanding to the fields of environmental humanities (Bird Rose, 2004 & 2022; van Dooren, 2014), social anthropology (Ingold, 2021), and ecology (Pelo, 2013). This post-qualitative project (St Pierre, 2021) was informed by the experience of Reggio Emilia and deployed pedagogical documentation as a key research strategy. The research was supported by indigenous elder Murrundindi (Njurungaeta of the Wurundjeri people). Participants signed information and consent letters and were offered the option of a pseudonym or use of their name. Parental consent was obtained, and children’s assent was consistently sought. This study compelled evolution of values as children and teachers deeply came to know kin in “inter-creature relationships” (Bird Rose, 2022). First explored as Water, they came to know River and Yarra Yarra and its “choir”. A relationship formed with Magpie was disrupted when children noticed Worm, curious about his world and their ethical obligation to him, transforming the hierarchical norm. Encounters and opportunities for kinship were extended, with indigenous knowledge building upon children’s curious engagement. The highlighted projects welcome engagement with the Australian more-than-human community as children (0-6) and their teachers make kin, fostering a sense of care and ethical responsibility.

A study on the relationship between shared book reading and young children’s language abilities
Miaoju Tu, Fu Jen Catholic University, Taiwan
This study investigated the current practice of shared book reading between parents and young children, as well as the language abilities of young children in Taiwan, to determine how shared book reading correlates with and predicts young children’s language abilities at given time points and over time. Children who were read to at 9 months had stronger expressive vocabulary skills at 36 months, even after accounting for socio-demographic and home literacy environment covariates measured at both 9 and 36 months (Leech, McNally, & Corriveau, 2022). Scaffolding enables and extends children’s learning within their Zone of Proximal Development (Vygotsky, 1978). During shared book reading, an adult actively scaffolds the young children, providing positive opportunities for children to stand a better chance of learning language. The data in the study were collected from the National Longitudinal Study of Child Development & Care (Kids In Taiwan) database, specifically the data of KIT-M3 at 12 months old and those of KIT-M3 at 18 months old, with a total of 4,300 responses selected. A consent form and information sheet were provided to all participants. Pseudonyms replaced the names of participants. Participants were given the opportunity to withdraw from the study at any time. Shared book reading was found to positively correlate with these children’s language abilities. The weekly frequency of shared book reading is the most significant factor in predicting children’s language abilities. These findings suggest implications for parents to increase the frequency of shared book reading with children, which positively impacts children’s language development.

shared book reading, language abilities, kids in Taiwan(KIT), young children, children’s development

This application discusses a completed piece of research.

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A teacher workforce to develop bilingual learners is needed: Costa Rican early childhood educators’ voices
Julia Atiles (1), Aleida Chavarria Vargas (2), Irma Zúñiga León (retired) (3); (1) East Tennessee State University, United States, (2) Universidad Latina, Costa Rica, (3) Universidad Nacional, Costa Rica

Understanding early childhood teachers’ beliefs and opinions about the importance of bilingualism and willingness to acquire the bilingual preschool credential. Bilingual (English) education is mandated in Costa Rica. Researchers identified challenges to the development of a competent workforce (Hillyard, 2011) including difficulty finding teachers who meet the minimum profile (Sayer, 2015), and who score a linguistic proficiency B2-C1 (Patiño Mora, 2021). Focused on the middle level of Andragogy in Practice Model (Knowles et al. 2005) we identified the learners’ situational differences that condition the learning process and shape the practice of andragogy i.e. face-to-face vs online preferences. Paradigm has elements of positivism and constructivism. Participants completed a questionnaire (multiple choice followed by short answers) regarding (1) interest in learning English to earn bilingual preschool teacher credential and (2) preferred learning environment. The survey included space for comments. Short answers and comments were analyzed qualitatively. IRB approved. Recruitment email included purpose of the study and a link to the consent form and survey. All responses were anonymous. 81.4% indicated interest in learning English to obtain bilingual preschool credentials. Explanations generated four categories addressing: (1) personal and (2) professional growth, (3) importance of bilingualism, and (4) reasons for not wanting to learn English. 52% of participants preferred virtual classes over 48% who desired face to face. Qualitative reasons were provided. Potential impact to all countries struggling to develop the workforce to teach EFL to young children. It is vital to understand the learners’ situational differences to develop and provide successful teacher preparation programs.

teacher workforce development, bilingual preschool teaching, English as a foreign language, face-to-face, on line

This application discusses a completed piece of research.

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Information and communication technology use among children separated from one or both parents: A scoping review
Emilie Poisson and Amandine Baude, University of Bordeaux, France

This presentation aims to review the literature on the use of information and communication technology (ICT) among children separated from one or both parents, paying particular attention to two contexts: parental separation and foster care. The growth of virtual communication raises important questions regarding the continuity and quality of parent–child relationships, children’s wellbeing and separation or placement arrangements (Macdonald et al., 2017; Saini et al., 2013; Simpson, 2019). Factors found to support ICT use in family separation situations include many young people’s desire to maintain ties with their parents, even if they have vulnerabilities (Potin et al., 2018). However, in some situations (high conflict, abuse), the use of ICT can undermine the safety or stability of child placement. Our study is based on the Bronfenbrenner’s (1979) ecological model. We employed a scoping review
method using the socio-constructivist paradigm and the Arksey and O’Malley (2005) methodological framework. Ethical consideration has been given to ensuring fair representation of literature from a wide range of sources, with identification of funding sources where possible to avoid possibility of bias. The literature dated from 1997 to 2020 and was particularly sparse and heterogeneous (e.g., the definition of ICT and characteristics of participants). Three topics emerged: (a) ICT practices and usage patterns, (b) ICT practices: opportunities and issues, and (c) sociolegal support issues. Given the risks emphasized by the carers and social work practitioners, it is imperative that legal and mental health professionals should consider ICT and their use when evaluating family dynamics and planning intervention strategies.

**foster care, information and communication technologies, parent–child contact, parental separation, scoping review**

This application discusses a completed piece of research.

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I 49

**Applying the theory of practice architecture to placement**

Vina Patel, Birmingham City University, United Kingdom

This study aims to gather tutors, students and placement mentor perspectives to understand the concept of professional identity in the early years, factors benefiting and constraining placement experience in shaping student professional learning, student perception of their professional identity development through placement and how all parties feel placement experience can be improved. This research builds on the examination of professional identity (Murray 2013; Dickerson and Trodd 2020; and Lightfoot and Frost 2015). It extends on the exploration of placement (Holman and Richardson 2020; Maynard et al 2014; and Richardson et al 2022). The Theory of Practice Architecture (Kemmis et al. 2014) provides a framework to construct the valuable role of people, spaces and arrangements supporting placement. This study will adopt a qualitative paradigm and draw on interpretivism. A phenomenological case study methodology has been selected. An online survey, focus groups, semi-structured interviews and cases studies will be employed. Pseudonyms will protect anonymity of participants and data will be stored on the institution OneDrive to protect confidentiality. Consent will be gained and right to withdraw respected. Power relations will be mitigated by participatory relationships (Formosinho and Formosinho 2012) empowering and promoting participants. This research will seek to gain perspectives from tutors, students and placement mentors. There will be a focus on The Theory of Practice Architecture (Kemmis 2022) and how it informs placement and professional identity. This research will be of interest to other institutions delivering courses where placement and the development of professional identity are pertinent.

**placement, professional identity, professionalisation, workforce, students**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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I 50

**Discovering and seizing opportunities for working with religious diversity in kindergartens**

Ine Bratsvedal, Queen Maud's University College for Early Childhood Education, Norway

This project aims to identify ways kindergarten teachers work with religion in Kindergarten. Research shows that working with religion in kindergartens in Norway is avoided and perceived as challenging (Hovdelien & Sødal, 2021: 136). When religion is dealt with it tends to reinforce majority culture and make minority cultures invisible (Krogstad & Hidle, 2015: 14-15). Working with religious diversity in kindergartens is about letting every child experience that they are recognised and valuable, as well as learning to understand other people’s perspectives. The theoretical framework draws upon diversity-theories such as multiculturalism and polyculturalism (Cho et al., 2018). This project falls within the critical research paradigm. The data material consists of group-interviews with, and logs written by, ten first year ECEC-students. Writing logs are a part of their practical training. The analysis use a thematic approach (Braun & Clarke, 2006). The Norwegian Centre for Research Data has approved this project. Only the students willing to participate in group interviews sent in logs. It was made clear to the students that their participation in this project would have no impact on their grades or relationship with the researcher. The discussion will focus on identifying characteristics for when opportunities for working with religion in kindergartens are used. E.g. using the Advent period to work with religion and not only secular practises with connected to Christmas. This project will be developed into a chapter in an anthology meant for ECEC students, which will contribute to a more up-to-date and relevant curricula.

**religion, diversity, minorities, practices, professional challenges**
Teachers’ curiosity as a starting point for developing a better school start
Maria Øksnes (1), Helene B. Svensson (2); (1) Norwegian University of Science and Technology, (2) Trondheim Municipality, Norway

Trondheim municipality has initiated a pilot project called “Better School start for all” to improve continuity in the transition from kindergarten to school. An innovation project funded by the Norwegian Research Council (2020-2024) is part of this pilot. The innovation project includes an intervention part and a research part. The research should provide knowledge about how children, parents and practitioners in kindergarten and primary school experience the transition to school before and after certain measures for a better school start are implemented. Research shows that school pedagogy often is based on expectations of school readiness. This pedagogy is resistant to change (Lillejord et al., 2015). The project draws on research suggesting that to challenge the notion of school readiness school teachers need to be curious to what children (Dockett, Einarsdottir & Perry, 2019), parents (Nordahl, 2015) and kindergarten teachers (Lillejord et al., 2015) have to say about the transition. The study is grounded in action research and demands a close collaboration between practitioners in kindergarten and school and researchers (Tiller, 2015). We have followed Guidelines for Research Ethics in the Social Sciences and the Humanities given by The National Committee for Research Ethics in the Social Sciences and the Humanities (cf. NESH, 2021). The findings suggest that school teachers curiosity was important in developing a transition pedagogy based on schools being ready for children. The findings implicate that school teachers’ curiosity contributes in developing a more meaningful life in school for first graders.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Children’s friendship
Anna Hreinsdóttir, University of Iceland, Iceland

The aim of the study was to shed light on how children perceive friendship. The purpose was to find out what characterises a school atmosphere that is safe and positive and prevents conflicts and bullying. Free of Bullying is a preventive anti-bullying programme (Free of bullying, ed.). The content is aimed at all members of the school community, e.g. staff, parents and children (Rasmussen, Bøgeskov and Mygind, 2017). Research show that parents of young children primarily emphasize that they learn communication and social skills in Preschools (Jóhanna Einarsdóttir, 2020). The learning of social and emotional skills is not limited to specific lessons but covers all schoolwork in a holistic way through the school atmosphere and environment (Weare and Nind, 2011). A mixed research format was applied, which is an explanatory sequential format (e. explanatory sequential design) (Creswell and Creswell, 2018). Two types of data were collected; from a questionnaire survey and a case study where headteachers, teachers and children were interviewed. Participants gave written informed consent and were ensured anonymity. The children were interviewed in play-settings and could easily leave. The findings show that most of the children have many friends at school and have good relationships with peers. This is also true for children with foreign background. The preschool teachers used the material in the program more often that the primary school teachers. The relevance of the research findings relates to the Free from Bullying program that is widely used in Nordic preschools, primary schools, and after-school centre.

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

The use of English during play and interaction – Children’s multilingual agency in Swedish preschools
Karolina Larsson (1), (2), Polly Björk-Willén (2), Katarina Haraldsson (2), (3), Kristina Hansson (1); (1) University of Lund, (2) Municipality of Halmstad, (3) University of Gothenburg, Sweden

The aim was to study how English is used in everyday conversation in Swedish preschool groups with varying proportions of multilingual children. The study relates to earlier research on peer interaction (Cekaite, Blum-Kulka, Grøver & Teubal, 2014) and
children’s agency in multilingual practices (Paugh 2012; Bergroth and Palviainen 2017). Language acquisition is a social process (Vygotsky 1978), and children are active agents who create language practices and language policies of their own (Bergroth and Palviainen 2017). The study is within the qualitative paradigm, and uses a videoethnographic method and Conversation Analysis as methodology (Sidnell, 2010). The data stems from a larger research project on language environments in eight Swedish preschool units, situated in both monolingual and multilingual areas. Consent was achieved from teachers, principals, the director of education, and children’s caregivers. In addition, all children were asked to participate at each recording session. The study has been approved by the Swedish Ethical Review Authority. Preschoolers with different language backgrounds sometimes use English as lingua franca instead of Swedish during play and interaction in Swedish preschools. They add a new language to their already multilingual repertoires and create and act within different co-existing language policies. The findings suggest that teachers need to balance their teaching assignment with children’s autonomy and rights to choose and speak all their languages.

English, lingua franca, preschool peer interaction, agency, multilingualism

This application discusses a completed piece of research.

I 54

Play and immersive narrative games in higher education
Marta Cabral, City University of New York (CUNY) College of Staten Island, United States

This presentation focuses on the whys and hows of placing play and games at the core of higher-education courses. Rather than focusing on the what (specific discipline content to be taught), this paper discusses ideas and practices, such immersive narratives games, that can be applied to any discipline. Situated in the context of current discussions on student engagement (Davidson and Katopodis, 2022), antiracist education (Chavez, 2021), ungrading (Blum, 2020), benefits of play (Portnoy, 2020) and gamification (Matera and Meehan, 2021), this paper questions practices of teaching and learning through ownership of learning. Based on my own journey of play, ungrading, gamification, and student-centered teaching; couched in current literature on what Davidson and Katopodis, call the new college classroom (2022); and inspired by a larger consideration of individual and societal educational beliefs, this poster discusses practices and ideas in the search for a meaningful higher education. Grounded on a post positivism paradigm, this qualitative study used auto-ethnographic methods such as journaling and participant-observations, and artifact analysis. participants consented to the study and to have the data shared. Play and games are an important way to courses accessible, interesting, and personally relevant to higher-education students. Students are engaged and are able to create meaningful work that furthers not only their education but is also a contribution to public knowledge. This is fundamental in the ways we reconsider teacher-education. If we want our teachers to offer student-centered, personally meaningful lessons to their young students, they need to experience the same for themselves.

play, games, higher education, teacher-education, ownership of learning

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

I 55

Playing with a deck of cards: Algorithmic thinking in early childhood education in Portugal
Maria Figueiredo, Valter Alves and Diana Gomes, Polytechnic University of Viseu, Portugal

The study is part of a project on algorithmic thinking (AT) in Early Childhood Education (ECE), focusing on how guided play can contribute to the development of AT by children, and on the evaluation of a deck of cards created to support creative collaborative drawing and the development of algorithmic thinking. Algorithmic thinking has been considered as part of curricula for Early Childhood Education, on its own or in connection to computational thinking (Figueiredo et al., 2022). The articulation with play or play-based approaches requires further research (Gencel, 2021). Play was conceptualized, following Zosh et al. (2018), as a continuum. The study was also inspired by research on pedagogical approaches that connect the curriculum as lived experiences and as planned experiences (Wood, 2022). It was an interpretative study, following a design-based research approach. The data was produced through participant observation of the teacher-researcher in the 14 sessions developed with four 5-year-old children in the ECE setting using the deck. The researcher conducted individual and group interviews with the children. The content analysis drew all the data together and was cross-checked with two researchers. The children were invited to participate after an adequate
explanation of what was involved and required. The invitation was repeated for each session. Parents were informed and signed an informed consent. Children used and explored different dimensions of AT in their activities and were able to discuss concepts involved in AT. Play needs to be highlighted in the discussion of concepts like AT in ECE.

algorithmic thinking, early childhood education, deck of cards, guided play, creativity

This application discusses a completed piece of research.

I 56

Establishing an environment of trust
Julie Brierley, University of Hull, United Kingdom

Nutbrown (2010:11) insist ‘that when we involve young children in our research, we have to hold a clear awareness of ...what we really think about young children'. This paper seeks to demonstrate how I created an intuitive and respectful relationship, one that allows participants’ voices to be recognised and heard, when the research participants were only two year of age. An essential aspect of working with young children is the recognition and acknowledgment of existing and embedded power relationships (Dockett & Perry; 2007). Nutbrown (2010) emphasises how such power not only needs to be recognised but also addressed. It was my intention to adopt Nutbrown's (2010:11) suggestion of viewing children as “other-wise - having a different way of knowing”.

