Knowledge development of secondary school L1 teachers on concept-context rich education in an action-research setting

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Chapter 5

Chapter 5
Partners in learning through dialogue
L1 teachers develop knowledge of student understanding and engagement[9]

What do L1 teachers learn about student understanding of and engagement in the L1 curriculum by conducting action research? In this study L1 teachers surveyed their students and discussed their findings with other L1 teachers. In this manner they developed practical knowledge of how to increase student understanding of the curriculum, how to let students express their opinions on the subject, how to involve them in the development of components of the L1 curriculum, and what the consequences for student engagement are. The data indicate the importance of this subject to these L1 teachers because issues of student understanding and engagement were raised in every meeting by multiple participants. By researching concept-context rich education in a collaborative action-research setting, these teachers developed knowledge of how to increase students' understanding and engagement and started to share responsibility for student learning with their students.

[9] This chapter has been submitted in adapted form as:
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5.1 Introduction

We are talking about Hanna's research in a meeting of research group South. Hanna tells of an "eye-opening experience" in class a couple of days ago. She states that because of her action research she feels more aware of what she assumes about her students and that the urge to check these preconceptions has therefore become stronger. She illustrates this by talking about a writing lesson that she was working on with the students. She had made an outline for the students to use while working on an assignment but was shocked to discover the students were not using the outline at all. Frustrated, she burst out: "What happened to the outline? Why aren't you using it?" The students, totally surprised by her outburst, responded: "The outline? We were supposed to use the outline?" Taken aback, Hanna began to reconsider her expectations of her students. She realized that the students were not unwilling – as she had secretly assumed – they just had no idea of the way she had planned and executed her lesson, and she might take that a bit more into account in future.

(Field note, 20 March 2007)

The opening anecdote illustrates that teachers tend to have presumptions about students and student understanding of their subject. Hanna assumed her students understood what her ideas and plans with the assignment were, but she found out that was not the case. Her simple question with which she opened the dialogue with her students helped her develop knowledge of student engagement and their understanding of the lesson.

This chapter describes how L1 teachers researched their ideas about students, and how they developed knowledge of student understanding and engagement in learning activities through dialogue with each other and their students. These teachers became involved in the research study on the development of concept-context rich L1 education. This form of education was first proposed by the Royal Netherlands Academy of Arts and Sciences (RNAAS, 2003) and is aimed at offering subject matter ("concepts") to students in various "contexts" that appeal to students, for instance by linking to their everyday lives, in order to deepen subject knowledge, enhance transfer of knowledge, and/or increase student motivation to learn. In this study, teachers themselves researched what concept-context rich education could entail and which contexts offered an opportunity for student learning and engagement. By showing how concepts of L1 education are utilized in context, teachers have the opportunity to show the relevance of their subject to students, and by doing so student engagement might be increased. Research literature shows that student involvement and engagement are a main concern of teachers (Meijer et al., 1999; Zyngier, 2008), and with good reason: Skinner, Marchand, Furrer, & Kindermann (2008) showed that students who are engaged in school are "both more successful academically and more likely to avoid the pitfalls of adolescence" (p.

765). Student engagement is a complicated notion that is influenced by many different factors (Newmann, 1992), but research shows that a student's sense of autonomy is the clearest contributor to student engagement (Skinner et al., 2008). Therefore teachers need to focus on stimulating participation and autonomy if they want to increase student engagement in learning.

In this study L1 teachers explored how they could engage students and increase their motivation by conducting collaborative action research on concept-context rich education. For this collaborative action research they surveyed students and reflected with each other on their experiences to make their personal practical knowledge explicit to themselves and each other (Olson & Craig, 2001). Research shows that teachers' knowledge development can be fostered through long-time engagement and collaboration with colleagues and by focusing on issues that relate to one's day-to-day teaching practice (Huberman, 1995; Darling-Hammond, 1997; Little, 2007). Through discussion and reflection with each other in research groups, shifts in teachers' views and knowledge could occur (Olson, 2000). In three research groups the teachers in this study determined how concept-context rich education could be applied in their teaching practice to increase student motivation and engagement, and they developed practical knowledge of student understanding of and engagement in the subject of L1 education.

5.2 Theoretical framework

5.2.1 Practical knowledge

In the past two decades interest in practical knowledge (Carter, 1990; Beijaard & Verloop, 1996; Van Driel et al., 2001; Meijer et al., 2001), the whole of knowledge and insights that underlie teachers' actions, has increased. The research literature shows that teachers' practical knowledge is generated by teachers themselves and integrates formal knowledge and personal beliefs. Teachers thus acquire it through personal and professional experience and subsequent reflection on that experience (Johnston, 1992; Fenstermacher, 1994; Meijer, 1999; Van Driel et al., 2001). Practical knowledge is mainly tacit and implicit and is used in all processes of teacher practice, including planning and executing activities (Lantz & Kass, 1987; Brickhouse, 1990; Verloop, 1992), and helps teachers make sense of their prior decisions (Schön, 1983; Beijaard & Verloop, 1996).

