

Contents lists available at ScienceDirect

International Journal of Educational Research

journal homepage: www.elsevier.com/locate/ijedures



Opening dialogic spaces: Teachers' metatalk on writing assessment



Synnøve Matre, Professor*, Randi Solheim, Associate professor

Faculty of Teacher Education, Norwegian University of Science and Technology (NTNU), 7491 Trondheim, Norway

ARTICLE INFO

Article history: Received 14 April 2016 Received in revised form 28 June 2016 Accepted 1 July 2016 Available online 26 July 2016

Keywords: Writing assessment Collegial discussions Metalanguage Professional development

ABSTRACT

This article reports on a qualitative study of teachers' collegial discussions on assessment of students' texts, focusing on how they use assessment tools, argue and interact. The data consists of two sets of collaborative dialogues collected within a large-scale project on writing and assessment in Norwegian primary schools. Findings indicate that the teachers are moving from an instrumental approach towards a more functional and integrated understanding of the students' texts. There are, however, great variations in how the teachers take advantage of the tools. This is partly explained through different interaction strategies opening up varying spaces for dialogic cooperation and joint assessment. The article argues for collegial discussions on writing assessment as stimulating environments for teachers' professional learning.

© 2016 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Introduction

The aim of this study is to reflect on teachers' textual knowledge and metalanguage that enable them to see, describe and assess students' writing competence. Listening to teachers' talk on students' texts and studying collaborative discussions provide opportunities to reflect on these issues as an integrated part of writing education. By also focusing on the interplay within groups of teachers, we gain insight into how they may build and co-construct knowledge through their assessment work and how they develop assessment competence in concert with colleagues.

More precisely, we want to focus on how teachers make use of a functional construct of writing and specified assessment norms through collegial discussions about students' texts, and how they use metalanguage to give a clear picture of the students' achievements. By delving into teachers' assessment dialogues, we study how they word and negotiate different assessment perspectives and how collaborative learning may take place – based on the given resources as well as accumulated knowledge and experience. The study has been carried out within the frame of a large-scale, longitudinal project on Norwegian primary school students' writing development and teachers' assessment competence (The NORM project). Drawing on data from this project makes it possible to relate experiences to different aspects of the teachers' writing instruction, and use these as a relevant basis for further discussion.

Writing assessment is a social and cultural practice, anchored in teachers' professional competence and varying with their experiences (Sadler, 1985; Wyatt-Smith & Klenowski, 2013). Even if measurement and test-oriented assessment

^{*} Corresponding author.

E-mail addresses: synnove.matre@ntnu.no (S. Matre), randi.solheim@ntnu.no (R. Solheim).

¹ Full title: *Developing national standards for the assessment of writing. A tool for teaching and learning.* The project is running from 2012 to 2016, funded by the Research Council of Norway and Sør-Trøndelag University College (now a part of NTNU).

practices seem to be expanding (Behizadeh & Engelhard, 2011; Yancey, 1999), assessment of complex performances – like writing – will always rely on the teachers' interpretations, experiences and competence (Moss, 1994).

Within test-oriented assessment practices, as well as assessment for learning, more or less fixed constructs, criteria and standards are important resources for mediating the assessment. Teachers' understandings of the varying resources will always be refined through use and moderated according to the specific context as well as former experiences (Parr, 2011; Sadler, 1989). As for writing and other complex fields where qualitative judgements are needed, the use of such tools is a demanding task. Sadler (1989) underlines how a competent teacher both should be able to make an appraisal based on a set of criteria, and, at the same time, have the confidence to "break the rules" due to qualities of the students' work. Such a flexible approach depends on the teachers' knowledge of – often tacit – metacriteria for the practical use of the resources (p. 124). Such guild knowledge among teachers is built up and shared over time. Based on similar reflections, a discussion is raised on difficulties concerning the use of detailed goals and criteria in writing assessment as opposed to more holistic approaches (Marshall, 2004; Sadler, 2009; Wyatt-Smith & Klenowski, 2013). Marshall (2004), for example, argues for understanding progression within writing education as heading towards a broader horizon rather than specific goals, focusing on an interplay between a multiplicity of variables based on the teachers' – and students' – knowledge.

Writing assessment still requires focus on the linguistic and textual knowledge that lie behind the teachers' work (Huot, 2002; Parr, Glasswell, & Aikman, 2007; Parr & Timperley, 2010). In such a context, a relevant metalanguage is a prerequisite for *seeing* what the students do and do not master, what they are trying to do, and, subsequently, for supporting the student's further work (Matre & Solheim, 2015; Myhill, Jones, & Watson, 2013). Writing assessment thus requires explicit knowledge of grammar and text linguistics as well as the ability to interpret the students' mediation of meaning. Myhill (2011, p. 250) defines metalinguistic activity broadly as "the explicit bringing into consciousness of an attention to language as an artefact, and the conscious monitoring and manipulation of language to create desired meanings grounded in socially shared understandings". Such complex activities make a good foundation for students' as well as teachers' work on writing and assessment.

Teachers need to be supported in implementing quality assessment in writing; they cannot alone translate constructs and general criteria into flexible practices (Black & Wiliam, 1998; Parr, 2011). Collaborative assessment work and collegial discussions, as studied in this article, may promote the teachers' use of the provided tools as artefacts both for mediating the assessment and for negotiating meaning in dialogic processes. Several researchers emphasise how collegial discussions characterised by mutual trust may open up dialogic spaces for negotiating interpretations of students' texts, questioning different understandings and sharing knowledge (Colombini & McBride, 2012; Jølle, 2014; Parr, 2011). Sharing experiences based on common resources is also a way of involving the teachers in their professional development.

2. Background: the NORM project and this study

The data material for our study is collected within a long-term intervention project on writing education and assessment in primary school, the NORM project (Matre & Solheim, 2015; Solheim & Matre, 2014; Berge et al., submitted; www.norm. skrivesenteret.no). Over a two-year period, a functional construct of writing, norms of expected writing proficiency and derived assessment resources (see Section 3 below) were used as a basis for teaching and assessing writing in 20 schools. A tenet in the NORM project is that a shared understanding among the teachers, both of writing as a phenomenon and of what to expect of children's writing proficiency, is necessary to make valid and reliable assessments of students' texts, and to plan and carry out good writing education.

The present study focuses on the teachers' understanding and use of the writing construct and the derived tools as expressed in assessment dialogues recorded in the middle and at the end of the project period (sessions 1 and 2).

The main research question for the study has been formulated as follows: *How do a sample of primary school teachers talk about students' texts in dialogic cooperation on assessment?* This is operationalised through the following sub-questions:

- How do the teachers use the construct and the norms?
- How do they underpin and argue for their assessment through use of metalanguage and text references?
- How do they collaborate and interact?

Bearing our findings from the analyses – and experiences from the NORM project – in mind, we will reflect on the teachers' development of assessment competence through collaborative learning.

3. Theoretical approach

The study draws on sociocultural theory of learning and development. The assessment conversations are understood as dialogic arenas where meanings may be revealed and developed in the meeting between students' texts and different teachers' voices. According to this theoretical approach, the construct of writing and the assessment resources are seen as artefacts mediating meaning in the dialogues (cf. Vygotsky, 1986). These are essential tools and offer appropriate metalinguistic concepts for discussing different aspects of student texts (Berge, Evensen, & Thygesen, 2016). Vygotsky (1986) underlines how thoughts – and learning – are shaped by semiotic tools and metalanguage. In our study, this tenet may shed light on the role of assessment dialogues in the teachers' professional development.

