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Chapter 9

Writing as multilingual and multimodal practices. The case of the Language Introduction Program in Swedish Upper Secondary School

Abstract

In this chapter focus is on writing in education for L2-students, with specific focus on the role of writing and on strategies that involve multilingual and multimodal resources. The chapter draws on material created through observations of lessons together with stimulated-recall interviews and analysed through Hornberger's *continua of biliteracy*. Findings show that content and context were mainly at the majority end of the continua, while inclusion of multiple language resources and multiple media enabled language development among students that covered both majority and minority parts of the continua. However, multilingualism was not valued as assets for the future and writing did not become an important tool for learning, and students did not get opportunities for their development of necessary writing skills in specific subjects.

Keywords: writing, second language students, multilingual and multimodal practices, languaging as source of meaning

Introduction

Developing advanced strategies for reading and writing is important for students in upper secondary school and requirements regarding writing skills are high. For adolescents who are recently arrived in a new country the demands are extremely high, having to learn a new language including developing advanced literacy skills in short time to qualify for upper secondary school. In Sweden recently arrived students (RAS) between the ages 16 and 19 years, who have not yet qualified for a mainstream program in upper secondary school, are admitted to *Språkin introduktionsprogrammet* (the Language Introduction Program, here LIP). At LIP they receive education in Swedish as a second language and in other school subjects that they need to fulfil the requirements for a mainstream program in Upper Secondary School. Education should be planned individually for each student and according to the Swedish Education Law (SFS 2010:800) students have the right to what is called Mother

Tongue Tuition and Study Guidance through the Mother Tongue (SGMT). Students should, through SGMT, receive support through a language other than Swedish that they master. Students' situation is extremely challenging as there is a limit set at the age of 19, after which they will not be admitted to a mainstream program. Thus, LIP is a transitional program and students need to progress at the highest rate possible.

The focus of this chapter is on the writing that takes place during the studies in LIP. The aim is to investigate how diverse linguistic and multimodal resources are used in writing in the subjects Swedish as a second language (SSL), social sciences and natural sciences. Social sciences (SS) in Swedish upper secondary school includes the subjects civics, history, religion and geography, while natural sciences (NS) includes the subjects chemistry, biology and physics. These subjects are chosen as they are central in the LIP. All students need to pass SSL to be admitted to ordinary programs and most students also have to supplement previous studies in one or several of the other subjects. As writing skills are important not only in SSL but also in subject studies when subject knowledge becomes more abstract, technical and complex (Schleppegrell 2004, Fang and Schleppegrell 2010, Shanahan and Shanahan 2008), an investigation of the writing that goes on in these subjects may give us important information about relationships between SSL and learning in other subjects. To investigate the use of linguistic and multimodal resources the following research questions will be used.

1. What literacy practices are students involved in in class?
2. What is the role of writing in these practices?
3. What strategies do teachers and students use for writing that include multilingual and multimodal resources?

Theoretical framework

The chapter starts in the concept *linguaging as source of meaning* (Wedin, 2021), derived from Barwell's (2018) *language as sources of meaning*, which draws on the shift in sociolinguistics from descriptions of languages, dialects and registers, to a more complex view of language as fluid and changing resources. Thus, *language as sources of meaning* continues earlier work by researchers such as Baker 2001, Blackledge and Creese (2010), Blommaert (2010) and García (2009). Barwell (2018) created the concept language as sources of meaning for mathematics education, and includes multiple discourses, multiple voices and multiple languages in his concept. *Linguaging as source of meaning* takes a step further understanding language as negotiated and developed in interaction between people "orchestrating language

and other semiotic resources to their benefit” (Canagarajah 2018, p. 809). This means in this case recognizing that much more is at stake in writing than only formulating text but that writing as all verbal resources is “mediated, shaped, and embedded in diverse other semiotic resources, situated in expanded social, material, historical and geographical scales” (Canagarajah 2018, p. 810-11).