Researchers (Beijaard & Verloop 1996; Verloop, Van Driel, & Meijer, 2001) indicate that practical knowledge – or craft knowledge – is defined and labeled in several ways. Kagan (1990) and Moore & Freeman (1993), for example, define it as a knowledge base of beliefs, orientations, and cognitions. An important influence on research into the content of teachers' practical knowledge was the development of the concept of pedagogical content knowledge by Shulman (1986, 1987) and his followers (for instance, Grossman, 1990; Gudmundsdottir, 1991; Van Driel et al., 1998). Pedagogical content knowledge is a form of teacher knowledge that focuses on

the communication between teacher and student on the one hand and on the direct relationship with subject matter on the other hand (Verloop et al., 2001). Studying teachers' pedagogical content knowledge can be seen as "studying teachers' practical knowledge with respect to a specific content area" (Meijer, 1999; p. 18). This study will look at a specific subject: L1 education. It will not focus on a specific content area of L1 education, but rather on teachers' practical knowledge of student understanding of and engagement in several content areas of the L1 subject. In a continuation on Shulman's work, Van Driel et al. (1998) mention the fact that practical knowledge consists of several aspects: a) knowledge of subject matter, b) knowledge of general pedagogy, c) knowledge of student learning and conceptions, d) knowledge of purposes, e) knowledge of curriculum and media, f) knowledge of representations and strategies, g) knowledge of context. Starting from this classification, Meijer et al. (1999) distinguish three subcategories within the category of knowledge of student learning and conceptions that inform teachers' practical knowledge: 1) knowledge about students' characteristics, 2) knowledge about their environment, and 3) knowledge of their motivation (p. 15). The distinction of these subcategories of teachers' practical knowledge is important in this study because they can help discern what teachers learn about differentiating between students (Fernández-Balboa & Stiehl, 1995), what teachers find out about the students' interests, and what knowledge they develop of students' understanding of goals, purposes, and content of L1 education, thus developing practical knowledge of student understanding of and engagement in L1 education. Interestingly, student engagement and participation have been known to enhance teachers' knowledge development. Park & Oliver (2008) show that students' responses such as "enjoyment, evidence of learning, and nonverbal reactions to instructional strategies affected teachers' decisions to replace, modify, or validate the strategies employed" (p. 272). They have also shown that "students' creative and critical ideas stimulated teachers" to be more innovative in future classes (p. 274). Developing knowledge of student understanding of and engagement in the subject of L1 education can help teachers interpret students' actions and ideas, and engaging students in class can help teachers further develop their practical knowledge.

5.2.2 Changing practical knowledge through dialogue

The research literature has shown that practical knowledge is something that can change and grow by engaging in professional development (Parke & Coble, 1997; Van Driel et al., 2001). Programs using learning networks and collaborative action research have been mentioned as potentially powerful environments (Oja & Smulyan, 1989; Van Driel et al., 2001; Van de Ven, 2007) in which reflection on classroom action plays a significant part (Zembal-Saul et al, 2002). Many researchers have stressed the importance of reflection on experiences and enactment in the teaching practice to foster the production or growth of practical knowledge (Mayer & Marland,

1997; Meijer, 1999; Clarke & Hollingsworth, 2002; Ebenezer, Lugo, Beirnacka, & Puvirajah, 2003). Reflecting on one's personal experiences is difficult; communities of teachers can make the process of reflecting on action easier by investigating and critically analyzing issues that occur in the teaching practice together (Frykholm, 1998; Seago, 2004), while questioning each others' assumptions and searching for multiple perspectives (Brookfield 1995; Little, 2007): in other words, engaging in critical and interactive dialogue (Bakhtin, 1981, 1986; Farmer, 1998). This interactive dialogue should focus on teachers developing more nuanced and critical perspectives on their teaching practice through critical questioning and reflection (Kooy et al., under review). Critical dialogue is an important tool for reflection because through reflection and social interaction teachers develop more nuanced and critical perspectives on teaching (Darling-Hammond & McLaughlin, 1999; Little, 2002). Thus, dialogue can play an important part in the development of teachers' practical knowledge. We therefore wish to investigate how critical dialogue between teachers and between teachers and their students takes shape. The dialogue between teachers and their students can provide information on student opinions, and their understanding of and engagement in the subject of L1 education. The dialogue between teachers can describe how the teachers inform each others' practical knowledge. To this end the following research questions were asked: *1) How does critical dialogue with each other and with their students foster teachers' practical knowledge development of student understanding and engagement in L1 teachers? 2) What practical knowledge of student understanding and student engagement do these L1 teachers develop?*

5.3 Method

5.3.1 Context of the study

The RNAAS report, mentioned in section 1.1. of this thesis, proposed two key ideas for the improvement of Dutch secondary education: concept-context rich education, and the teacher as developer (2003, p. 17). To see whether these two suggestions could help solve some of the problems in secondary education we invited L1 teachers to develop concept-context rich materials that could be used in their daily teaching practice. By conducting collaborative action research the teachers developed knowledge of concept-context rich education and how to use this approach to increase their practical knowledge of student engagement.

5.3.2 Procedures in the study

Eleven teachers developed concept-context rich education by engaging in action research (Ponte, 2002; Kemmis & McTaggart, 1988; McKernan, 1994).

