Inclusion as mental models: Learning processes among educational teams in special classes

Johan Edin

SAMMANFATTNING


Nyckelord: specialpedagogisk forskning, organisatoriskt lärande, arbetslag, specialklasser, neuropsykiatriska funktionsnedsättningar.
INTRODUCTION

In special educational research, inclusion has become something of a catchphrase, and it is almost impossible to conduct research in the field without touching on the concept of inclusion. There is no doubt that inclusion is important in special educational research, not least when it comes to segregated learning environments. However, to understand special education settings, not only the concept of inclusion but also the present segregated learning environments need to be scrutinised (Göransson et al., 2020; Skrtic, 1991). In this article, the concept of inclusion is used as a way to locate obstacles and prerequisites regarding aspects of organisational learning in educational teams in special classes designed for pupils with autism spectrum disorders (ASDs) and attention deficit/hyperactivity disorder (ADHD).

The categorisation and segregation of pupils in Swedish compulsory schools has existed since the public ‘folk school’ was introduced in 1842 (Ahlberg, 2007; Berhanu, 2014; Hjörne, 2016). The placement of pupils in different education settings has always been a question about normality versus deviance, following the current discourse (Thomas, 2013). Although the justifications for segregating pupils have shifted over time, a categorical perspective of pupils’ shortcomings where the deviancy is placed within the pupil has always been present (Ahlberg, 2007; Berhanu, 2014; Hjörne, 2016). More recently, neuropsychiatric diagnoses have come to play a role in the creation of segregated learning environments (Malmqvist & Nilholm, 2016). This can be explained by the increase of diagnosed individuals that has been seen in recent decades (Socialstyrelsen, 2019). Diagnoses of pupils with disruptive behaviour, learning difficulties or attention deficits have emerged as a way of identifying the need for special educational support. Although the Swedish Education Act (SFS 2010:800) does not stipulate that a diagnosis is necessary to receive support, neuropsychiatric disorders (NPDs), such as ASD and ADHD, have influenced the view of pupils in need of support. In contrast, diagnosis is a tool in a broader understanding of pupils’ deficiencies and the need for a different learning environment—an environment that cannot be offered in regular classes—and thus, calls for separated solutions (Hjörne & Säljö, 2019b; Malmqvist & Nilholm, 2016). These solutions often involve special education groups and special classes designed to fit pupils with NPDs (Hjörne & Säljö, 2014, 2019b; Malmqvist, 2018; Malmqvist & Nilholm, 2016).

Schools can be seen as organisations in the sense that they have several implicit or explicitly defined goals to achieve (Jarl, Blossing, & Andersson, 2017; Skrtic, 1991). An organisation is a rational tool to attain stipulated goals, meaning that the organisation is structured in such a way that the implementation process is feasible (Berg, 2011; Jarl et al., 2017). Schools as organisations can be analysed at both the macro- and micro-levels. The macro-level consists of standardised and formal structures, whereas the micro-level is represented by professionals within pedagogical practices (Skrtic, 1991). In this article, special classes for pupils with ASD and ADHD and the educational teams connected to the classes represent the micro-level. Educational teams can be organised as interdisciplin ary teams and consist of different professions, such as subject teachers, pupil assistants and special teachers. The teams’ structures vary among different schools; however, the teams’ assignments are more extensive than merely teaching (Havnes, 2009). Usually, educational teams gain influence over pedagogical practices and teaching methods. Educational teams can function as an arena for pedagogical discussions to enhance practitioners’ shared competence and promote a collective learning process (Ohlsson, 2013; Scribner, Sawyer, Watson, & Myers, 2007). The reason for organising schools into educational teams is the endeavour to reach professional development at both the
individual and collective levels (Larsson, 2004; Skolöverstyrelsen, 1980). However, the structure of educational teams does not lead to a collective learning process or a problem-solving organisation per se (Havnes, 2009; Ohlsson, 2013; Scribner et al., 2007; Senge et al., 2000; Skrtic, 1991). In line with Skrtic’s (1991) reasoning, special education settings (e.g. special classes) are not organised rationally, which can largely be explained by the lack of collective learning and clearly defined goals of the role of special education in general.

Educational teams possess a certain amount of pedagogical freedom affecting not only teaching but also how to handle specific groups of pupils, learning environments, and the interpretation and implementation of core concepts (Larsson, 2004). In a Swedish context, this means that educational teams at certain schools gain influence over special education settings for pupils with ADHD and ASD. Therefore, it is important to illuminate how individual members of the educational teams understand key concepts (e.g. inclusion) as a way to scrutinise obstacles and prerequisites concerning organisational learning processes.