The focus on writing in this chapter will be based on New Literacy Studies (NLS) (Street 1996, Barton, 2000) with its basic concept *literacy practices*. In NLS and critical aspects of literacy (Janks, 2010) the focus is directed towards classroom practices in relation to writing, the socially and culturally situated practices when participants, teachers and students, read, write, talk and in other ways relate to written text. Thus, what participants *do* is foregrounded while what they *know* is in the background. This does not mean that literacy skills are not perceived as important, but that the focus here is on how participants value and use written text in various situations and in ways that may influence their learning. To enable an analysis of writing in these classrooms as a complex phenomenon, embedded in the web of ongoing social practices, Hornberger’s *continua of biliteracy* will be used (1989, 2003). This model is grounded in an ecological perspective on language, through its four continua *context*, *media*, *content* and *development*. The combination of NLS with Hornberger’s model allows an analysis of literacy practices through various variables. The continua intersect and Hornberger includes aspects of power in the three dimensions of each continuum. Through the intersection, the model shows the flexibility and variability in the various dimensions, while the whole is kept together. According to Hornberger “the more the learning contexts allow learners to draw on all points of the continua, the greater are the chances for their full biliterate development” (1989:286). The whole model relates language practices to issues of power relations through the multi-dimensional continua which have one end associated to what is commonly assigned lower status and the other to what use to be assigned higher status. This makes the model relevant in this case enabling the analysis of one dimension in relation to the whole while including aspects of power relations, as RAS often face a tough situation and may live in a vulnerable situation under high pressure.

Writing in various school subjects

The situation for RAS is not much researched and writing in particular is seldom researched in relation to other school subjects than languages. Applebee and Langer (2013) stress that a significant part of writing in middle and high school classrooms is done in various subjects.

They found that although more writing was done in English than in any other single subject, there was in total more writing done in other subjects than in English by itself. However, most of the writing in other subjects was of the type that they call *show – you – know writing* and not in the form of more authentic tasks. They claim that writing is not an add-on but an integral part of various disciplines themselves, emphasizing the importance of writing to learn and the importance of writing in disciplines. For them writing is a comprehension strategy that is cognitively engaging. It may be used instructionally to activate students' knowledge, to consolidate new learning, as well as to extend what they already know (2013, p. 7).

Also Schlepppegrell (2004), Fang and Schlepppegrell (2010) and Shanahan and Shanahan (2008) stress the importance of rethinking content area literacy. Fang and Schlepppegrell highlight the increasing linguistic demands that are needed to express the more specialized knowledge that students face in secondary school. Shanahan and Shanahan (2008) brought subject experts in Chemistry, Mathematics and History to read subject texts and to discuss their strategies to find ways to teach these to students. They illustrate the literacy progression through a triangle with basic literacy as the base, through intermediate literacy to disciplinary literacy at the top (Figure 1). This may be compared to Cummins' (1979) concepts Basic Interpersonal Communicative Skills and Cognitively Advanced Language Proficiency, and academic language (Schlepppegrell, 2004; Shanahan and Shanahan, 2008). Shanahan and Shanahan show that cause-effect relationships between different historical events are important in history and that students need to be given opportunities to construct these themselves to learn to think like historians. In chemistry importance was rather on the transformation of information from one form to another and to create knowledge through experiments. Thus, focus was on understanding how a particular experiment took place and how processes developed. In mathematics, on the other side, emphasis was on precision of meaning and correct understanding of words. The importance of creating errorless proofs and rereading these proofs was highlighted, as was memorization of the true meaning of definitions. Specific for mathematics was also the use of letters and symbols to signify specific meanings.

FIGURE A. The Increasing Specialization of Literacy Development (after Shanahan & Shanahan, 2008)

In their study Applebee and Langer (2013) found that tasks in typical classrooms mainly meant that teachers did all the composing while students were engaged in filling in missing parts. They highlight students' need to develop writing in various disciplines as a way to construct knowledge and generate networks of knowledge, something that they found was rare. They emphasize the importance of students engaging in discovery, problem solving and to become active participants in developing reasoned interpretations. For history they stressed, as did the experts in Shanahan and Shanahan's study (2008), the importance of learning to question historical sources, in terms of the time they were written in, the situation, the author and the audience.