Bowman (2006:7) describes how narratives have the ability to ‘convey the shape and character of human experience’. Nutbrown and Page (2008:32) describe ‘the importance of establishing an environment of trust’, allowing participants’ voices to be recognised and heard. Clandinin and Connelly (2000) describe such relationships as dynamic and an essential part of the research process. All ethical permissions were gained. As the researcher I considered myself more as a ‘guardian’ (Nutbrown 2010: 171), to ensure that I use my position responsibly. This research study captured the wholeness and integrity of conducting researching with young children providing a lens to “unravel the complexities of a given situation” (Denscombe, 2007:36). An essential element of the research is the responsive and interactive relationship with the research participants. Enabling opportunities for shared discovery and learning.

narrative enquiry, power, respectful relationships, child voice, shared discovery

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

I 57

Multiple movement themes-based physical activity program improves preschool children’s executive function
Hyeju Yun and Yunhee Kim, Duksung Women’s University, South Korea

The purpose of this study was to investigate the effect of multiple movement themes-based physical activity on children’s executive function. It has long been emphasized that physical activity improves young children’s health-related physical fitness (Mačak et al., 2021). Recently, it has also been shown that physical activity has beneficial effects on the development of executive function (Hillman, Erickon, & Kramer, 2008; Willoughby et al., 2018). The subjects of the study were 61 children aged 5-years-old. The children in the experimental group participated in a total of 18 movement activity sessions over nine weeks. Three elements of executive function with respect to inhibition (cognition, behavior), flexibility, and working memory were measured based upon task performance. Pre- and post-test data were analyzed using a repeated measures two-way ANOVAs. The study was approved by the Institutional Research Ethics Committee of Duksung Women’s University. Consent was obtained from all of the participating children's parents and the children were also told that they had the opportunity to withdraw from any activity in the study at any time. The results showed that the movement program had positive effects on children’s executive functions, including inhibition, flexibility, and working memory. The results suggest the importance of well-planned physical activities in children’s development. Early childhood experts are recommended to consider implementing multiple movement themes-based physical activities to facilitate children’s active play as well as executive function development.

multiple movement themes, movement program, executive function, preschool children, pre-and post-test

This application discusses a completed piece of research.
The potential of storytelling in learning early science
Marjanca Kos (1), Tim Prezelj (1) Špela Klofutar (2), Sue Dale Tunnicliffe (3), Gregor Torkar (1), Martina Bačič (1); (1) University of Ljubljana, Slovenia (2) Institute for Education and Counseling Špelinice, Ljubljana, Slovenia (3) University College London, United Kingdom

The aim of the study was to investigate how children’s science learning is affected when using storytelling. Research has shown that children’s imagination is one of the strongest tools in learning (Egan, 1988). In the field of science education, it has been suggested that storytelling could facilitate an understanding of science and create an interest in scientific knowledge (Negrete and Lartigue, 2004; Walan and Enochsson, 2019). The content we wanted to convey to the children was the biology of the olm (Proteus anguinus) - a cave amphibian, which - with its depigmented skin and reduced eyes - is a model animal for learning about biological adaptations and also a Slovenian national symbol. First, a fiction story was created that included the targeted contents (animal structure, adaptations, food, movement, respiration, systematics). 88 five-to-six-years-old children participated in the study. We conducted pre-tests in the form of semi-structured individual interviews. This was followed by an intervention in which the story was read aloud three times within the period of two weeks. Post-tests and late post-tests were performed one and five weeks after the intervention. The answers were categorized and statistically analysed. The ethical rules of confidentiality, information, autonomy and voluntary participation were followed. The results showed that before the intervention children mostly had very poor or wrong ideas about the biology of the olm. Post- and late post-test have shown that storytelling significantly improved preschool children’s knowledge. We conclude that storytelling is an instructional strategy with positive potential in teaching preschool children science.

storytelling, early science, instructional strategy, preschool children, Proteus anguinus

This application discusses a completed piece of research.
II 1

The experiences of home visitors adopting a state of curiosity when reflecting on their self-care
Sonya Goulding, Early Learning Initiative, Ireland

The current research seeks to explore the experiences of Parent Child + home visitors engaging in self-care CPD and whether adopting a state of curiosity when reflecting on self-care needs and practice contributes to a positive or productive outcome in Home Visitors’ roles. Self-care supports the needs of early years practitioners (Home Visitors) engaged in work that can be emotionally demanding and stressful (Nicholson et al., 2020). Placing practitioner wellbeing needs at the heart of early years settings not only supports practitioners to cultivate a healthier relationship with themselves but also their capacity to create and sustain strong and healthy relationships with those they are supporting (Frei, A., Herman-Stahl, M., & Baumgartner, S. (2021). This research follows an action reflection cycle (Bleach, 2016) ensuring the programme can evolve and change according to the needs of the participants. A self-care programme supports Home Visitors in developing self-awareness, compassion, and regulation through various approaches and strategies. A community action research model, focusing on changing practice, understanding of practice and conditions of practices (Kemmis, 2009; Bleach, 2013) was used. Data collected include facilitator observations and participant reflective surveys. The study is part of the organisation’s Community Action Research approach and the researcher adhered to ethical guidelines for research with human participants throughout. Participants reflections on their self-care needs while adopting a state of curiosity will be shared when the research is completed. Further consideration for inclusion of self-care support for early years practitioners.

self-care, reflection, resilience, capacity building, self-regulation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

II 2

Interstice, encounters between children, artists and educators. An innovative artistic teacher training method
Silvia Blanch Gelabert, Gemma Paris and Anna Ciraso, The Autonomous University of Barcelona, Spain

The aim of this research is to identify the impact of a nursery teachers artistic training course in individual learning of teachers, children, artists, and cultural agents. Art is a discipline that has a great potential for education (Camnitzer, 2018); moreover, the presence of artist in the schools can generate personal, academic, and social changes (París, 2019). It will enable another type of educational experience, empowering children to take control of their own learning, through problem solving, finding alternative paths, questioning, and identifying problems and solutions, through experimentation and investigation (Jeffrey & Craft, 2004). Three nurseries participated, with a total of 32 early childhood teachers. The research followed a systemic paradigm with a qualitative approach: 23 initial and 28 final questionnaires; 14 fieldnotes; 6 nursery observations and 8 learning activities. 11 semi-structured interviews were also conducted to directors, practitioners, artists and a cultural agent. All the families and participants gave their consent filling and signing a document. The confidentiality of the participants was granted and also the use of the data for educational purposes. The research provided evidence of different degrees of learning for teachers and for artists who were involved in the training process. The potential of the method to promote artistic languages, to re-think educational practices, and experiences was evidenced. The importance of the presence of quality art in the nurseries is crucial, but also the teacher’s training and the presence of artist collaborating in a daily bases. This experience can inspire ways to create artistic experiences with the very young.

artist, children, teacher-training, aesthetic-experiences, critical thinking

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Starting at home: What does the literature indicate about parental involvement in early childhood STEM education?
Loreto Salvatierra and Valeria Cabello, Pontifical Catholic University of Chile, Chile

The review aimed to answer the question: What does the literature indicate about parental involvement in early childhood STEM education? to identify advances and gaps in this newly explored field. Developing STEM (Science, Technology, Engineering, Mathematics) competencies is a global priority (Hurst et al., 2019; OECD, 2019). However, initiatives to promote them have focused on the school level (Chapman & Vivian, 2016). Although early childhood and parents' role in developing these competencies is a promising domain, it is still less explored (Hapgood, 2020; Ata Aktürk & Demircan, 2017; Yücelyigit & Toker, 2021). The theoretical framework included early childhood (Ravanis, Kaliampos & Pantidos, 2021; Wan, Jiang & Zhan, 2020), STEM education (Johnson et al., 2020; Moore, Johnston & Glancy, 2020), and parental involvement (Anfara & Mertens, 2008; Hoover-Dempsey et al., 2005). We selected 11 documents published between 1995 and 2021 in educational databases (Web of Science, Scopus). This scoping review was conducted in June - July 2021. In terms of ethical aspects, we explained the search criteria used, and we had the review and feedback of three experts. The results show that STEM activities can promote parental engagement, improve the value parent attribute to STEM, and positively affect STEM learning in preschoolers. Moreover, parents shape children's interests and self-efficacy about STEM and content applications that can favor their children's approach to STEM. We present practical criteria to guide the development of early STEM education in the family context and questions to guide the planning of research and intervention programs.

STEM education, STEAM, early childhood, preschools, parental involvement

This application discusses a completed piece of research.

Supporting toddler's emergent literacy through books
Monica Gjelsten, Høgskulen i Volda, Norway

The goal of this research was to gain more knowledge about toddler’s interactions with toddlers picture books with tactile elements and natural photograph or cartoon-drawings of different animals. The study builds on Tare, M., Chiong, C., Ganea, P., DeLoache, J. (2010)’s research on how manipulative features affect children's learning from picture books and their hypothesis: «picture books with no manipulative features and high iconity will support learning over books with manipulative features and less realistic pictures». The theoretical framework about toddler’s books from, Kümmerling-Meibauer, & Meibauer, J. (2018) studies on early-concept books and concept books, is to show the relevance of analyzing the books used in the study. This qualitative research study from a kindergarden is an observation study of 25 hours from a kindergarden with 19 toddlers (13-28 months). The observations had focus on how the toddler’s interacted with toddlers picture books; alone and with an adult in a socio-cultural theory perspective (Vygotsky, 1978). The study also contains four qualitative interviews with adult workers on how they think around quality of books made for toddlers. The analysis of the books is within a phenomenological hermeneutical approach. A consent form and information sheet was provided to all the participants. The study showed that both the toddlers and the adults working in kindergarden, preferred natural photographs depicting animals. These findings points to the importance of knowledge about books in kindergarden.

toddlers, emergent literacy, books for toddlers, multimodality, iconity

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Supporting parental sensitivity and self-efficacy: An Italian pilot study
Simona De Stasio, Daniela Paoletti and Francesca Boldrini, Lumsa, Italy

The present study provides an evaluation of the brief web-delivered CIG Intervention, aimed to enhance parental sensitivity, self-efficacy of parents of typically-developed children. Principal models of intervention aim to support parental skills and foster quality
of parent-infant interactions since the early infancy (Cook et al., 2021). The possibility to continue sustaining relational aspects of parent-infants bond along infancy in a time of great weakness, throughout a web-delivered intervention, during pandemic appeared a considerable resource. The CiG is built on well-known evidence-based intervention models from the attachment theory (Juffer, 2008; Powell et al., 2014) Four interactive group sessions, based on well-known empirically-based programs’ assumptions (VIIP, Juffer et al., 2014; COS: Powell et al., 2014; Woodhouse et al., 2018) were delivered. Twelve parents (10 mothers, M age=43, SD= 6.2; children M age=3.3; SD=1.4) completed some measures at baseline/after the intervention: parental sensitivity questionnaire, the Tool to Measure Parenting Self-Efficacy (Kendall & Bloomfield, 2005), the Parenting Stress Index-SF (Abidin, 1995), the Emotion Regulation Checklist (Shields & Cicchetti, 1997) and the Social Provisions Scale (Cutrona and Russell, 1987) for social support. The study was approved by the Ethics Committee of LUMSA. After the intervention, some improvements were detected in parental sensitivity but not in parental self-efficacy. Results showed statistically significant decrease in parental distress and increased social support after attending CiG. Our findings confirm the potential value of online-delivered interventions targeting parenthood in infancy, supporting parent-infant relationship from early infancy in a public health community approach.

parenting, online-delivered intervention, parental self efficacy, parental sensitivity, early childhood

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Il 6

The associations among maternal parenting behaviors, class emotional support, and toddlers’ emotional competence in Taiwan
Jo-lin Chen, Fu-jen Catholic University, Taiwan

The purpose of this research was to examine the associations among parenting behaviors of mothers and fathers for first-time parents, child care class support and toddlers’ emotional development. In reference to the studies of Smith (2010) and La Paro, Hamre, & Pianta (2012), the relations among parenting, class emotional support, and toddlers’ emotional competence were explored in Taiwan. Based on Bronfenbrenner’s microsystems concepts in the ecological theory, it investigated the predictions of family parenting behaviors and child care class support on toddlers’ emotional competence. The research participants consisted of 304 first-time mother-father pairs with 1-3 year-old toddlers and child care providers were invited and recruited from child care centers in Taiwan. The parents provided the parenting and family information. Mothers and fathers were asked to fill in the questionnaires separately. The child care class support for toddlers was observed and scored by the trained assistants. The child care providers provided information regarding young children’s emotional competence. The parents and child care providers were invited and consented. The confidentiality of the collected data was promised. The correlation results indicated that maternal parenting behaviors, positive climate and regards for child perspective were significantly positively related to toddlers’ emotional competence at child care centers. Finally, the regression results showed that after controlling the background variables, maternal parenting behaviors and positive climate of child care class predicted significantly and positively to toddlers’ emotional competence. Practical suggestions and implications were made for government, child care centers and parenting education practitioners.

maternal parenting behaviors, class emotional support, toddlers’ emotional competence, child care, first-time parents

This application discusses a completed piece of research.

Il 7

Interprofessional collaborative practices for children with speech, language and communication needs: perspectives from Norway and the Netherlands
Jana van der Zwart-Langner (1), (2), Ruben Fukkink (2), Ellen Beate Hansen Sandseter (1); (1) Queen Maud’s University College for Early Childhood Education, Norway, (2)University of Amsterdam, the Netherlands

This comparative study investigates the perception of Interprofessional Collaborative Practices (IPCP) in ECEC and aims to explore relationships between IPCP, professional related outcomes and personal relational skills. IPCP are considered essential for service delivery for children’s speech, language and communication needs (SLCN), but takes place in diverse health, educational and care contexts with national different degree of integration for ECEC and early intervention delivery (ASHA, 2019, Eurydice, 2019; Søndergaard Knudsen et al., 2022). The conceptual framework for IPCP (Stutsky and Spence Laschinger, 2014) offers a comprehensive Interprofessional Collaboration Survey (IPCS). A mixed-methods design was used for this cross-national study. Professionals from Norway (N=71) and the Netherlands (N=74) participated in an electronic survey, using subscales of the IPCS. Analyses consisted of descriptive, inferential statistics and multiple regression. Semi-structured interviews with professionals from both countries are analysed thematically. Participants were provided with an information letter and consent form addressing details...
concerning data management, privacy policy and ethical issues. Results related to diversity of intervention delivery in Norway support a more integrated working tradition. However, no significant difference in levels of IPCP were found. Moderated moderation analysis showed country-specific patterns for the relationship between IPCP, team effectiveness, and personal relation skills of trust and communication. While trust seems to be a more crucial factor for IPCP in the Dutch SLCN context, communication skills seems to be more important in the Norwegian context. Additional preliminary results from the interviews are considered to provide a better understanding of the implications for daily professional practices.

interprofessional collaboration, speech language communication needs, intervention, mixed methods, comparative

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

II 8

Critical reflection for developing culturally sustaining pedagogy in ECEC: A systematic literature review
Alexandra Anton (1), Emmanuel Acquah (1), Mia Heikkilä (1), Nancy L. Commins (2); (1) Åbo Akademi University, Finland, (2) University of Colorado, United States

This study reviews the literature’s professional development (PD) approaches with critical reflection (CR) elements. The purpose is to assess how CR is defined and implemented in the literature and the reported effectiveness in developing culturally sustaining pedagogy. Numerous early childhood learning frameworks around the world viewed critical reflection as a crucial component for challenging teaching practices from a social justice perspective (Brookfield, 2017; Farrell, 2015). At the same time, it is acknowledged as one of the teaching practice elements that is most struggled with in actual implementation (McNicholas, 2018). The framework used for this study is based on the theory of culturally relevant pedagogies (Ladson-Billings, 1995), broadened as culturally responsive teaching (Gay, 2000), and remixed as culturally sustaining pedagogy (Paris, 2012), which proposes decolonizing the mind through critical reflection (hooks, 2013). Altogether 60 peer-reviewed articles published between 2001-2021 were analyzed in terms of aims, participants, methodology, and outcomes. The findings from this review were formulated by the research question they answered, providing quantitative insights into the demographics identified in the included articles, as well as the qualitative thematic analysis. The ethical considerations included acknowledging the sources of secondary data and clearly describing the research strategy based on which the review process was made. The examination revealed that: CR is diversely understood, defined, and applied in research; a 4-dimensional framework of analysis was developed, and approaches used with pre-service compared to in-service teachers were discussed. Theoretical and practical implications for teacher education and directions for future research are outlined.

critical reflection, culturally responsive pedagogy, early childhood education, teacher education, social justice

This application discusses a completed piece of research.