The knowledge contribution of this article is that it broadens the path of special educational research by using the interpretation of the concept of inclusion in combination with an organisational learning approach at the educational team level. By presenting an alternative perspective on the use of the concept of inclusion, it makes a significant contribution to how to understand the ways in which mental models can affect the organisational learning processes in educational teams. Furthermore, little is known about organisational learning in educational teams in special classes, an aspect that reinforces the relevance of this article.

The concept of inclusion

The aim of this article is not to present strategies in how to establish inclusive learning environments; nevertheless, the concept is of importance in this article. Thus, an account of the complexity and various interpretations of inclusion is required.

The concept of inclusion originates from the Salamanca Declaration (UNESCO, 1994), which stipulates that only in exceptional cases should pupils in need of special educational support be placed in segregated learning environments. However, inclusion can also be understood as something more than the physical placement of pupils. It can also involve teaching methods and striving to ensure that all pupils are part of the whole educational context (Emanuelsson, Persson, & Rosenqvist, 2001; Haug, 2017; G. Lindqvist & Nilholm, 2014; UNESCO, 1994).

Conceptualising inclusion is important in the understanding and analysing of special education settings and mental models among members of educational teams, but there is a lack of a common definition both in practice and among researchers (Amor et al., 2018; G. Lindqvist & Nilholm, 2014; Nilholm & Göransson, 2017). Haug (2017) claims that the implementation process for inclusion is difficult because of the gap between the realisation arena and policy documents. Thus, inclusive educational practices cannot be realised. Dyson and Millward (2000) and Clark et al. (1999) illuminated the discrepancy between a school’s espoused policy of inclusion and its implementation into practice. In the implementation process, the policy will transform into what is more suitable in accordance with the pedagogical practice. The discrepancy between these two arenas can be explained by conflicting interests of policymakers and practitioners in the interpretation of educational core values expressed in curricula and legislation (Clark et al., 1999; Dyson & Millward, 2000).
Cigman (2007) lists two principles of inclusion—universalist (everyone should be included, and therefore, special schools are not to be a part of the educational system) and moderate (special educational solutions are a necessity if all pupils are to be included). The moderate view brings about a discussion on whether it is possible to achieve inclusive environments in special education settings and whether a universalist view of inclusion leads to a state of exclusion for pupils with NPDs (Cigman, 2007). The two principles of inclusion are also notable in the Swedish context. Several researchers in the field hold the position that complete inclusion cannot be fulfilled in special education settings (Haug, 1998; Malmqvist, 2018; Malmqvist & Nilholm, 2016). Thus, separate learning environments for pupils with neuropsychiatric diagnoses can never be seen as inclusive if inclusion is to be stated as it is in the Salamanca Declaration (Malmqvist & Nilholm, 2016). Although Malmqvist (2018) expresses ambiguity in his position regarding inclusion, he states that the so-called “neuropsychiatric paradigm is obviously a threat to inclusive education” (p. 18). Other scholars in special educational research, who claim that diagnosis leads to the categorisation of pupils and excluding strategies, share this point of view. Therefore, these diagnoses hinder the development of inclusive learning environments (Hellblom-Thibblin, 2018; Hjörne, 2016; Hjörne & Säljö, 2019b, 2019a). Categorisation of pupils is often used in schools, particularly when it comes to pupils with neuropsychiatric difficulties (Hjörne, 2016). Hence, the focus tends to be directed towards the pupils’ deficits instead of inadequate learning environments, and this increases the risk of stigmatisation and exclusion (Hjörne & Säljö, 2013; Norwich, 2008, 2014).

Although several researchers in the field of special education express a universalistic view of inclusion, some voices embrace a more pragmatic outlook. The placement of pupils can be seen as a dilemma (Clark et al., 1999; Dyson & Millward, 2000; Norwich, 2008, 2014) because the categorisation of pupils can both hinder and enable inclusion. Pupils who attend special classes are at risk of being labelled deviant, but the separated learning environment can also provide special support that cannot be offered in regular classes. Norwich (2008, 2014) emphasised that pupils have general, specific and unique needs that are not always met in an ordinary classroom. If their needs remain unmet, the principle of inclusion cannot be fulfilled (Norwich, 2008, 2014). However, Clark et al. (1999) argued that inclusion ought to be seen from a wider perspective than merely a “policy rhetoric” (p. 173). The adapted learning environments and teaching methods are important in the understanding of inclusion. This idea is shared by Kauffman and Badar (2014), who hold that although segregation should be avoided it is sometimes a necessity to provide adequate learning environments. Inclusion, which refers to including all pupils in the same class regardless of their needs, is not a realistic goal. More importantly, the inclusion of certain pupils in regular classes leads to internal exclusion. Special classes can be a way back into the educational system for pupils who have experienced involuntary absences from their ordinary schools. Alternative schools can function as an instrument for re-inclusion (McGregor & Mills, 2012).