Initial meetings occurred in January 2006. Every participant attended one meeting. Ideas about concept-context rich education and action research were

discussed in short workshops. Three research groups were formed, keeping the distance between participants' homes and the meeting locations minimal. The three groups (West, East and South) met separately about once a month to research from February 2006 to June 2007 and discuss their practice, and develop and evaluate classroom materials. To stimulate dialogue between the teachers, on two other occasions during the eighteen-month period, research groups West, East, and South met each other. These two meetings took place at the end of the first year (June 2006) and the end of the second year (June 2007). In these meetings ideas about concept-context rich L1 education were discussed. To prepare for this research, research literature on concept-context rich education was incorporated in an article about the notion of concept-context rich education, published in a Dutch journal for L1 teachers (Platteel et al., 2006). At their request all the teachers received the article before the project started. To provide a rich context for the empirical study, a set of research articles on L1 education, contextrich education, and action research was compiled and distributed among the participants at the beginning of the second year. It was not distributed sooner because, initially, the influence of the academic researcher was kept as minimal as possible; however, over the course of the study it was realized that distribution of the articles, along with active engagement from the academic researcher in the project, would be beneficial to the participating teachers. Also, an electronic learning environment (ELE) was set up, so participants could contact and respond to each other.

5.3.3 Participants

Eleven L1 teachers participated in the collaborative action-research project. In section 1.3 of this thesis, Table 1.1 depicts the participants and the research groups. The project began in January 2006 and ended in June 2007. The three regional action-research groups were each accompanied by a facilitator (college instructor) and by an academic researcher (author of this thesis). Some teachers responded to an invitation sent to the web community of L1-education teachers, while others responded to an invitation sent to their schools. Although the teachers volunteered for an action-research project, with the exception of Abby, none had experienced the process before. The project started with fourteen teachers, all with a minimum of three years of experience in secondary L1 education.

5.3.4 Data

Various methods and data sources were combined: oral (semi-structured interviews with the participants before and after the project, taped research-group meetings), and written (teachers' written plans, evaluations, survey findings, responses to fictional cases, and the academic researcher's field notes). This chapter focuses on the teachers' development of knowledge of their students through self-reported dialogue with them and each other, and we therefore focus on the data sources in

which the teachers' dialogue and communication are exhibited. The teachers discussed their ideas and research projects in the research-group meetings. Thus, the transcripts of the research-group meetings and the academic researcher's field notes were the primary data sources for the analysis.

a) Audio-taped research-group meetings: the meetings lasted approximately two hours and were taped by the academic researcher (author of this thesis).
b) Field notes: the academic researcher wrote a report after each research-group meeting. The written reports were sent to the participants, and they were asked to respond to the field notes in case of errors or misinterpretations of the discussions.

5.3.5 Analysis

Data were analyzed in several steps using Kooy's method of analysis (2006, p.25-28).

1) The parts of the discussions that were concerned with knowledge of student understanding and student engagement were identified through subsequent readings of the (corrected) field notes.
   First, "chunks" of data were discerned in which one participant discussed his or her research project with the other participants. Student understanding and engagement in these chunks was identified once, when the teacher discussed student understanding in one of his or her projects. For instance, Abby talked about her research project and mentioned several aspects of student understanding, which was counted as one mention of student understanding.
   Sometimes, teachers worked on several research projects simultaneously. In that case, when the teacher talked about his or her research projects, mentions of student understanding and engagement were distinguished per project. For instance, Abby talked about two of her research projects and mentioned student understanding and engagement in both projects. This constituted two mentions of student understanding, revealing how often the teachers were concerned with student understanding and engagement when discussing their projects.

2) While coding the parts of the discussions that were concerned with student understanding and engagement, three themes emerged from the data that described teachers' knowledge of student understanding of and engagement in L1 education:

   Teachers practical knowledge of how

   A. informing students of goals, purposes, and content of L1 education increased student understanding and engagement;
   B. deliberately allowing students to express opinions about L1 education increased student engagement;

C. involving students in the development of L1 education increased student understanding and engagement.

To gain insight into which themes (A, B, or C) of student understanding and engagement the teachers were talking about and according to what frequency, the discussions in the field notes were analyzed. The specific times issues concerning themes A, B, and C were mentioned were counted. For instance, Amy discussed one of her projects and mentioned theme A in that project: this was counted as theme A reported once. In another instant, Amy discussed one project and mentioned both themes A and B in that project; this was counted as theme A reported once and theme B also reported once.

3) After all the field notes were analyzed according to the three themes, the coded field notes were used to find strong representations of the themes. Five representations were discerned to reduce the amount of data for the next steps of the analysis. For this discernment the criteria were: 1. which theme (A, B, or C) was explored in the critical dialogue between the participants, 2. which research groups and participants were involved in the critical dialogue in order to show the variation in data and discussion in the three research groups, and 3. which aspects of the L1 curriculum were focused on in the dialogues, in order to see whether different aspects of the L1 curriculum raised issues of student understanding and engagement. At this point the audio-taped research meetings were revisited and the five representations selected from the field notes were transcribed. For each theme one of the critical dialogues was chosen to represent that theme in the section "Findings" of this chapter to show how critical dialogue aids teachers in developing their practical knowledge o student understanding of and engagement in L1 education.

