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Approaching pedagogical language knowledge through student teachers: assessment of second language writing

The article examines student teachers' pedagogical language knowledge. The analysis is based on data from an applied task in which Finnish student teachers (n=221) of 16 school subjects assessed second language (SL) learners' writing skills. First, we briefly discuss subject teachers' role in language and literacy teaching in the multilingual and multicultural classroom. Our findings indicate that the student teachers use a range of criteria but focus mainly on word-level assessment when assessing writing samples, and that their assessment orientation varies from technical to analytical. Finally, we discuss the challenges of developing teacher education to promote pedagogical language knowledge across the curriculum.

Keywords: pedagogical language knowledge; second language writing; teacher education

Introduction

Mainstreaming is a growing pedagogical tendency in multilingual and multicultural schools (Mohan, Leung, and Davison 2001; European Core Curriculum 2010; Bunch 2013; for critical views see e.g., Franson 2007; Gibbons 2009, 9). There seems to be a widely shared understanding that the education of SL learners must be seen as a shared responsibility by all teachers, not separated from content learning. From this perspective, language is not a skill to be learnt first and then used as a means to communicate content, but the learning of language should be integrated with the learning of content (e.g. Lucas and Grinberg 2008; Bunch 2013). Furthermore, literacy

engagement is a strong predictor of academic success, and the low educational outcomes of language-minority students and also native-speaker students have been identified largely as resulting from inadequate academic language skills (e.g., Guthrie 2004; European Core Curriculum 2010, 29–30). Finally, engagement in disciplinary practices and interaction with peers and teachers in joint activities are regarded as key elements for both content and language learning (Walqui 2006; Gibbons 2007), and these conditions should be provided in the mainstream classroom. Consequently, mainstreaming requires language-related expertise from all teachers, but many teachers still lack preparation for working with SL learners (More 2000; Nieto 2000; Bunch 2013).

Relatively little is known about teachers' language awareness, language learning experiences and their understanding of language learning in the mainstream classroom (Cajkler and Hall 2011) and research on teacher education for linguistic diversity is also scarce (Lucas and Grinberg 2008; Bunch 2013). It is notable, however, that subject teachers' (also referred to as *secondary teachers* and *mainstream teachers*) role in language and literacy teaching has been increasingly recognized in line with the increasing diversity in classrooms (e.g., Gibbons 2007; Walqui 2006; García 2008).

It has been argued that teaching language learners requires more than just good teaching (De Jong and Harper 2005) and that subject teachers' language expertise differs fundamentally from the knowledge needed in second language teaching and also from the pedagogical content knowledge that teachers adopt in disciplinary instruction (Bunch 2013, 326). For this reason, the knowledge and skill base for all teachers should be conceptualized, as subject teachers are called to provide SL learners with full access to academic language and subject-area content, and the instruction should not be limited to vocabulary or language decontextualized from disciplinary contents and meanings

(Robinson 2005; Schleppegrell and O'Hallaron 2011). In this article, we focus on subject teacher students studying to be subject specialists (hereafter student teachers) and explore their approaches to assessing SL learners' writing skill during their pedagogical studies in Finland.

Subject teachers' pedagogical language knowledge

Over the past decades a number of approaches have been adopted to develop teachers' abilities and understanding for coping in multilingual and multicultural settings (for reviews, see Lucas and Grinberg 2008; Faltis, Arias, and Ramírez-Marín 2010; Schleppegrell and O'Hallaron 2011; Pettit 2011; Bunch 2013). Concepts proposed vary considerably, for example: *educational linguistics* (Fillmore and Snow 2002), *pedagogical language knowledge* (Galguera 2011; Bunch 2013), *linguistically responsive teacher* (Lucas and Villegas 2011), *language-sensitive teaching* (Bailey, Burkett, and Freeman 2008), *teacher language awareness* (Breidbach, Elsner, and Young 2011; Andrews 2003 in the context of language teaching), *language-intensive tasks and practices* (Quinn, Lee, and Valdés 2012; Lee et al. 2013).