The complexity in how to interpret the concept of inclusion also affect pedagogical practices, such as special education settings, which are shaped by assumptions, preconceptions and discourses. To develop special education settings, the interpretation of core concepts need to be scrutinised through dialogue and discussions among practitioners (Ainscow & Sandill, 2010; Skrtic, 1991, 2005). In Swedish schools, this becomes evident as the clarification of what inclusion means is not explicitly outspoken in policy documents (Magnússon, Göransson, & Lindqvist, 2019), and therefore, it is open to different interpretations (Göransson, Nilholm, & Karlsson, 2011). Those in favour of separate solutions often claim that pupils with NPDs need something else, such as specific teaching
methods, which cannot be provided in regular education settings (Malmqvist & Nilholm, 2016). Those who advocate for separate solutions claim that these types of settings strengthen the learning outcome among the pupils and prepare them for a more inclusive environment (Hjörne & Säljö, 2019a, 2019b; Lozic, 2014). The interpretation of inclusion is important because it affects the way in which special classes are organised and how they function. In this article, the educational teams’ interpretation of the concept is an important part of identifying mental models.

Point of departure
The aim of this article is to examine how members of educational teams in special classes construct mental models to illuminate the obstacles and prerequisites for organisational learning. The study seeks to answer the following research questions:

- How do the members of the educational teams talk about and understand the concept of inclusion?
- What kinds of mental models can be identified through the team members’ interpretations of inclusion?

THEORETICAL FRAMEWORK
In this article, educational teams are seen as organisations; therefore, the study takes its departure from a theoretical framework that focuses on organisational learning and learning organisations (Argyris, 1990, 1999; Argyris & Schön, 1978; Senge, 2006). Organisational learning theory is a way to make it possible to scrutinise learning processes in educational teams. Organisational learning, the fundamental component of a learning organisation, is often referred to as collective learning in school contexts (Larsson, 2004, 2018). Collective learning is a joint learning process that results in organisational development (Argyris & Schön, 1978).

The theoretical framework draws from Senge’s (2006) model of the learning organisation presented in *The fifth discipline*. The model consists of five disciplines, but in this study, only one part of the model was used—mental models. The discipline is crucial when it comes to organisational learning and the development of a learning organisation. Mental models are described as cognitive assumptions, generalisations, interpretations or prejudices used to understand the world and how to act in certain contexts (Senge, 2006; Senge et al., 2000). Every member of a team or organisation has mental models that are explicit or implicit to the individual team member and the other members of the team. If a mental model is implicit, since it cannot be scrutinised and questioned by other team members it functions as a hindering factor for the development of the organisation (Senge, 2006). Mental models can also function as a defensive mechanism towards an outside threat. This strategy is used for justifying the own organisation’s raison d’être concerning, for example, political decisions and policies (Argyris, 1990, 1999). Mental models can reflect either individual perceptions or a common discourse shared by the team on how to interpret certain concepts. In the latter case, the discourse can consist of rules and routines that in themselves serve as conservative forces when it comes to organisational learning and development (Senge, 2006). Mental models can be seen as underlying norms and values that affect the actions taken in a specific context or situation (Argyris, 1990). An individual’s or group’s mental model affects a certain perception and implementation of a concept.
Educational teams function as organisations in the sense that they seek to accomplish a mutual purpose, at least in theory. The way the team members talk about and understand the concept of inclusion illuminates what types of mental models are represented in the teams. The theoretical framework is a useable analysis tool to clarify how the individual members of the educational teams understand and argue about the concept of inclusion.

METHOD

The context
The study focusses on members of educational teams in special classes designed for pupils with ADHD and ASD. Educational teams at three schools in a municipality in Sweden participated in the study. The selection criteria included that the schools would be located in the same municipality and have a municipality organiser. The schools were regular schools within the compulsory educational system, but each had one or several special classes that were only open to pupils with ADHD or ASD. All classes were integrated within the ordinary school and located in the same building. However, they were separated from regular classes physically and educationally. The special classes were situated in a separate part of the building, to which only pupils who were attending the special classes had access. The pupils very seldom left their ‘home classrooms’, and co-education with pupils without diagnoses was rare. In the study, the schools are labelled School 1 (S1), School 2 (S2) and School 3 (S3). S1 and S3 consisted of secondary schools including grades 7–9, and S2 was a middle school comprising grades 4–6. The educational teams differed in size, where S1 had the largest team, at 10 members, S2 had four members, and S3 had five members.