4) To assess and strengthen the internal validity of the analyses, an independent researcher traced the steps, reading the field notes and coding the critical dialogues that were concerned with knowledge of student understanding and engagement. After this process the author of this thesis and the independent researcher discussed the results and compared their analyses until consensus about the codes and the themes was reached.

5.4 Findings

To answer the research questions, this section will describe what practical knowledge of student understanding and student engagement the teachers developed through critical dialogue with their students and with each other in the research groups. For their action research the teachers surveyed their students, and the subsequent findings were discussed in the research-group meetings. The data show that discussions of teacher knowledge of student understanding and engagement were

held in all three research groups. In research group West issues of knowledge of student understanding and engagement (issues of themes A, B, and C) were mentioned 45 times in the course of 11 meetings. In research group East they were discussed 25 times in the course of 9 meetings, and in research group South 19 times in 10 meetings. To indicate how the critical dialogue between student and teacher and teachers in the research groups fostered practical knowledge development in these teachers, a discussion from each of the three research groups will be described and analyzed. First, how often a theme was observed in the data will be indicated, followed by a description of how the theme was discussed by participants in the research groups.

5.4.1 Theme A

Teachers' practical knowledge of how informing students of goals, purposes, and content of L1 education increased student understanding and engagement

The data show that the teachers in this study discussed engaging students by informing them of goals and content of L1 education 56 times in the course of one and a half years of research meetings. In research group West this theme was discussed 29 times, in research group East 19 times, and in research group South 8 times. Teachers talked about explaining the goals of L1 education to their students and why what specific content is important in light of the whole curriculum. They realized, as did Hannah in the opening dialogue, that it is not always clear to students why specific content is offered at that specific moment or in that specific way. Opening dialogue with their students helped students acquire knowledge regarding the goals and content of the curriculum and helped the teachers acquire a more realistic view of their students and their opinions. We will illustrate this by showing how dialogue with his students and with the teachers in research group West offered Paul new insight into this matter.

Paul's case: lessons in literature

Paul is a teacher who is passionate about student participation. Because he wanted to increase student engagement he had decided in the previous meeting of research group West to involve students in the development of a series of eight lessons on the topic of literature and literary history. Paul explained that he had time to devote to a literature project because the class was well on its way with the obligatory curriculum and Paul was therefore able to entertain his students' ideas for the project. He was eager to incorporate students' voices in his plans for the eight literature lessons. In the next meeting of the research group he told us how he started the dialogue with his students and what their ensuing lack of reaction to his initiative and in the discussion was. The other participants of research group West

(Nina, Alice, Eve, and Tamara [academic researcher]) questioned Paul about his initiative:

Paul *So I'm wondering: why did they respond so halfheartedly? So that's why I say, they are just focused too much on the completion of the school year. They have a lot to do and they are tired. A lot needs to be done and now the weather is getting better also.*
Alice *Yes.*
Nina *But it needs to be within their reach, I think, depending on the context you offer.*

Paul started off by providing explanations for why the students responded the way that they did; he blamed the time of the year and the weather. Nina then tried to diagnose why, in her opinion, the students reacted halfheartedly. She thought the students might not have enough knowledge of the curriculum to respond adequately; it was therefore out of their reach. Next, a question from Tamara focused the discussion on how Paul opened the dialogue with his students:

Tamara *I would find it difficult to think of something when asked, "What would you like to do"?*
Paul *Well, I didn't ask it that vaguely.*
Tamara *No…"We have a couple of hours and we can do something"…. Can you tell me how you did that? I find it difficult to envision.*
Paul *The final ten minutes in class, I said: "Guys I'm thinking about the first period after the summer holiday. We have covered all the theory, but we need a test; we need to process the material together". Well, a test, that they understand. That needs to be done, and they study for it. But we don't want that.*
Nina *But, how can I put it… If you were a student, how would you have reacted? Could you have reacted, you think?*
Paul *No, I think I would not have been able to respond so quickly, but that was a completely different time.*
- Laughter –
Nina *What would you have needed to be able to say something about that?*
Paul *Yeah, maybe it was due to a shortage of knowledge and skills. But I had - because I hear remarks from them, such as "We want something else; can't we change this?" - so I had expected some reaction, especially from them.*

Nina again tried to open the dialogue about what students know about the curriculum, and then Paul agreed that students might have a lack of knowledge, but

he still feels the students should have responded differently, more enthusiastically, because of previous discussions he had had with them.

Nina *Yes, so you presented something to them; you wanted to do something in the eight lessons after the summer holiday concerning literature, and they want change, etcetera. I understand that very well; I would want something different if I were a student, and then you asked for, let's call them tips, right? I understood it correctly, right? Well, and as a student …*

Paul *Well, I didn't ask for tips. It was more like, "It is still very open; there's no structure. I have to come up with it, and maybe you all can play a part in this", more like that…*

Eve *But I can imagine that wasn't concrete enough for them to express their views on.*

By summarizing accurately what Paul said, he and the other participants got a clear picture of what he did in the dialogue with his students. Eve, another teacher, joined in, also focusing on students' understanding of the curriculum. Then, Tamara added to the dialogue by expressing that the dialogue with the students as conducted by Paul was something new to all of them, including Paul and his students. This might also have confused the students.