In natural science, researchers such as Lemke (1990) have raised issues about language use. Huang (2004) created education where students were trained step by step to write classification texts to learn scientific thinking and communication. Starting with a model text and using graphical representations students developed their scientific thinking through their writing. Regarding L2 students, Richardson Bruna et al. (2007, 2010) warn teachers in natural science against focusing too much on terminology, as this may restrict students' development of the scientific language. Focus on concepts tends to deplete the dialogue, while exploratory interactions may develop skills for scientific problem-solving and scientific reasoning. They stress the importance of offering students a rich linguistic in- and output, and cognitively demanding thought patterns to help students see the connection between concepts and how different systems and phenomena work. They claim that to teach natural science and

its language implies teaching students to formulate hypotheses, draw conclusions, evaluate, classify and generalize. This means that students need to get to know and be able to decipher and use explanatory, investigative and instructing texts, and to be able to formulate such texts themselves. Thus writing is positioned as an important tool for learning in all subjects, implying that the development of necessary writing skills should be related to the characteristics of the needs in each, specific subject.

Method and material

The material used here was created as part of the research project *Recently arrived students in Swedish upper secondary school – a multidisciplinary study on language development, disciplinary literacy and social inclusion*. The research used Linguistic Ethnography (LE) as a methodological frame (Copland & Creese 2015, Martin-Jones & Martin 2017). LE is an umbrella term that combines linguistic and ethnographic approaches. Influenced by linguistic anthropology, LE has been developed by researchers such as Copland and Creese as a base for the exploration of “disciplinary boundaries of linguistics and sociolinguistics (2015 p. 3). LE allows linking “the micro to the macro, the small to the large, the varied to the routine, the individual to the social, the creative to the constraining, and the historical to the present and to the future” (Copland & Creese, 2015 p. 26). This is particularly relevant when analyzing a complex phenomenon such as writing in classrooms, including the use of multiple discourses, multiple voices and multiple languages in the negotiation of meaning that goes on between participants. Data was created during two school years, autumn 2018 to spring 2020, and the material consists of observations of 37 lessons with ten teachers, each 60 minutes long with fieldnotes, together with photographs and video-recordings from various parts of observed lessons. The focus of the observations was on language use and interaction patterns in classroom practices. Also semi-structured interviews with twelve students and informal interviews with 25 students are used. Students were interviewed in Swedish in pairs or individually and interviews were between 17 and 42 minutes. Questions focused on previous studies before arriving in Sweden, their study situation in Sweden and their plans for the future. The first four semi-structured interviews using video-stimulated recall, where students were interviewed in relation to observed lessons and these interviews were video-recorded. The other eight were interviewed individually or in pairs, and these interviews were audio-recorded. Some of these students were in their first year of the program and some were in their second year. During observations students were sometimes asked or told the researcher

about their work and how they used various media. In table 1 an overview over the data from classroom observations used here is presented.

	Lessons á 60 minutes	Teachers	Student groups	
Social sciences	9	3	4	Video 1 lesson
Natural sciences	8	1	1	Video 2 lessons, photographs
Swedish as a second language	20	6	4	Video 7 lessons, photo

Table A: Data used.

Ethical considerations have been taken into account through the whole research process, following the directives from the Swedish National Research Council (2020) and the study has been approved by the Regional Ethical Board in Linköping (Dnr 2018/191-31). Informed consent was gathered and only students and teachers that approved were recorded. The video camera was mainly aimed at students' work and not at their faces. All material has been handled following the data processing plan for the project and will here be presented in ways that prevent recognition of individual teachers and students.

To analyze how diverse linguistic and multimodal resources are used in the writing in the lessons, Hornberger's continua will be used to identify various resources in relation to writing. The dimensions in the model will be used through the four continua (Hornberger 1989, 2003):

- *context* (micro – macro, oral – written, multilingual – monolingual),
- *development* (reception – production, oral – written, first language – second language),
- *content* (minority – majority, vernacular – literal, contextualized – decontextualized),
- *media* (simultaneous exposure – successive exposure, different structures – similar structures, various scripts – similar scripts).