Although the approaches toward subject teachers' language knowledge and skill base vary, scholars seem to share many fundamental understandings. Broadly taken, various frameworks and conceptualizations aim to describe firstly, subject teachers' beliefs, knowledge and understanding of language and language use, and secondly, the pedagogical skills needed in multilingual and multicultural classrooms (Faltis et al. 2010; Bunch 2013). The appropriateness and relevant aspects of linguistics and second language acquisition as a foundational knowledge base have been prioritized differently, but generally, knowledge and understandings of second language acquisition, the role of L1 in promoting learning in academic language, and language and culture as a medium

of learning and as a goal of instruction are built into various conceptualizations (Farcia 2008; Faltis et al. 2010). Furthermore, the ability to monitor language use both in the classroom and more broadly in different situations and for different purposes has been promoted (e.g. Walqui 2006; Gibbons 2007). In terms of pedagogical skills, effective practices to provide adaptable support for engagement and scaffold learning, ability to draw on linguistic and cultural diversity in teaching and using talk as a tool for enhancing learners' reasoning and understanding are often included in the conceptualizations (Cummins 2000; Gibbons 2007; Lee et al. 2013).

In this article, we use the term *pedagogical language knowledge* to refer to “knowledge of language directly related to disciplinary teaching and learning and situated in particular (and multiple) contexts in which teaching and learning take place” (Bunch 2013, 307). That approach leads us to treat language rather as an action than as a structure (see also van Lier and Walqui 2012; Bunch 2013). As language forms and functions are considered subordinate to action, the approach to teachers' language expertise moves away from traditional, customary conceptualizations of language. Furthermore, teachers' language-related understanding is determined from the viewpoint of the knowledge and skills needed in developing meaningful activities that engage students' interest and foster both language growth and content learning (see also Canale and Swain 1980; Bunch 2013). The foundation for subject teachers' pedagogical language knowledge lies in developing abilities to observe the role and characteristics of talk versus written language and variation in language use in accordance with situation, audience and genre in disciplinary learning (e.g., Mortimer and Scott 2003).

In this study, we are interested particularly in student teachers' ability to analyze learners' language skills, as that knowledge is needed in planning and supporting learning. In order to build on learners' prior skills teachers should have the

ability to monitor their language use and identify relevant characteristics that either influence their comprehension in learning situations or require teaching (see also de Jong and Harper 2005; Gibbons 2009, 159; Pettit 2011; Lee et al. 2013). Many scholars and pedagogical models emphasize scaffolding and building on learners' prior skills, knowledge and cultures, which provides evidence and arguments for specifying teachers' ability to identify learners' language skills in academic language use (see also Canale and Swain 1980). However, the main focus of current research seems to be on disciplinary sense-making and language use/knowledge and how to prepare teachers for the language demands of their subject (e.g., Gibbons 2007; Schleppegrell and O'Hallaron 2011; Jones and Chen 2012). Research literature has also provided evidence that in-service subject teachers do not always know enough of the process of SL acquisition. Furthermore, they often do not consider it important to be able to interpret SL learners' language proficiency exams, and their expectations of learners' ability to master the curriculum may be low (Faltis et al. 2010; Pettit 2011). The connection between language proficiency and content areas is particularly crucial when assessing SL learners. Subject teachers should be able to distinguish between underachievement due to mainstream reasons (e.g., motivation, subject knowledge, commitment) and underachievement due to multilingual and multicultural reasons (e.g., the phase of SL learning, cultural expectations). To be able to validly assess and support the learning of diverse students, the ability to track learners' SL development should be embedded in subject teachers' pedagogical language knowledge (see Cummins 2000; Canale and Swain 1980).

The pedagogical language knowledge requirement of all teachers is a current issue in Finnish educational policy. Teacher language awareness is one of the underpinning principles of the new comprehensive school National Core Curriculum to

be launched in 2016. This poses a challenge for teacher education too, and at the Jyväskylä University Teacher Education Department, where the present study was conducted, disciplinary language and scaffolding learning has been recognized as a key issue since 2006. Teachers in Finnish schools are still largely unprepared to encounter and deal with plurilingual students in their classrooms, and it is clear that some students are not provided with the support needed for quality learning. Despite the national policy, students do not seem to be equal in terms of the amount of SL instruction they receive and the assessment practices applied by teachers (Korpela 2006; Suni and Latomaa 2012). Lower educational achievement of children of immigrants in comprehensive school tends to have a large effect on their final educational attainment (e.g., Kilpi-Jakonen 2011; Kuusela et al. 2008). These problems may partly be based on teachers' inability to assess their pupils' language skills and to adjust their teaching accordingly with respect to learning tasks and assessment practices. Moreover, as there is evidence that teachers tend to overestimate their students' language skills (Sun and Latomaa 2012), there is a clear need to specify the pedagogical language knowledge that subject teachers need to acquire.