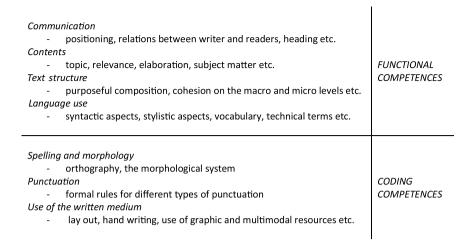


Fig. 1. Assessment domains (with key words to indicate focus).³

The given artefacts play a central part in the dialogues where the teachers, with their different voices, engage with each other to negotiate and develop their understandings. Meaning thus exists in the relationships between different utterances – in the dialogic gap between intention and interpretation (Bakhtin, 1986; p. 84). The teachers' assessment dialogues imply continuous recontextualisations of the construct and the resources (Bernstein, 1990; Linell, 1998, p. 154ff). Following this, discussions on students' texts may constitute learning arenas for the teachers with a potential for developing a deeper understanding of writing and assessment, capturing the student's perspectives and their learning.

The negotiations, the meaning making and the interactions between different voices in dialogues represent a dynamics that Linell (1998, p. 24) refers to as

an intrinsically social and collective process, where the speaker is dependent on the listener as a "co-author" (. . .) and where he, the speaker, is also a listener (to his own utterances) and is engaged in sense-making activities in the course of the verbalization process itself.

In this way of understanding sense-making, the contexts play an essential part. A dialogue is thus understood as a continuous interaction between initiative, response and different relevant contexts. To get a better understanding of how meaning is created it is necessary to study this interaction closely, focusing on how the participants listen to each other, follow up and develop topics in concert.

Considering this, dialogues may have different distinctive features. According to Mercer (2000), cumulative dialogues are characterised by uncritical, non-competitive and constructive turns building on each other. Exploratory dialogues represent a combination of cumulative and more disputing talk, where the participants are both adding to and challenging contributions from each other. These two dialogue types in different ways open up for developing knowledge.

Wenger (1998) draws on a similar understanding of knowledge construction, saying that "meaning arises out of a process of negotiation that combines both participation and reification" (p. 165). He emphasises the importance of making the issues in focus concrete – which in our study may refer to use of the assessment resources to see and assess students' texts. The interplay and mutual engagement between teachers in their assessment work constitute small communities of practice within the frame of the larger professional development project.

The functional construct of writing – the Wheel of Writing – represents a more specific theoretical foundation for this study. This construct is anchored in sociocultural theory and sees writing across the curriculum as intentional activities centred on three dimensions: *Acts of writing, purposes of writing* and *semiotic mediation*. The visualised model (see Appendix A) illustrates the dynamic interaction between these three dimensions.²

In the first stage of the NORM project, a set of norms for students' expected writing competence after 4 and 7 years of education was formulated, based on empirical data from students' texts and teachers' assessment work. These were organised into seven assessment domains, corresponding with the theoretical construct (Evensen, Berge, Thygesen, Matre, & Solheim, 2016). The domains are described in Fig. 1.

During their assessment work in the second phase of the project, the teachers used these domains and the norms of expectations to insure that they addressed different levels and aspects of students' texts. Each dimension was rated according to a five-level scale, where the mid-level (level 3) equals the norms of expected writing proficiency after 4 and

² See Berge, Evensen et al. (2016), for further explanation and discussion on the Wheel of Writing.

7 years of education (see examples in Appendix B). Level 4 and 5 represent achievements above and high above the expected level, while level 2 and 1 correspondingly represent achievements below this. The construct of writing, the assessment domains with the specified norms and the scale together constitute central mediating tools in the assessment dialogues analysed in this article.

4. Methodology

4.1. Data collection

The data material for this study consists of dialogues between experienced teachers in groups/pairs discussing and assessing students' texts, using the writing construct and the norms of expectations. The dialogues were part of the NORM project's intervention and data collection and took place at two different points in time during the intervention period.

Session 1 was scheduled in the middle of the intervention, session 2 at the end. In session 2, the teachers had been trained and practising for a total of one and a half years. In the first session, five groups with 2–3 teachers assessed five texts each. In the second session, three groups with two teachers assessed ten texts each. All the informants had participated in the intervention program from the outset. The teachers, who came from different primary schools across the country, were selected according to their stability in the project. Three of them participated in both sessions.

Both in sessions 1 and 2, the teachers assessed texts from year 4 or year 7 students. They had prepared themselves individually by reading the texts and suggested preliminary scores. In their collaborative work, they were instructed to discuss the texts, aiming for joint summative assessment based on the norms of expectations. In this work they used an assessment scheme where they plotted in levels of mastery (1–5) for the different domains. The teachers did not assess texts from their own students.

In this article, the assessment dialogues from session 2 are analysed in detail, while findings from session 1 are used as basis for comparison. The three session 2 groups consist of experienced teachers with at least 12 years of teacher experience. The teachers are labelled as follows:

- Group 1 teachers E1 & J1 (E1 male, I1 female)
- Group 2 teachers S2 & B2 (both male)
- Group 3 teachers R3 & A3 (R3 female, A3 male)

The dialogues were audio recorded, without the researchers being present. Altogether, the data consist of about five hours of recorded data from each of the two sessions.

4.2. Analytical approach

The dialogues were transcribed by the researchers working together, simultaneously listening to the recordings and discussing preliminary interpretations and categories. The first part of the analysis section was carried out alternating between individual and joint readings of the transcripts, which implied careful re-listening, re-reading and discussion. Tentative thematic categories emerged and were talked through, tried out and refined. The teachers' construct references and their use of the norms (cf. the research questions) were important elements in this analytical process. Contextual data, such as writing prompts and instructions, were also considered. The combined procedure of interpretation, discussion, sorting and categorising is inspired by grounded theory (Glaser & Strauss, 1999). This approach provided the opportunity to engage deeply with the data and facilitated continuous sharing and discussing of the analyses.

In the second part of the analyses, the interaction between the participants was studied by focusing on initiatives, responses and participation structure.⁴ With this as the point of departure, the teachers' conversation strategies and positioning in the dialogues were discussed. These analyses were carried out while anchored in a dialogic approach to interaction analysis, combined with hermeneutic interpretations. Altogether, the two parts of the analysis section contributed to answering the research questions, both those focusing on central thematic aspects and those on interaction between the participating teachers.

Even though three of the teachers participated in both sessions, we will not compare *individual* development, but rather focus on the dialogic cooperation at the group level. This methodological choice is based on an assumption – and preliminary

³ See Appendix B for illustrative examples of norms for expected writing proficiency for the domains "Contents" and "Language use". Such norms are developed for all the assessment domains outlined in Fig. 1. For further presentation and discussion of the domains and the related norms, see Evensen et al. (2016).

⁴ The analytical approach to this interaction analysis will be further described in Section 5.3.

experiences – that the individual teachers' participation in the assessment dialogues might vary with the group constellations. Consequently, we do not have the empirical foundation to argue for individual development.

Results from session 1, midway in the intervention, have been previously reported in Matre and Solheim (2015). These make it possible to have a longitudinal perspective on teachers' acquisition of assessment competence. Findings and main categories from session 1, briefly presented below, are therefore included as a basis for the analyses from session 2.