For the analysis only material from teacher-initiated writing activities will be considered, as this was what was visible in the material. Students' private activities including writing, such as private communication through social media, have not been included here. The analysis will be presented in three steps. In a first step teacher-initiated literacy practices in the classrooms will be distinguished with a focus on writing. This means that research questions one and two will be answered about the literacy practices students are involved in, and the role of writing in these. In a second step strategies used for writing including multilingual and multimodal resources will be identified through observations and interviews to answer research question three. Finally,

the education in the three subjects will be related to each other through analysis of how languaging is used as source of meaning through multilingual and multimodal practices in the respect of writing in these classrooms.

Findings

To understand the role of writing in the literacy practices that students were involved in during the observed lessons, first the role of writing in varied literacy practices in the observed classrooms will be analyzed through Hornberger's continua, focusing on context, development, content and media.

Writing in literacy practices

The two dominant literacy practices in these classrooms including writing are probably common in classrooms all over the world. The first consists of whole-class instruction, what is sometimes called chalk – and – talk, with the teacher standing in front of the class giving instruction, while using the board for written texts. The second practice is when students work with texts and write answers to questions. In all these ten teachers' classrooms, and eight school subjects, these practices were common and resembled each other. Thus, these literacy practices in all subjects will here be analyzed together regarding use of linguistic resources in all eight subjects and classrooms.

The chalk – and – talk practice has been analyzed elsewhere but mainly through its interactional pattern, Initiation – Response – Evaluation (Sinclair and Coulthard, 1975). Here the focus is instead on the use of multilingual and multimodal resources in relation to writing. In all classrooms the context was a macro context dominated by traditional school norms with Swedish as the default language. Teachers combined their talk with written text on their whiteboard. Sometimes this was handwritten before the lesson by the teacher and presented through the lecture and sometimes teachers wrote parallel to their talk. The writing was mainly in Swedish but English expressions were sometimes used and only by SGMT assistants who used other languages relevant for students, such as Dari, Arabic or Somali were used as translation. In picture 1 a SGMT assistant has written an explanation of the concept "inspiration" in Somali and Arabic on the whiteboard.

Picture 1 Written text on whiteboard in three languages.

Varied media were used, although there was a strong dominance for oral and written Swedish combined with photographs or short educational films. Some teachers used their computer for their lectures through a projector that was available in each classroom, but no classroom had a smartboard. Those who used projectors had either prepared a text to show or used the Internet to access information, films and illustrations. The school had access to a digital platform, Unikum, which was sometimes referred to but only exposed once on the whiteboard during the observations. It was not common, but happened, that students copied text from the whiteboard in their note books. On one occasion, in the beginning of one lecture, the teacher invited students to “sammanfatta, anteckna lite” (summarize, note a bit) during the instruction. That was not followed up by the teacher. The content of teachers’ talk may be understood as related to the majority rather than the minority, as the topic was something planned by the teacher based on the curricula. It may also be understood as literal rather than oral, building on content in curricula and textbooks. Only one instruction during the observed lessons may be understood as having minority related content, or at least as possibly closer related to

students' interests outside school. That was an instruction in SSL where students were to write texts in groups about one of three popular artists at the time, Rihanna, Massi and Cherry.

The level of contextualization varied, from the content being clearly related to students' everyday life and experiences, such as the skin (biology) and sound (physics), and to more abstract and decontextualized, such as the role of the Jewish people through history (religion) and ions (chemistry). Teachers mainly used Swedish while students and SGMT assistants shared translations and explanations in varied languages.

Thus, students' development of writing in Swedish during teacher-led instruction drew mainly on listening and reading and, to some extent, their own writing while they did not talk much Swedish. Swedish was the main language used, but also other languages were used, mainly through talk between students and SGMT assistants and through digital resources on the Internet, but not to a high extent during this practice.