II 9

Pre-service ECE teachers and professional identity - Constraints and possibilities for children’s agency
Ester Catucci, Pernilla Kallberg, Eva Ärlemalm-Hagsér and Therese Welén, Mälardalens University, Sweden

The aim of this study is to gain knowledge about dilemmas and challenges pre-service ECE teachers describe while constructing their professional identity. Previous research in a Swedish context has identified different challenges for the development of preschool teachers’ professional identity. Those challenges are related to changes in policy and practice (Catucci, 2021; Tallberg Broman & Vallberg Roth, 2019). However there are few studies on how pre-service ECE teachers’ develop their professional identity in higher education in Sweden. Kelchtermans (2009) practice-based framework, specifically the concepts of professional self-understanding and subjective educational theory are used to analyse pre-service ECE teachers’ expression of their professional identity. The data consists of 40 written texts pre-service preschool teachers wrote at the end of their third practicum, describing their professional role as becoming ECE teachers. In those texts they connect practice with theory and ethical standpoints. To analyse data a critical qualitative content analysis has been used (Alvesson & Deetz, 2000) in order to identify challenges and dilemmas in their understandings and perceptions of professional identity. This study follows the Swedish ethical guidelines (Swedish research council, 2017; Codex, 2021). The participants has been informed about their written texts being a part of a research study. Consent has been collected from all participants. Data indicates both dilemmas and challenges in the pre-service teachers’ written descriptions of professional identity with implications for children’s agency and curiosity in ECE. This study has implications for practice and higher education.
The challenge of balancing the competing pressures of enabling children's agency and the practitioner's role in challenging gender stereotypes
Cathy Kilburn, University of Hull, United Kingdom

This study aimed to identify the techniques that pre-school children use to reinforce their peers' knowledge and adherence to gender stereotypes and norms. Research has shown that pre-school children develop their early knowledge of gender stereotypes through their observations and interactions with parents and siblings (Bluiett, 2018). Once children start pre-school they are exposed to the gender beliefs of their peers (Paechter, 2007). Research by Xiao et al. (2019) states that pre-school children police their peers gender behaviour to ensure they adhere to the setting norms regarding appropriate behaviour. This research is situated within a social constructivist paradigm and utilises a qualitative methodology. The methods used include video-recorded observations, video stimulated conversations with the children and a picture task. Ethical concerns identified included the use of video recording and digital voice recording. Children with parental consent took part in assent conversations where an information booklet was shared with them using appropriate language. Children's assent was negotiated daily, and pseudonyms have been used for all participants. The findings demonstrate that whilst early childhood settings work hard to reduce the stereotypes and inequalities that children are exposed to, pre-school children use a range of techniques to reinforce gender stereotypes with their peers. This raises the dichotomy between the practitioner's role in providing a values-based provision that aims to provide a gender equitable environment, whilst also respecting children's agency regarding their own beliefs.

pre-school children, gender stereotypes, children's agency, practitioner's role, gender equitable

This application discusses a completed piece of research.

6 - 7-year-old children's opinions about learning in the outdoor area of the kindergarten
Lehte Tuuling (1), Tiia Õun (2), Aino Ugaste (2); (1) Narva College of University of Tartu, (2) Tallinn University, Estonia

The aim of this study was to clarify children's opinions about experiences of outdoor learning. Merewether (2015) found that in outdoors children value the opportunity to move, imitate, explore and discover and do these things in a social context. Child-initiated education, which emphasizes the need to consider children's interests, involve them, and clarify their opinions, supports children's agency, which can be addressed and explored through the interaction and influence of the child and the surrounding context (Sarainen, et al., 2020). Successful outdoor activities offer flexible opportunities for children to develop their communication skills and build relationships with other children and adults (Canning 2010). A combined approach was chosen, in the framework of which the children photographed the outdoor area of the kindergarten and then the children were interviewed. The choice of methodology was based on similar studies by Merewether & Fleet (2014) and Einarsdottir (2017). 63 children aged 6 - 7 from kindergartens in Estonia participated in the study. The wellbeing and anonymity of all participants in the study are guaranteed. More than half of the children who participated in the interviews agreed with the fact that you can learn to draw and write outdoors. They have learned about the changes in nature and natural objects outdoors. Several children said that they have learned to sing and play outside. Since children are actually the users of the outdoor area of the kindergarten, it is important to understand how the children perceive activities and learning there.

children's agency, children's opinions, outdoor environment, learning, kindergarten

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

The importance of emotional support for child engagement in preschool: A focus on the teacher's mentalization capacity
Mariane Chiasson-Roussel, Université du Québec à Trois-Rivières, Canada
The purpose of this research is to explore the importance of the teacher’s mentalization capacity to emotionally support the children and to solicit their engagement in preschool. The scientific literature specifies the importance of the quality of interactions between the teacher and the children to promote their learning and overall development (Burnish & al., 2008; Churchill & al., 2008; Howes & al., 2008). The emotional support is explored since it is essential to a high quality education (Brock & Curb, 2014; Castro & al., 2015; Downer & al., 2010). The teacher who can mentalize could offer better emotional support to the children, by recognizing their emotions and needs to stimulate the child’s interest in learning (Pinata & al., 2008). Since the quality of emotional support plays a crucial role in social adjustment (Nirenberg & al., 2011), the children’s engagement, that refers to the ability to interact with different aspects of the school environment (Roorda et al., 2011), could also be improved. This research is part of a mixed-methods design and exploit a case study approach given its exploratory nature. The research is approved by the ethics committee of psychology and psychoeducation of the Université du Québec à Trois-Rivières. The preliminary results will assess the teacher’s ability to mentalize, the level of emotional support offered to the children and their commitment to the teacher. An improvement in emotional support practices and a better relational experience are desired to promote the exploration and optimal development of the children.

*teacher's mentalization capacity, teacher's emotional support, children engagement, quality in preschool, children development*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**II 13**

### Integrating emotional intelligence for early learning pre-service teachers into literature education

Andri Schoonen, North-West University, South Africa

This scholarship of teaching and learning project aims to support early learning teachers with developing strategies to model emotional intelligence (EI) to young children by using literature as vehicle. Teachers need to develop a high level of EI to become teachers who create enabling, socially just and safe learning environments (Welmilla, 2020). Young children need role-models that show healthy ways to cope, process and understand emotions- all of which ECD-teachers play an important role in (Arace et al., 2021). Salovey and Mayer (1990) developed the four branch model of EI, a theoretical framework that underpins this study. The four branches include perceiving, expressing, understanding and managing emotions. This practitioner self-inquiry action research study is rooted in a transformative paradigm and infused with values of social justice, empathy, knowledge democracy and lifelong learning. I thematically analyzed arts-based and reflective assignments of 32 pre-service teachers. To prevent researcher bias, the findings were member–checked by critical friends and I made use of Habermas’s (1978) criteria of ethical reporting, namely: comprehensibility, authenticity, truthfulness and sociohistorical accuracy. Literature is a powerful and effective teaching tool to enable young learners to develop EI, with guidance and modelling from teachers that also attain high EI themselves. In the absence of healthy role-models for emotional regulation, learners need to develop EI from their social environment at school. This research can support teachers and teacher educators to infuse their teaching with opportunities to use literature as resource to enable young learners to develop emotional intelligence.

*emotional intelligence for teachers, early learning emotional development, ECD teacher education, classroom literature as resource, healthy emotional regulation*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**II 14**

### Social representations of early childhood teachers regarding the enculturation process of two-year-old children

Olalla Juastri (1), Inaki Larrea (2), Alex Muela (3); (1) Begoñako Andra Mari Irakasleen Unibertsitate Eskola, (2) Mondragon Unibertsitatea, (3) University of the Basque Country, Spain

The paper reports on the findings of a study which analyzed the social representations of Early Childhood teachers regarding the enculturation process of two-year-old children. Very little has been done so far, but in order to improve Early Childhood education it is crucial to research the factors that impact the enculturation processes of children, such as the social representations of teachers. The enculturation process enables children to construct their own identity and a sense of belonging to a community, by developing a cultural identity and adopting a whole set of spiritual, material, and affective elements (Grusec & Hastings, 2015). The child’s
identification with the world is emotionally charged and therefore comprehending the cultural aspects of the community takes place with the accompaniment of those adults important to them, their teachers amongst them (van Oers, 2019). The data presented here come from a questionnaire completed by 256 Early Childhood teachers and analyzed using SPSS software. The study was carried out in accordance with the ethical standards established by EECERA and was approved by the university’s Ethics Committee. The results were conclusive as to the three main factors that explain the way teachers view the enculturation process of two-year-old children: Routines, What to transmit, and How to transmit. The findings show ways in which to improve initial and continuous teacher training in order to enhance teachers’ awareness of their role as agents of enculturation as well their practices in this process as a result.

**two-year-old children, teachers, social representations, enculturation, early childhood education and care**

This application discusses a completed piece of research.

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**II 15**

**A case study of an experienced teacher’s approach to preschool STEM education**

Hye Ryung Won (1), Ithel Jones (2); (1) Slippery Rock University, United States, (2) Florida State University, United States

This case study sought to investigate how an experienced teacher integrated STEM teaching and learning into preschool education. Research questions explored how the teacher developed and implemented STEM activities to facilitate preschool children’s STEM learning. Research findings suggest that early exposure to STEM education can cultivate young children’s continuous interests in STEM fields and reduce potential gender bias and stereotypes in STEM-related careers (e.g., Bagiati & Evangelou, 2015; Çetin & Demircan, 2020; Clements & Sarama, 2016; McClure et al., 2017; Pantoya et al., 2015; Sullivan & Ber et al., 2016). This study was framed within social constructivism (Vygotsky, 1978), developmentally appropriate practice (DAP) (NAEYC, 2020), and inquiry-based learning (Bybee et al., 2006; Crawford, 2007). Purposeful sampling was adopted to learn from an “information-rich” teacher case. An experienced preschool teacher, who had invested significant time and effort in developing and delivering STEM activities, was selected for the study. Using a case study approach, data were collected by observing classroom activities, reviewing lesson plans and other documents, and conducting in depth semi-structured interviews. Ethical issues were considered including adhering to appropriate university procedures and guidelines for the ethical conduct of research. Informed consent was obtained from all of the participants. The teacher drew on her expertise to create real world problem-based activities organized in an interdisciplinary and cohesive manner. Findings suggest that early childhood educators already possess the ability to design and implement developmentally appropriate STEM activities by integrating their early childhood expertise with STEM content.

**preschool, STEM education, preschool science, preschool STEM, developmentally appropriate practices**

This application discusses a completed piece of research.

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**II 16**

**The relationship between practitioners’ sensitivity to nature and practice in Japan**

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In Japanese pre-schools, the aim is for children to become aware of the nature around them and to think about life through the preschool environment set up by the practitioners. This study aims to clarify the actual situation in Japan in terms of how the practitioners who set up the preschool environment perceive the environment themselves. Alexia et al. (2020) suggest that children’s connection to nature is related to the number of hours they attend outdoor nurseries and their parents’ connection to nature. This study focuses on the nature connections of preschool practitioners. This study takes an environmental psychology perspective, which identifies the relationship between environmental cognition and specific behaviours. An original questionnaire was developed and a web-based survey was conducted in November 2022. Responses were received from 300 practitioners in preschools in Japan. The survey was anonymous, and all respondents agreed to participate. Three factors were extracted from the factor analysis: ‘reverence for nature’, ‘interest in and care for nature’ and ‘love of nature’. A t-test of the three subscale scores showed that those with more than 20 years of experience scored significantly higher on all of them than those with less than 20 years of experience. The characteristics of nature-sensitive practitioners identified in this study promote a better environmental setting by practitioners.
ecosystem sustainability, environmentally conscious behaviour, nature-sensitive reactions, views of symbiosis with nature, practitioners setting up preschool environments

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

II 17

Attempt to develop resilience scale for infant interview survey: Comparison of responses from children, parents, and kindergarten teachers
Izumi Ishiyama (1), Kimiko Akama (2); (1) Tokoha University, (2) Shinshu Honan Junior College, Japan

The purpose of this study was to revise our resilience scale to a more valid scale comparing responses of children, parents, and kindergarten teachers. Resilience is the ability to adapt to difficult situations and considered a necessary factor for mental health (Fraser, M. W. et al. 2004:22). It is speculated research on this ability will contribute to the development of socio-emotional skills (Heckman, J. J. 2013:5), attracted attention in early childhood education. Based on the existing resilience scales responses by teachers, we have created a scale response by child himself/herself. Our scale consists of 4 categories and 20 items with original 20 illustrations familiar to infants. We conducted a survey of 15 parent-child pairs of 5-6-year-olds and a class teacher. A structured interview survey was conducted to the infants. A self-administered questionnaire survey was conducted on a teacher and parents. A consent form and information sheet were provided to parents and teachers. On the day of the interview, children received explanations and gave assents. Participants were given the opportunity to withdraw from the study at any time. Comparing the responses, the matching rate was 64.4% between children and guardians, 66.3% children and teacher, and 73.1% teacher and guardians. It was shown that teachers’ and parents’ evaluation of children’s resilience was lower than children’s self-evaluation. In the future, we will increase the participants and promote the standardization of this scale. Development of this scale would contribute to cultivate children’s resilience, a socio-emotional skill, in cooperation with teachers and parents.

resilience, scale, socio-emotional skills, structured interview survey, self-administered questionnaire survey

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

II 18

Social class dynamics in parental experiences of children’s disability services
Lána Cummins, National College of Ireland/Maynooth University, Ireland

This research aims to understand how social class shapes parents, particularly mothers, experiences of children’s disability services and early childhood care and education. The current policy context fails to account for how parents are forced to draw on their social and health capital when dealing with services required to support their children (Gengler 2020). Douglas and Klar (2020) find that neoliberal capitalism forces a need for a two-parent working family, but the family-state-market nexus has pushed health, social and education into the community and consequently onto mothers. This work will be underpinned by a feminist theoretical framework and the human rights model of disability, the approach adopted by the United Nations Charter on the Rights of Persons with Disabilities. Case study research design using purposive sampling, interviews with wide variation of families and stakeholders over 36 months. Quantitative data to capture family circumstances regarding disability and demographics. Engaged research will involve knowledge mobilization techniques to keep research stakeholders abreast of emerging findings. Ethical consideration will consider best practice in relation to the sensitivity of experiences for parents in vulnerable circumstances. Parents must have the resources to navigate bureaucratic systems. These resources make life management easier for middle and upper-class parents (Gengler 2020). The provision of ECCE and disability services for children focuses on their tangible availability. With mothers carrying out the majority of family caregiving, there is a need to investigate their experiences in this context and what this means for policy and service provision.

social class, parenting, disability, early years, children’s services

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

II 19

Ms. Jung’s journey to becoming a professional childcare teacher: Focusing on pedagogical documentation in a childcare center in South Korea
Juyoung Lee and Yunhee Kim, Duksung Women’s University, South Korea

The purpose of this study was to support the professional growth of a childcare teacher in the implementation of a play-based childcare curriculum. Previous research suggests that documentation can serve as a powerful tool for promoting professional growth among teachers (Knauf, 2020). Through documentation, teachers can gain insights into infant play and learning and acquire effective strategies to support it (Löfgren, 2017). Documentation can also help to identify, comprehend, and systematize previously unnoticed aspects of play-based situations (Davies, 2017; Olsson, 2017). What is more, the act of documenting their teaching practices can prompt teachers to engage in reflective thinking, leading to positive changes in their instructional approaches (Dahlberg et al., 2016; Hostyn et al., 2020). This research used a collaborative action research approach that centered on pedagogical documentation. The study involved Ms. Jung and 12 two-year-old toddlers under her supervision. The primary data sources were the teacher’s pedagogical documentation, class documents, and photographs, which were supplemented by in-depth interviews with the teacher. The researcher collected additional data through field notes and reflective journals. To ensure that ethical considerations were met, consent was obtained from all participants and parents, and the data was anonymized and stored securely. The study’s findings suggest that pedagogical documentation had a positive impact on Ms. Jung’s professional development, particularly by enhancing her autonomy and ability to support children’s agency and promoting perspective-taking during free play. The collaborative action research approach proved effective in facilitating self-research and reflective practices among teachers, with the guidance of experts.

childcare teacher, pedagogical documentation, collaborative action research, professional growth, implementation of a play-based childcare curriculum

This application discusses a completed piece of research.

II 20

User perspectives related to the implementation of a larger professional development model aimed at supporting children’s language development
Camilla Reiersen, Tone Sofie Røsholt, Veslemøy Rydland, Ratib Lekhal, Anna Girolami Bråthen, University of Oslo, Norway

We examined how preschool teachers and leaders self-reported on challenges and gains from working with the professional development (PD) model of the Oslo Early Education Study, which aimed to prepare multiethnic preschools to utilize their potential to support children’s language learning. Establishing preschool quality by providing support for staff is strongly dependent on local and national educational traditions and priorities, as well as motivation for change in staff (Weiner, 2009). It is therefore important to understand how PD programs are received and endorsed by staff. Few intervention studies have examined staff’s perceived challenges with implementation, or whether they experience the interventions as meaningful. The present study is based on the PD conceptual framework of Buysse et al. (2009), implementation science (Halle et al., 2013). Conducted within a constructivist paradigm (Creswell & Creswell, 2018), the study emphasized participant perspectives. 90 teachers and 14 leaders in 29 Norwegian preschools qualitatively described their perceived challenges and gains from the intervention. The responses were analyzed with thematic analysis. Participants gave informed consent, and all names were pseudonymized. The analysis resulted in five themes: 1) Appreciating new work methods, 2) Confirmation of pre-established work methods, 3) Receiving a premade material decreases workload, 4) Staff shortage, and 5) Feeling overwhelmed by task demands. Despite reporting challenges, participants also described becoming more aware of how they could support children’s language development. These findings suggest how effective implementation of similar future PD programs might be hindered or promoted.

professional development, intervention implementation, user perspectives, thematic analysis, preschool

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

II 21

Professional curiosity in early childhood initial teacher education in England: Unmasking pedagogical activism
Karen Vincent, Canterbury Christ Church University, United Kingdom

My professional curiosity during my doctoral study led me to explore the pedagogical narratives of early childhood initial teacher educators (ECITEs) in England, from an insider perspective. Teacher educators need to be able to draw attention to their teaching pedagogies whilst in the act of teaching (Murray and Male, 2005; Cochran-Smith, 2005; Lunenberg et al., 2017). This is challenging
but necessary work (UCET, 2019). However, there are a lack of studies conducted by academics in initial teacher education in England (Wyse et al., 2018) and universally (Czerniawski, Guberman and MacPhail, 2017) because articulating pedagogical approaches is challenging to do (Loughran and Menter, 2019). This research study is based on Bakhtin’s (1981) notion of language as a struggle between competing forces. ‘Carnivalesque’ (Bakhtin, 1984) was used as a playful device to disrupt the narratives of practice and explore pedagogical thinking. In this narrative, interpretivist, social constructivist research, four ECITEs had three conversations each, to iteratively explore, re-evaluate and clarify meanings. These were audio recorded and transcribed for analysis where emerging pedagogical themes were identified. An information sheet and consent form assured the participants that pseudonyms would be used and that they were free to withdraw at any time. ‘Pedactivism’ describes the pedagogical activism infused throughout the ECITEs narratives of teaching. The findings suggest that a broader consideration of pedagogical approaches that embrace conceptualisations of teaching in early childhood initial teacher education are required.

pedactivism, carnivalesque, pedagogy, play, unmasking

This application discusses a completed piece of research.