5. Analyses and findings

5.1. Session 1: Learning in progress

The analyses of assessment dialogues from session 1, revealed a rather complex picture of the teachers' competence. Still, we could clearly identify two ideal typical points in a continuum of assessment approaches when it came to the teachers' use of the resources and their metalanguage. On the one hand, we found a rather *instrumental* and ritualised use of the norms for expected writing proficiency. On the other hand, we identified a more *flexible* and functional understanding, where the teachers to a larger degree assessed textual features related to contexts, acts of writing and students' individual projects. Nevertheless, none of the teacher groups used just one or the other of these approaches, and between the two extremes we saw clear signs that the teachers' discussions and collaborative work brought them into learning processes that dealt with internalising a more complex understanding of writing, expressed by a more nuanced metalanguage. This continuum is referred to as a third category, labelled *learning in progress* (cf. Fig. 2).

What distinguishes the two extreme categories in the continuum is first and foremost how the construct and the norms of expectations are anchored in the teachers' knowledge. The instrumental approach is characterised by a mechanical use of the norms, more or less as checklists. The teachers were often looking for what was missing before looking for what was relevant, and they were mostly commenting on the linguistic surface without focusing on functional aspects. The teachers using this approach also seemed to have difficulties giving precise and text-specific assessments, both on the micro and macro levels. The functional and flexible approach, on the other hand, was characterised by more thorough discussions among the teachers, often provoked by questions and objections. Assessors using this strategy went deeper into several aspects of the texts. They used an extended metalanguage (both concepts from the norms and from other relevant areas) and related linguistic concepts and textual phenomena to broader communicative contexts. They also made more independent judgments, drawing on the context as well as the construct of writing.

A large part of the assessment utterances in session 1 are somewhere in between the instrumental and the flexible approach – in the continuum where learning is in progress. All the teachers in the study managed to pinpoint and label different aspects of the texts, but only to a varying degree managed to see the function of the students' writerly choices. A majority of the teachers were closer to the instrumental than the flexible approach.

One aim of the NORM project's intervention was that the teachers should learn to use the norms of expectations in a functional and flexible way. In this trajectory, however, it is reasonable to assume that they have to work their way through a phase where the resources are used more mechanically. This means it is important to see experiences from the end of the intervention period (cf. dialogues from session 2) in light of the continuum – and it makes learning in progress an important and interesting phase.



Fig. 2. Teachers' approaches to students' texts, illustrated as a continuum.

5.2. Session 2: Towards a flexible approach? Aspects characterising teachers' assessment dialogues

In studying the dialogues in session 2, an overarching impression is that the teachers have moved further within the continuum. To answer *how* the teachers move forward we focus on central thematic aspects in their assessment dialogues and dialogic interaction.

Through careful listening to the dialogues and analysis of the transcripts in several steps of sorting and interpreting, we found three interrelated aspects that – in different ways – were central in all the teachers' discussions. We list them here, to foreshadow the results and give an outline of this part of the analysis section:

- anchoring the assessment in the construct of writing and the norms of expected writing proficiency
- use of relevant metalanguage
- connecting to teacher experiences and practice

In the following, we will allow the teachers themselves to give voice to the thematic categories above through excerpts from the dialogues. The interaction between the teachers will be touched on through all the categories and then analysed more thoroughly in the last part of the analysis section.

5.2.1. Anchoring the discussion in the construct of writing and the norms of expectations

All the teachers seemed to have an internalised understanding of the construct of writing. They put this knowledge to use by frequently questioning and discussing the given task in relation to the acts of writing, and by considering acts of writing in their assessment of different domains. The following excerpt from Group 2's discussion illustrates that the two teachers are critical as to how the act of writing is realised in the task and in the student's text⁵:

- S2: But do they mean that this is an exploring text? That it is discussing, analysing and interpreting?
- B2: The way it's written and the way the task is given [. . .] The text doesn't explore anything, it is just a reproduction of facts, or what he knows.
- S2: He just shares the facts with us, explains what this religion is about.
- B2: But I don't think it's the student's fault, it's the task.
- S2: That may be. But it depends on what the teacher was expecting when he asked them to explore a religion.
- B2: Yes, it's difficult.

By using and questioning relevant concepts, the two teachers show knowledge of the construct of writing and how to use it as a basis for their assessment. They also relate their discussion to the task and the classroom context. Groups 1 and 3, also making use of the construct in their discussions, discussed how acts and purposes of writing are realised in tasks and texts. Utterances like "This is certainly an exploring task" and "This text is obviously describing" may illustrate this. The teachers show a flexible understanding of the construct by discussing how, for example, an exploratory text has to contain descriptive parts.

The functional understanding of writing includes reader-oriented perspectives. In most of the assessment dialogues, the teachers discuss such aspects as part of their overall assessment. "Who are the intended reader(s)?" is thus a frequently asked question. In a discussion where Group 3 disagrees on how to assess the domain "Communication" in relation to a folder written for young readers, teacher R3 argues in the following way: "The reason that I arrived at level 4 is that this text communicates well with young people. Young people do not bother to read that much. The student is clever at picking relevant elements." This statement underlines R3's functional understanding of the student's text adapted to the intended readers, and at the same time shows how she sees "Communication" and "Content" as interrelated domains.

The teachers' emphasis on functional aspects of students' writing is especially apparent in instructional and persuasive texts. Teacher B2, for example, assesses a student's instruction by asking "Would I be able to carry out the described process?", and teacher J1 states that a student has to be more specific in his argumentation letter if he *really* wants the school to buy iPads for the students. Both these examples show how the teachers attach importance to the intentional use of the texts. Functional perspectives are also considered when assessing more specific linguistic aspects, like Group 3 commenting on an instruction:

R3: I have noted level 4 on language use, in fact, because I think he is clever at explaining. Neither too much nor too little is said. The language is very precise.

A3: Ok, I can agree with that. And it's not advantageous to have a very rich language in such an instruction. The student understands that.

⁵ The dialogues are transcribed in Norwegian and translated into English. Transcription key: [...] part of speech left out; [] contextual information and/or summing up of speech left out; ... incompleted/interrupted utterances; words in italics – pronounced with emphatic stress.

The teachers here agree that the language is well functioning for this writing purpose.

The examples above show – in different ways – how all the teacher groups anchor their assessment in the construct of writing on different text levels. We see a flexible and independent approach, indicating that the teachers have understood and refined the construct – and thus made it part of their assessment competence (cf. Parr, 2011, p. 33). This represents progress from session 1, where a majority of the teachers had a more instrumental approach and rather relied on the specific norms of expectations than the overarching construct and interpretations of the students' texts (Matre & Solheim, 2015).

When it comes to the teachers' use of the specific assessment resources, a closer look at the assessment dialogues reveals that the groups take advantage of the tools to varying degrees. All of them are using the seven assessment domains to navigate in the texts and to sort out qualities and shortcomings. But not all the teachers fully manage to exploit these possibilities or to use the resources to obtain a more nuanced picture of the text as a whole.

The teachers in Groups 2 and 3 show a flexible use of the resources. They use the listed order of domains as a basis for their discussion, but are moving back and forth. The excerpt below shows how R3 and A3 effectively draw lines between different functional competences ("Text structure", "Contents" and "Communication"), but are still sorting out specific aspects:

- A3: Mhm, yes. There's something about the thematic coherence too. It's a very short text, so it's a bit difficult to ...
- R3: Actually, I think the introduction is very good. It's good because he explains very simply and precisely what they have filmed, what they have made the commercial for. Yes. So he is communicating well with that introduction. But I think he should have written some more, for example what they disagreed on when they were supposed to edit the movie.
- A3: Yes. That belongs to "Contents".