In this study, we aim to add to the literature on subject teachers' pedagogical language knowledge by exploring student teachers' approaches to assessing SL writing samples.

Methods

Research questions

This study explored the following questions:

1. How do subject teacher students assess samples of L2 writing?
2. What do their assessments reveal of their pedagogical language knowledge?

Participants and data

The informants in the study were Finnish fourth-year subject teacher students who were being trained to teach in the nine-year Finnish comprehensive school system, mainly grades 7 to 9, and the upper secondary school (grades 1 to 3). To qualify as subject teachers, all students across the curriculum need to complete a Master's degree, which includes at least 60 ECTS of teachers' pedagogical studies offered by departments of teacher education. A total of 221¹ students participated in the study, representing 16 school subjects: History and Philosophy (HP) (n=20), Finnish Language and Literature (F) (n=31), Foreign Languages (FL) (English, Swedish, German, French, and Russian) (n=62), Physics and Chemistry (PC) (n=18), Mathematics, Biology and Environmental Science and ICT (MBEI) (n=30), Sports and Health Education (SH) (n=51), and Music (M) (n=9).

Within their pedagogical studies, the students completed a study unit on subject-specific pedagogical practices from the viewpoint of linguistic and cultural diversity in the classroom: how to build on learners' prior skills and scaffold learning and develop language-sensitive pedagogical practices. As part of these studies the students were requested to fill in a questionnaire with built-in applied tasks. The aim of the enquiry was to explore the student teachers' pedagogical language knowledge and, specifically, to determine their ability to assess SL learners' language proficiency in relation to the perceived linguistic challenges in their own discipline.

In this article, we focus on an applied task in which student teachers assessed SL learners' writing skills from two short text samples written by a 14-year-old pupil with

¹ Students of Physics and Chemistry did not answer the open-ended verbal assessment task, so the number of informants is 203.

migrant background (see Appendix 1). The texts represented a message to an online shop and an argumentative text. Texts were graded as A2 on the Common European Framework Reference scale² by three trained raters. Writing skills were selected as the core of the data, as Finnish school pedagogical practices rest significantly on the written tradition, for instance with regard to assessment and course fulfilment. The assumption was that the student teachers' analysis of pupils' writing performance reflects their pedagogical language knowledge and understanding of language.

The data consist of open-ended verbal assessments and Likert scale assessments completed by the participants. Table 1 shows the instructions given and the continuum so formed.

Table 1. Data setting: two types of data elicited by questionnaire.

Assessing samples of writing (research question [RQ] in focus)	No. of participants
<ul style="list-style-type: none"> Open-ended verbal assessment 1: What is the pupil's writing skill like? Describe as diversely as possible and give reasons for your observations. (RQ 2) 	203
<ul style="list-style-type: none"> Likert scale assessments: Assess the same samples of writing on the basis of the following criteria: comprehensiveness, grammatical complexity, grammatical accuracy, lexical variation and textual coherence. (RQ 1) 	221
<ul style="list-style-type: none"> Open-ended verbal assessment 2: Which of the criteria used in the multiple-choice questions is most important in your opinion? Why? (RQ 2) 	221

² More information on the CEFR and the assessment scale available here:

http://www.coe.int/t/dg4/linguistic/cadre1_en.asp.

The main focus was on qualitative data to deepen understanding of student teachers' pedagogical language knowledge in this context. Quantitative data was used for gaining descriptive information on a larger scale. Content analysis (Miles and Huberman 1994; Patton 2002; Hsieh and Shannon 2005) was used to comb through the student responses (open-ended verbal assessments) to identify emerging elements of assessment criteria used by the student teachers. The students' opinions of the quality of the text were not treated as an issue of interest. ATLAS.ti 7 was used as an analytical tool in data processing. The goal was to establish categories which provide a more detailed understanding of how prospective teachers view writing as a skill. The categories were constructed, compared and refined through cycles of analysis empirically on the basis of students' formulations in the data. Thereafter, the criteria were grouped and reduced to three major clusters: word-related, sentence-related and text-related. Finally, the analysis was quantified by counting the frequencies of each category. The assessments of different subject groups were contrasted with each other. Having elicited the set of assessment instruments, we went on to explore the orientations that the assessments reflected.