II 22

Autistic children exploring digital worlds
Irina Silva, Queensland University of Technology, Australia

This study aimed to understand how young autistic children engaged with digital technologies in the home. Observing children's practices permitted the identification of the purpose, affordances, challenges, and how digital interactions integrated autistic children's daily living. The use of digital technologies increased during the COVID-19 pandemic and supported autistic children to engage in multiple activities from their homes (Jayman, 2021; Montag & Elhai, 2020). The impact of these experiences on autistic children's lives is unclear, and this research provided critical understandings. Two complementary theoretical frameworks supported the study. Sociology of Childhood recognises children's agency to inform research and demonstrate their realities and viewpoints (Corsaro, 2016). The Affordances Theory framed the analysis of the other elements involved in children's digital interactions, including the context, the digital technologies involved and others that shared the interactions (Ostern & Rosemann, 2021). Digital Ethnography allowed studying the phenomenon within the home context and provided autistic children and their families various opportunities to participate. They showed their digital activities during in-person and online meetings, video-recorded their experiences with video cameras provided and shared their viewpoints during phone calls and text messages. The range of methods available offered autistic children opportunities to participate, respecting their preferences, times and challenges. During the study autistic children experienced their agency by exploring digital technologies, engaging with the expected affordances and uncovering new possibilities that supported their everyday lives in multiple ways. Accounting for autistic children's viewpoints and including them in research and decision-making processes that affect their lives is essential.

agency, Autism Spectrum, children's digital interactions, digital ethnography, sociology of childhood & Affordance Theory

This application discusses a completed piece of research.

II 23

Exploring teacher perceptions of parent collaboration in multilingual ECEC settings
Tone Sofie Røsholt, Veslemøy Rydland, Vibeke Grøver and Ratib Lekhal, University of Oslo, Norway

This study aimed to explore teacher perceptions of communication and challenges in parent collaboration in multilingual early childhood education and care (ECEC) settings of Norway. Teacher-parent collaboration is considered a core feature of ECEC quality (Cadima et al., 2020), and is particularly important for dual language learners (DLLs) and their language development (Paat, 2013; Sawyer et al., 2017). As part of the mesosystem in the bioecological framework of Bronfenbrenner (1979), teacher-parent collaboration connects two of the most important microsystems of a young child’s life: home and ECEC settings. Within a postpositivist paradigm (Creswell & Creswell, 2018), the current study collected survey data from 266 teachers in 198 classrooms across 56 ECEC centers of Oslo. The data were analyzed both quantitatively and qualitatively, using structural equation modelling and thematic analysis. Participants gave informed consent and participant names were replaced with pseudonyms. Preliminary findings indicated variation in teacher perceived quality of parent collaboration, even though all the centers were in multilingual areas and had similar structural quality. The two aspects of collaboration measured – communication and challenges – were not related to each other and had somewhat different predictors; teacher self-efficacy predicted communication, while teacher self-
efficacy, teacher experience and center context predicted challenges. Qualitative data gave insight into teachers’ understanding of communication and challenges. The findings offer a clearer picture of the context of DLLs language development in multilingual ECEC centers in Oslo and suggest that promoting teacher self-efficacy through professional development programs can strengthen teacher-parent collaboration.

multilingual ECEC settings, parent collaboration, dual language development, teacher perspective, teacher characteristics

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

II 24

Parents’ roles in directing children’s digital curiosity in the KSA: Mediation and influential factors
Nouf Hassanin, University of Reading, Saudi Arabia

This paper examined how parents guide their children towards digital citizenship as they manage their children’s curiosity in digital technology. Several studies have shown that children are exposed to digital technology at a young age (Livingstone & Third, 2017; Smahel & Wright, 2014). As primary socialisation agents, parents should guide their children’s interests and provide them with appropriate online skills and knowledge (Kalmus, 2013). While Saudi Arabia has made substantial progress in digital growth in recent years, following Vision 2030, research on parents’ roles in coping with their children’s online curiosity and formation of digital citizenship (Ribble, 2009, 2017) is limited. The study was guided by Vygotsky’s (1978) mediation concept and Bronfenbrenner’s (1994) macrosystem view. A qualitative interpretative paradigm (Crotty, 1998) was used to collect data through online interviews. Pseudonyms were given to ten parents of children aged 4 to 9, and consent forms with withdrawal opportunities were presented. Thematic analysis identified five parental strategies for mediating their children’s digital interactions: supervision, active, co-use, role modelling, and restrictive rules. The data showed that the participants had positive attitudes towards their children’s digital usage. The findings demonstrated that children’s online experiences and the creation of digital citizenship were influenced by sociocultural values, digital media, and home and school interactions. This exploratory study had a limited timeframe and area of investigation. Parents’ perspectives on their interactions with their children’s digital curiosity and the societal influences on their online activities might be interesting topics for future investigations.

digital curiosity, digital citizenship, parental mediation, early childhood, Saudi Vision 2030

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

II 25

Using story books and a philosophically informed pedagogy to enhance young children’s language and capacity for reasoning and reflection: Preliminary findings from a 3 year study
Fufy Demissie and Sally Pearse, Sheffield Hallam University, United Kingdom

The Talk with Tales for Children (TWitCCH) project is a structured intervention that is designed to improve early childhood educators’ facilitation skills during story time. This paper outlines the rationale for the project and the emerging findings from a small-scale pilot project, and the lessons learnt to inform the next stage of the project. Extensive research has shown that despite a consensus that high quality interactions enhance language development (Sylva et al 2004; REPEY 2002), early childhood educators struggle to adopt interaction strategies that can nurture language development (Purdon, 2016; Noble et al., 2019). The theoretical framework for analysing the data is the COM-B model for behaviour change relating to capability, motivation and opportunity (Michie et al., 2014). The study is framed within the qualitative paradigm based on a questionnaire educators completed about their experiences of facilitating reflective talk during story time. Content analysis was undertaken to categorise the emerging themes about the educators’ experiences and the impact on their practice. The participants received a project information sheet before completing a consent form that outlined the arrangements for confidentiality and the options for withdrawing from the study. Emerging findings from the pilot project suggest that motivation was higher for educators who understood and valued philosophical approaches. The findings have implications for the design of professional development training materials for the next phase of the project to take into account the challenges encountered in the pilot stage of the project.

story time, interactions, reasoning, philosophy, early years

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
The impact of childhood experiences on the formation of "nurturance" - based on the results of the 2011 and 2022 surveys
Narumi Matsumoto, Michiko Iwasaki, Yuko Takahata and Takahiro Sato, Tokyo Kasei University, Japan

The purpose of this study is to examine the influence of childhood experiences on the formation of "nurturance" from the results of a survey conducted in 2011 and 2022 among university students in Japan. Kojima developed a "nurturance" questionnaire and extracted three factors that form the core of the three scales; interest in the baby, confidence in handing the child well and acceptance of a positive nurturing role. Additionally, it showed that involvement with young children influenced the formation of "nurturance" (Kojima, 1991:79). "Nurturance" was theorized by Fogel, Melson, & Mistry et al. (Fogel, A., Melson, G., & Mistry, J., 1986:53-67) The definition of "nurturance" was defined and proposed by Kojima in Japan as empathy and skills used to promote the healthy development of others. (Kojima, 1989:191). A total of 367 students in Japan were included in the analysis. The results of the responses to the questions on the "nurturance" scale and on childhood experiences were analyzed. Statistical processing was carried out using the statistical package SPSS ver. 26. Consent forms were provided to the survey participants and consent was obtained that the responses would only be used for the research study and that the responses would remain anonymous. The findings showed that the experience of working with younger children, caring for animals and helping out, had an impact on the formation of "nurturance". The results of this study provide useful suggestions for considering and supporting the important experiences in early childhood life that promote the formation of "nurturance".

nurturance, formation of nurturance, impact of childhood experiences, early childhood life, Japan

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Kindergarten teachers’ self-efficacy in teaching indigenous languages
Catherine Compton-Lilly (1), Ya-Lun Tsao (2), Ching-Ting Hsin (2), Wan-Chen Chang (2); (1) University of South Carolina, United States, (2) National Tsing Hua University, Taiwan

The study examined the impact of a workshop designed to promote teacher collaboration and self-efficacy when using bilingual books designed to support student learning of an Indigenous language. Teacher workshops are associated with increased focus on their own developmental purposes, collaboration, and a sense of self-affirmation (Fenwick, 2003). This professional development session served novice and experienced teachers and facilitated the sharing of experiences and instructional practices related to the use of the bilingual books (Coenders & Verhoef, 2019). Questionnaires and assessments (i.e., Indigenous Language Maintenance Attitude Questionnaire, Cronbach’s α = .984; Questionnaire of Self-Efficacy in Teaching Indigenous Language, Cronbach’s α = .972; Atayal Phonetic Test, Cronbach’s α = .913) were administered before and after the workshop to understand the effectiveness of the workshop. Questionnaires and assessment data were collected from 42 participants who signed the consent form with a response rate of 85.71%. When pre- and post-questionnaires and assessments were compared through paired sample t tests, the results showed t = 3.32 p < .01 on the Indigenous Language Maintenance Attitude Questionnaire, t = 2.51, p < .05 on the Questionnaire of Self-Efficacy in Teaching Indigenous Language, and t = 3.10, p < .01 on the Atayal Phonetic Test. Findings suggest that the post-test performance - on the both questionnaires and assessments - was significantly higher than pre-test performance, indicating the effectiveness of the workshop. This study documents the effectiveness of a collaborative teaching model involving kindergarten and indigenous language teachers which allowed teachers to learn about the children’s development as readers, and the native language and culture brought by their students.

collaborative-teaching model, Indigenous language, self-efficacy, language revitalization, early childhood

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Professional learning as a collaborative practice
Madeleine Brodin Olsson, Anette Olin and Anne Kultti, University of Gothenburg, Sweden
The aim is to study the process of learning theoretical concepts for understanding teaching and play within teams of teachers, facilitators, and a principal in early childhood education and care (ECEC). Research of professional development has shown the importance of including teachers as active co-creators included to influence their learning processes. An important tool that gained a growing interest is the facilitating practice (Nehez et al., 2021). In this study, learning as a social phenomenon is grounded in the theory communities of practice (CoP) (Wenger, 1998). Wenger’s perspective is used to understand what is learnt and how, in the CoPs that have been followed for a period of two years. The concepts reification and participation are used to analyze learning about a theory (play-responsive teaching) which with Wenger’s terms is a boundary object in play. The study was conducted through following 18 professionals participating in professional development activities consisting of dialogues. The audio recordings were analysed inspired by sociocultural informed interaction analysis, SIA (Wallerstedt et al., 2022). Ethical approval has been obtained. Participants were given the opportunity to withdraw from the study at any time and pseudonyms have replaced their names. Findings show that implementing a theory so that it is expressed in practice is a complex process. Social learning depends on the different initiatives of participants and their opportunities to try new thoughts and actions in cooperation with each other. Implications are that time and spaces are required for sustainable learning of new theories to take place.

**communities of practice, ECEC, facilitator, professional development, professional learning**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

### II 29

**Play-based promotion of children’s curiosity – professional development of competences during pre-service training**

Lea Barnikol, Justus-Liebig-University, Germany

The study looks at how students’ competences in promoting children’s curiosity develop during a ECEC university degree and to what extent pedagogical experiences before and during their degree act as predictors. Previous studies underline the importance of responsive and play-based interactions to foster children's curiosity (Remsperger-Kehm 2022: 187, Laevers 2003: 14). There is evidence that pedagogical experiences positively influence these competencies (Weltzien & Söhnen 2020: 101). The study ties in with the discourse on professional development in ECEC in Germany, in which the importance of academic training for prospective professionals is growing (Helsper 2021: 57). For this study, the formal and the competence-theoretical perspectives are particularly relevant (Thole & Polutta 2011: 111). The study is designed as a quantitative online survey on the self-assessment of competences of ECEC students at three points of measurement (N = 494). Multivariate statistical methods are used to analyse the extent to which students’ competences develop during their studies and which predictors have an effect on competence development. All information provided by participants was voluntary and treated with the utmost anonymity and confidentiality. The results show that part-time pedagogical work during the university program as well as experience in the greatest possible variety of institutions act as predictors for the acquisition of competences for the play-based promotion of children’s curiosity. It is further shown that these competencies increase during the course of program. A wide range of different paedagogical experiences before and during ECEC pre-Service training should be a core element of policy.

**professional development, competences of ECEC-teachers, academic training, children’s curiosity, play-based promotion**

This application discusses a completed piece of research.

### II 30

**Enhancing regulation and inspection processes for early years services operating outdoors in Ireland.**

Grant Landon and Marie Gibbons, Tusla, Ireland

TUSLA is the statutory regulator for early learning and care in Ireland. The Childcare Act 1991 (Early Years Services) Regulations 2016 provide the regulatory requirements for the sector. In 2022, the EYI engaged with the sector to examine how they operate and what supports are needed with regulatory compliance. It has been identified by the Early Years Inspectorate (EYI) that there is limited regulatory focus on the outdoors as a care and learning environment. The survey was informed by theories of consultation and participation. 27 outdoor service providers participated in an online survey incorporating qualitative and quantitative elements. Respondents all indicated their informed consent to participate. Issues that are challenging for the outdoor sector include the lack of registration categories, space requirements, group sizes and ratios. Other issues include the lack of clear guidance on fire and safety requirements, risk assessments, defining suitable shelter and other operational and practice issues. The findings highlighted the
positive relationship that exists between the sector and the EYI and pointed to areas where the EYI could further support the sector to ensure that outdoor services are operating in compliance with regulations and children and families are reassured of high-quality service provision. While there is no doubt that there are aspects of the regulations that require more clarification and possibly regulatory amendments, the findings indicate that the sector is focussed on a collaborative, solution focussed approach with the EYI to ensure that regulation and inspection processes are appropriate and reflect outdoor pedagogical philosophies and approaches.

*outdoor pedagogy, risk, collaboration, policy, regulation*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

II 31

**Children's perceptions, interpretations, and reactions to their mothers' breast cancer behind the scenes**

Jui-Chih Chin and Yin-Ying Chen, University of Taipei, Taiwan

The purpose of this study was to explore the accounts of Taiwanese children to identify their perceptions, interpretations, and reactions to maternal breast cancer. The diagnosis of breast cancer is very devastating, not only to patients themselves, but also to the second-order patients, i.e., children. In Western literature, an open style of illness communication is valued (Fitch & Abramson, 2007; Davey, Tubbs, Kissil, & Nino, 2011), whereas Asian mothers are reluctant to do so due to a belief that young children can’t grasp cancer (Chin, Chang, & Lin, 2021). However, children are active learners by seeking and interpreting information in the socio-cultural environment (Vygotsky, 1978), sometimes without parental awareness. This study was following a qualitative interpretative approach. A group of 22 children aged 6-13 years were interviewed. Before data collection, written consent forms were obtained by the participating mothers and children. The results revealed that children were keenly observer of changes in mothers’ behaviors and family routines. They interpreted mothers’ health conditions by mothers’ continuing use of massager, and the messages delivered indirectly by mothers’ verbal words and behavioral manners. Younger children experienced worry surges during maternal absence, whereas school-aged children expressed a feeling of loss in terms of missing mothers’ cooking and disciplinary practices. These findings demonstrated that children constructed their knowledge about maternal breast cancer mainly based on nonverbal information. The results underscore the importance of messages, rather than spoken language, conveyed to children by mothers’ behaviors, especially in an Asian society.