Participants
The respondents consisted of the members (N=19) of the educational teams associated with the special classes in the three schools. The educational teams represented a mix of different professions (see Table 1).

Table 1. Professionals at the schools

<table>
<thead>
<tr>
<th>Profession</th>
<th>School 1 (S1)</th>
<th>School 2 (S2)</th>
<th>School 3 (S3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>3</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Pupil assistant</td>
<td>7</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Special teacher</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
<td><strong>4</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

The respondents were approached via the schools’ principals. The data collection followed the ethical rules formulated by the Swedish Research Council concerning information, consent to participate, scientific use of information and confidentiality (Swedish Research Council, 2017). All the participants gave individual approval and were informed about the voluntary nature of participation in the research project.
Data collection and analysis
To collect the empirical data, individual semi-structured in-depth interviews were conducted. Using interviews as a method is particularly appropriate when it comes to answering ‘how’ questions (Kvale & Brinkman, 2014), which is in line with the aim of this article. Since the article aims to locate mental models among the members of the educational teams, interviews were a suitable approach for collecting empirical data. To illuminate each educational team member’s mental model, group interviews were less appropriate. Group interviews can provide a vivid climate for discussion. However, some aspects can affect the interview situation negatively; for instance formal or informal leaders can take control of the interview situation in trying to represent the group’s opinion (Fontana & Frey, 1994). It was important to avoid such undesirable effects and thus, individual interviews were chosen.

All the interviews followed an interview guide consisting of themes and questions where inclusion was one of the themes. The author of the present article conducted all of the interviews. The questions and themes in the interview guide served as guidance, giving the interviewer the possibility to follow up the respondents’ answers, resulting in answers characterised by reflection and thought. Examples of questions asked in the interviews are as follows:

- What is your opinion about special classes and special teaching groups motivated by NPDs?
- Are there pupils who cannot be included (who and why)?
- Is inclusion a point of departure in your work?
- What is your view regarding the concept of inclusion?

The interviews took place in a context that was well known to the respondents. Audio recordings were made of all the interviews. The recordings were then transcribed, and during that process, all respondents were anonymised. The interviews lasted 45–60 minutes. After the transcription, a content analysis was undertaken using NVivo 12. A content analysis of interview data may include both inductive and deductive approaches (Drisko & Maschi, 2015). Since a theoretical framework of organisational learning guided the present article, the analysis process was characterised by the latter type. Inclusion served as the main category and during the content analysis, subcategories were created based on how the respondents talked about inclusion. The subcategories were used to interpret the collected data and systematise the results in the shape of themes. Quotations used in the article were translated from Swedish to English. The aim of the translation process was to translate verbatim to keep the content and meaning, but this was not always possible.

RESULTS
The present section describes and analyses the findings from the interviews using the theoretical framework and previous research according to the concept of inclusion.

Themes of inclusion
The results from the interviews are presented in themes drawn from subcategories identified in the data analysis process. This section answers the first research question:

- How do the members of the educational teams talk about and understand the concept of inclusion?
The findings are illustrated by quotations to elucidate the interpretation of the data. From the content analysis, four themes emerged, as shown in Table 2. Some themes are closely connected, and in some cases, the respondents expressed an interpretation of inclusion, that covered more than one theme. The table shows how often a certain theme occurred in the respondents’ answers.

Table 2. Number of themes of inclusion

<table>
<thead>
<tr>
<th>Theme</th>
<th>School 1 (n=10)</th>
<th>School 2 (n=4)</th>
<th>School 3 (n=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusion as a politically made-up concept</td>
<td>3</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>There is something wrong with The system</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Inclusion through exclusion</td>
<td>15</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>The vision</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26</strong></td>
<td><strong>18</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

Inclusion as a politically made-up concept

Some respondents talked about inclusion as a politically driven concept. Hence, the practitioners expressed a different interpretation of what inclusion is according to what was perceived as the politically correct definition. This understanding of inclusion shows that there is a gap between the political policy arena and the realisation arena. One respondent stated:

> what politics or politicians are talking about now with inclusion I think it is pure and simple bullshit (Pupil assistant S1).