Findings

Student teachers' assessment: the big picture

The student teachers assessed the text samples on a Likert scale after having verbally assessed the pupil's writing performance independently, without guiding questions (open-ended assessment). They were asked to assess the samples in terms of comprehensibility, grammatical complexity and accuracy, coherence and lexical variation. Their assessments proved fairly consistent (Figure 1). Most considered the

texts to be completely or fairly comprehensible and fairly coherent. Grammatically, the texts were assessed to be relatively simple and inaccurate, and lexically rather simple. There were no major differences between subject groups, but future language teachers tended to consider the pupil's writing performance more comprehensible and more accurate than future non-language subject teachers.

Figure 1. Student teachers' Likert scale assessments of the writing samples.

Analysis of the open-ended verbal assessments revealed further assessment criteria employed by the student teachers, as shown in quantified form in Figure 2. Based on qualitative categorization of the responses, comprehensibility formed a criterion of its own and the remaining criteria occurring in the student teachers' answers were grouped into word-related, sentence-related and text-related assessment. Compared to the Likert scale assessment, the responses to the open-ended verbal assessments varied more: a large number of student teachers commented on the comprehensibility and accuracy of the text, while vocabulary use and coherence were

much less in focus. Most of the criteria were used by less than 30% of the participants and only comprehensibility, spelling and punctuation and word inflection were commented on by more than 50% of the participants.

Figure 2. Writing assessment criteria used by student teachers in open-ended verbal assessment.

Comprehensibility as the main criterion

Comprehensibility was the most frequently used criterion (80% of participants referred to it in open-ended verbal assessment 1, and 87% used it as the main criterion for writing in open-ended verbal assessment 2). However, the majority did not specify what makes the text comprehensible in terms of linguistic or textual features. The comprehensibility of the text was commented on either on a rather general level (e.g. *comprehensible without problems; opaque; comprehensible as a whole, although*

individual utterances vague) or from the point of view of expressiveness, for example what the writer is able to say, express or do with their text (*the message comes over; content and the aims of the writer are comprehensible; the issue is dealt with, nothing unclear*).

The students typically considered the text to be comprehensible despite the lack of accuracy. They listed numerous errors, but did not regard them to be serious or to affect comprehensibility:

There's not much linguistic variety in the pupil's writing but nevertheless it's comprehensible. There are a lot of spelling mistakes, but they're so small that they don't interfere with comprehension. (ID33 HP³)

Many students who indicated comprehensibility as the major criterion for writing in open-ended verbal assessment 2 still concentrated on analysing inflection, spelling and punctuation in their own free assessment. Text genre or contents were not analysed to the same extent.

Of all students, 20% made no reference to comprehensibility in open-ended verbal assessment 1. A closer look at their responses revealed that their approaches varied, but most typically they concentrated on discrete language features (sometimes even at length), as in the following example:

writing skill is rather simple. The sentences of the text are loose, as connectors (pronouns, particles etc.) are missing. Word inflections and "emphases" are occasionally wrong (kiini-kiinni). Vocabulary is not very rich, and the same words are repeated. Word inflections seem to be challenging (e.g. cases). (ID105 MBEI)

³ Abbreviations in quotations refer to school subjects (see Participants and data section).

It is noteworthy that even those participants who did not mention comprehensibility in their free assessments usually selected comprehensibility as the main criterion for writing ability.

Word, sentence and text-related assessment

The criteria used by student teachers in their open-ended verbal assessments were classed into three groups according to their level of language description: word, sentence or textual level (Figure 3). In practice, all participants analysed the pupil's writing ability at the word level, whereas sentence- and text-level analyses were much fewer.

Figure 3. Student teachers' references to word-, sentence- and textual-level phenomena in pupils' writing.

Word-level assessments

Finnish is a synthetic language that uses suffixes to express grammatical relations and to derive words. Finnish is also characterized by a rich system of word

inflection, for example, fifteen cases for nouns and a wide set of verb forms. Finnish phonemes (vowels and consonants) have two lengths, short or long: short sounds are spelt with one letter, long sounds with two. The student teachers' word-level assessments focused largely on these characteristics of Finnish: spelling and punctuation (72%), word inflection (60%) and also vaguely, without specification, on grammar or grammatical mistakes (23%), while 25% commented on vocabulary use.

Most of the word-level references focused on **spelling and punctuation**, e.g. correct use of single and double vowels and consonants, capital letters and punctuation. These features were typically listed but not further analysed or specified.