The tools are used here as scaffolding more than strict guidelines. Several similar episodes illustrate an approach to the assessment situation where the teachers are making interpretative readings, in addition to assessing the text within each of the domains.

The teachers in Group 1 are more instrumental in their approach, following the listed order of the assessment domains more mechanically. They spend little time discussing functional competences and tend to give the same score to all these aspects, which may indicate that they find it difficult to see and separate different qualities at these domains. Instead, they spend far more time discussing coding competences and surface traits, and they also seem more confident here—in line with the description of the instrumental approach in session 1.6

One symptom of a flexible use of the assessment resources is that the teachers see how the norms of expectations have to be used selectively, as not all features listed under the different domains are relevant in all the texts. One example is the criterion under "Text structure" saying that the writer should master the composition of the text by using an introduction, a main part and an ending. In the assessment of a student's text that gives an instruction for a game, Group 1 criticises the text for lacking an introduction. Later, however, when considering functional aspects, they change their mind:

J1: An instructional text, because that's what this is, should not contain much more than what is necessary to say. That makes it easier to understand. F1: Yes

The teachers see that a specific introduction might be redundant, and they therefore choose to ignore this criterion. It is interesting to see how, within a short sequence, they move from an instrumental strategy, relying on the norms of expectations and focusing on the scale, towards a more flexible approach. This illustrates how they gradually manage to relate content and text structure to the function of the text – and that they are on their way in the continuum (cf. Fig. 2).

5.2.2. Use of metalanguage

The teachers in session 2 use metalanguage to varying degrees in their dialogues. Groups 2 and 3 display rather extensive knowledge of concepts from grammar and text linguistics, while Group 1 largely relies on everyday language.

Teacher R3 is one of the teachers who easily manages to talk about different text dimensions using relevant linguistic and textual concepts. For example, she distinguishes between "complex sentences", "subordinate sentences" and "sentence fragments", and uses these concepts in discussions on punctuation and language style. She also talks about "coherence" and "conjugation" and labels different parts of the text (like "ingress", "introduction, 'turning point'). By employing her metalinguistic competence, R3 manages to talk about student texts in a precise way and to contribute to a qualified exchange of meanings in her group.

The other teachers do not hold the same knowledge of metalanguage as R3. Still, they display that they perceive essential aspects of the texts by pointing to them and reading out loud, commenting on extracts using non-technical language. Thus, they turn to alternative strategies when talking about the texts. In Group 1, for example, the teachers identify a complex

⁶ These differences have to be seen in light of their text competence and metalanguage, which will be further discussed in Section 5.2.2 below.

sentence including four sub-clauses and label it as "advanced language" and "kind of grown-up language". They obviously see the quality of this sequence, but do not label it with syntactic metalanguage.

In all the three groups there are many similar utterances related to the assessment domains "Language use" and "Text structure", especially on the micro level. Everyday language is often used when commenting on syntax, like in these examples: "There's a few incomplete sentences", the student has "long/short/complicated sentences", "clumsy formulations" or "well formulated, nice sentences". The following excerpt also illustrates this tendency:

- A3: I see that you have marked level 3 on "Language use". I think she has long, awful sentences. [quotes from the text]
- R3: No, I think she is on level 2.
- A3: Yes, this is not written in a mature way. It's kind of childish . . . kind of young student text language.

A similar tendency applies to labelling connectors and adverbials grammatically. Also here, the teachers point to occurrences in the texts: "He uses *thereafter* and *finally*", presupposing that these words are important in structuring the text, without being explicit as to what functions they have. It is reasonable to interpret the pointing and exemplifying as steps on the teachers' way to enhanced text knowledge. They manage to perceive structural and syntactic qualities in the texts, but fail to label them with relevant metalinguistic concepts to make precise descriptions. These experiences are in line with the results from session 1, indicating limited knowledge on these domains.

Also in Group 2, where the teachers master metalanguage rather well, they seem to fall short on certain domains. In a discussion on whether the writer communicates in a relevant manner, teacher G2 says:

G2: I have put it at level 3. Could have considered 4, but stopped at 3 because it's very *tidy* at times, but there are some eh *things* here that there are *lacking*. He has no such . . . Here: 'Next morning, when he woke up, he had become a Buddha'. We do not get to know any more.

Teacher G2 puts emphasis on the words in italics. At the same time this underlines his limited metalanguage; he needs to instantiate what he sees in the text. To make his point clear, he turns to the text and reads. Again, we see the strategy of pointing and exemplifying, together with the use of everyday language.

Despite relevant use of metalanguage among all the teachers in session 2, the shortcomings are at times striking, especially related to functional competences and to labelling syntactic phenomena and cohesion on the micro level. This is an impediment for seeing essential qualities in the texts and assessing them in a relevant way. However, the teachers at the end of the intervention period are clearly using a more precise language than observed in session 1. The teachers are obviously enhancing their competence through their collaboration – making progress along the continuum.

5.2.3. Relating to teacher practices and experiences

The NORM project as a whole is based on the knowledge of experienced teachers. The assessment dialogues analysed in this study have frequent references to the teacher's practices. Utterances like "This is like expected, isn't it?" can both be grounded in the teachers' practices and in the scale. The dialogue below illustrates how the teachers in Group 2 use their experiences from working with students at different ages as the basis for their assessment, but without anchoring the discussion in the text or the given tools:

- B2: The level of reflection is very low here.
- S2: Yes, it is . . . [. . .] It seems almost like juvenile, considering that this is a year 7 student.
- B2: It does.
- S2: I would rather have said maybe a year 4 or 5 student.

Teacher R3, on the other hand, anchors her assessment to a greater degree in the norms of expectations while she uses her own experiences more as support: "He's communicating in a relevant manner. And this is the voice of a seventh grader," she states. In session 1, and in earlier stages of the NORM project, the tendency to rely on teacher experiences *ahead of* the construct and the tools was more pronounced.

One phenomenon running through several dialogues, especially from Groups 2 and 3, is frequent comments concerning aspects of *formative assessment*. Even if the dialogues in this session – according to the instructions – primarily should deal with summative text analyses, and even if the teachers did not know the writers, tentative formative considerations were made, like: "If we were supposed to give a feed-forward response to this student, I would say be aware of too long sentences". Such perspectives indicate that the teachers see assessment for learning as an overarching perspective for their text readings.

The dialogues also reveal how the teachers, at the end of the intervention, see writing as a process involving responses and revisions – another key issue in the NORM project. Several comments focus on the texts' potential for improvement and/ or points to concrete changes that could be done: "If this was a draft, I would have asked him to change the closing part of the text". Such utterances illustrate that the teachers see the text as a part of a writing process – and, as pointed out above, they see themselves in a teacher role, even if they are talking about expectations and responses to unknown students in imagined situations.

The teachers in Groups 2 and 3 are the ones who most often consider assessment for learning – both when it comes to strengths and weaknesses in the text:

- R3: If we were to write a feed-forward message to this student, then it would be that we think that he has a vivid language; he has to some extent long, comprehensive sentences, but that he has to be more aware of the use of the comma.
- A3: Mhm [pause] yes, I think that if we were to write a forward response, I actually think . . . I think it's very important that we only write what he ought to . . .
- R3: We have to pick one thing that he specifically is going to work on.
- A3: Yes

At the end of most text discussions, R3 and A3 make inferences beyond the text, summarising and trying to understand the texts in light of actual writing situations – and making formative considerations. This becomes a way of activating – and developing – their own teacher competence in concert with colleagues. The way the teachers rely on former experiences and relate the actual assessment situation to their practice represent a functional and flexible use of the construct and the derived assessment tools. Consequently, they make the assessment dialogues relevant in their professional development.