How inclusion is advocated among politicians and officials at the municipality level is often seen as a criticism of special classes. Inclusion is a concept that threatens the core of special education settings:

> that is to say, it is not politically established that there should be this establishment, the municipality's point of departure is inclusion and by that, you mean that this class does not work for it in that way (Special teacher S2).

One of the respondents argued that there is a need for practitioners to prove themselves and the establishment worthy in the eyes of politicians and officials. The way inclusion is understood and implemented in the special classes does not follow what is stated in the municipality’s policy, and therefore, the practitioners have to persuade the local politicians that they are doing the right thing:

> this political intention regarding inclusion it still lingers like a yoke (...) we then try to explain that this is the first time our pupils feel included, they have never been that before, they have been on a class list, but they have not been included (Teacher S2).

A teacher from S3 described what happened when the school was forced to shut down an earlier special education group because of the political discourse regarding inclusion. The attempt to include all the pupils with special educational needs in regular classes was a fiasco:
The first time this inclusion concept became popular it was decided that this special education setting should be closed down, it was ugly and wrong that it existed (…) and the pupils were moved from that setting into classes without receiving any resources and of course, it went wrong (Teacher S3).

The respondent from S3 (Teacher S3) shared the same understanding of inclusion as the practitioners from S1 and S2; the concept was not established or accepted in the educational teams. The overall stated point of view among the respondents was that inclusion is a concept that is a top-down-driven project with little connection to what works in special educational practices. Theory and practice cannot be combined in a shared understanding and implementation of inclusion. There are conflicting interpretations of inclusion between the political and policy arenas and practitioners, and the concept is not discussed and analysed by the team members. The team members expressed a view characterised by a struggle between politicians and practitioners. The overall picture is that policymakers represent the wrong interpretation of inclusion. The politicians and officials at the municipality level hold an overly rigid attitude towards inclusion that cannot be combined with special classes, and the proponents of this viewpoint perceive the concept as hostile. The hostility towards the concept overshadows the ability to problematise it in accordance with special education settings.

There is something wrong with The system

Inclusion cannot be realised as long as there is something wrong with the system—namely, the regular school. The system is not adapted for pupils with ADHD and ASD; therefore, they cannot be fully included in regular classes. The types of logics that were evident among the members of the educational teams’ approach the interpretation of Inclusion as a politically made-up concept. The hindering factors for inclusion were located outside special education settings, and much of the respondents’ views on inclusion were related to physical placement. At its core, inclusion is something that fosters equality and participation in the educational environment, and the respondents shared a positive attitude towards the concept; however, they expressed that it cannot be realised when it comes to pupils with ADHD and ASD:

I thought about this with inclusion, my point of view is also to make adjustments in the classes where you are as far as possible obviously, you should not move pupils randomly, absolutely not (…) but there are exceptions and I think that these are the exceptions we should take care of (Teacher S2).

The inability of the system to include pupils serves as a justification for the existence of special classes; so the argument goes, special classes are needed because the system is imperfect. Thus, a certain amount of exclusion is needed because of how the regular school system is constructed. Regular learning environments are not adapted for pupils with ADHD and ASD, which means that pupils with NPDs cannot benefit from education on the same terms as pupils without diagnoses:

but given how the system is structured, there is also, like, no opportunity for our pupils to participate on equal terms (Pupil assistant S1).

Advocators of this theme place responsibility for unsuccessful inclusion at a system level. Placement in special classes is enforced by the system and is sometimes seen as unavoidable:
In the ideal world, all personalities can fit in one classroom, until we have achieved that, we need to, in the best way help pupils who have difficulties (Teacher S3).

That our [pupils] would like attend large classes. For some it would be totally, it is impossible, it is not possible, but there are some pupils who want to try (…) but on the whole, it is not good or for some, it is not good, who wouldn’t cope (Pupil assistant S1).

The concept of inclusion and how it should be interpreted appeared to be less significant to the members of the educational teams because it was placed outside the special education settings and the team members could not change or influence the system. The respondents advocated an understanding of special education settings and inclusion in a way that can be interpreted as an intention to protect the pupils from the world outside––that is, the regular school. Advocates of this theme agreed with respondents supporting the theme Inclusion as a politically made-up concept in the sense that the operationalisation and problematisation of inclusion are not always in the foreground. A definition of the concept already exists, delineated by the policy arena to which the team members must relate. That definition prevails in regular classes, and pupils with ADHD and ASD must be protected from such views and learning environments. Once again, the politically narrow-minded view of inclusion serves as the justification for special classes. There is a tendency among the respondents to note that the physical location offers some sort of inclusion. Inclusion is connected to both placement and the size of classes. Neuropsychiatric diagnoses and the regular school system are not compatible; therefore, the pupils require special solutions. The arguments often contain a comparative perspective towards regular classes, where the form of inclusion offered is worse than what can be achieved in special classes. A separated solution is seen as better than attendance in a regular class.