The second main literacy practice, when students worked with texts and exercises, usually covered the main part of the lesson. While the instruction part commonly covered 5-15 of the 60 min, in most lessons 40 and 50 minutes were used for work with exercises. During all nine lessons in SS and in seven of the eight in NS the task was similar to what Appelbee and Langer (2013) described as show – you – know where the text composing was done by textbook authors or the teacher while students' task mainly was to fill in missing parts. This practice also existed in SSL but to a lesser extent, only in parts of some of the lessons and then usually in the form of grammar exercises. In SS and NS students had textbooks that were simplified versions of ordinary books, originally produced for students with learning disabilities. This means that texts were short, fragmented and linguistically simplified and the content on a relatively basic level. Students were, particularly in social sciences, required to read these texts and answer questions in an exercise book. These questions did not usually require extended writing but rather words, phrases or single sentences. Students had access to various media and through these to a variety of languages. Each student had a laptop through the whole study time, and most of them also had a private mobile phone which they frequently used to translate words, phrases and whole texts, and to look for explanations as in picture 2. When SGMT assistants were present, in eight of the 37 lessons, they also helped some of the students through diverse languages.

Image B Using private mobile phone to find explanations.

Some students wrote translations in their textbooks and some held their mobile over the text to access a translation. Only one of the students claimed not to have access to a translation tool as it was not available in his language. Through *inläsningstjänst* (Reader Services) students had access to oral translations of texts in the textbooks in NS and SS in various languages, and in some cases also to explanations of content. In NS they also had access to educational films with oral talk and/or undertexts in varied languages. These films only covered parts of the content and in many cases were aimed at children of 10-12 years of age. Not all languages that students needed were available and the material was at the time of observations not complete, but many students used the services to support their reading and writing for their meaning-making to understand. In SSL classrooms there were sets of dictionaries in some of the relevant languages, but they were never observed to be used. Instead, digital media were used for translation. In the work with texts and exercises, students' development relied on their use of their varied languages to a higher extent than in whole-class instruction. In these practices they mainly looked for explanations and translations using media and each other. It should be noted that availability was different for different students, and as mentioned above not all students had access to tools in a language they mastered.

Focusing on writing in the text-exercise practice, it became obvious that writing was not done in isolation, but students used their varied media, through varied languages, and their writing

was embedded in reading and talk. Writing in this practice was short, mainly in the form of words, short phrases or single sentences.

Apart from these two dominant practices some other teacher-initiated literacy practices which included writing were observed, and only one of these was observed outside SSL, one writing task in NS. This was also the only observed example outside SSL where students were required to write a whole text. The task was from a chemistry lesson on healthy food where students were assigned to write a text explaining *tallriksmodellen* (the eat-well-plate, a Swedish model for a healthy meal) based on the concepts: proteins, carbohydrate, fat, water, minerals and vitamins. Then students used their books, handouts and digital tools through their laptops and mobiles, and talked to each other to find explanations of the words. They combined explanations from the given concepts in the textbook, the handouts, Google translate, Wikipedia, and in some cases also other web-pages. They did not get any instruction on how to write the text or how to use varied sources, but to describe a healthy meal based on the eat-well-plate using the concepts. They prepared the texts during the lesson and finished the writing at home. The written texts were handed in as assessment for that part of the chemistry course. Thus, in this case students developed their writing by finding explanations and translations and using them to compose their texts. They had access to varied languages but mainly used Swedish, and the texts they produced were close to the formulations they found in the varied media.

As may be presumed in the subject SSL there were regular lessons focused on writing. Topics related to writing such as critically valuing sources and how to write arguing and reasoning texts were talked about and students wrote texts and filled in gaps in given texts in relation to that. Teachers instructed students and showed examples of written text of various types, such as reviews, chronicles, debate articles, reportages, letters and personal descriptions, and then students were required to write texts of their own following the instructions. Instructions followed what is commonly called genre pedagogy or genre-based approach (Gibbons, 2002), presenting models for texts. Although focus was on written Swedish, various languages were used in the work, mainly through the talk of students and SGM assistants and through digital media. When students searched on the Internet they mainly looked for Swedish explanations and translations which they used for their texts. Notably students did not talk Swedish much, but most Swedish talk was done by the teacher. Thus, students' reception of Swedish was

mainly through teachers' talk and reading pre-produced texts, while their production was mainly in written form.