Tamara *What is interesting about this is that it is new; it is new for them and for you. Because you are saying, I'm pretty loyal to the textbook, and I'm fed up with that; I want to change that. I want to keep the textbook but be less dependent on it, but that implies that you are focused on the textbook, but so are they.*

Paul *They don't know any better.*

Tamara *Exactly! So, we all said last time, "Great, they will surely like having something to say. I can't imagine it otherwise. They will say, "Cool! We will just think of something, do something completely different." But now I think that might have been rather naive of me because they aren't familiar with that, apparently. Even though you know they could do it.*

Nina *School culture plays a big part in that also.*

Tamara *Yeah, the school culture is a factor also, so that was a clear preconception on my part. I thought: if I had been there, I think I would have liked that, but now I think that this was way too hasty.*

The participants together tried to understand why the students reacted the way they did. Through dialogue they formulated several hypotheses and linked these to Paul's observations. Their own preconceptions were explicated, and they realized their ideas needed to be adjusted. They also realize that there were several reasons for

the students to react the way they did, and these needed to be taken into account if Paul wanted to increase his students' level of engagement.

Nina *Yes, and you already possess a great deal of life experience and knowledge that aids you in filling in the blanks, but the students don't have that experience yet. That was what I was aiming at before.*

Paul *Yes.*

Nina *That makes it harder on them. I think it would be nice if you, and you don't have to be all that concrete, mention some themes and then assess their enthusiasm. Find out what theme they like the most, and then you can talk with each other and decide how you can go about realizing this. That way they are more in flow, I think.*

Paul *Grunts (assenting).*

In summary, Paul developed knowledge of his students by opening dialogue with them and talking to the research group about his findings. Paul assumed that because of their general outspokenness the students would have a clear view of the L1 curriculum and the possibilities for change regarding the topic of literature and literary history. He interpreted their lack of enthusiasm as a lack of engagement, but the discussion with the research group made him reconsider his opinion. He realized that his students might be outspoken about education in general, but they did not have a clear idea of the possibilities for learning about literature and literary history, and this prevented them from generating ideas about the coming lessons. In his research Paul pursued the matter by providing students with structured information on possible lessons. He, for instance, did not make the students think of different possible subjects all on their own, but considered previous discussions he had had with this class and proposed "women's roles through the centuries" as a subject for the eight lessons on literature and literary history, thereby using his knowledge of previous dialogue with the students as a source of information. The students responded enthusiastically to this and participated in the eight literature lessons, for instance by contributing their collected study materials as learning materials for the other students.

5.4.2 Theme B

Teachers' practical knowledge of how deliberately allowing students to express opinions about L1 education increased student engagement

The data show that the teachers in this study discussed engaging students by allowing them to share their opinions on L1 education 56 times in the course of one and a half years of research meetings. In research group West this theme was discussed 32 times, in research group East 13 times, and in research group South 11 times. Student

surveys were conducted 1) orally, by teachers asking students for their opinions; 2) in writing, when students were given questionnaires that they were asked to fill in; and 3) in writing, when students were given assignments to write about an aspect of the subject of L1 education, for instance, "should comparative literature be a focus of secondary education?" The teachers discussed the findings from these student surveys with each other in their research-group meetings and formulated what they learned about student understanding and student engagement as a result of them.

Amy's case: correct spelling and grammar
Amy was frustrated by the bad spelling and grammar she encountered in her students. In the previous meeting of research group East the other participants, Wilma, Bert, Kate, and Tamara, asked her why correct spelling and grammar were so important to her. She formulated that, according to her, these are skills every student needs to acquire for his or her general knowledge base. To be able to actively participate in society requires proper spelling and writing. However, she was convinced that whenever she explained this to her students her words would fall on deaf ears. She felt that they did not recognize the importance of correct spelling and grammar and was frustrated by this. In the previous session the other participants focused on whether she was sure of the students' opinions. In that session she said she was sure because of the reactions she received whenever she mentioned spelling to the students and felt she did not have to research the matter any further. In the following meeting she explained what happened after that:

Amy *You remember that during the last research-group meeting you asked me why I find spelling so very important, so that needed a follow-up. I surveyed students in general secondary education (fourth year), asking them to answer the following questions: "I master spelling: well, sufficiently, insufficiently"; "I find spelling: important/not important, because…"; "I think school pays enough/not enough attention to spelling, because..." – they have to illustrate this; "A good way to learn spelling is …"*
Well, I haven't collected responses to the last question yet, but it does show that the students feel that they master spelling sufficiently; ten of them think they are insufficient, but a large group thinks they are sufficient.
Tamara *That they are doing fine.*

In between sessions Amy changed her mind about further looking into the students' opinions. Even though in the previous discussion with her critical friends she did not express the intention to survey the students, she changed her mind and entered into

a dialogue with them after all. At first it seemed that the student survey confirmed her ideas about student opinions, but the data showed more.