5.3. The three assessment groups – opening different dialogic spaces

The analyses presented above, display great variation among teachers given the same training and the same supporting resources. How can this be understood and explained? A closer look into the interaction in the three groups might give some answers. Below we will present an analytical description of the interplay between the teachers, focusing on how they develop topics through initiatives and ways of responding (Linell & Gustavsson, 1987; Linell, 1998), aiming at identifying what characterises the dialogues and how the teachers to varying degrees are relying on and learning through their colleagues in the discussions.

The analytical units in these analyses of interaction are *topical episodes* conceived as "units of naturally unfolding social interaction" which "attend to and move within some kind of 'topic'" (Linell & Gustavsson, 1987, p. 187). Such episodes have been analysed by focusing on how the participants take initiatives and respond to one another's utterances, and in that way contribute to the joint production of meaning. In the description below, we present our findings through a sample of episodes, which we comment on to illustrate our findings.

5.3.1. Group 1, teachers J1 & E1

In Group 1, the teachers, E1 and J1, hold rather symmetrical roles in their discussions. The scale plays an essential part in their dialogues, and they sometimes seem to be seeking consensus on the level of mastery prior to stating reasons for their assessment.

The following episode from assessment of a fourth grader's text may illustrate some central aspects characterising the interaction in this group.

- (1) E1: If we start out with "Use of the medium", so . . . It's neat.
- (2) $\,\,$ J1: Yes, it's very nice. It's following the margin all through the text.
- (3) E1: Yes, split up a bit with open lines to get some air.
- (4) J1: Heading
- (5) E1: Continuous handwriting
- (6) J1: Yes, I think it's as expected.
- (7) E1: Yes, I think that it's at least as expected.
- (8) J1: Yes, it might be a bit more.
- (9) E1: I was thinking more in direction of level four.
- (10) J1: Yes, but I can agree with that. Very neatly set up and easy to read. Actually nothing that pulls it down.
- (11) E1: This is a text that, when you get to see it, makes you want to read.
- (12) J1: Yes
- (13) E1: Gives a good first impression.
- (14) J1: Yes, it does. Continuous handwriting all over. Yes, but that's OK, we'll put it on level four.
- (15) E1: Yes

E1 initiates this episode, followed by a judgement: "It's neat". J1 follows up by confirming and expanding on E1's utterance, stating that the text is aligned with the margin. E1 responds by agreeing and contributing with a new expansion on the visual impression ("air" in the text). The two next turns (4–5) add to the conversation in a similar cumulative way. Together the two teachers, in these six opening utterances, are giving an evaluative description of the text relating closely to criteria from the norms (use of margin, heading and continuous handwriting).

In utterance 6, J1 starts discussing the level of mastery. "I think it's as expected," she says. E1 agrees and reinforces this judgement, "... at least as expected". Again J1 agrees, and also opens for scoring the text higher. E1 then reveals that he actually had thought of giving a higher score. Once again J1 takes her turn by agreeing – and underpinning, "Very neatly set

up and easy to read. Actually nothing that pulls it down". In the last four utterances the two partners alternate by expanding the topic using the same cumulative approach as indicated above. They conclude by stating their agreement. It is interesting to note that a majority of the utterances starts with a confirming "yes".

To summarise, the analysis uncovers a very supportive and closely cooperating episode. The partners are attending to a shared focus, linking to and building further on one another's utterances, confirming and expanding on the topic. This appears as a typical cumulative dialogue (cf. Mercer 2000), with no challenging opposition, characterised by a consensus seeking approach.

We find a similar consensus seeking interaction in most of the dialogue in Group 1. The teachers add to the ideas of one another in a close interplay, confirming each other's utterances and adapting to one another in an attentive way.

The analyses also reveal some other characteristic features. Firstly, the two teachers are minimising disagreements. All through the discussion of the ten texts they explicitly disagree only twice, and then their diverging points of view are brought to a shared understanding very soon through pleasant negotiations supported by confirming minimal responses.

Furthermore, the teachers' initiatives and responses are often formulated in an inquiring way. Their points of view are presented as questions or suggestions, often using moderating words: "But isn't it as expected anyway, maybe?" The teachers seldom insist on their points of view, instead they turn to one another in an inviting way, adapting and adjusting. This mutual inviting and supporting approach is another characteristic trait in this assessment group (cf. Wyatt-Smith & Klenowski, 2013).

The interaction patterns that we find in Group 1 indicates a shared but rather narrow understanding of the assessment situation and the task. The teachers do what they are supposed to do in a ritualistic way (cf. the instrumental approach), focusing on the criteria, negotiating scores and ending up with joint conclusions. They do not expand the discussions to include contextual considerations or drawing on own teacher practices. Their cumulative and consensus-oriented interaction style narrows the discussion and constricts the dialogic space.

5.3.2. Group 2, teachers S2 & B2

The relation between the teachers within Group 2 are also rather symmetrical, but it is worth noting that while S2 starts off as the most confident of the two, several incidents indicate that B2 gradually adopts a more confident role and strengthens his position. Text-specific discussions constitute the main part of the conversation between these two teachers, while they pay less attention to the scale.

The following episode illustrates some key aspects concerning the interaction in Group 2. The teachers are discussing structure in a text written by a seventh grader.

- (1) B2: I have marked level four also here, yes.
- (2) S2: Yes. I can agree with that, actually. It's very tidy and schematic, but there's something with this last part . . .
- (3) B2: The last part, yes . . . But I don't think it's enough to . . . Otherwise, I think it's quite good.
- (4) S2: Yes [pause]. But isn't this more like . . . Well . . . Isn't it a bit serious that . . . ? When you read about the Buddhists, as well written as here, it makes you think that now you are going to get a summing up or a concluding part where she explains how it is in India today. Then I would expect that . . . And then she just goes back to . . .
- (5) B2: Yes, I agree with that. And then it's . . .
- (6) S2: I think the conclusion kind of reduces . . . If this had been a first draft, I would have said that "If you change the concluding part a bit . . . " I see now that she maybe could have used . . .
- (7) B2: And then I think that if I relate to the norms of expectations, this is not much above what I would expect from a seventh grader.
- (8) S2: No, it depends how much . . . She's clever, I think, to pick out what is relevant within Buddhism, without bringing in much else. Even if she uses words, like you say, like "pudsja" without explaining what they mean . . . But I would have changed a bit on the concluding part here and made a conclusion that told a bit about Buddhism today. And then maybe take this part and rewrite it [exemplifies].
- (9) B2: That's more natural.
- (10) S2: To get that concluding part.
- (11) B2: That would have been a more natural way of concluding. We'll put it on level three.