*children's perceptions, children's reactions, maternal breast cancer, social constructivism, parent-child illness communication*

This application discusses a completed piece of research.

II 32

**Play-responsive mathematics teaching in one Swedish preschool**

Lena Karlsson, Department of Mathematics Didactics, Sweden

This study is about the implementation of Play-Responsive mathematics teaching in Swedish preschools. The aim is to study the characterises of activities when preschool teachers implement play-responsive teaching focused on cardinality. In Sweden, teaching is part of education in preschool with the aim to stimulate and challenge children to develop and learn. Mathematics teaching in early childhood should be based on the children’s lived experiences (Björklund et al., 2018) meaning that these experiences can be expanded by teachers in play. Play-Responsive Teaching is a theory on how to design teaching responsive to play without removing the essential characteristics of play. The theory emphasises that the children, together with teachers, can develop new understandings through play without the child’s agency or play-story being lost (Pramling et al., 2019). The study is conducted through design research (Bakker, 2018), with one researcher and three teachers collaborating. The empirical data are video recordings of implemented activities in line with Play-Responsive Teaching. Guardians and preschool teachers have been informed and agreed to participate, and the children's participation in the activities has been voluntary (Swedish Research Council, 2017). Preliminary results show patterns of sequences found within the activities; sequences of play, mathematics teaching and play-responsive mathematics teaching. The results indicate that an activity is not either play or teaching, but instead, these two within each activity are sometimes separated and sometimes merged.

*play-responsive teaching, play, teaching, preschool teacher, cardinality*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
Early childhood practitioners’ response to ‘play fighting’ in Japan: Based on a questionnaire survey using a fictional scene
Machiko Tsujitani, Ochanomizu University, Japan

This study explores how practitioners consider and respond to children’s ‘play fighting,’ which practitioners support or sometimes prohibit. Rough and tumble play (RTP), valued for children’s development and wellbeing (St George & Fletcher, 2019), includes ‘play fighting’ as fantasy play (Hart & Tannock, 2019), which practitioners sometimes find challenging to support (Ogawa, 2010). However, practitioners’ beliefs and responses have yet to be explored. This study positions ‘play fighting’ as belonging to both RTP and fantasy play in the context of Ogawa (2010)’s theory of early childhood education through play in Japan. The online address for questionnaire responses was sent to Japanese early-childhood centres, and 164 practitioners responded. Questions about the existence of ‘play fighting,’ the reasons, and participants’ responses to children were included, referring to studies on safety rules during play (Tsujitani, 2021). Only participants who agreed responded. This research was approved by the research ethics committee of the Ochanomizu University. Among the participants, 83.5% (n=137) answered that ‘play fighting’ exists in their centres, while 11.6% (n=19) answered that they do not promote it. Based on a fictional scene, 38.0% (n=52) in 137 answered that they respond when it is clear from a child’s facial expression that they do not have fun. The main reasons to stop play were when sharp objects were used and disapproving facial expressions. Practitioners’ varying responses on the meaning of safety management and supporting children’s relationships became clear. Further analysis and studies are needed to identify the reasons for such differences.

play fighting, practitioners' response, practitioners' beliefs, questionnaire survey, rules in Japanese early childhood centres

This application discusses a completed piece of research.

Schoolification – Changes in the political vision of preschool education
Kristin Dýrfjord, University of Akureyri, Iceland

Schoolification has risen in the ECE for at least the last decade, manifested in increasing external programs to teach basics (the three Rs) and control behaviour (Roberts-Holmes & Moss, 2021). In Iceland, there has been a public push to frame the working conditions within preschools to look more like primary schools. The study examines and maps out the scope and influence of schoolification within preschools. We draw on the work of Roberts-Holmes & Moss, 2021 concerning how schoolification and neoliberalism collide within the preschools, both internally and externally (Alexiadou et al. 2022). The research is based on Ball & Youdell, 2008 theories, arguing that forms of privatisation change how education is organised, managed and delivered and have an impact on, i.a., professional development and the nature of teachers’ everyday activities. A questionnaire was sent to all preschool principals in Iceland to gather information about solutions bought and used in Icelandic preschools and to explore which challenges the principals face in their daily work.

The research was reviewed and supported by the University of Akureyri research fund. Data is gathered with the informed consent of partitioners. Schoolification appears in three dimensions; similarities in working conditions between pre- and primary schools, 3-in-1 teachers’ licence, which is open for a preschool teacher to teach at other school levels and the emphasis on the three Rs in the form of external programs.

Findings are a platform for the profession to discuss where it is heading and how agreeable that development is.

schoolification, principals, neoliberalism, the three Rs, preschools

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

A case study on young children’s experiences and exploration of poetry
Minling Tsai, National Taipei University of Education, Taiwan

This intrinsic case study (Stake, 1995) documented how a class of two teachers and 29 young children aged 3 to 5 experienced and explored poems in poetry reading activities. In Taiwan, ECE teachers rarely read poems with young children. On the contrary, poetry reading is a popular and well-supported activity in ECE settings and elementary schools in Western countries (Burke, 1990, Brountas,
1995). This study intended to challenge the status quo regarding young children's competence in experiencing and exploring poems. The “aesthetic reading” approach (Rosenblatt, 1978) and Vygotsky's (1978) view on the functions of sign system was applied to explain how poems connected young children's contact with "the immediate" as well as "the mediated" qualitative world (Eisner, 1993). Guided by social constructivism, the researcher observed how the class experienced and explored 15 "poem books" and 29 short poems. The researcher interviewed the teachers and the children about their views on reading poems. Classroom culture was observed to construct contextualized understanding. After being approved by Research Ethics Committee of N.T.U. in Sep. 2020, the research was launched in Oct. 2020. There were four stages in teacher-led poetry reading activities, including from life to poetry, overall experiencing, exploration in details and from poetry to life. Children enjoyed exploring poems and constructed ideographic perceptions. Poetry reading mediated young children's contact with the sensuous as well as the symbolic world. It is concluded that young children aged 3 to 5 are capable of making interesting and insightful responses to poems.

**poetry for young children, intrinsic case study, to experience and explore poems, teacher and young children reading poems together, young children and literature**

This application discusses a completed piece of research.

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**Place-based learning in the neighbourhood in early years and primary school**

Kathrin Paal (1), Kim Defoirdt (2), An Dubuquoy (2), Petra Ristić, (3), Helena Varhulíková (3), Danielle Cools (4), Janet Georgeson (1); (1) University of Plymouth, United Kingdom, (2) Buitenschool De Bergop (Outdoor school 'De Bergop'), Belgium; (3) Mateřská škola Sluničko pod střechou (Sun under the Roof Kindergarten), Czech Republic, (4) UC Leuven- Limburg (UCLL) University of Applied Sciences, Belgium

This project aimed to explore how place-based learning (PBL) projects can be conducted with children in the Early Years and primary school bringing together classes from two different countries – Belgium and Czech Republic. The produced resources were then used by BEd students in England to explore PBL. PBL gives children a sense of their own agency and collective capacity (Smith, 2007), even at young age (Boyd, 2019). It helps to develop a stronger connection to the community, and increases the commitment to be an active, contributing citizen (Sobel, 2004). We aim to illustrate ways in which PBL projects can be scaffolded to empower teachers and future teachers to adapt this approach into their practice. We drew from the place- and inquiry-based learning approach (Van Helleputte & Cools, 2022). Children developed research questions. They were also data collectors and involved in data interpretation and analysis. Finally, they played an important role in the dissemination of findings. A consent form and information sheet were provided to all participants. We explained the research to the children in a sensitive and age-appropriate manner. Pseudonyms replaced the names of participants. All participants were given the opportunity to withdraw from the study at any time. Findings provide a guide of place-based learning in the school surroundings for teachers to draw from. They also illustrate how practitioners can collaborate between countries and age groups. The findings provide valuable information into the use of PBL approaches and critically discuss the use of PBL especially with young children.

**place-based learning, inquiry-based learning, international collaboration, diverse learning environments, innovative learning approaches**

This application discusses a completed piece of research.

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**Rethinking toddlers’ participation in early childhood dance education – The Tiger Eye Model.**

Sara Frödén, Örebro University, Sweden

The aim of this study is to explore the educator’s role in enhancing young children’s participation while developing their artistic expressions, knowledge, and skills in dance education. According to research, EC educators’ limited knowledge and skills to teach dance leads to focusing on the joy of movement at the expense of broadening children’s repertoire of movements and awareness of aesthetic qualities (Pastorek Gripson et al. 2022:351). The study is drawing on the work of Isadora Duncan (1928) and Rudolf Laban (1948) as well as the Deweyan concept of aesthetic experience (Dewey 1987). The data is based on interviews with three EC educators and their long-standing documentation of dance teaching. It consists of films, photographs, and transcripts. The analysis of data was a multi-staged process. It was conducted together with the educators through an abductive theme analysis, as a part of a learning evaluation within an action research paradigm (Svensson et al. 2009). All the children’s guardians signed consent forms.
Attending dance sessions was voluntary. All the filming and photographing were made by the participants as a part of their everyday practice. The participants’ names are replaced with pseudonyms. The findings demonstrate how the teaching evolves from and challenges children’s interests. Various dance genres were systematically introduced to inspire and educate. Children and educators were mirroring each other in dance improvisations. They choreographed dance tales together based on toddlers’ movements. Finally, an open-ended model for teaching dance is presented, consisting of five parts: Introduction - Inspiration – Improvisation - Instruction – Involvement.

dance education, creative dance, children’s participation, toddler, aesthetic experience

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

II 38

The Art of As: Motherhood of autistic musicians
Chin-hsieh Lu and Hui-Jing Ng, National Taipei University of Education, Taiwan

The purpose of this study was to investigate mother’s roles and self-efficacy in cultivating their autistic child’s musical talent and how their praxis redefined the child-centered practice from the perspective of culture-historical theory. Theoretically, the child-centered practice would be the most adequate and valuable approach for responding to children’s learning. Practically, caring an autistic child is more or less a burden to a family, not mention how desperate a mother would be while struggling in between what their child’s needs for successful learning in school and in their lives. What and how a mother learned through the processes will provide insights of the child-centered practice. Based on the social-cultural perspective, children’ learning is always situated and talent development is the potential of effective person-in-context transaction instead of stable characteristics of few individuals (Barb & Plucker, 2002; Dewey, 1938; Vygotsky, 1978). A multiple case study was implemented in this study. Three mothers who had raised a successful autistic pianist were invited to participate. Data were collected from semi-structure interviews and related documents and analyzed qualitatively. Participants were fully informed and signed the consent. It was found that the mothers showed their parenting efficacy in four critical roles to fulfill the needs of their autistic musician: as teachers, resources seeker, mediator and advocator. While striving a successful musical life with their child, they transformed into a successful role model of parenting. Learning to live fruitfully and intelligently as a child’s best partner is the best practice of child-centered.

motherhood, talent development, child-centered, autistic musician, parenting self-efficacy

This application discusses a completed piece of research.

II 39

Parents’ perspectives on children’s play in transitioning from ECEC to school
Else Johansen Lyngseth (1), Kristine Warhuus Smeby (1), Tuva Schanke (2); (1) Queen Maud’s University College of Early Childhood Education, (2) Norwegian University of Science and Technology, Norway

The project aims to contribute to new knowledge about parents’ experience of their children’s play in transition from ECEC to school. We focus on the possibilities of parental participation and parents’ perspective on children’s play in school. Previous research indicates that the possibility of play in school is reduced (Nilsen, 2017; Schanke 2019), and there is a lack of research on parents view on children’s play in first grade in Norway (Lillejord, Børte & Nesje, 2018). The project’s theoretical framework intersects with childhood studies and play studies (Gopnik, 2016; Øksnes & Sunsdal 2020) as well as transitional theory (Balduzzi, et al. 2019). The project has a qualitative research design (Denzin & Linclon, 2018) and data was collected through qualitative interviews with 30 parents in Trondheim (Kvale og Brinkmann, 2014). We have used thematic qualitative analysis (Braun & Clark, 2008) within a phenomenological and hermeneutical approach. Ethical considerations were taken into account by informed consent from the participating parents. Participating in the study was voluntary and the informants will be kept anonymous. Findings show that parents understand play to be important for friendship, curiosity and learning in transition, and that childrens possibility to play in school have decreased compared with ECEC. At school children have little space and time to play. Our research brings new knowledge that are expected to be used to improve local practices in Trondheim municipality by critically discussing the role of play in children’s transition to school, and might contribute to innovate practices.

play, parents’ experience, transition to school, qualitative research, thematic analysis
Factors regulating changes in attitudes toward participation in group activities among young children
Makiko Hayashi, Aichi University Of Education, Japan

This study focuses on group fingerpainting by young children and aims to identify environmental factors involved in changes in their attitudes toward participation in the activity. ECEC staff must ensure an educational environment in which young children feel safe and able to express themselves. This is one of the basic aims of preschool life and promotes the development of social and emotional skills (OECD:2015). This study will be conducted with the intersubjective approach (Kujiraoka,T.), which is based on phenomenological and clinical attitudes, as its theoretical framework. Intersubjectivity in this study includes the concepts of intersubjectivity (Merleau-Ponty,M.), which is the mutual unconscious response of two bodies to each other, and mutual intentionality (Trevarthen,C.), which is the communication of one’s intentions with the other. The study was conducted within the constructivist paradigm: four young children were fingerpainted in groups for approximately 50 minutes. Analysis was conducted by Steps for Cording and Theorization (SCAT). The consent of the target children and their parents was obtained for the conduct of this study. In addition, we confirmed the guarantee of the children’s freedom of participation and withdrawal from the activities. This study suggests that although instruction that is not in line with the child's wishes is not a factor that encourages participation in activities, the presence of ECEC-staff is an environmental factor that indirectly stimulates behavior. In summary, this study is significant in that it has identified environmental factors that influence young children's engagement in independent activities.

group fingerpainting, self-expression of young children, How ECEC-staffs relate to young children, intersubjective approach, qualitative research

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Arousing children's curiosity about different kinds of picturebooks
Anna Backman, University of Gothenburg, Sweden

This is a published teaching study that aims to contribute to an understanding of how children distinguish and experience different kinds of picturebooks when they are introduced to differences between them. The teaching design is inspired by teaching suggestions from previous studies. Mantzicopoulos and Patrick (2011) addressed the idea that fiction and non-fiction books on the same subject may be paired and compared in teaching. However, children’s non-fiction picturebooks are often fictionalised. Pappas (2006) suggests comparisons between traditional and fictionalised non-fiction in teaching. The theoretical and conceptual framework for the study is variation theory (Marton, 2015), with the basic idea that in order for learning to occur, differences must be perceived. Using design experiments (Brown, 1992), four reading activities were planned and carried out with a teacher and six five-year-olds in a Swedish preschool. The analysis directed interest towards the aspects that the children expressed, in words and actions, to focus on when deciding whether a picturebook is non-fiction or not. For participation, the children gave verbal consent and their guardians gave written consent. Several distinguishing aspects between non-fiction and fiction were presented to the children, but the children focused almost exclusively on that non-fiction is books “without fiction” in them. However, as non-fiction picturebooks for children are often fictionalised with fictional elements, teaching challenges arose. But the fictionalisation of children's non-fiction picturebooks also creates teaching opportunities, such as critical evaluations of the reliability of non-fiction as a source of information.

picturebooks, non-fiction, fiction, children's perspectives, preschool

This application discusses a completed piece of research.

Investigating children’s perspectives on inclusion using a participatory map-making approach
Linda Kelly, Lisha O'Sullivan, Shirley Heaney and Emer Ring, Mary Immaculate College, Ireland
The research interrogates the role of the Leadership for Inclusion in the Early Years (LINC) Programme in enhancing inclusion in early years settings in Ireland through the development of the role of INclusion COOrdinator (INCO). Equipping educators with the specific knowledge(s), practices and values central to providing high-quality provision to children with diverse needs and abilities is critical (Ring et al. 2018). An adapted version of Guskey’s (2002) framework for evaluating continuing professional development (CPD) underpins the present research (LINC Consortium 2019). This methodological approach focuses specifically on Guskey’s fifth level – outcomes for children. Data were collected from six single case-study early years settings employing a map-making methodology to gather children’s perspectives on inclusion. Map-making is a child-centred participatory approach that enables children to express their views and experiences in context and recognises the multiple modes that children draw upon to create meaning (Gowers 2022). This approach respects children as competent, active and curious meaning-makers who have the right to be consulted in matters affecting them. Children were invited to create maps of their setting to be used as a basis for child-led tours and dialogue based on key principles of inclusion (Ring et al. 2021). Further to parental consent, informed by a rights-based approach, children’s assent was secured. Data collected provide a valuable insight into the impact of LINC on how children experience inclusion in settings and contribute to an understanding regarding the impact of professional learning on cultivating inclusive culture, practice and pedagogy in the early years.