**Inclusion through exclusion**

According to this point of view, inclusion is achieved through exclusion––that is, by attending special classes. The respondents emphasised the need for preparation regarding inclusion. The pupils who attend special classes often have a long history of school failure. The lack of adapted learning environments has led to involuntary absence, with the result that the pupils have been excluded from a learning and social context compared with their peers without NPDs. Thus, the special class functions as a way back into an educational context:

I think they are included, because it is pupils who have been home, away from a context and who feel that, yes this is my class (Special teacher S2).

This respondent from S2 indicated an approach towards inclusion where the need for placement in a special class is a starting point in the realisation of inclusion. The pupils need a period of preparation before they can be included in larger contexts. The proponents of this view emphasise the importance of smaller and calmer learning environments as a prerequisite on the path towards full inclusion. This is to be done in a systematic process in which the first step is to re-include the pupils in a school context.

One important aspect was the expressed ambiguity regarding inclusion, exclusion and pupils’ well-being. According to the respondents, the well-being of the pupils had the upper hand concerning
inclusion and exclusion. Special classes provide a safe environment at the cost of full inclusion; however, the classes are inclusive since they provide the safety that this type of pupil requires:

the goal is that you should feel safe here and that it is a somewhat inclusive environment because it is adapted to make our pupils feel safe and in this environment that is, sort of, separate from the big environment that is outside (…) then it is inclusive, so our establishment is inclusive to the extent that the pupils who come here should feel included, but if you think the school here as a whole, then we are excluded in some way (Pupil assistant S1)

Because of the pupils’ diagnoses, they need support for their safety and well-being. The respondents often proclaimed their view from the pupils’ perspective and became spokespersons for the group of individuals attending the special classes. Although some of the respondents expressed a more individualistic belief regarding inclusion, the common denominator was the NPDs. This way of thinking was shared by several respondents at S1. The team members decided that the pupils should not attend, for example, field days or other activities outside the regular schedule. The staff of the educational team at S1 emphasised the need for predictability for the pupils and not being exposed to unknown situations. A disturbance could result in a refusal to go to school. The mind-set expressed reflects a view of a protective character, where inclusion in larger learning environments leads to exclusion. The diagnoses becomes a hindering factor for inclusion outside the special class. The diagnosed pupils need special classes, as such classes provide an environment of similar peers, which is a significant factor for the pupils’ well-being and feeling of inclusion. Because of the NPDs, the pupils lack the ability to comprehend how to interact in a social context and they need preparation before being included in a larger environment.

Special classes also provide the necessary preparation for successful inclusion in later school years. In S1, this was done via a theoretical approach aimed at preparing pupils for challenges in upper secondary school. One of the respondents described what awaits the pupils after leaving secondary school:

we have (…) life-knowledge [a self-made up school subject] and that we in the ninth grade talk a lot about this, how to get to upper secondary school, how should I as a pupil think when I step into my upper secondary class (…) it means a big change from the reality they have here and this is what we talk a lot about in life-knowledge and also in other situations and things like this, how to deal with this which I think is exactly what you need to do, we try to help our young people to be included in upper secondary school (Pupil assistant S1).

To comprehend and manage upper secondary school, the pupils require a learning environment that consists of special classes. They need to be aware of what is expected of them before they can be included in a non-separated learning environment. However, some respondents expressed ambiguity about placement in special classes because the protective approach can be counterproductive.

One respondent at S1 talked about inclusion competence, reporting that a lack of skilled competence among teachers in regular classes causes internal exclusion. The required skilled competence is found among the educational teams in special classes:
so you need more methods how to do it, you need more skills simply to find all these pupils because they have a lot of differences, and we have that [competence] (Pupil assistant S1).

According to Pupil assistant S1, to be able to include pupils with ADHD and ASD, a certain competence is necessary. Inclusion can only be met in special education settings where expertise is present. The team members have knowledge of how to adapt the learning environment and teaching strategies. The arguments build upon the idea that competence exists only in the educational team and is closely associated with special education settings. The team members know what is required to establish an inclusive learning environment.

The vision

The vision was characterised by a view in which inclusion is broader than just a physical placement in a special education class. This kind of reasoning was most frequent in S3, where the respondents indicated that inclusion also comprises the opportunity to learn:

yes, inclusion to me is that you are allowed in an environment in a context (...) where you can be and where you can make use of the teaching, where there are the necessary conditions needed (Teacher S3).