The content for the writing in SSL was in some cases related to topics in NS and SS, such as climate zones and healthy food. In these cases, no collaboration was observed between teachers in SSL and the different subject teachers or reference to texts from these subjects, such as textbooks.

The analysis revealed different practices related to writing, as well as varied opportunities for students to develop writing skills with variations between the three subjects. While students were instructed in writing in SSL, including writing various types of texts on topics related to other subjects, no instruction about writing was observed in the lessons in NS and SS. In SSL students wrote varied types of texts and were instructed in how to use varied language and in how to construct their texts following given models, while in NS and SS the writing was mainly of the type show – you – know (Applebee and Langer, 2013) and fragmented copying from textbooks or the white board, through the two main practices identified, whole class instruction and students' work with texts and exercises, and their talk and writing in Swedish was mainly in the form of single words or short phrases. The text-writing of the eat-well plate, where students wrote based on explanations of concepts and their writing was used as assessment, was the only observed exception.

The content may be understood as macro in all three subjects, planned based on the curricula and preparing for tests, as was the earlier mentioned work with popular artists. This was however the only observed case during all 37 lessons where a topic was initiated by a teacher that may be referred to micro context. That the macro context was dominant, with Swedish norms and curricula, could perhaps be expected in the context of LIP, where the main goal is that students qualify for an ordinary program. It is apparent that students were encouraged to, and did, use a variety of languages and media, while the linguistic focus was on Swedish, of the type that Shanahan and Shanahan (2008) call *intermediate literacy* and Schleppegrell (2004) *academic language*. However, what Shanahan and Shanahan call *disciplinary literacy*, which may also be called *subject-specific language*, did not appear.

The writing that took place in these lessons was in a majority dominant context, the school setting where Swedish was the target language, while other languages played an important

part. Also the content was predominately macro and written, while the use of media was diverse, including both varied structures and simultaneous exposure. Notably oral Swedish was mainly produced by teachers while students mainly talked other languages while writing in Swedish. The role of writing in these literacy practices may be summarized as of two major types; 1) writing following instruction and modelling, and 2) show – you – know (Appelbee and Langer, 2013), with the first predominant in SSL and the latter mainly in NS and SS, but also represented in SSL. The practice that may be called *writing to learn*, the type of writing which was highlighted for subject learning (Appelbee and Langer, 2013), did not appear at all.

Strategies for the use of multilingual and multimodal resources

In the second step of the analysis, strategies for the use of multilingual and multimodal resources will be identified. The use of strategies is not always observable and students may have created and used varied strategies for their learning which are not recognizable through observation. This concerns for example strategies for homework and studies outside the classroom. Here mainly strategies made visible through observations are analyzed, complemented with some strategies mentioned by students in formal and informal interviews.

Teachers and students were observed to use various strategies in relation to multimodal tools and diverse language resources. Teachers used and referred to various media, but were never observed to use other languages than Swedish, with the exception of a few expressions in English. They all inspired students to use diverse modalities and languages to find explanations and translations and then find ways to express the knowledge in Swedish, but they were not observed to show how to do this or to suggest useful strategies, such as strategies to learn new concepts in Swedish through the support in other languages.

Some of the students who had previous long school education were observed to use specific strategies and in interviews they also explained such use of, while most of the students were mainly observed to translate or look for illustrations of various concepts. There were for example students who were observed to and who explained how they worked through various languages to create understanding of new concepts. Two students explained how they deliberately worked with a combination of the language they knew best and that was available, which in this case was Arabic for both. One first read or listened to the text in Arabic and then read it in Swedish, while the other read the text in Swedish while listening to the text being read in Arabic. One student explained how she in her home used to sing new

concepts and have her younger brothers dance to this, and that she used a strategy for memorization of important concepts by repeating them in the four languages she knew best, Arabic, English, French and Swedish. Another student said that she created her own power points where she related new concepts to each other and to particular topics, to create a context for the Swedish concepts. Some students explained that because they had already studied on more advanced levels earlier than they were studying on now, they could value the information they got on Internet critically and choose what they perceived as reliable. However, other students had short or no earlier schooling and when asked they did not explain how they judged the reliability of the information but said that they wrote down what they found.