**inclusion, professional learning, child participation, children’s meaning-making, child voice**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

II 43

**Early childhood educators’ perceptions of children’s outdoor play and learning in China during the COVID pandemic**

Junjie Liu (1), Shirley Wyver (1), Helen Little (1) and Muhammad, Chutiyami (2); (1) Macquarie University, (2) University Of Technology Sydney, Australia

The aim was to explore educators’ perceptions of outdoor time and space in early childhood education and care centres (ECEC) in China during the pandemic. China has undergone a recent rapid transformation in early childhood outdoor pedagogy and moving towards more outdoor time in ECEC (Ministry of Education of the People’s Republic of China, 2022). China was also the first country to detect COVID-19 cases, and the pandemic, along with the restrictions, affected all families, schools, and children (Rao & Fisher, 2021). Despite the reform, there is an inadequate opportunity for outdoor play, and research showed a considerable gap between Chinese early childhood educators’ curriculum pedagogy and the actual practice (Hu et al., 2015; Yang & Li, 2022). The Bullerby model (Kyutta, 2003) and affordance theory (Gibson, 1979) will be applied to interpret children’s outdoor opportunities in ECEC during COVID-19. The study was conducted within a qualitative paradigm, following an interpretive approach, and collecting data through semi-structured interviews with 11 educators working from pre-pandemic onwards in Chinese ECEC. The project was approved by the Macquarie University Human Research Ethics Committee. We informed participants about the purpose of the study, confidentiality, and voluntary participation and received signed consent forms. The thematic analysis will be used to explore emerging themes on why there was a change in outdoor time and space in Chinese ECEC or stayed the same during the pandemic. The findings will contribute to understanding what educators encountered during the pandemic and provide direction for professional development.

**outdoor play and learning, outdoor space, outdoor time, COVID-19, educator’s perceptions**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

II 44

**Mediation of play in the restructuring of the relationship of children including a “child of concern”**

Sakiko Sagawa, Kyoto University of Education, Japan

In the Japanese ECEC fields, teachers often describe children with some kind of problem as “children of concern”. This study aims to explore the peer consciousness of 5-year-old children, including a “child of concern,” in the game of tag through changes in game types. The objective is to understand the relationship between the process of peer relationship formation and the characteristics of game of tag. Since 2000, many studies discussing “children of concern” in relation to developmental disabilities emerged (Nomura, 2018). Consequently, many studies and practice aimed to enrich play and activity in ECEC fields to solve children’s disabilities (Matsui, 2013). Participatory observation was conducted, focusing on the help-seeking behaviour (Cluver et al, 2013) and helping action to explore interactions between children. For eight months, 5-year-old children in a kindergarten class were observed. Twelve
cases of the game of tag were analysed qualitatively. The consent of all the participants and the parents was obtained. The kind of fun the target child experienced in the game of tag differed according to the types of game. The target child demonstrated agency in the fun of game of tag. Fun of play activity mediated the relationships between children and their peer consciousness. The intention of the teacher to restructure relationships among the whole group of children, including the target child, through the game plays a significant role. It is necessary for teachers to understand both the children’s favorite things and the fun of the particular play activity.

**relationship, play, game of tag, “child of concern”, inclusion**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

II 45

**Early childhood teachers’ responsiveness in play-activities with scientific content**

Anna Henriksson, Kristianstad University, Sweden

This study explores how Swedish early childhood teachers show responsiveness in play-activities with scientific content. Empirical research studies that examine 1–3-year-old children’s learning in play-activities in relation to scientific content (O’Connor et. al., 2021), and the potential of play in relation to children’s scientific curiosity is a limited field (Ilgas et. al., 2018). Theoretically, the study is grounded in, Play-Responsive Early Childhood Education and Care (PRECEC). Play and teaching is understood as mutual activities were both teachers and children are responsive to each other’s perspectives. In these mutual activities children can learn and acquire knowledge about the world as it is (as is) through imagination and fictional worlds (as if) (Pramling et. al., 2019). The empirical material consists of video-observations of when teachers and 1-3-year-old children participate in activities that incorporates play and scientific content. A thematic analysis was performed through PRECEC. The participants and the caregivers were given access to consent forms and information about the study, which www.vr.se advocates. The children’s consent was taken into account in the documented activities. All participants are treated confidentially. The results show that science as a teaching-object and play can form as responsive activities. And that the teacher (as a more knowledgeable adult) has an important role to introduce this kind of content, it does not arise by itself. This study intends to contribute with knowledge about how scientific content and play can be brought together as responsive activities.

**early childhood education and care, play and learning, play-responsive early childhood education and care, preschool teachers, scientific content**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

II 46

**KVALid Supervision. An observation tool for daycare quality assessment**

Heidi Trude Holm, Sandie Malene Ravn Nielsen, Anette Hvolby, Torben Næsby, Signe Engh Lundgreen and Birgitte Skov Pedersen, University College Northern Jutland (UCN), Denmark

KVALid Supervision focuses on developing an observation tool for daycare quality assessment. In Denmark, daycare providers care for small groups of children in the providers own homes. This target group needs supervision in developing the learning environment. Opportunities to explore curiosity, participation and agency are essential elements in KVALid. The overall quality of the daycare learning environment is crucial for childrens wellbeing, development and learning – both short and long term (Heckmann, 2006. Sylva et.al., 2010. Næsby, 2017), hence the growing interest in high quality outlines and measurement (Moser et.al., 2015. Taggart, et. al., 2015). The theoretical framework consists of interactionist and ecological system theories (Bronfenbrenner & Morris, 2012. Vygotisky, 1978. Hundeide, 2009/2014). Quality indicators are based on a literature review of research in high quality daycare (Sheridan, 2009. Moser et.al., 2017. Næsby, 2020). KVALid is developed within a pragmatic research paradigm using an abductive approach. Rooted in pragmatism and experiential learning (Peirce, 1955. Dewey, 1997) the generated knowledge is continuously qualified. KVALid is used for quantitative research combined with qualitative feedback. In Denmark, daycare supervision is mandatory. The aim of the observation tool is to explore from childrens perspective although we do not interview 0–2-year-old children. Preliminary results include the construction of KVALid and how to implement it, combined with results from a small pilot trial. KVALid can contribute to quality development beneficial for all children and professionals involved, if the organization collaborates to implement changes. Ongoing adjustment is necessary and data interpretation requires training to ensure correct use.
Daycare quality assessment, supervision and observation in daycare learning environments, pragmatic research in developing a supervision and observation tool, children's opportunities to thrive, develop, learn, explore and participate, competence building and organizational development

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

II 47

Experiences of early childhood teacher participating in the learning community to practice child-centered, play-based education
Youngmi Go, Soonchunhyang University, South Korea

The aim of this study was to analyze the experiences of early childhood teacher participating in the learning community. In Korea, as an effective way to enhance the professionalism of teachers, the learning community is actively being implemented in the field (Kim & Go, 2022). This study is based on the professional learning community study (Go, 2017) and Korea’s 2019 Revised Nuri Curriculum, which emphasizes child-centered and play-based education. A phenomenological approach was used in this study to focus on the meaning of the member’s experiences (Creswell, 2010). The learning community operated from the 3rd week of April 2020 to the 3rd week of April 2021. For the validity and reliability of the qualitative study, consultations, interviews, journals and play videos were collected and analyzed. Consent forms were obtained from all participants with details of the research process and confirming confidentiality. Pseudonyms replaced the names of participants. The participants had the opportunity to withdraw from the study at any time. They were experiencing difficulties due to a lack of their practical capabilities for child-centered, play-based education and a lack of understanding of parents on child-centered, play-based education. On the other hand, they were improving professional development by trying to change their roles, building mutual understanding and empathy, and forming horizontal relationships among learning community members. This result suggests that the learning community is an effective way to not only enhance the professional development of each member, but also create a culture of mutual cooperation among members.

learning community, child-centered and play-based education, professional development, early childhood teacher, teacher's role

This application discusses a completed piece of research.

II 48

A curvilinear relationship between kindergarten teachers’ scaffolding of make-believe play and children’s executive functions
Stéphanie Duval (1), Lorie-Marlène Brault-Foisy (2), Enkeleda Arapi (1), Noémie Montminy (1); (1) Laval University, (2) University of Quebec in Montreal, Canada

This study examines the mediating relationship between adult support, make-believe play and executive functions [EFs] skills. Since a mature level of make-believe play [MBP] is assumed to better contribute to EFs, many researchers (e.g., Lillard et al., 2013) suggest that the relationship between teachers' scaffolding during MBP and child’s cognitive skills should also be considered. EFs skills (e.g., inhibitory control, working memory) are interdependent cognitive processes that allow overriding automatic thoughts and behaviors in favor of more adaptive and goal-directed responses (Carlson, 2005; Diamond, 2013). MBP represents a key tool in developing the child’s ability to form mental representation of objects and events (Vygotsky, 1978). However, it is the mature form of MBP that is associated with children’s developmental gains (Bodrova & Leong, 2008). Kindergarten children (N = 160) and teachers (N = 12) took part in this study. Children’s EFs skills were assessed with the Executive Functions Observation Tool (Duval & Montminy, 2020) and their level of play maturity alongside teachers’ level of scaffolding were assessed with the Mature Play Observation Tool (Germeroth et al., 2019). All standard ethical procedures (ethics approval, informed consent, ability to withdraw participation, confidential responses) were followed. Results from stepwise polynomial regressions and mediation analysis showed a significant mediating effect of the context (classroom’s maturity level of MBP) on the curvilinear relationship between teacher scaffolding of MBP and the child’s EFs. The observation of EFs skills in class could allow interventions to be more intentional in supporting the child according to their developmental needs.

make-believe play, executive functions, teachers’ scaffolding, kindergarten, mediating relationship

This application discusses a completed piece of research.
Constructions of belonging in early childhood policy and practice
Kristina Westlund, Kristianstad University, Sweden

The aim of this ongoing doctoral study is to generate knowledge about how young children’s belonging is promoted in early childhood policy and in the work of early childhood teachers. Even though teachers support children’s belonging, this is not necessarily as result of a conscious aim (Juutinen, 2018). Previous research has revealed the complexity of preventing children’s exclusion considering the power relations that are embedded in early childhood settings (Berge & Johansson, 2021; Erwin et al, 2022; Puroila et al, 2021). Following the work of Yuval-Davis (2011), belonging is regarded as a relational and intersectional phenomenon. This project is located within a critical paradigm of values education (Johansson et al, 2018). A multi-methodological approach including policy review, teacher interviews and video observations of teachers’ interaction with children will be used. The study will receive approval from the Swedish Ethical Review Authority before initiation of the empirical fieldwork. Prior to interviews and observations, all teachers and parents of participating children will be asked to fill out consent forms. Findings from the policy review will show how children’s belonging is constructed in early childhood policy. From observations, critical incidents where belonging is promoted will be used to discuss the relationship between pedagogical intentions and practice. Insights will be offered on how the professional work of early childhood teachers contributes to the construction of belonging and how teachers relate to policy intentions in their daily work.

belonging, values, politics of belonging, early childhood teachers, early childhood policy

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

Exploring children’s language-based agency as a gateway to understanding early bilingual development and education
Mila Schwartz, Oranim Academic College of Education, Israel

The study aimed to take a zoom on differences between young children in the way they express their language-based agency in learning languages in a preschool bilingual classroom in Israel. Because child’s language-based agency is a novel research domain, we aspired to understand how it is related to ecological factors such as the child’s linguistic background, personal characteristics, family language policy and wider socio-linguistic context. Agency is a sociocultural and contextually embedded phenomenon, children enact it through interaction with proximal and distant environmental systems. We applied a multiple case study with classroom ethnography as its main methodological framework and conducted 25 observations during one school year. Our focus was on how five 4-5-year-old children, two Hebrew (L1)-speaking children, two Arabic (L1)-speaking children, and one English-Spanish speaking girl express their agency through dialogical conversations with the researcher. Insights from both teachers and parents about children’s language-based agency were collected. We received permission to take field-notes and make video and audio-recordings in the preschool from the Centre for Jewish–Arab Education, the teachers, and the children’s parents and children. We found that differences between the children in how their language-based agency has been expressed were related to individual characteristics and linguistic experiences as well as to their families’ and communities’ language policies. We view the main contribution of this study as conceptualizing ecological factors related to child agency enactment in early language education. Caregivers need to build a positive image of all languages in the child’s environment regardless of their social status.

children’s language-based agency, preschool bilingual education, ecological factors, multilingual experience, family language policy

This application discusses a completed piece of research.

The Montessori teaching method and the early mathematical competence of 4-7 years old children: a case study in the Greek educational system
Eleni Tympa (1), Vasiliki Karavida (2), Ioannis Fykaris (2), Athanasia Siaviki (2); (1) International Hellenic University, (2) University of Ioannina, Greece

This application discusses a completed piece of research.
The main objective of this study was to compare the early mathematical competence of children aged 4-7 years old taught in a private Montessori educational setting with those of children at similar ages from public and private, typical educational backgrounds at the Eastern Thessaloniki, Greece. The Montessori method and philosophy of education offer an alternative approach to public and independent schooling (Morrison 2014). Montessori programs are being implemented in various schools and educational levels all around the world with beneficial results for both educators and students (Lillard 2005, 2017). In the Greek educational system, the Montessori teaching method is usually implemented in preschool and primary educational settings. The sample of the research consisted of 142 students, 68 from the Montessori educational setting (study group) and 74 from typical educational settings (control group), as well as of 119 parents. The data concerning children’s parents were collected using a specially designed questionnaire, which was distributed to the sample using an electronic platform while the assessment of the early mathematical competence of all children was conducted with the Utrecht Early Mathematical Competence Scales standarized in the Greek language. The study has been approved by the Ethics Committee of the University and the Municipality. Results showed a statistically significant difference of the Level of early mathematical competence between the study and control group for the children at pre-kindergarten, at kindergarten and at first grade (Franc & Subotic, 2015). The effectiveness of the Montessori approach in mathematics will be further discussed.

Montessori, teaching method, early mathematical competence, children, Mathematical Competence Scales

This application discusses a completed piece of research.

I 52

Fun and laughter in ECEC promotes wellbeing and social inclusion
Anette Boye Koch, VIA University College, Denmark

The aim is to show how fun appears in ECEC and discuss how pedagogues can use fun more consciously in pedagogical practice. The research refers to previous work exploring children’s agency and perspectives (Koch 2019, 2018), and to Goffman’s notion that we have neglected to develop an analytical view of the light fun throws on interaction in general (Goffman, 1961: 17). Fun is explored with reference to a sociology of fun (Fincham 2016). Findings are analyzed with reference to theory of wellbeing (Ben-Arie et al. 2014, Koch, 2017), pedagogical tact (van Manen, 1991) and social exchange (Mauss, 2001). The method includes interviews and field observations in 3 ECEC settings within a qualitative interpretive research paradigm (Denzin & Lincoln 2018). Data analysis was conducted within a phenomenological hermeneutical approach (Dahlberg et al. 2008). The inquiry depended on informed consent and voluntary participation by children, parents and professionals. High ethical standards were applied to minimize any distress caused throughout the research. Pseudonyms have replaced the names of participants. Empirical data illustrates how fun appear in ECEC, it arises momentarily, in communication, in physical activity and in play and games. Pedagogues use fun based on child-sensitivity, timing, courage, atmosphere, informality and equity. Fun and laughter can be used purposefully to create a special inclusive atmosphere in ECEC with potential to break down power inequalities and promote wellbeing and social inclusion. The findings may be used by professionals and students to reflect upon the potentials of fun as mediator of wellbeing and social inclusion in ECEC.

fun, laughter, wellbeing, social inclusion, children’s perspectives

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

I 53

Exploring early years managers perceptions of sustainability: Agency, learning, the journey, compliance and impact
Cheryl Hadland, Tops Day Nurseries, United Kingdom

This paper is part of research towards a DBA and asks what the meaning of sustainability is to nursery managers, why and how do they engage with sustainability? Leadership for sustainability (Dixon, 2022) refers to schools and introduces “Cs” of sustainability: captaincy, curriculum, campus and community within Brundtland’s (1987) social, environmental and economic sustainability pillars and there is an imperative for day nurseries to become more sustainable, (Yelland & Siraj-Blatchford, 2002). to achieve the SDGs (U.N. 2016), The theoretical perspective of the study is predominantly interpretivism developing “the effectiveness of business codes” model by Kaptein & Schwartz (2008). The philosophy of this research is both epistemological and ontological, a radical paradigm. Inductive using thematic analysis. (Braun & Clarke, 2022). Ethics approval for this research using semi-structured interviews was granted from Portsmouth University in 2022, Participants could withdraw from the study at any time, and were
reassured that any data shared in the interviews could not impact on any aspect of their employment (power relationship) and was protected. Sustainability is a process, comprised of many parts, and improving the sustainability of an early years setting can be enabled by empowering colleagues to have agency, embedding sustainability in all their decisions, even the little ones, pragmatically. This research helps the target company improve its sustainability in practice, potentially other day nurseries, the English government and the DfE with their Strategy for Climate Change and Sustainability (2022), the researcher being a consultant on this project.

**sustainability, agency, Kaptein & Schwartz, thematic analysis, day nursery**

This application discusses an ongoing piece of research and findings may be preliminary/emerging.