Inclusion to me is (...) that you create a climate where the pupils, despite their, like, the difficulties and the lack of executive functions they have, that they can still make use of teaching and learning success and feel that they succeed (Teacher S3).

The learning perspective was not common in S1 and S2, and this adds another dimension to the understanding of the concept of inclusion. Inclusion was not seen as just the placement of pupils; rather, it was conceptualised as an opportunity to participate:

when you can fulfil all aspects of this participation that are crucial to all development and learning, I think it is strongly related to inclusion in an establishment when you fill these with availability, affiliation, collaboration, autonomy and recognition then you can also say that you are included (Teacher S3).

The concept of inclusion and what is required to create an inclusive environment cannot be blamed on policy documents or the pupils’ diagnoses. Although the themes of Inclusion as a politically made-up concept and There is something wrong with the System were expressed by team members at S3 they emphasised a view where the responsibility for successful inclusion falls within the teachers’ territory.

One respondent at S3 mentioned the importance of discussions about pedagogical strategies and didactic methods concerning inclusion. Inclusion must be seen from a wider perspective. It is not about placing pupils in special classes; rather, it should focus on modifying and developing regular practice. Several members of the educational team at S3 expressed the same point of view regarding the conditions for successful inclusion. Inclusion was seen as a vision to strive for but not a goal that was out of reach. Thus, the concept must be operationalised and analysed from a wider perspective. The hindering and facilitating factors for inclusion are placed inside special education settings and not outside them.
ANALYSIS

In this section, the themes from the interviews are analysed in light of the theoretical approach and previous research to answer the remaining research question:

- What kinds of mental models can be identified through the team members’ interpretation of inclusion?

The team members adopted various mental models that affected the interpretation of inclusion. In some cases, the interpretation of inclusion consisted of organisational defensive routines (Argyris, 1990, 1999), which served to protect special education settings from the world outside. This interpretation was most common among respondents from S1 and S2. For the respondents advocating this view, the threat was represented by politicians’ and officials’ view of inclusion, which was incompatible with the practitioners’ view. Therefore, inclusion was seen as threatening, giving rise to a mental model of limiting nature. This was due to the cognitive assumptions that the impeding factors for inclusion were located outside the special education settings and out of reach of the team members. It was also important for the team members to create distance from the political interpretation of the concept, which threatened the existence of special classes. This is what Clark et al. (1999) and Dyson and Millward (2000) describe as conflict perspectives and dilemmas because of the built-in contradictions in the educational system between the policy and realisation arenas. The policymakers’ and officials’ views of inclusion clashed with the practitioners’ perceptions of the concept and the expressed core values of education. This mental model represents the internal image of what inclusion is and what the concept represents. Although they expressed different views of inclusion, the team members did not challenge this mental model. This type of interpretation raised obstacles in striving for organisational learning (Senge, 2006; Senge et al., 2000), and it reinforces the picture of inclusion as being of less importance. When the assumptions become a fact, the mental model is entrenched and cannot be challenged in the way necessary to promote a positive and developing learning process (Senge, 2006; Skrtic, 1991). This mental model jeopardises the opportunities to create and strive towards a more vivid discussion within the team about inclusion because the concept is seen as hostile and the mental model is not challenged.

The theme of Inclusion through exclusion represents a mental model where special classes are a foundation for further inclusion. Inclusion can only be fulfilled via special classes. This mental model was represented by the respondents of S1 and S2 and drew from a categorical perspective of inclusion. The perspective represents a discourse in which the pupils are ascribed impairments because, for example, ADHD or ASD (Norwich, 2014). Several respondents at S1 and S2 stated that the pupils need a special educational environment because they lack the skills needed for inclusion in regular classes. Respondents from S1 and S2 emphasised that pupils with ADHD and ASD, as a collective, were better off in special classes because the regular school could not adapt the learning environments. Inclusion can only be achieved in an environment consisting of pupils with NPDs. The mental model that emerged represented a view in which the pupils are treated as a collective instead of individuals (Norwich, 2014). This point of view mediates a picture of the school system as differentiated, where pupils with diagnoses are to be separated and protected from those without. When it comes to the question of inclusion, a categorical perspective tends to disregard individuality. Thus, inclusion is to be dealt with at a group level. Although diagnoses of ADHD and ASD can cover a wide spectrum, meaning that the need for special education support can vary from individual to individual, this aspect was seldom taken into consideration by the team members. This categorical
type of mental model resembles a moderate view of inclusion (Cigman, 2007); however, the respondents’ focus tended to be directed towards the pupils’ deficits instead of the inadequate learning environment, which also increased the risk of exclusion from regular classes (Hjörne & Säljö, 2013; Norwich, 2008, 2014). The mental model was emphasised among the respondents and served as a hindering factor when it came to the interpretation and implementation of inclusion, preventing an organisational learning process. The team members ended up in a limited learning process (Argyris & Schön, 1978); although the individual team members were aware of the mental model, it was not explicitly problematised, with the result of bringing the learning process to a halt (Argyris & Schön, 1978; Senge, 2006; Senge et al., 2000). The mental model is controlled by norms of categorisation, which are not thoroughly scrutinised by the team members. If the team members accept the differentiated version of inclusion without a critical approach, the mental model is at risk of reproducing itself, affecting the conditions for organisational learning (Argyris, 1990; Argyris & Schön, 1978; Senge et al., 2000; Skrtic, 1991).