There are some spelling mistakes and he seems to have difficulty identifying when to use capitals. Also double letters are problematic for him. (ID177 FL)

The pupil knows Finnish words, but there are letters missing from some words, which hinders clear reading. (ID74 SH)

As with spelling and punctuation, most references to **inflection** were on a rather general level:

- - inflection is incorrect or completely missing. (ID148 FL)

Some student teachers were familiar with basic concepts such as *pronoun*, *genitive*, and *perfect tense*. However, many lacked the concepts needed to describe writing skills, thus making their comments somewhat vague and likely raising the number of **non-specific grammar references** (23% of participants).

- - writing is occasionally good and the endings are right, but what he can't manage especially is the change from t to d in the possessive structure. Actually, it seems he can't manage any of the words where body letters have to be changed. (ID120 MBEI)

There are lots of spelling mistakes and grammatical mistakes and commas are here and there. (ID202 M)

In general, the student teachers related morphological issues to comprehensibility and use of correct forms of individual words was not given high importance:

Word inflection (although not a very significant issue) occasionally goes wrong. (ID70 SH)

While many student teachers reflected on inflectional phenomena in relation to comprehensibility, they seemed to lack the idea of progression in learning to express grammatical relations. Word forms were mostly described technically in terms of form (*they don't go right*), but there were no indicators of considering the significance of one grammatical category in relation to another. Word-level inaccuracies seemed to be considered of equal value. When related to comprehensibility the students did not clarify whether one linguistic category was regarded as more significant than another.

Only 25% of participants commented on the **vocabulary** used in texts. Their focus was mainly on breadth and depth, and thus the writer's vocabulary was mostly described as insufficient, limited and simple.

- - his vocabulary is so limited that the content comes across as naive, as the same words are repeated - -. (ID193 FL)

Finally, **colloquialism** was commented on by a quarter of the participants (24%). Most of these referred to the colloquial word form such as *tärkeetä* instead of *tärkeää* (meaning 'important'). Colloquialism was sometimes treated neutrally without value judgement; when it was valued, the judgement varied from disapproval to being described as a strength or valuable resource.

In summary, word-related assessments accumulated considerably under the spelling and punctuation and inflection categories, and the participants differed in their attitudes towards learner performance.

Sentence-level assessments

Compared to the word-level, sentence-level assessments were few in number. In total, 57% of participants commented on sentences or how clauses were connected to each other. Cohesion between clauses was categorized as sentence-level assessment, because participants did not treat it as a textual issue. Student teachers commented on sentence structure somewhat unanimously from three distinct points of view: 1) How clear, functional or simple versus complex are they? 2) Has the writer used subordinate clauses? 3) How are clauses connected to each other?

Sentence structure is simple and grammatically imperfect. (ID36 HP)

Each clause is separate and there are also single subordinate clauses. (ID77 SH)

In conclusion, the student teachers' sentence-level assessment was limited to three distinct common aspects. This can be considered predictable as the texts were very short, consisting of only a few sentences (see Appendix 1).

Textual-level assessments

The number of text- and sentence-related assessments were approximately equal. Most textual comments came from future language teachers, 73% of whom commented on the writings from a textual point of view, compared with 45% of non-language subject students. The fact that differences between subject groups were minimal (only 2-3%) in references to word or sentence levels makes this finding especially notable.

The text-related assessment category contains four comment types concerning the text: genre, content, context and coherence.

Characteristics of the requested **genre** of the task (semi-formal message and argumentative text) were commented on by 33% of participants (51% of future language teachers and 17% of student teachers of other subjects). Comments mostly addressed the conventions of formulating a message (structure, salutation, introducing oneself, ending and politeness), as in the following examples:

The pupil knows how to begin and end a message, although the ending probably isn't the most appropriate for the situation. (ID69 SH)

- - the text is a bit aggressive, as he hasn't really got the hang of linguistic formalities - - (ID100 SH)

The **context** category refers to comments that did not treat the text samples plainly as technical, autonomous performances but saw them in terms of a wider context and explicitly sought to assess the sufficiency and limits of the pupil's writing skills in regard to requirements in real situations. In total, 22% of participants made context-related assessments and focused on the scope of situations that the writer might encounter, the continuum of everyday versus abstract and formal topics, and the roles of age and task instructions in the performance of the writer.

The pupil's writing skills were usually considered sufficient for dealing with familiar, everyday topics closely related to the writer's own life. More abstract and formal topics and situations were expected to exceed the limits of their ability.