This episode hinges on how the two teachers re-evaluate their points of view as a result of the discussion. B2 starts the sequence by presenting his scoring, "I have marked level four". S2 responds by agreeing and underpinning this evaluation. But then he adds an objection, "... there's something with this last part". B2 obviously sees his point and agrees, but in a reluctant way (turn 3). He does not think that this objection is enough to change his scoring, and emphasises his positive evaluation once again. In turn 4, S2 links to this utterance, agreeing, but at the same time elaborating further on his objection, explaining why he does not think the concluding part works well. He pauses, hesitates and interrupts himself. B2 follows his reasoning (turn 5), and S2 continues: "I think the conclusion kind of reduces ..." (probably: the quality of the text). He suggests some tentative formative response, followed by some words on how he *now* sees the text (turn 6). We get the impression that S2 is in a process of talking himself into clarity, in concert with his colleague. In turn 7, B2 admits that he is about to change his initial judgement, "And then I think [. . .] this is not much above what I would expect from a seventh grader". He relates both to the norms of expectations and his own teaching experiences as references for the assessment. Again S2 links to B2's utterance agreeing, and he summarises how he has come to see the text, balancing the stronger parts against the weaker concluding part, suggesting more extended tentative feedback. B2 rounds off the episode by agreeing fully with S2, stating: "We'll put it on level three".

In this dialogue, the teachers position themselves as confident raters who dare to present their points of view, without posing them as questions or adding modifying words. They both state clearly that "I think", "I would have said", "I would have changed" (turns 6, 7, 8), followed by their points of view. They obviously see that what they are dealing with are interpretations, nothing absolute.

The analysis above reveals a closely collaborating dialogue where the two teachers have a shared focus. They link closely to each other's utterances and build further on them. In addition, an opposing utterance leads to a closer reading and discussion of the text. The two teachers are not primarily seeking consensus, instead their communicative project seems rather to be to understand and interpret the text, underpinned by their readings. In this process, they do not limit themselves to seeking support in the norms, they also relate to broader contexts as tentative communication situations and teacher experiences. An appropriate label to describe this episode would be a cumulative dialogue with exploratory elements (cf. Mercer 2000).

This way of interaction is characteristic for extensive parts of the assessment conversations in Group 2. An especially prominent trait is the teachers' tendency to underpin and give reasons for their points of view; they even state reasons when they *agree* on their scorings, as in the following discussion on orthography:

- B2: There I have put it on level 3
- S2: Yes, I have also put it on 3. What's the reason for putting it on 3 then? Is the language a little bit too simple?

S2 here challenges himself – and B2 – to argue for their judgements, which results in a sequence where they end up by agreeing on a higher level of mastery. They also challenge each other by daring to be very explicit in their disagreements, as in one incident where S2 opposes B2's level 3: "The text is too thin. It's not acceptable to say that this is what we expect from a seventh grader [...]. I nearly feel that as a teacher you're a bit sloppy if you say that this is good enough."

The interaction in this group displays a common interest in understanding the texts and the students' projects. This implies that stating reasons and including different perspectives are valued as more important than consensus. This cumulative and (genuine) questioning way of interacting stimulates discussion – and opens up dialogic spaces with a potential for learning.

5.3.3. Group 3, teachers R3 & A3

The third group consists of teacher R3, who are holding an extended knowledge on grammar and text linguistics, and one younger teacher, A3. They enter the conversation with different approaches; A3 presents his score and is ready to conclude at once while R3 insists on arguing for her judgement. Their first utterances run like this:

- A3: Level 3 on "Text structure".
- R3: I have marked level 4 there because I think the text has such a good thematic coherence. It is split up in well-functioning paragraphs, even if the two last ones could have been combined into one.

Similar sequences follow. A3 introduces his score, while R3 gives detailed descriptions of how she reads the text. They obviously have different understandings of the procedure from the outset, but through R3's explicit and insistent approach, based on her grammatical and textual knowledge, A3 gradually adjusts to her practice and also starts underpinning his judgements. At the beginning, he is rather fumbling and imprecise ("a bit short", "a bit difficult"), and twice he admits that he does not have a good reason for his scoring and goes back to the text to underpin his opinion.

Stating reasons and arguing for their assessment are main characteristics of the interaction in this group – even when the teachers agree on their scores. Aligned with this, they are often responding to one another's utterances by opposing, as illustrated below.

- R3: I have put him on level 3-when it comes to structuring of the text, because I think he has almost a schematic introduction to everything that he writes about, which makes it hard to read.
- A3: But he has chosen to do it that way, and he has followed in a way the teacher's instruction, but he has not learnt to do it in a more elegant way. [. . .] I don't think it's below what should be expected.

The adversative conjunction *but* and the causal conjunction *because* frequently occur in the two teachers' discussions. They challenge one another, explicitly and implicitly, by disagreeing and arguing for their respective points of views. This leads to negotiating parts in the dialogues and more nuanced descriptions of the texts. Several times these sequences end with A3 concluding "I give in. You're right".

The two teachers are both contributing very actively in the dialogue. A3 is the one introducing most topics, while R3 responds by elaborating them and anchoring her arguments in the texts, using her extensive linguistic subject knowledge. They take on different roles in the conversation, and through their collaboration both are adding to their understanding and also, when it comes to A3, the repertoire of meta-concepts. An excerpt from a discussion on punctuation may illustrate this:

- A3: He uses a comma in front of 'but' and a comma in front of subordinate clauses. So he masters the use of the comma [refers to the standards].
- R3: But there are some places where he doesn't separate the subordinate clauses with a comma [gives several concrete examples].
- A3: Are we going to give him ...?
- R3: [continues commenting examples from the text]
- A3: OK
- R3: Yes, therefore I have given him 2, because there he has a potential for improvement.
- A3: I think you're a bit more knowledgeable about comma rules than I am. I barely noticed this. I didn't read it that closely.
- R3: No, this student likes to write long sentences, but he has not remembered that he has to separate subordinate clauses and such sentence fragments with commas.

A3 is the one taking the initiative here, focusing on the writer's competence on punctuation. He is ready to conclude after a short exchange ("Are we going to give him ...?"), but his partner does not allow him to and continues arguing with reference to the text, using relevant metalanguage. A3 realises his own limited competence in this field. Later on, assessing other texts, he returns to this topic several times, asking questions about commas and how to separate sentences: "I think this represents a *new* sentence. But . . . it might perhaps be permitted to use a comma there?" He seems challenged – and inspired – by his partner's more extensive knowledge, adopts her words and terminology and tries it out, in close cooperation with his partner. A3 positions himself as an attentive listener, eager to try out new knowledge, while R3 maintains her role as a confident and competent reader.

Nonetheless, this cooperation does not take place without resistance. An obvious power struggle is revealed in their interaction. A3 tries to take the lead by decisively taking initiatives, R3 by elaborating on descriptions and evaluations. This creates a tension which intensifies the discussion between the teachers.

With their different knowledge basis, and taking different roles in their assessment, the two assessors give the conversation a dynamics that seems to make it a good arena for learning and professional development. They are asking questions, challenging one another, arguing for different views and daring to disagree – all the time signalling mutual respect for one another's views. Their reasoning and opposing opinions result in interpretations and negotiations that lead them to fluctuate between different perspectives and textual levels. Together they are opening up dialogic arenas which invite to dialogues with strong exploratory traits (Mercer, 2000).

6. Discussion: Towards an integrated use of assessment resources and text knowledge

Altogether, the analyses show that the teachers anchor their assessment in the construct of writing, while there is great variation when it comes to the way they use the assessment tools and the associated metalanguage. This variation is related to the teachers' linking of their newly acquired knowledge to former experiences – and to the way they interact with each other.