In S3, a mental model was identified in the theme The vision, where the concept of inclusion was discussed from a broader perspective. A relational perspective of inclusion occurred in the reasoning among the team members, where it was something more than just a physical placement of pupils. Following the relational perspective, inclusion must be seen as an interaction between the pupil and the learning environment (Emanuelsson, et al., 2001). Inclusion is discussed and problematised not according to the pupils’ diagnoses but in relation to the surrounding learning environment. Participation and learning were crucial parts of inclusion in the arguments among the team members at S3. This is in line with Skrtic’s (1991, 2005) and Ainscow and Sandhill’s’ (2010) reasoning on how to achieve inclusive learning environments and promote an organisational learning process. Pupils’ diversity is not a hindering factor; rather, it is an asset in the organisational learning process in that it leads to reflection and problem solving among the practitioners. Although the team members also gave voice to other views of inclusion, this mental model affected how they interpreted the concept. This revealed that an individual learning process existed among the team members via the analysis and reflective thoughts about inclusion. The participants challenged themselves and reflected on their thoughts, connecting inclusion to learning and availability. Such reflective reasoning is a crucial part of organisational learning and the development of a learning organisation (Argyris, 1990; Argyris & Schön, 1978; Senge, 2006; Skrtic, 1991).

CONCLUSIONS

The purpose of the current study was to examine how members of educational teams in special classes construct mental models to illuminate the obstacles and prerequisites for organisational learning. This was done using a framework of learning organisational theory. The primary reason for a learning organisational approach was to elucidate the various interpretations of inclusion in the educational teams and to reveal hindering and facilitating factors regarding organisational learning.

This study identified several interpretations of inclusion among members of the educational teams. In most cases, interpretations served as obstacles to the development of organisational learning. The respondents often expressed a view indicating that inclusion is not a concept that is frequently discussed. The results also revealed how inclusion is used to justify special education settings and separate learning environments for pupils with ADHD and ASD.
Organisational learning and the development of learning organisations are crucial in special education settings, especially when it comes to special classes with the purpose of providing adapted learning environments for pupils with ADHD and ASD. Diagnosed pupils are at risk of being excluded from regular classes and placed in special educational environments; therefore, the mental models in educational teams need to be scrutinised. The scrutiny reveals whether the educational teams are striving towards learning organisations. The mental models affect how the teams interpret and implement inclusion, and thus, the right to equivalent education, regardless of whether the pupil has a diagnosis. If mental models are not problematised and visible, they risk creating obstacles to organisational development and learning.

Like all research, this study has its limitations. First, the respondents represented only three schools, making generalisations on a larger national scale difficult. Second, the teams consisted of different professions, a factor that was not taken into consideration in the analyses of the results. As seen in the results section (see Table 2), the respondents’ professions could affect their interpretation of inclusion. The theme *Inclusion through exclusion* appears only in special classes with pupil assistants, which can indicate that pupil assistants’ view of inclusion is characterised by physical placement. In a literature review by Lindqvist et al. (2020), the authors highlight the importance of not handing over pedagogical decision making to pupil assistants because they often lack the proper education. This is a factor in need of consideration when pupil assistants’ views of inclusion are discussed concerning organisational learning. Yet another factor of importance is the respondents’ emphasis on the pupils’ well-being, most frequently appearing at S1 and S2, in accordance with inclusion. The pupils’ well-being as an important aspect of placement in special classes and not their education and learning processes needs further scrutiny because it can affect mental models among the team members. The aforementioned aspects are important topics in future special educational research concerning special classes designed for pupils with NPDs and the educational teams attached to special education settings.
REFERENCES


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