Amy *But the funny thing is that many more students than I had expected say that they think spelling is important, and the ones that don't find it important defend their opinion by saying: "As long as you understand what is meant, it doesn't matter anyway." Those kinds of reasons, but others mostly feel it is important "otherwise you get all these strange sentences that might be understood differently from how you intended." [reading from the paper] "When writing reports or letters you need spelling"… So, rather nice opinions. And now I'm looking into whether we provide the topic enough attention, according to them. Well, many students think what we do is sufficient, here for example: "does not require much attention in class but you can catch up by going to tutoring classes".*

Amy expressed that she was surprised by the students' opinions. Contrary to her expectations, many students mentioned that they think spelling is important and even formulated that they are aware of possibilities for extra lessons.

Wilma *Right.*

Amy *And now I have to look into ways of presenting spelling to them because that is something rather important, but you can't score that; I just have to collect and compare the answers.*

Kate *Still, this is rather nice.*

Amy *Yes, I think your questions [gestures to Kate], "What do these students think of the topic themselves?" and "You think it is important, but how do they perceive that?" I thought, after the last session, I need to dig deeper into that issue, so I did the survey.*

Tamara *That's great.*

The critical dialogue with Kate in the previous meeting encouraged Amy to enquire further into her students' opinions, and this brought her new insights and much data that she was still in the process of analyzing thoroughly.

Kate *Yeah, and you have a rather nice inventory of how important it is for you, and whether they find it important as well.*

Amy *Yes, that was my question, and also, what is a good way to approach the topic? So, I'm hoping that these answers offer some insight, but what I have seen while glancing through them is "practicing" and "asking questions", "visiting tutoring classes", "online exercises", "using the*

blackboard with many examples", "memory aids", and at the same time I think: a lot of practice is something that they apparently value because when a big group mentions it I think I need to conclude that it is not the case that they resist it; they see the value of practicing a lot.

Kate *They agree that they can learn by practicing.*

Amy *Especially because, this is rather funny, because students think it is important, more important than you might think. Often it is said that students don't think spelling is important – well, a big group does recognize the importance. So it is a good thing that we need to continuously check our preconceptions.*

The fact that practicing spelling and grammar is boring but sometimes necessary, according to these students, was new to Amy, and she was pleasantly surprised by the students' responses.

In summary, the dialogue with the other participants of the research group stimulated Amy to conduct a student survey, and this helped her to develop a more nuanced and accurate view on student opinions on spelling and grammar. Amy subsequently developed a method to make students more aware of their weak points in spelling and let them, together with others, find their own solutions. Students were invited to read over their own solutions before writing another essay, and this made them aware of the difficult aspects of spelling and grammar and that specific aspect of the L1 curriculum.

5.4.3 Theme C

Teachers practical knowledge of how involving students in the development of L1 education increased student understanding and engagement

The data show that the teachers in this study discussed engaging students by involving them in developing the L1 curriculum 27 times in the course of one and a half years of research meetings. In research group West this theme was discussed 12 times, in research group East 6 times, and in research group South 9 times. Because the teachers included questions in the student surveys asking students for ideas on how to improve the L1 curriculum, some interesting answers were revealed. The teachers were often impressed by the students' ideas, and on several occasions teachers saw opportunities to include these in their plans for the curriculum improvement. One example of a teacher in the study who employed the students' ideas is described in Macy's case.

Macy's case: students developing assignments

Macy contributed the data she collected in her survey on literature assignments in a meeting of research group South. She and some colleagues had developed assignments aiming to increase student engagement in reading Dutch literature by letting students process the books they read in a fun and engaging way by linking them to the students' everyday lives. She had thought of some interesting assignments and had offered them to the students. In a previous meeting of her research group we discussed how Macy could survey the students, asking them whether they felt these assignments linked to their everyday lives. She decided to conduct a student survey, a poll. To her surprise, the survey showed that the students did not link the assignments to their everyday context. She therefore decided to let students develop assignments themselves. She received the assignments and used a great many in her project. In the meeting the research group looked at what kind of assignments the students came up with and what could be learned from this.

Macy *Yes, because the goal was to link up with the students' everyday lives. That's why I took this step [letting students develop assignments]. And that had an effect on the last assignment because students mentioned they felt the connection to their world, and I collected a whole arsenal of possibilities that weren't in the textbooks, yet. Because the material came from the students, and you can offer it to them in that manner, they just like it more because the teacher didn't generate it…*

Rachel *And it is ours.*

Macy *It is all ours.*

Macy explained that she found that because of the fact that the assignments were developed by the students themselves, they felt it linked to their everyday lives. She mentioned that this enhanced the students' motivation to work on the assignments. The discussion then focused on what interpretations of concept-context rich education Macy's students mentioned. The data were analyzed by Macy and the other participants.

Tamara *And what kind of context do we see in these assignments? Because the basic context consisted of students' everyday lives, right? To link up with their world, but there might be more…*

Macy *I do see some social context [linking to newspapers and society].*

In the discussion Macy used terms she acquired over the course of the project, by reading the previously mentioned Dutch article (Platteel et al., 2006). She mentioned the functional context consisting of the everyday lives of students (music and books),

and the social context, the societal environment, students are confronted with (current affairs and newspapers).