An important aspect of the study is the flexible and functional approach to assessment identified in session 1 and further developed in session 2 – in contrast to a more instrumental approach. Elements from these approaches are running through the various parts of the analysis, and all the teacher groups are, to varying degrees, making use of both. We argue that the teachers' ability to read and interpret the students' texts and to point out characteristic traits according to context and purpose, comprise a fundamental approach for developing a qualified basis for formative assessment – supported by the norms of expectations. Using Sadler's terminology (1989), we could say that such an approach is based on metacriteria on the practical use of the resources – and experience – that allows the teachers to attach importance to the specific text and its context, moving back and forth between different textual domains and levels. This approach also includes use of the writing construct itself as an adaptive semiotic tool that helps the teachers to see and value different qualities of the texts. The more instrumental approach, on the other hand, where the teachers to a larger degree use the norms of expectations in a ritualistic way, have more restricted metacriteria that do not open for seeing the texts against a more holistic and contextual backdrop.

The analyses reveal that all the teachers through their collaborative assessment are establishing a better foundation for a flexible approach. However, it is obvious that the teachers in Groups 2 and 3, who to a larger degree are adding their knowledge and experiences from the intervention and their own professional practices to the process, have developed more elaborate metacriteria. By also relating their summative assessment work to overarching perspectives on assessment for learning (relating to relevant purposes and suggesting formative responses), they show that they are able to operationalise the project's perspectives on writing and assessment within authentic educational contexts. This means that they are using the norms of expectations in a more pragmatic way related to specific subject discourses. The teachers' former experiences and professional practices play an important part in their work, giving resonance to the new perspectives on writing raised in the intervention and helping the teachers towards a more integrated knowledge on writing education. This flexible approach can be related to Marshall (2004) who speaks of the affordances in making progress through heading towards a horizon based on guild knowledge on writing, not limiting the assessment to clearly defined goals.

The teachers' work leads to establishing of small communities of practice (Wenger, 1998) where they together develop a more integrated understanding of the resources. Similar processes are described in Parr et al. (2007), with support in Little et al. (2003):

While we see assessment as having, above else, a purpose of informing teaching and learning, we also see the process of engaging in assessment functioning to deepen the teacher understanding of their subject and their teaching of it.

Collectively examining samples of students' work, against specific criteria, can foster teacher learning within a professional community (Parr et al., 2007, p. 71).

The analyses of the interaction in the three communities of practice display great variation, offering different potentialities as arenas for professional learning. One reason is that the groups establish different understandings of the assessment task. In Group 1 the teachers interpret it as primarily reaching consensus on the scores by referring to the norms of expectations. In this context, the scale becomes a key element. In the two other groups, the main focus is on the texts, and the teachers share one another's readings as the basis for their decisions, using the norms and their professional experiences as support. The different interaction patterns that are revealed within the three groups, shows that Group 1 is very supportive and consensus-oriented, building uncritical and non-competitive cumulative dialogues. In Group 2, a cumulative interaction is also dominant, but largely oriented towards inquiring one another's assessments and understanding of the texts. In Group 3, the dialogues are characterised by the teachers disagreeing and challenging one another, resulting in many exploratory episodes where the underpinning judgements are in focus. This group also holds a distinct asymmetry when it comes to knowledge basis, with one of the teachers revealing an extensive insight into the field of linguistics. In the other groups, the joint knowledge building and the use of metalanguage and text references are more equally distributed.

Bearing in mind the close connection between language and thought, with language understood as a tool for sharing and jointly developing knowledge (Mercer, 2000; Vygotsky, 1986), these different interaction patterns, knowledge and perspectives stimulate learning to varying degrees. The teachers in Group 1 are learning to identify criteria from the norms in the students' texts. They are thus learning to see different aspects of the texts better, but due to their restricted metalanguage they are mainly working on the surface and to a little extent value functional perspectives. This gives a frail foundation for entering deeper into nuanced and qualified discussions of textual qualities. Such an instrumental approach narrows the dialogic space within this group. In Group 3, on the other hand, the critical challenging of one another's readings and assessments to a much larger degree open up dialogic spaces with the potential for developing knowledge and understanding. Opposing utterances compel the teachers to argue for their points of view and lead them back into the texts to re-read and make re-assessments, negotiating their judgements. The more knowledgeable teacher in this group also makes it possible to draw on textual and linguistic knowledge that stretches beyond the given criteria. The exploratory interaction and the asymmetry obviously help these two teachers to develop a community of interpretation in an extended meaning, which implies a deeper understanding of texts. The potential in disagreeing is prominent here, contrary to the other groups, who most likely perceive opposing as a risk of losing face. In this way asymmetrical dialogues may be looked upon as fruitful.

The three communities of practice described through the analyses open up for dialogic spaces that are differentially effective in assessing the texts, achieving consensus and building knowledge among the teachers. The teachers are to varying degrees relying on and learning through their dialogic cooperation, depending on their way of interacting, their use of the given construct and assessment resources and their professional knowledge basis.

7. Concluding remarks

The analyses of the teachers' assessment dialogues indicate that they are heading towards a more functional use of the writing construct and the derived assessment resources. Even if the data material does not make it possible to study teachers' individual development of assessment competence, we may state that the dialogues from session 2, to a larger extent than those from session 1, are anchored in a shared understanding of writing, aligned with the construct and the intervention. The teachers' metalinguistic knowledge and concepts seem to be a key factor both for seeing qualities and nuances in the students' texts and serving as a basis for arguing and stating reasons for assessment and for further writing instruction. Such knowledge is unevenly distributed among the participating teachers, from having a well-developed repertoire to mainly relying on everyday language. This variation emphasises that expanding teachers' metalinguistic knowledge and professional vocabulary for textual and linguistic aspects is an important area for further development – and future research.

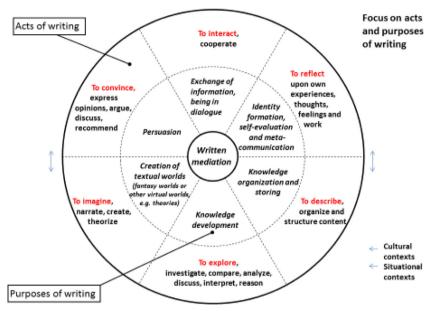
The presented study points to how the quality of the teachers' assessment is enhanced through collegial discussions and in the dialogic spaces opened up through questioning, arguing and stating reasons for readings and assessments. The approach of having teachers discuss students' texts, referring to concrete resources and continuously refining them, seems to represent a stimulating environment for professional learning. But, it takes time and effort to develop the knowledge and metalanguage needed – and to implement this in different educational contexts.

Drawing lines between the findings from this study and similar professional development projects, we find it relevant to point to the potency of teachers' talk on students' texts as a decisive factor for teachers' advancement within writing education. By arranging for such collaboration, school leaders may thus create promising arenas for teachers' development – and for sustainable assessment practices adapted to local learning ecologies.

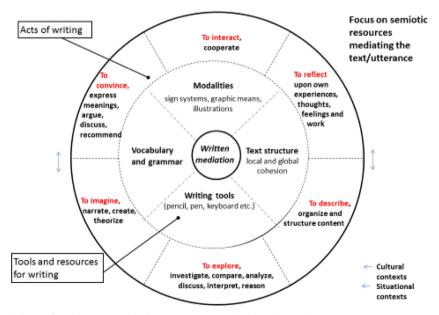
Acknowledgements

We are grateful to our colleagues in the research group, Kjell Lars Berge, Lars Sigfred Evensen, Hildegunn Otnes, Gustaf Bernhard Uno Skar, Ragnar Thygesen, Sindre Dagsland, Trine Gedde-Dahl, Jannike Ohrem Bakke and Jorun Smemo for their collaboration in the NORM project.

Appendix A. The wheel of writing⁷



The Wheel of Writing - focusing on acts and purposes of writing.