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**II 54**

**The student-teacher relationships in an innovative course: Rethinking about learning and teaching**

Lee-Feng Huang and Ya-Ling Chen, National Ping-Tung University, Taiwan

The purpose of this study is to explore pre-service teachers’ impressions of participating in an innovative science course and the instructors’ rethinking about the relationship between students and teachers. Pre-service teachers experience intensive teamwork and are encouraged to construct learning contents in field of science education for young children independently and repeatedly apply and reflect on multiple teaching skills. Fraser (2019) indicated educators of high education are expected and rewarded for teaching innovation to improve students’ learning motivation, however students think of possible failures and additional work in such of courses. This course based on inquiry-based learning. Students are encouraged to collaborate, to think, explore and compare the learning contents, and to apply teaching skills. This study conducted a qualitative survey. The collected data were video during the course, the interviews of 35 pre-service teachers and the instructors’ reflection on the course. The collected data were sorted, coded and condensed to conclude the findings. The pre-service teachers were informed they could decide not to participate in this study or withdraw at any time without negative effect on their scores. Pre-service teachers believed that learning is not necessarily dependent on teachers, and they became active learners in this course. In student-designed activities, the instructors were pleased to be a "learner". Moreover, the pre-service students’ performance encouraged the instructors to challenge new knowledge. The researchers suggest that teachers of higher education should transform the relationships between them and students and believe that teachers and students could learn from each other.

**pre-service teachers, innovative course, high education, student-teacher relationship, inquiry-based learning**

This application discusses a completed piece of research.

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**II 55**

**Collaborative action research of teachers and researcher seeking the meaning of free choice activities**

YungEui Yoo, BoKyoung Cho, Misun Lee and Eunjung Jang, Soonchunhyang University, South Korea

The purpose of this study is to seek the meaning of free choice activity through collaborative action research by teachers and the researcher. on-site teachers reflected the interests and demands of young children during the free choice activity time, how to operate them so that they could enjoy them, what role teachers should play to improve the quality of play. We are constantly thinking about how to intervene while respecting them (Kim Soo-jeong, 2002). During the free choice activity time, the teacher appropriately intervenes in the play situation and plays a role to expand and diversify the play (Kim Su-jeong, 2002; Eom Jung-ae, 2010; Lee Jung-hwan and Kim Hee-jin 2007; Samuelsson & Johansson 2006; Seefeldt, 1987). The study, conducted as collaborative action research with the researcher and teachers of Pureun Class 1 and 2 for five-year-old children, utilized methods such as participant observation, interviews, and teacher council, and collected and analyzed various documents including journals. The study was conducted with classrooms that had given consent through signed forms that included questions about the study and its discontinuation procedures. The collaborative action research conducted by teachers and a researcher on the meaning of free choice activities helped improve an educational site that had issues due to the lack of such activities. The collaborative action research is expected to provide practical and feasible support for teachers exploring free choice activity in educational settings, and may contribute to improving early childhood education quality through policy proposals.

**collaborative action research, free choice activity, early childhood teacher, researcher, meaning search**
How two-year-old children develop peer relationships in day care center with the aid of their teachers? (2): A six-month longitudinal observation study of teachers' intervention
Kaoru Onishi (1), Masafumi Ohnishi (2); (1) Gifu Shotoku Gakuen University Junior College, (2) University of Fukui, Japan

The purpose of this study was to clarify relationships between two-year-old children's peer relationships development and interventions by nursery teachers throughout longitudinal observation. Before 3rd age class, children become capable of shared activity with peers (Howes, 1996). Although many psychological findings didn't focus on teachers who provide well planned educational support and care, child development is a result of interaction of children's factors and those environmental factors. This study was based on the socio-cultural theory (Vygotsky, 1978) and the ecological systems theory (Bronfenbrenner, 1987) which emphasize the interaction between child and socio-cultural factors in human development. An ethnographic investigation of 6 two-year-old children and their teachers, informed by social constructionism, was conducted in Japanese nursery school for 6 months (3 times). Participant observation in free play situation were used. A consent form and information sheet was provided to parents and teachers. The following things were explained; the purpose and the procedure of the study, pseudonyms have replaced the names of participants, and they were given the opportunity to withdraw from the study at any time. Then we obtained informed consent. The findings demonstrate that both child-peer relationships and teacher intervention changed dynamically. It is supposed that they cased bidirectionally. Peer interactions increased. In contrast, teachers gradually stop intervening in children; providing physical attachment, mediating play and arbitrating conflict decreased. To develop two-year-olds' peer relationship, it is important that not only teachers provide secure base but also teachers verbalize child's intention and behavior that they cannot express clearly.

peer relationships, two-year-old children, nursery teacher, intervention, longitudinal observation

This application discusses an ongoing piece of research and findings may be preliminary/emerging.
**“PED”agogical Talks**

**Thursday 31st August 2023, 16:45 – 17:30**

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**Group A**

Chair: Eleni Loizou, University of Cyprus / EECERA Board of Trustees, Cyprus

**A1**

**Stay and play sessions in the early years: a medium for integrating Ukrainian children and their families in Ireland**

Helen Awhinawhi, Westmeath County Childcare Committee, Ireland

Stay-and-Play as an early intervention programme supports children and their families. Collaborating with displaced families, I witnessed the positive impact of this programme on families to support their integration into Irish communities. The activities were uniquely tailored to support their needs to feel a sense of normalcy and stability. This was an Irish government-funded initiative in response to the Ukrainian humanitarian crisis. This was my experience seventeen years ago. The story of the families I supported resonated with my own personal experiences as a displaced mother with three young children in Ireland. My role as an integration officer gave me the opportunity to empathetically support Ukrainian children and their families to integrate into the Irish community. I was able to draw on my own experiences to support families in a way that was personal and practical. Having lived through a situation like this myself, it was about meeting families in a respectful way within their own safe environment. I could see the immediate and potential benefits of these sessions. One of the mothers with whom I worked, always asked at the end of the session- “hello, tell me, will you visit us again”? It was evident that she was worried about what the future held for her and her child. The Stay-and-Play sessions positively impacted children and their families. Continued government funding to support these initiatives for immediate and potential life-long benefits is crucial. Additionally, implementing similar initiatives should be prioritized as early intervention and advocacy strategies.

Ukrainian humanitarian crisis, integration, early intervention, stay and play, collaboration

**A2**

**Re-evaluating attachment theory: Examining the importance of group-based approaches for early childhood education and care service**

Matthew Stapleton, Centre Support, Australia

I will be exploring how the shortcomings of attachment theory eclipse the importance of the group paradigm in the education and care for infants. Attachment theory does not consider caregiving behaviour as a historically and cross-culturally variable and equating effective infant care exclusively with dyadic maternal care can be viewed as a form of misogyny. As an early childhood practitioner, I have questioned attachment practices when working with babies as I have witnessed many group interactions that do not require adult interference for the young to have their complex needs met. This has led me to the large body of previous critique and research questioning the direct effects of attachment and suggesting that group-based contextual variables like social support have a stronger association with later outcomes. I have road-tested Darwin’s theory that humans are fundamentally group animals (Bradley, 2020), exploiting findings that babies engage in supra-dyadic group interaction long before they form one-to-one attachments. The main discussion points are that group-based approaches constitute an improved approach for working with infants, challenging the idea that infants need a primary caregiver or ‘focal educator’ to flourish. I illustrate how an attachment focus remains implicit to many national guidelines for infants in early education and care, and to the ‘common sense’ assumptions of many practitioners and argue that policymakers and practitioners must rethink the dominant model of attachment-based-care and promote the importance of group-based education and care policies and programs.

attachment theory, attachment behaviours, group-based caregiving, infant-mother dyads, relationship curriculums

**A3**

**Playful vision, playful practice: Research on fundamental play topics that lead to 10 aspects for an innovating playing practice in ECEC**

Simon Wemel and Ann Steverlynck, Artevelde University College, Belgium
In this PED-talk Ann Steverlynck and Simon Wemel talk passionately about their practice-based research on a play vision and innovating playing practice. Children play spontaneously. Is that enough? What about the role of the pedagogical professional? What is rich play and what is the connection between rich play and the 21st century? This PED-talk starts with 4 fundamental topics to rethink play for children between 0 and 6 years, starting from the curiosity of the child towards agency and stimuli for creative thinking with children (Bodrova & Leong 2015; Potters & Lutke, 2018). From this conceptual vision on play, the research leads to a framework of 10 aspects for a rich playing practice. What about materials, inner and outer space with a little step to risky play (Sandseter 2010), playing support (Cagliari and others, 2016), language through play, activities, themes and projects (Crul, 2005), visits, rituals and amazement? Each aspect of the playing practice starts with observations from the perspective of the playing child. How do they participate in the playing process? Accessible theoretical frameworks and reflective questions are combined with these observations to enable the discussion in teams and lead them into action in their daily practice to support and stimulate play in ECEC. Welcome to this playful PED-talk that will encourage your reflection on the importance of a strong supporting vision on play and innovating playing practice. Because playing makes us stronger, more creative and even more curious. Because playing is participation, exploration, dreaming, having fun.

innovating playing practice, creativity, play vision, perspective of the child, support and stimulate play

A4

‘How do you know that?’ The impact of adult-child interactions when investigating children’s thought processes

Katie Crouch, University of the West of England, United Kingdom

Previous research investigating sound-symbolism, i.e. non-arbitrary link between sounds and meanings, in childhood (Maurer, et al., 2006) have excluded children’s voices (Malaguzzi, 1996). This presentation discusses the need for research into children’s thinking to invite children’s perceptions (Clark, 2011; Pascal and Bertram, 2009). As an experienced early years professional, I always champion children’s autonomy and contributions. As such, this study bucks the trend of previous research into this area of psycholinguistics. Interactions with sound-symbolism and the link between phonemes and phonics, intrigue and motivate me as a neurodivergent learner and an educator. Standardised testing within the UK, judges children’s ability to de-code with a pass/fail outcome (Department for Education, 2017). Therefore, I formulated and carried out a sound-symbolic study which invited and explored individuals’ perceptions and not just assessed outcomes. Therefore, this study involved children as co-researchers, ensuring data creation as opposed to data elicitation; something which I have been asked to defend this philosophy throughout the progress of my PhD study. The outcomes of this study report new insight into children’s thought processes in relation to their understanding of language and phonemes. Children as young as 24 months were able to convey their thoughts and strategies when exploring sound-symbolism in exciting and enlightening ways. This may influence how researchers’ access, understand, and empower young children’s voices in research fields which are not primarily based within the early years. This evidence of agency and metalanguage from young age, calls for the need to employ co-participatory research within scientific fields.

co-research, meta-language, phonics, sound-symbolism, paradigms

Chair: Tony Bertram, Centre for Research in Early Childhood (CREC) / EECERA Board of Trustees, United Kingdom

B1

Nature purpose and children stewardship

Elena Dominguez Contreras, Cornell University, United States

Few papers have focused on learning and other outcomes of children’s engagement in restoring nature, or nature stewardship. I am interested in the learning outcomes of children’s engagement in nature stewardship. Moreover, I am aware that no research has addressed how stewardship participation among children is connected to purpose, defined as pursuing a meaningful life aim. Purposeful adults, who have life goals and understand their daily routines as significant and constructive, enjoy positive feelings, higher self-esteem, confidence, happiness, lower stress levels, social connections, and resilience. I am interested in how children’s participation in nature stewardship could be a vehicle to fuel purpose among children. More specifically, I introduce the term “nature purpose,” which refers to meaningful and sustained goals aimed at contributing to nature’s wellbeing or protection. Building on the literature on purpose and stewardship under the mentorship of Dr. Anthony Burrow, Cornell professor of Human Ecology, I am proposing a new construct—“nature purpose”. The wellbeing of nature directly implicates children, and how social institutions educate them is fundamental for a healthier earth. Thus, I seek to use my research to argue for investment in opportunities for
young children to contribute to their communities through nature stewardship and to facilitate nature purpose (Dominguez Contreras, manuscript in preparation). To have a life purpose is a psychological asset. Lack of purpose in youth potentially results in a “sense of drift. Children (Syrs. and above) could pursue purpose. I propose nature as the purpose content and stewardship as a mechanism to cultivate it.

**nature purpose, nature stewardship, children as agents of change, early childhood education for sustainability, young children’s perspectives**

**B2**

**Storytelling a powerful tool for learning**

Kate Shelley, Tales Toolkit, United Kingdom

Storytelling is a powerful tool for learning. Those magic moments shared between a child and an adult where ideas are valued and stories are only limited by imagination. This kind of storytelling facilitates sustained shared thinking where adult-child cooperation leads to dynamic learning (Sylva et al., 2011; Brodie, 2014). It also creates opportunities to be playful and engage in meaningful learning, allowing for greater creativity and flexibility in ideas and problem-solving (Hirsh-Pasek et al., 2009). I was lucky to have a childhood full of creative storytelling. Becoming a teacher, I realised how different my experience was from many of the children I worked with and I saw the development gap this created particularly for children from disadvantaged backgrounds. Storytelling became a core part of my day weaving into all areas of learning. As children began to create their own stories I started to realise the power of giving them a voice, valuing their ideas and using story as a tool to solve their real life problems. I used simple story structure to create a resource Tales Toolkit that would support and scaffold children in their first steps in storytelling and was amazed by the results and still continue to be. We’ll discuss listening to children’s ideas through story, and discuss how to create a supportive environment for this at home and school, with minimal resources. We’ll also talk about developing confidence to allow storytelling to be genuinely child-led, including responding to children’s tendency to solve problems with aggressive actions.

**storytelling, sustained shared thinking, play led learning, social problem solving, creative thinking**

**B3**

**How children’s curiosity creates innovations**

Lara Schindler, University of Applied Sciences Koblenz, Germany

It takes innovations to conquer challenges and crises we have to face as a global society like climate crisis, wars, discrimination or fading of resources. Even though adults have life experience, a certain amount of knowledge and creativity, they are also burdened with pressure. Concurrently, adults are more likely to follow (antiquated) standards and conventions, to have biases and strive for money and power. To face our challenges and save our planet in both environmental and social ways, we are under pressure to create much needed innovations. However, children have a natural creativity, an impartiality, a spontaneity, the urge to explore and a simplicity. Even though – or exactly because – they have less life experience and less knowledge than adults, they have a genuine curiosity. With all those qualities, especially the children’s curiosity, we might create faster and stronger innovations. Not only within my professional doing I am eager to expose meaningful issues concerning our nowadays society. I am convinced that thinking big and outside the box, trying to free thoughts from conventions, is a productive way to get to innovative ideas. In my opinion innovations are the only way to face the challenges of our today’s world, by creating sustainable solutions in every conceivable area of our society. Expounding children’s qualities, I will present ways to involve children, listen to their views and ideas and use those inspirations and impulses to create innovations. With that the society and the adults use children’s agency and strengthen it furthermore.