You'd probably get by with this level of writing for basic everyday purposes, but difficulties may arise in more official situations. (ID106 MBEI)

For example, this pupil would have real difficulty with science and social science subjects at school. I'd say the pupil is at the level where he can write intelligibly about familiar things related to his own life. (ID165 FL)

Some participants tried to place the writing performance in a real situation and assess it with respect to the requirements of getting by with a real audience.

In an online shop they'd definitely understand what the client wants - -. (ID92 SH)

The **content** of the text was commented on by 19% of the student teachers. The focus was mainly on quality and credibility of the content: how clear, versatile, repetitious and consistent it is. Students also reflected on the pupil's ability to express their ideas.

In one of the texts, in terms of content, the issues are dealt with in a relatively versatile way, although in terms of structure it isn't as skilful. (ID5 F)

The factual contents of the texts are clear, simple and snappy. (ID57 SH)

Written performance often came up in relation to the writer's ability to express himself, e.g.:

Again, the pupil stretches his writing skill excellently so that he can express what he wants to say. (ID94 SH)

As indicated in the previous section, student teachers made observations on the use of connectors and conjunctions and commented on separate clauses. However, overall **coherence** of the text was focussed on much less, being referred to by only 9% of participants.

The text is consistent and there is also synthesis in that sentences following each other do not seem separate at all. (ID10 F)

Less than half of the participants made text-related assessments. However, they incorporated rather diverse aspects of writing, ranging from genre and context to text coherence. Next, we discuss some orientations revealed by the student teachers' assessments and analyze them in relation to their pedagogical language knowledge.

Orientations in pedagogical language knowledge

Overall, many student teachers had difficulties orienting towards SL learning. They were unused to perceiving their own mother tongue as a second language to be learnt. Therefore, they were confused by the characteristics of the SL pupil's language use:

In text 2 I initially took notice of one thing. 'Mobile' is spelt inaccurately in the heading, but in the text once completely accurately and another time again wrong. It's a bit surprising how spelling can change like that in the middle of the text.
(ID180 FL)

Students' notions of the pupil's texts often reflected their own school experiences, as seen in the following quotation:

In written text, in my opinion, technical requirements take priority over comprehensibility. To some extent linguistic skill covers coherence, readability and grammatical and lexical skills. If the text is linguistically skilful, it is also comprehensible. I've hardly taught mother tongue, so my opinion is based solely on my own experiences and on the feedback me and my classmates have received on our texts. (ID201 M)

On the basis of the analysis, the student teachers seem to have two kinds of orientation towards the pupil's texts. The first orientation can be described as *technical* as it refers to considering language as language knowledge and approaching it technically by listing and naming distinct features of it, whereas the second, more *analytical* orientation seeks to perceive the process of language learning and to interpret

learner performance in a wider context of language use and learning as understood from a socio-cultural perspective. These approaches are elaborated and discussed in the following.

Those with a technical orientation typically described the writing samples as good or rather good without reference to whether they were successful in any particular context:

In my opinion, the pupil's writing skill is good. (ID48 HP)

The pupil writes really fluently. (ID88 SH)

Technically oriented assessment tended to be based on criteria typically used in the L1 tradition. As colloquial Finnish differs substantially from the written register, keeping those registers separate is one of the key issues in teaching Finnish as a mother tongue. Student teachers frequently raised colloquialism without explicitly considering whether it is an important consideration with respect to A2-level writing performance.

“Tärkeet” ‘*important*’ the last word of the second message is spoken language, which the person presumably hears all the time around him. These kinds of words also pop up in Facebook postings, text messages and e-mail messages. As many native speakers of Finnish don't care about the accurate writing of these words, it becomes even more challenging to teach the correct forms to migrants. (ID46 HP)

In contrast, some student teachers adopted a more analytical orientation that did not plainly list linguistic features but anchored the language forms used and the mistakes made in the texts to the writer's ability to express meanings. Those participants typically put themselves in the second language learner's place and tried to envisage the pupil's current phase of learning, predict their future progress and find grounds for the characteristic features and inaccuracies in their writing. They speculated about the pupil's mother tongue, the difficulty of the Finnish language, inexperience in

writing, and difficulty perceiving Finnish sounds by listening. The student teacher behind the following quotation seems to be able to identify phases in language learning in their reference to partial skills (knowing the rule but lacking the ability to apply it with new words).