Macy *I think it is a personal context for this student, which is functional...*
Tamara *Yes, but he [student] mentions two aspects, "you can focus on your own feelings", so that is very functional and personal, almost like revealing one's identity, like "the fear of becoming blind", which is very personal, and "you're faced with it in the media." He really focuses on two aspects of context.*
Rachel *Yes.*
Tamara *So these kids apparently also see a difference. That's very interesting, because, for instance, looking at "a collage of the main character", that relates to their own personal preference, their functional context. "I like working with images" and "I like working with the book in a different way", there you also see a link to their interpretation of context, you see. So in the personal context of the students, you can discern all these different approaches – functional and social – branching off.*
Macy *Yes, exactly, and they mention them; you also see that in class.*

A close look at the data that Macy gathered through her student survey showed that her students had a varied view of what they perceived as linking to their daily lives, and Macy responded to Tamara's comment with a connection to class observations that confirmed this analysis.

Tamara *In a lot of literature on educational theory the students' everyday lives are mentioned, but what that entails exactly is very difficult to define. Here you see these options appear, that is rather interesting. So it's not just about their daily lives, like their music or TV shows; they themselves show distinct characteristics and differences, and I like that a lot about your data.*
Rachel *Yes.*
Macy *And somewhere, a student makes a remark on Thessa de Loo's book [a Dutch writer]; "I want to know why she wrote that like this".*
Tamara *What kind of reason the writer had, something like a subject-specific context?*
Macy *I wouldn't call it subject specific.*
Rachel *More focused on the writer?*
Macy *Yes, on the writer… What I also liked…was Bernlef [a Dutch writer]: "Explain why making a play of the story is impossible or not", I like the interdisciplinary combination with the arts.*

Macy observed that her students were interested in different aspects of the literature and literature lessons. They wanted to know what the writer was thinking and took the initiative to make a connection with the arts and the school subject of fine art. The fact that the students' opinions included all these different aspects of literature and arts was a pleasant surprise for Macy.

Macy *One boy came up to me and said: "Miss, I handed in my assignment on time – that was the first time – because my own assignment was one of the choices!" I had not put it in on purpose, but afterwards I was very happy that I did. He said "I liked my own assignment!"*

In this transcript we get a taste of student engagement in the development of L1 education. Macy asked them for help in a structured and clear way, and the students responded.

In summary, by surveying her students Macy collected information on students' opinions of the curriculum she had developed herself; she did not reach her goal of linking to the everyday lives of the students. By asking the students for assignments she received several useful ones, and because she used them she was able to observe an increase in student engagement. The subsequent in-depth discussion in the research group about the results of the student findings exposed an interesting and complex view of student opinions and views on L1 literature lessons. Macy, furthermore, expressed being generally content with the level of student achievement in these assignments, and she was especially content with the level of student participation. When comparing the assignments of the students with those of the teachers, Macy found that they did not differ a great deal. The main difference was that the students felt good about having a say and having their opinions taken seriously. The students developed knowledge of reading and processing literature and how assignments could be developed, and Macy developed knowledge of what students found interesting about this L1 topic and how they could be invited to participate.

5.5 Conclusion and discussion

This chapter described how critical dialogue with their students and with each other developed teachers' practical knowledge of student understanding of and engagement in L1 education. As a result, the following research questions that guided this study can be answered *1) How does critical dialogue with each other and with their students foster teachers' practical knowledge development of student understanding and engagement in L1 teachers? 2) What practical knowledge of student understanding and student engagement do these L1 teachers develop?*

Research question 1

Teachers developed knowledge of student understanding and engagement by surveying students and critically discussing the findings of these surveys in the research-group meetings. In the student surveys, teachers deliberately asked for students' opinions on diverse issues concerning L1 education and in various ways, for instance by means of questionnaires, writing assignments, and group dialogue. After collecting their data, the teachers analyzed the findings, hypothesized on what they could mean in light of their research questions, linked their ideas to multiple perspectives, and thus made an effort to hear the students' voices (Beattie, 2002). To develop knowledge of student understanding, ideas, and possible factors of engagement, the participants explored their ideas and findings in the research groups. They asked critical but open questions to help each other notice possible blind spots in their reasoning. They also exchanged experiences and knowledge to assist each other in reflection on their practical knowledge of student understanding and engagement. Although critical dialogue in a community might seem like a natural process, we must not forget that it involves trust and courage. Even though it was difficult at times, these teachers engaged in and carried on dialogue with each other and with their students, and because of this they learned about the advantages of involving students in student learning as well as in teacher learning. As formulated by Sasha: *I experienced that much can be gained by for once not only looking at what I want or need to teach but to consider my audience: lazy and annoying adolescents but at the same time sweet and creative minds.*

Research question 2

Through data analysis of the teachers' discussions three themes in teachers' knowledge of how to increase student engagement and foster student understanding could be discerned. Teachers found that students actively participate in class when curriculum aims, objectives, and content are clearly stated (theme A). Through the research process, the teachers learned that students are able to express thoughtful views on the L1 curriculum content (theme B) and can even be challenged to participate in the development of certain aspects of that curriculum (theme C). The critical dialogue of the teachers, however, indicated that these themes should not be viewed separately. For students to formulate an opinion on L1 education (theme B), and especially to take part in the development of the L1 curriculum (theme C), knowledge of aims, purposes, and curriculum content (theme A) is key. Not only is student understanding of the L1 goals and curriculum content important to help them see the "bigger picture" behind the separate lessons, knowing why this content is vital and how it is linked to other content helps students become aware of their learning process. This reflective approach to their learning will help students to form an opinion and express this opinion when asked for in a survey or in aspects of curriculum development.

