

This file was downloaded from BI Open Archive, the institutional repository (open access) at BI Norwegian Business School <u>http://brage.bibsys.no/bi</u>.

It contains the accepted and peer reviewed manuscript to the article cited below. It may contain minor differences from the journal's pdf version.

Steen-Utheim, A., & Wittek, A. L. {2017}. Dialogic feedback and potentialities for student learning. *Learning, Culture and Social Interaction, 15*{December}, 18-30 Doi: <u>https://doi.org/10.1016/j.lcsi.2017.06.002</u>

Copyright policy of Elsevier, the publisher of this journal. The author retains the right to post the accepted author manuscript on open web sites operated by author or author's institution for scholarly purposes, with an embargo period of 0-36 months after first view online. <u>http://www.elsevier.com/journal-authors/sharing-your-article#</u>

This manuscript version is made available under the CC-BY-NC-ND 4.0 license http://creativecommons.org/licenses/by-nc-nd/4.0/

Title: Dialogic feedback and Potentialities for Student Learning

Author names and affiliations:

Author: Anna Steen-Utheim. Handelshøyskolen BI, 0442 Oslo, Norway. <u>anna.steen-utheim@bi.no</u>

Affiliation: Handelshøyskolen BI, 0442 Oslo Norway

Author: Anne Line Wittek. University of Oslo, Post Box 1092, 0315 Oslo, Norway. a.l.wittek@iped.uio.no

Corresponding author: Anna Steen-Utheim, Handelshøyskolen BI, 0442 Oslo, Norway. Anna.steen-utheim@bi.no

Abstract

Dialogic approaches to feedback has been highlighted as important in re-conceptualising the notion of feedback in higher education. However, these kind of claims has rarely been explored conceptually, and we know little about how dialogic feedback takes place when learners engage in feedback practices. The object of this study is two-fold; first we derive four dialogic dimensions from dialogic theory, and second we use these dimensions as an analytical framework to investigate feedback dialogues between a teacher and his students. For the purpose of in-depth investigation of the learning potential in dialogic feedback, we use interaction analysis. Based on the four theoretical dimensions merged with findings from our empirical case, we suggest an analytical model for the purpose of conceptualizing the distinctive features of dialogic feedback. The model holds four potentialities for student learning from dialogic feedback, which are; (a) emotional and relational support, (b) maintenance of the feedback dialogue, (c) opportunities for students to express themselves, and (d) the other's contribution to individual growth. We propose this model as an analytical tool for researchers in further investigation of learning potential in dialogic feedback in higher education contexts.

Keywords: dialogical theory, dialogic feedback, student learning, higher education