The Wheel of Writing – focusing on semiotic resources mediating the text/utterance.

⁷ See Berge, Evensen et al. (2016).

Appendix B. Norms of expectations - examples from the assessment domains "Contents" and "Language use"8

Assessment domain 2: "Contents"

(Within this domain, the teachers assess whether the topic is dealt with in a relevant and elaborate way) After four years of schooling, the writer is expected to . . .

- present his/her own impressions, experiences, thoughts and/or opinions
- present relevant content elements derived from conceptions, dimensions of experience and/or knowledge familiar to the reader(s)

After seven years of schooling, the writer is expected to . . .

- present and elaborate his/her conceptions, experiences, thoughts and/or opinions, as well as those of others
- present and elaborate on content elements that are topically relevant, e.g. to a subject field
- adjust the amount of content relative to the topic

Assessment domain 4: "Language use"

(Within this domain, the teachers assess choice of words, sentence structure and style) After four years of schooling, the writer should . . .

- use comprehensive declarative sentences, interrogative and imperative sentences
- use elaborate nominal phrases
- demonstrate some variation at the beginning of sentences
- use a relevant and varied vocabulary, including terms relevant to school subjects
- include some idiomatic expressions, where appropriate
- use direct and indirect speech where relevant

After seven years of schooling, the writer should . . .

- build complex and varied sentences of appropriate length
- use a relevant, varied and precise vocabulary, including discipline-specific terms
- use an appropriate tone
- use various idiomatic expressions, where appropriate

Specific norms of expectations are established for all the seven assessment domains presented in Fig. 1. These were developed in close cooperation between experienced teachers and the research group. See Evensen et al. (2016) for further description of the norms and the development process.

References

Bakhtin, M. (1986). Speech Genres and Other Late Essays. (Transl. by V. Mc Gee, edited by C. Emerson & M. Holquist). Austin, Texas: University of Texas Press. Behizadeh, N., & Engelhard, G. Jr. (2011). Historical view of the influences of measurement and writing theories on the practice of writing assessment in the United States. Assessing Writing, 16(3), 189–211.

Berge, K. L., Evensen, L. S., & Thygesen, R. (2016). The wheel of writing: a model of the writing domain for the teaching and assessing of writing as a key competency. *The Curriculum Journal*, 1–18, . http://dx.doi.org/10.1080/09585176.2015.1129980.

Berge, K. L., Skar, G., Matre, S., Solheim, R., Evensen, L. S., Otnes, H., & Thygesen, R. (2016). Introducing new semiotic tools for writing instruction and writing assessment: effects on students' writing proficiency. submitted.

Bernstein, B. (1990). Class, codes, and control. The structuring of pedagogic discourse, Vol. 4, London: Routledge.

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. Assessment in Education Principles Policy Practice, 5(1), 7-74.

Colombini, C. B., & McBride, M. (2012). Storming and norming: exploring the value of group development models in addressing conflict in communal writing assessment. Assessing Writing, 17, 191–207.

Evensen, L. S., Berge, K. L., Thygesen, R., Matre, S., & Solheim, R. (2016). Standards as a tool for teaching and assessing cross-curricular writing. *The Curriculum Journal*, 1–17, . http://dx.doi.org/10.1080/09585176.2015.1134338.

Glaser, B., & Strauss, A. L. (1999). The discovery of grounded theory. Strategies for qualitative research. New York: Aldine De Gruyter.

Huot, B. (2002). (Re)articulating Writing Assessment for Teaching and Learning. Logan, Utah: Utah State University Press. http://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1136&context=usupress_pubs.

Jølle, L. (2014). Pair assessment of pupil writing: A dialogic approach for studying the development of rater competence. Assessing Writing, 20, 37–52. Linell, P., Gustavsson, L. (1987). Initiativ och respons. Om dialogens dynamikk, dominans och koherens. [Initiative and response. On the dialogue's dynamics, dominance and coherence]. SIC 15, Tema Kommunikation, Universitetet I Linköping.

⁸ See Evensen et al. (2016).

Linell, P. (1998). Approaching dialogue. Talk, interaction and contexts in dialogic perspectives. Amsterdam: John Benjamins Publishing Company.

Little, J., Gearhart, M., Curry, M., & Kafka, J. (2003). Looking at student work for teacher learning, teacher community, and school reform. Phi Delta Kappan185-

Marshall, B. (2004). Goals or horizons – The conundrum of progression in English: or a possible way of understanding formative assessment in English. The Curriculum Journal, 15(2), 101–113. http://dx.doi.org/10.1080/0958517042000226784.

Matre, S., & Solheim, R. (2015). Writing education and assessment in Norway: Towards shared understanding, shared language and shared responsibility. In E. Krogh, & S. Penne (Eds.), Paradoxes and negotiations in Scandinavian L1 research in languages, literatures and literacies. L1 [78_TD\$DIFF]- educational studies in language and literature: (15. pp. 1-33).. http://dx.doi.org/10.17239/L1ESLL-2015.15.01.05.

Mercer, N. (2000), Words and minds: How we use language to think together, London: Routledge,

Moss, P. A. (1994). Can there be validity without reliability? *Educational Research*, 23(2), 6–12.

Myhill, D., Jones, S., & Watson, A. (2013). Grammar matters: How teachers' grammatical knowledge impacts on the teaching of writing. Teaching and Teachers Education, 36, 77-91.

Myhill, D. (2011), 'The ordeal of deliberate choice': Metalinguistic development in secondary writers. In I. V. Berninger (Ed.), Past, present and future contributions of cognitive writing research to cognitive psychology (pp. 247–274). New York: Psychology Press/Taylor Francis Group.

Parr, J., & Timperley, H. (2010). Feedback to writing, assessment for teaching and learning and student progress. Assessing Writing, 15, 68-85.

Parr, J., Glasswell, K., & Aikman, M. (2007). Supporting teacher learning and informed practice in writing through assessment tools for teaching and learning. Asia-Pacific Journal of Teacher Education, 35(1), 69-87. http://dx.doi.org/10.1080/13598660601111281.

Parr, J. (2011). Repertoires to scaffold teacher learning and practice in assessment of writing. Assessing Writing, 16, 32-48.

Sadler, D. R. (1985). The origins and functions of evaluative criteria. Educational Theory, 35(3), 285-297.

Sadler, D. R. (1989). Formative assessment and the design of instructional systems. Instructional Science, 18, 119-144.

Sadler, D. R. (2009). Indeterminacy in the use of preset criteria for assessment and grading. Assessment and Evaluation Higher Education, 34(2), 159-179. http://dx.doi.org/10.1080/02602930801956059.

Solheim, R., & Matre, S. (2014). Forventninger om skrivekompetanse. Perspektiver på skriving, skriveopplæring og vurdering i «Normprosjektet».

[Expectations on writing competency. Perspectives on writing, writing education and assessment in The NORM project]. Viden om Læsning, 15, 76-89.

Vygotsky, L. S. (1986). Thought and language (Transl. and edited by A. Kazoulin.). Cambridge, MA: MIT Press.

Wenger, E. (1998). Communities of practice. Learning, meaning and identity. Cambridge: Cambridge University Press.

Wyatt-Smith, C., & Klenowski, V. (2013). Explicit, latent and meta-criteria: Types of criteria in play in professional judgement practice. Assessment in Education: Principles Policy & Practice, 20(1), 35-52.

Yancey, K. B. (1999). Looking back as we look forward: Historicizing writing assessment. College Composition and Communication, 50(3), 483-503.