In summary, this study shows the practical knowledge these teachers have developed: students can be engaged in L1 education by their teachers, and no major changes in the curriculum need to be made to do so. Students need guidance from teachers in order to inform them about the goals, purposes, and content of the curriculum, and, when teachers take the time and effort to do so, they experience that students can express thoughtful opinions about the subject and even participate in the development of high-quality assignments that increase their motivation. Teachers have learned that they can mobilize students to develop assignments, thus sharing the effort and the responsibility of student learning.

Limitations and Implications

Only one part of teachers' practical knowledge was looked at: knowledge of student understanding and engagement. Knowing how teachers can learn about student understanding is important, but it would also be interesting for further research to look at other practical knowledge components because they each inform the other (Magnusson, Krajcik, and Borko, 1999; Abell, 2008), and combining the different aspects could add to the understanding of practical knowledge and student engagement. An aspect that might be interesting to look at in light of knowledge development of student understanding and engagement is that of teachers' purposes (Van Driel et al., 1998). Are the goals clear to the teachers; are the teachers' goals clear to the students, and what are the students' goals and purposes? Students are usually very task orientated; they come to school to finish a task and move on (Holt, 1964/1982; Winograd, 2002). How does this link to the teachers' goals and purposes, and can dialogue with students be of further value?

Furthermore, students' ability and willingness to participate in curriculum development may differ per student group and per topic. Further research can shed light on this and enable a clearer view of student understanding and the possibility of incorporating students' voices in the development of L1 curriculum and in other subjects as well. This study focused on L1 education. It might be interesting to find out whether the practical knowledge developed by these teachers about engaging students in their learning process by increasing their understanding of the goals and content of the subject, valuing their opinions, and including them in curriculum development is applicable to teachers of other subjects as well. The subject content and goals will differ, but teachers' interest in involving and engaging students in their learning is something that might be universal. Further research and collaborative action-research projects might shed light on this issue.

Only a small number of teachers participated in this study; therefore, caution must be taken not to generalize the study's conclusions. More research on student engagement and teacher knowledge of how to increase student understanding and engagement needs to be conducted. This study may serve as a tool for reflection and

discussion for teachers and researchers working with these issues of teachers' practical knowledge.

Although the representations of the themes in the findings show the critical dialogue between several teachers, the findings focus on the practical knowledge development of three teachers. Generalizations about the knowledge development of the other teachers must therefore be avoided. Data do confirm a great deal of dialogue between all participants about student understanding and engagement. This suggests the importance of the subject of student understanding and engagement for all the teachers. The teachers informed each others' practical knowledge by exchanging findings from surveys and reflecting on these findings together.

The data show differences in the extent of dialogue on the different themes. The way the research project was shaped – through collaborative action research including student voices as an important data source – probably brought about more dialogue regarding theme B than themes A and C. Furthermore, informing students of goals, purposes, and content of L1 education required less time and effort from teachers than involving students in the development of the L1 curriculum. It is therefore to be expected that issues concerning theme A will be reflected in the data more than issues concerning theme C. Also, students need knowledge of goals, purposes, and content of L1 education (theme A) to be able to express a thoughtful opinion on L1 education and participate in the development of the curriculum. This might be an indication of the greater amount of dialogue on theme A than on theme C. The differences in dialogue between research groups might be explained by the differences in collaboration within the groups. It is beyond the scope of this chapter to discuss this in great detail, but the data show that some research groups spent more time discussing the collaborative action research process than other groups. These other groups more often talked about the progress and results of their individual research projects, and raised issues about student understanding and engagement.

The representations in the findings were chosen because they concerned the different research groups, represented the three themes, and focused on different aspects of the L1 curriculum. This illustrates that the critical dialogues these teachers engaged in, and the knowledge they developed could be observed in various research groups, and concerned various aspects of the curriculum. In the eighteen months of this collaborative action-research project, not all aspects of the L1 curriculum, especially those concerning student understanding and engagement, could be researched by these teachers. Further research with L1 teachers can shed light on student understanding and possibilities for student engagement in other aspects of the curriculum. These data suggest that this may increase student awareness of the goals and content of the L1 curriculum and make it more engaging and motivating for students as well as teachers.

Finally, what was the impact of this study on these teachers? Were their classrooms completely transformed by this project? These examples do not guarantee that teachers will involve students every day. Furthermore, these teachers were not observed in their classrooms, so we had to rely on their own reports. Observations might have offered a different perspective of student involvement and participation, and might therefore be incorporated into further research on teachers' practical knowledge of student understanding and engagement in L1 education.