**society’s innovation, children’s rights, sustainable ideas, creative solutions, children’s voice**

**B4**

**Towards an equal participation model, Ireland’s story so far**

Mark Considine, Department of Children, Equality, Disability, Integration and Youth, Ireland

Towards a model of equal participation. The vision is the inclusion of all children in ECEC and overcoming the barriers to full participation. I have found the development of our Equal Participation Model in Ireland a huge challenge. I have led this work on supporting all children in accessing ECEC in my country. In developing this talk, I want to take the listeners on the journey I have been in in meeting the full participation challenge. I am deeply passionate about including every child in provision and ensuring their needs are met. Seeing children as individuals and not as a list of needs. The model I envisaged includes children living in areas of significant disadvantage, children with additional needs and minority groups and in particular children from the Traveller and Roma
communities. The key elements I will discuss in my talk will be: Introducing the challenge, we undertook. What or who, is ECEC for? Real consultation with ECEC educators and families. Overcoming or removing barriers? Why full participation has to be a key aim in ECEC.

participation, inclusion, barriers, disadvantage, equal

Group C

Chair: Chris Pascal, Centre for Research in Early Childhood (CREC)/ECERA Board of Trustees, United Kingdom

C1
Reconceptualising CPD by embracing the complexities of neoliberalist ‘baggage’
Vikki Wynn, University of Sunderland, United Kingdom

Practitioners often have a strong desire to respond in a more effective way to meet children’s needs post-pandemic yet find themselves restricted by perceived restrictions within national frameworks. Reflection with a leadership team of a nursery school federation demonstrated that it is possible to shift such perceptions, recognising the impact of systemic performativity pressures encroaching on the Early Years. Within the Early Years workforce a pedagogy of the oppressed continues to be evident. As a female who has worked in a range of roles in Early Years I am passionate about empowering practitioners to conduct praxeological research that can build more rich, practice-based evidence to further professionalise the sector. There needs to be increased recognition of the innovative approaches used along with the commitment to publishing more practice informed research. An example will be referred to, showing how the impact of neoliberalist informed policies might have been considered but not acknowledged quite so acutely in practice, where it was evident that even when there is a strong underpinning ethos in place, external pressures continued to weigh heavily on practice. By addressing practitioners ‘baggage’ through action research it was possible to reconceptualise CPD to meet the needs of a whole team, allowing their voices to be heard and freeing them from perceived restraints. It is hoped that this will encourage personal reflection on the audiences own ‘baggage’ and lead to consideration of a change to their own practice when the possibilities are demonstrated.

neoliberalism, CPD, reflexivity, action research, empowering

C2
Teachers’ posture in promoting agency in outdoor educational contexts
Francesca Rota and Letizia Luini, University of Milano Bicocca, Italy

The contribution presents reflections on the role of the adult in outdoor educational contexts: his posture can support children’s agency, interests and participation. As passionate researchers on the topic and teachers in the field, we believe that reflecting on the possibilities supported by adults in outdoor contexts can be interesting in promoting the development of democratic and participatory learning contexts. The literature suggests that promoting autonomous experiences outdoor supports the expression of children’s agency (James, Prout, 1997): free and self-directed experiences (Brymer et al., 2018) are possible when adults are responsive to children’s interests in outdoor experiences (Waters, 2017). In this sense, the posture of adults, who can use the natural environment’s resources to promote children’s autonomy (Barrable, 2019), appears crucial. Adults are often driven by the achievement of predefined learning objectives and ask questions with precise expectations, risking to extinguish children’s curiosity. But if the adult listens to the propensities of children outdoor, abandoning his position of power and welcoming children’s curiosities (Luff et al., 2016), he turns out to be a supporter of agency, enabling children to act as primary agents, encouraging them to solve problems on their own and shaping their own experiences by negotiating meanings with the context. In conclusion, cultivating contexts in which children can perceive themselves as subjects with agency appears crucial: for this reason, it is necessary to rethink the role of the adult in outdoor experiences, starting from the awareness that the outdoor fosters personal forms of independent action.

children’s agency, teachers’ posture, outdoor contexts, participation, listening

C3
Maths for 1-year-olds - Are you kidding me?
Karin Franzén, Karlstad University, Sweden
My interest is toddlers as mathematicians and their right to explore and learn mathematics in their own way. This PED talk will focus on these young children's exploration of mathematical concepts supported by the body. From a historical point of view, the subject of mathematics is strongly linked to logical thinking, calculations and being able to explain how to understand mathematical concepts. It can be a problem for the youngest children's opportunities to learn mathematics because they have not yet developed their speech. It may also be a reason why the children's exploration of mathematics with the support of the body is not always noticed by the preschool teachers. The purpose of this Ped-talk is to draw attention to young children's need to explore mathematical concepts with their bodies as an important complement to the cognitive learning. In this talk, I will give examples of what mathematics can be for a 1-year-old in preschool. Perhaps my talk can challenge the audience's perceptions of what mathematics can be for our youngest children in preschool. Another aim is to challenge the view of mathematics as something that is too difficult for young children.

1-year-olds, mathematics, preschool, learning, the body

C4

The mindfulness imperative
Cathryn Lokey, Florida State University, United States

Not long ago in history, the day of a human being looked quite different than it does today. Human beings spent time in nature, quiet, and solitude. Mindfulness, or present-moment non-judgmental attention, was built into daily life. This is no longer the case. Over the past several hundred years, our world has become increasingly busy, noisy, cluttered, crowded, and over-stimulating. Because of this, practicing mindfulness has become essential to a balanced, healthy life. Through my career as a school counselor and educational psychologist, I have seen first-hand the dramatic difference having a regular mindfulness practice can make in a person's life. My personal experience is corroborated by a fast-growing body of literature that demonstrates how powerful mindfulness can be in changing a person's life for the better. Individuals are healthier, calmer, kinder, and more joyful when they engage in mindfulness practices. I have come to believe that the path to peace and prosperity on our planet is for us, globally, to become a more mindful people. The ideal time to start mindfulness instruction is in childhood. Young children are naturally mindful. When they are taught to practice mindfulness, they are able to retain dispositional mindfulness as they age. I will begin with a brief examination of mindfulness in human history through an anthropological lens. I will then briefly discuss what current research is showing about mindfulness practices with children. I will conclude my talk with key points regarding why early childhood is the ideal time to introduce mindfulness instruction.

mindfulness, wellbeing, childhood, peace, prosperity

Group D

Chair: Irene Gunning, EECERA Board of Trustees, Ireland

D1

Rethinking play with posthuman curiosity/ludicrosity
Mandy Andrews, University of Plymouth, United Kingdom

What does it mean to be a posthuman practitioner of play? How might we put Deleuzian influenced posthumanism to work effectively in challenging our professional perspective and acknowledging percept, affect and informal concept (or otherwise curiosity and cues, intensities of response and the development of new knowledge)? I have been playing with play and posthumanism for some years as a part-time PhD student and see that maintaining the posthuman focus is like keeping ones eyes unfocused in order to see a ‘Magic Eye’ 3D picture. However, although at times difficult and complex, posthumanism is more than a shelf book philosophy, it has a playful potential to be liberating, inclusive, and open ended in acknowledgement of the ongoings of the world. Posthuman philosophy is not just about thinking about the granular and molecular engagements of children with the natural world, although that has been useful. It is a challenge to existing Cartesian ‘common sense’ ways of thinking, researching and being; of child concepts, of structured instrumentalism, of teleology and assessment and of the very definition of concepts of such as play by their negative binary (being defined by what they are not, rather than what they might be). Deleuzian influenced posthumanism has implications for the way I see the world as playfully, ludicrously intertwined and inclusive with a shift from segmenting and naming to doing-with creatively. However, it takes away the professional scaffolding - so what does a de-centred professional do?
D2
Talking with my daughter (on the spectrum): Waypoints for navigating (school) life
An Piessens, KdG University of Applied Sciences and Arts - Pedagogy in Practice Research Centre, Belgium

When children encounter difficulties in school, a diagnosis of a learning or developmental difficulty is sometimes sought or advised. The main idea is that a diagnosis will help children and their families to gain access to support and assistance. This talk shows an insight in daily life, based on an observations offered by my daughter, gifted with wit, a strong will, a lot of humour, a sense of poetry, love for animals and three labels since the age of five. Her observations point the way to what she perceives as support needed to navigate life. Trained as a pedagogue and schooled in social constructionism and feminism, I developed quite some skepticism towards diagnosing young children. As a family, we underwent and followed the advice to seek a diagnosis for one of the children, urging us nevertheless to deal with the ensuing diagnosis."Seek a diagnosis and the right help will follow", is a creed many parents hear. But a diagnosis pinpoints and shapes life for children and their families. As this child grows older, she gets a stronger idea of what works for her and what doesn't. Thus, again, urging us to balance hopes for her with her aspirations in life, now and in the future. All this within a context where help and assistance is, at best, something that needs constant negotiation. Children's accounts can help to understand and maybe disrupt carefully wrought programmes.

children's voice, Autism Spectrum Syndrome, navigating inclusion, activism, autobiography

D3
Professional reading and adults as curious learners
Jacquelyn Brien, Department of Education and Training, Australia

This conference focuses on our wonderings, research and learnings about children's curiosity and learning. There is also the provocation and challenge to professional development and action. International rights, legislative frameworks and ethics support the expectation for educators to engage in professional practice that is evidence-informed (DET, 2016; ECA, 2016; COAG, 2009, UNCRC, 1989). Research provides knowledge about ways to support children's agency, curiosity and learning. However, how do early childhood professionals foster their own curiosity, learning and professional growth? There is very limited research that considers the role of professional reading. My graduate research at the University of Melbourne has afforded me the privilege of learning the perceptions and experiences of early childhood educators and leaders about their professional reading. I am also involved in Early Childhood Australia, as a member of the National Publications Advisory Board and Co-Editor of the national magazine, Every Child. As a current policy maker, former educator and always avid 'reader', I am fascinated by and totally immersed in this issue of the impact of professional reading - and look forward to sharing this with others. Key elements of this talk will be the voices and experiences of a range of Australian early childhood professionals about links between professional reading and their professional wondering, learning and growth. Examples will be provided about how professional reading is both enabled by and supports professional curiosity, motivation and learning. "Take home" messages will focus on the potential of professional reading to promote professional curiosity and learning.

professional reading, professional curiosity, professional learning, evidence-informed practice, professional motivation

Group E

Chair: Leesa Flanagan, Dundalk Institute of Technology, Ireland

E1
A journey into the method called inclusive research
Francesca Granone, University of Stavanger, Norway

What mathematical knowledge do we need in an ordinary day? How could be possible to understand the everyday challenges encountered by a person with mathematical impairment, maybe with intellectual disabilities? Mathematics is part of everyday life experiences. Difficulties in learning mathematics, or disabilities that can impair mathematical learning, become a problem not just in an educational environment, but in everyday life. Literature shows that people with Down Syndrome, Asperger syndrome, autism, ADHD can have mathematical difficulties. But they can be supported, by teachers or parents, in filling the gaps by enhancing their skills. We believe that the best way for understanding is to involve a person with disability in the research process, for working
together to identify gaps and skills in the learning process. As mathematical teacher in higher education, and mother of a child with Down Syndrome, I felt the curiosity and the urge in understanding how my son could receive support in his learning. Who could answer better than a person with Down Syndrome? But it is not just my son, and it is not just Down Syndrome. This showed us the need in communicating as much as possible our method, and our findings. This presentation is prepared by three researchers, one of them has Down Syndrome. The aim is to introduce the audience in a wonderful journey called “inclusive research”. Here we will explain what every component of the research group has learned during a collaboration in a project about children’s mathematical learning in Early Childhood Education.

inclusive research, Down Syndrome, mathematics, partnership, mediation

E2

Just breathe...A mindfulness journey for young children and educators
Leesa Flanagan, Dundalk Institute of Technology, Ireland

Exploring how adopting a mindfulness pedagogical approach can enhance the wellbeing of both the child and the educator in early year’s settings. I was introduced to mindfulness a number of years ago at a pivotal point in my life when I was experiencing stress and anxiety as an early year’s educator. Mindfulness became a new way of being for me, to guide and ground me and it became a vehicle to nurture my wellbeing. In light of COVID 19, I observed the impact of the pandemic on early year’s educators and young children. The children were presenting with increased stress and anxiety and I began to consider mindfulness as a potential vehicle to help negate some of these stressors. Sharing both my personal and professional practice of mindfulness with a wider audience will allow individuals to consider mindfulness as a way to nurture their own wellbeing within both a personal and professional context. Furthermore, I will share how simple practices and embodiment of mindfulness can nurture the wellbeing of our youngest citizens and allow them to flourish. I hope that audience members will leave my presentation with an new understanding and openness to the possibilities of mindfulness.

mindfulness, wellbeing, young children, educator, pedagogy

E3

Why aren't we listening to them?
Verity Downing, The Open University, United Kingdom

I am deeply concerned that young children are being left out of important discussions about gender. I am exasperated by how underestimated children are, how normalised it is for adults to speak for children, and how children’s agency is down-played. I am also concerned about the seeming resurgence of innocence-based ECE narratives that disguise gender inequalities. Recently, a friend spoke on my behalf, despite me being capable of speaking for myself. I thought; is this how children feel when a ‘grown-up’ talks for them? I know that my friend had good intentions, as do most adults when they speak for young children, however, the feeling of frustration struck me. It must be disheartening for a young child to feel like this, especially if this feeling is intertwined with the complex, and deeply personal, topic of gender. I want to encourage a wider audience to be mindful of children’s agency, particularly when it comes to making gender-based decisions, and to afford value to children’s views. In my talk, I will discuss what I have noticed in practice, the theoretical and research-based backdrop of gender and ECE, pedagogies and policies, the value in children’s experiences and knowledge, and the importance of children’s gender-based wellbeing. My hope is for my audience to recognise that if we are to strive for a more balanced society in which we see gender-balanced and diverse opportunities in all aspects, we must start with young children. We must include them in important discussions and hear their voices.

gender, recognition, innocence, society, policy

E4

Lia’s journey through disability is not disability itself
Katia Hueso-Kortekaas, Asociación GINSaltamontes, Spain

Autoethnography is a powerful tool to transform a personal story into a useful experience for a broader audience and even for policy making. This contribution aims at showing a first exploration into the study of the early life of Lia, a 13-year-old child born with congenital severe cerebral palsy in Spain. Her journey through childhood, brimmed with therapies, treatments, bureaucracy, physical barriers of all kinds, but also joyful moments is nothing out of the ordinary for a child like her. But it’s a journey that can be shared under the academic and personal lens of autoethnography. This methodological tool provides the background and rationale of a personal story, so that the reasons and outcomes of a single testimonial become patterns that require analysis and action. These first steps into the autoethnography of Lia and her family aim at contributing to improve the life of children on similar
journeys in Spain. The work will hopefully provide practitioners, therapists, social workers, and decision makers with an intimate view into the background of the daily challenges their families face and how these may be lightened with simple measures and a pinch of (institutional) sensitivity. The presentation will provide, in the form of storytelling, some real-life examples of the challenges of a child with complex needs against the backdrop of a broader perspective, including a note on disability theories and (failed) inclusion practices in Spain. Whenever possible, data will be provided on the situations described and solutions for their improvement will be suggested.

autoethnography, disability, complex needs, inclusion, Spain

Group F

Chair: Aline-Wendy Dunlop, University of Strathclyde, Scotland

F1
Shifting the think: Reconceptualizing transitions research for the future
Sharon Lynn Kagan, Columbia University / Yale University, United States

A cursory review of children’s transition research over 40 years reveals that it mostly focuses on the transitions children make as they move from setting to setting, often pre-school to formal schooling or the transitions that they make during the day. Less abundant, though occurring increasingly, research is focusing on the transitions parents make, those that institutions make (and need to make), and on intentional alignment of policies and practices that foster children’s effective transitions. This work is largely premised on the stance that improvements must be understood and undertaken to address transitions’ negative (at worst) or challenging (at best) consequences. In work with children, families, and adults (as well as in my own life), I have come to rethink, and perhaps even conceptually re-position, transition from being negative and aberrant to being positive and normative, from being a deficit experience to being one of opportunity, and from being one to be eliminated to being one to be seized or even relished. With scores of transitions throughout life, I wonder if we have and how we can best prepare young children for a life that is and will continue to be characterized by increasingly abundant transitions (e.g., increased rates of changes in employment, marital status, domiciles, and gender, positionalities). Awash with rapid and frequent alterations in life patterns, I ponder if we are on the right track in privileging continuity amidst a world where discontinuity is the “new normal.” To address this, I propose to discuss a new set of framing principles for “transition” and “transition research.” I posit that past research is a platform from which we must pivot to make future transition research maximally relevant to the realities of today’s (and tomorrow’s) context.

effective transitions, continuity/discontinuity, contextual relevance, transition research, thinking fresh

F2
Becoming a parent and being a parent now
Aline-Wendy Dunlop, University of Strathclyde, Scotland

Parental perspectives on their child’s experiences of transition feature in the early childhood educational literature, but very little attention has been given in this particular literature to the significance of parental experience of the major life transition of becoming a parent and in being a parent presently. In a small scale study using storying and sketch notes to facilitate discussions and analysis, we asked parents “What was it like for you to become a parent?” and “What is it like to be a parent now?” (Dunlop and Taylor, 2023). After studying transitions in early childhood and school education for many years, this gap in our understanding of parental experience seems to be shouting out for attention. As a trustee of Parent Network Scotland I have been privileged to learn about their parental wellbeing programmes and to reflect on what it is like for adults embarking on parenting when networks of support are disrupted, as they were throughout the pandemic and in the current cost-of-living crisis, and to realise that such supports do not exist for some parents in more regular times. One key message is about sensitivity to the wide range of experiences of becoming parents, for example: “Nothing is straightforward”; “When I found I was pregnant I thought my life was over”; and in being parents now: “We’ll do it differently from our parents”; “We play together”. A second key message rests on ethical issues involved. A third is the importance of choosing an approach that works in understanding deeply personal experiences.

parents, parenting, diversity, complexity, voice
Teachers researching their own transitions practice
Sally Peters, University of Waikato, New Zealand

Much had been said and written about what teachers can or should do to support the transitions of children (and their families) as children move within and across sectors. Sometimes this work positions the teacher as problematic, and yet conversations with teachers suggest they want the best for the children they teach. However, looking deeper, teachers in different sectors, and even within sectors, may have diverse views about what ‘the best’ looks like. Often their views draws on different theoretical ideas, which may be explicit or implicit. In this PED talk I consider the role of teacher researchers in examining their own practice. Teacher research is sometimes critiqued for being small scale and methodologically unsophisticated and yet there is an argument for the value of teacher research that informs their own practice, speaks to other teachers and may help to shape policy. Coming from a teacher researcher background prior to working at the university, and having worked in partnership with teacher researchers for many years, one key message is the power of teacher research for understanding transitions in context and the potential of university researchers to support these endeavours. A further key message draws on what we (a team or teacher researchers and university researchers) have learnt by examining the layers of background and histories of each person, group and context (including those of the research team) to uncover some of the factors influencing transition journeys and how they are perceived and understood.

teachers’ perspectives, transitions, teacher’s role, teacher research, best practice
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