Students also helped each other, and asked each other for help, mainly students sharing the same language but also between various languages. In their interaction students shuttled between the linguistic resources they had, and for example students who spoke Somali, Dari, Kurmanji and Sorani discussed various issues through similarities between their languages, such as words with Arabic roots. Few students used English as a tool for support, but one of the students, Lemlem, who sometimes was disappointed with what she perceived as a low quality of translations in Tigrinya searched for translations in English, a language that she did not master. Her class-mate Musahkah, with Somali background, had a high level of English so through her help Lemlem got an explanation in Swedish. Thus, strategies including translanguaging, use of varied linguistic resources, was visible among students and SGMT assistants, while teachers were not observed to involve themselves in such strategies. That some teachers were not aware of the translanguaging practices among students in classrooms is exemplified by one teacher who referred to students' and SGMT assistants talk as "using their mother tongue", and in one case when the researcher mentioned an example of multilingual conversation during the lesson said: "Oh, is that so? I didn't know that they have different languages and that they know several languages."

Students did not frequently ask teachers for help, but rather asked their class-mates or tried to find a solution another way. It is difficult to determine by observation if a student does not understand but avoids asking the teacher, but it was apparent that few students asked the teachers questions although they could be observed not to understand certain things, either by arriving at the wrong answer or by not writing some of the required answers, and that they used peers and digital media to try to solve problems rather than asking teachers. One student

said explicitly that she preferred not to ask the teacher but rather to ask her friend, her parents or try via the Internet. This may be understood as an example of a face-saving strategy (Wedin, 2004; Chick, 1996; Hornberger and Chick, 2001). Such strategies have been shown to be used particularly in demanding situations to create an image of successful teaching and learning. This is probably a common strategy used by many upper secondary school students, who strive to show proficiency as a strategy to gain desired grades, and it may be in both the teacher's and the students' interest to create an image of students as understanding what they are expected to.

One difference in teacher strategies between subjects was that while teachers in SSL taught the writing of specific text types, with Shanahan and Shanahan (2008) intermediate literacy, teachers in NS and SS did not teach disciplinary literacy, or subject specific literacy, and how to use writing to learn in the various subjects, and no writing practices were observed in these subjects to exercise such skills. As one example, the observed instruction of writing on climate zones and healthy food was done in SSL, while the learning of these topics was part of the content in the specific subjects, geography and chemistry respectively.

To summarize, the main strategies identified among students for using multiple languages and the variety of media for writing were 1) searching for explanations and translations, 2) copying from other texts, and 3) shuttling between linguistic resources to find ways to express the intended knowledge or information in Swedish. There were ambiguities in teachers' strategies in relation to language, on the one hand encouraging the use of various resources including multiple languages, while on the other hand not engaging themselves in translanguaging practices. Another ambiguity was that students were taught academic writing in relation to subject knowledge in SSL, while not having access to subject teachers or subject textbooks. Thus, writing became an issue for SSL, and it was up to students themselves to transfer their writing skills to other subjects. Furthermore, some teachers gave much responsibility to students to find explanations and translations on their own, while showing discontent with their work.

Multilingual and multimodal resources in writing in the three subjects

As a third step, similarities and differences regarding the use of multilingual and multimodal resources in the different subjects will be discussed. Using Hornberger's continua (1989, 2003); *context, content, media* and *development*, in combination with identifying strategies for

the use of diverse resources revealed that multimodality and the use of varied digital resources was frequent in this context, both among teachers and students, but while students used these to shuttle between linguistic resources, teachers were nearly exclusively observed to use Swedish, in writing in the standard form that may be called academic language or intermediate language. What teachers do signals what is valued as important, and thus students' other linguistic resources were invited but never explicitly valued as assets for future studies but rather as a tool to develop Swedish. That the content was mainly on a macro level, related to official curricula and tests, may be expected in a transitional setting such as LIP, but means that there was limited space for students' initiatives or contribution for example regarding choice of topic or in relation to their earlier knowledge. Although students may be presumed to draw on their earlier knowledge, this knowledge was rarely made visible but what was acknowledged in class was explicitly related to the Swedish curriculum.