The pupil can produce both main and subordinate clauses, but the connection between them still isn't perfect. There's room for improvement in using commas and full stops, but the text was comprehensible. The main point was made clear to the reader although there were spelling mistakes. The pupil knows how to use grammatical cases although occasionally the inflections go wrong. In the inflection of difficult words like *paita*, *paidan* 'shirt', 'shirt's' you can see that the pupil knows the grammatical rule but still can't apply it properly. The pupil can write words familiar to him accurately, but there's room for practising the new words. Occasionally vowels are wrong and there are especially mistakes with double consonants. (ID56 SH)

There are no clear-cut borders between these orientations and even the same student teacher may represent both orientations in different parts of their response. However, the orientations provide a synthesis of the open-ended verbal assessments and bring the separate criteria into a wider context.

Discussion

The findings of this study provide a picture of the pedagogical language knowledge that future subject teachers are able to draw on in their encounters with SL learners and in their pedagogical decisions. The findings indicate that while student teachers' orientations to pupil performance vary, many made a notable effort to analyse the performance in a wider context. However, it is seemingly difficult for student

teachers to perceive the challenges of the SL learner, as their own learning experiences often do not provide sufficient insight into learning in a SL.

As earlier studies indicate, previously constructed language beliefs and knowledge about language and use are likely to remain unchanged after graduation (Peacock 2001). According to the findings of this study, student teachers' pedagogical language knowledge echoes both traditional and socio-cultural approaches to language. Student teachers mainly perceive language as small, conventionalized units, but also value comprehensibility highly as a major criterion for SL performance. The fact that most text-related assessments were made by student teachers of languages might tell us about the change in pedagogical culture: while language teaching in schools in the participants' school years still rested on emphasizing word- and sentence-related language knowledge, textual, socio-cultural approaches to language are gradually gaining ground. Students of language subjects have probably been exposed to them in their university studies (Cf. Bunch 2013).

The technical orientation to language may pose the biggest challenge within teacher education. Ability to identify the relevant features in both disciplinary language and in student performance does not primarily require mastery of a predictable, finite set of concepts and linguistic systems, but rather an adaptable ability to analyze language as action (van Lier and Walqui 2012) and to identify key constructions that convey essential meanings.

In addition to becoming aware of beliefs, the findings of this study implicate that pedagogical language knowledge could be developed by enhancing future teachers' ability to identify learners' current proficiency and skills in academic language in order to be able to build on their prior skills in disciplinary teaching. Although the student teachers valued comprehensibility highly in their open-ended verbal assessment,

appropriately per se, also the ability to give more emphasis to the significance of linguistic deficiencies in relation to each other and to the challenges of the disciplinary language could provide them insight to support learning more effectively. This is relevant, as without adequate understanding of learners' current skills and the learning process teachers are not able to consciously plan relevant and timely contexts in which to practise language (see also Gibbons 2009).

According to Pettit (2011), a major factor affecting teachers' beliefs is training in working with language learners. In other words, during pedagogical studies, students' beliefs should be challenged and discussed and, based on this, students should be provided with opportunities to examine the ways language is used to represent knowledge (see Galguera 2011). This seems to be the case also in the light of the findings of this study. Student teachers' own experiences accompanied by analysis, reflection and discussion should be an organic element of pedagogical studies in order to promote their pedagogical language knowledge, and to enable them help SL learners achieve academically.

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Appendix 1. Writing samples

Sample 1. Message to the online shop

Hei!

olen Maija N.

Minä olen ostanut teidän verkosta t-paitan, paita on minulle liian pieni, ja sen väri ei ole sama väri jossa teidän mainoksessa oli.

Haluaisin uusi paitan ja saman värin jossa mainoksessa on, kiitos Hyvää jatkoa!!!

Hello!

I am Maija N.

I bought a T shirt from your website, the shirt is too small for me, and its colour isn't the same colour that was in your advertisement.

I would like a new shirt and the same colour that's in the advertisement, thank you
All the best!!!

Sample 2. Argumentative text

Kännykät koulussa pois.

Sos luokassa soi kännykät se häiritsee muita lapsia. On tärkeä että kännykät on kiinni, siksi että on rauha luokassa, Tai että saa tää. Se on tärkeä.

Mobile off at school.

If the mobile rings in the classroom it disturbs other children. It's important that the mobile is switched off. So that it's peaceful in the classroom. Or so that you get stars. It's important.