The importance of giving students opportunities to engage with texts that are subject specific and to construct such texts themselves was highlighted by Richardson Bruna et al. (2007, 2010), Fang and Schleppegrell (2010) and Shanahan and Shanahan (2008). This was, however, not observed in NS and SS. The subject specific language students met was restricted to teachers' instructions and the simplified books, and their writing in NS and SS was fragmented. This means that the examples they could build on for their writing in various subjects were few as were their opportunities to write such texts, as the only text examples of some length they met were in SSL and did not focus on subject specific writing. For an example, the writing in SSL of the text about healthy food was done earlier the same semester as the chemistry task writing a text on healthy food based on the eat-well-plate and on particular concepts. There was however no reference made by teachers between the two writing practices, and no collaboration between the involved teachers was observed in this case. Thus, the developing of strategies to a high extent relied on the individual student's knowledge and students' own agency and collaboration with others than the teacher.

Discussion and pedagogical implementations

The study of writing as embedded in literacy practices, through Hornberger's continua, has painted a picture of how languaging is used as source of meaning in the observed classrooms. Through the continua also power relations in practices related to writing became visible. While the content and context were mainly at the majority end of the continua, the inclusion of multiple language resources and multiple media enabled a language development among

students that covered both majority and minority parts of the continua. In the classrooms, multilingual and multimodal practices appear as crucial in practices where writing was part. However, the analysis made ambiguities visible, when multilingualism was invited but not valued as assets for the future, and the development of writing was referred to SSL. The use of writing, as highlighted by Appelbee and Langer (2013), as a comprehension strategy to engage cognition, to consolidate learning and to extend earlier knowledge, that is *writing to learn*, did not appear during observations. Thus, writing did not become the important tool for learning that it has the potential to, and students did not get opportunities for their development of necessary writing skills in specific subjects. The importance of writing to develop understanding and formulate explanatory, investigative and instructive texts lifted by Richardson Bruna et al. (2007, 2010) was here referred to SSL which means that students did not have access to subject teachers and subject texts in relation to this work.

A question that appears is what the reason may be that the necessary subject specific writing did not take place in these classrooms considering available resources, such as teachers educated in their respective subjects, SGMT assistants in some of the students' other languages, digital tools such as multilingual reading services and instructional films, and access to the Internet. One reason that emerges may be considered as structural traditions for Upper Secondary School and LIP. Teachers are educated in their respective subject; SSL teachers are educated in language development and conditions for learning among L2-students, while teachers in SS and NS are generally educated in their respective subjects, but not in the role of language in the development of knowledge and relations between development of language and knowledge (see for example Hermansson et al., 2019, Paulsrud & Zilliacus, 2018). Traditionally, teaching in different subjects on secondary school level is separated from each other and teachers may collaborate in their respective subjects but not often between subjects, which was also the case here. Moreover, the role of SGMT assistants is not clear, and reports (School Inspectorate 2017) and research (Avery, 2016; Reath Warren, 2016) show that structures for collaboration between them and teachers are often not well developed. Another structural problem may be due to the heterogeneity in LIP which results in students in the same study group studying different subjects. In this case students were grouped mainly according to their level in Swedish, and not as much depending on what subjects they needed to supplement their former studies with. Thus, individual students in the same study group in SSL participated in different subject studies, which made collaboration between teachers of different subjects difficult.

Another tradition that may be of relevance in this context is the role of the secondary school student. These students are in a situation where the focus is on transition, to fulfil requirements to be admitted in an ordinary program. The students in these classrooms took on a role of the good student, by seeking to show good performance rather than inquiring and contesting. That role is not unusual in upper secondary school and it can be understood as in the interest of the students to show high performance rather than to show lack of understanding, such as by asking questions. This may be understood as a type of safe strategy (Chick, 1996; Wedin, 2004,) to create an image of good education where students learn what they are expected to, an image that both teachers and students may be interested in maintaining. This may, however, have devastating effects on students' learning, if it means that teachers become unaware of students' actual comprehension and knowledge level.

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