1. Introduction

Educational research from recent decades clearly demonstrates that formative assessment and feedback act as important guiding forces in student learning (Black & Wiliam, 1998, 2009, 2015; Hattie & Timperley, 2007; Kluger & DeNisi, 1996). Current research on assessment feedback demonstrates that feedback is a complex and multi-layered concept, and there seems to be no common, agreed understanding of the notion of feedback. Researchers use different approaches to study feedback in higher education; however, in her meta-review, Evans (2013) claims the principles of effective feedback are clear within the higher education literature. Based on a growing body of evidence of what researchers see as valuable, she emphasizes the importance of holistic and iterative assessment feedback design drawing on socio-constructivist principles. Other researchers in the field support this view (Boud, 2000; Juwah et al., 2004; Yorke, 2003). In holistic and iterative assessment feedback designs, feedback is considered as an ongoing process and an integral part of assessment and learning. In these feedback designs, students play a participatory role in the feedback process, and the feedback focuses on performance (Gibbs & Simpson, 2004; Hattie & Timperley, 2007), such as strategies to improve student performance (e.g., Boud, 2000; DeNisi and & Kluger, 2000; Hattie & Timperley, 2007). In holistic and iterative feedback designs, the interaction between teacher and student plays an important role because this is where student and teachers can share meanings and clear up misunderstandings through dialogue. Increasingly, the literature focuses on dialogue as means to enhance students' understanding from feedback (e.g., Black & McCormick 2010; Carless, Salter, Yang, & Lam, 2011; Nicol & MacFarlane-Dick, 2006). In the past few years, the notion of *dialogic approaches* to feedback has emerged and been highlighted as important for re-conceptualizing the study of feedback in the field of higher education (Beaumont, O'Doherty, & Shannon, 2011; Carless, 2013b; Carless, 2006; Nicol, 2010; Nicol & MacFarlane-Dick, 2006; Yang & Carless, 2013). The re-conceptualizing of feedback to the concept *dialogic feedback* arises mainly from limitations identified from studies of feedback practices in higher education. For example, these identified limitations are that feedback often comes too late for the students to use it formatively (Higgin Hartley, & Skelton, 2001), that students do not understand the feedback (e.g., Falchikov, 1995; Weaver, 2006), and that they find it difficult to act upon (Gibbs, 2006; Poulos & Mahony, 2008). To overcome these limitations, dialogic feedback approaches emphasize the importance of engaging learners in dialogue around learning. Doing so gives learners the opportunity to interact with notions of quality and standards in the discipline. This in turn makes it possible for students to apply feedback. Our understanding of dialogic feedback is based on Carless's (2013a) definition:

dialogic feedback [is defined] as interactive exchanges in which interpretations are shared, meanings negotiated and expectations clarified... dialogic feedback is facilitated when teachers and students enter into trusting relationships in which there are ample opportunities for interaction about learning and the notions of quality. (p. 90)

Summing up, dialogic feedback is learning about and from feedback that takes place through dialogue, and involves students in interpretational meaning making about the feedback.

In this paper we conducted in-depth analysis of oral feedback dialogues between 11 students (N = 11) and their teacher. We used interaction analysis, an approach that allows us to in-depth explore nuances related to the interactional and relational character of feedback dialogues. Interaction analysis is a powerful methodological tool when the aim is to gather insight about feedback dialogues displayed in a naturalistic setting (Jordan and Henderson 1995), which also preserve its contextual factors. We approach our phenomena from a dialogical perspective, a theoretical framework that rarely has been used in previous research

on feedback in higher education. That said, we acknowledge the body of empirical research on talk and learning from the school context, which has been informed by a sociocultural perspective. This research supports the views that talk between teachers and students can be powerful in the development of reasoning and academic performance (Mercer & Howe, 2012). For example, the article by Mercer and Howe (2012) focuses on the study of educational functions of talk and the role of talk in classrooms using sociocultural theory. We also find studies that use dialogic approaches to investigating learning and teaching in an educational context; for example, Wegerif (2007) uses the concept "dialogic spaces" to explain dialogic interactions between teachers and students. Dialogic interactions are, according to Alexander (2006), interactions that support thinking and advance learning. We found few publications applying a dialogical approach to *feedback* in higher education. In a theoretical article by Sutton (2009) he argue that "feedback must assume a central position within a dialogic approach to learning and teaching" (p. 1), and that dialogic feedback is central to the process of enabling students to become more reflective and autonomous learners. However, in one recent published article by Ajjawi & Boud (2017), the authors examine sequences of written feedback dialogues in an online course using interaction analysis. The authors argue that interaction analysis offers a valuable approach to analysing feedback dialogues in situ, because it provides a broader insight into feedback as a relational and dialogical phenomenon. They encourage further research using this approach, claiming a major strength using this approach would be with the use of audio or video data (Ajjawi & Boud 2017). They also advocate for more research on real feedback interactions, because of the limited research that document this in the literature (Ajjawi & Boud 2017). With our current study using interaction analysis of audio data of faceto-face feedback interactions, we contribute with new insight to this gap as identified by Ajjawi & Boud (2017).

Our analytical approach is based on the assumption that individual growth and learning cannot be treated as isolated from the social and cultural contexts in which the students engage. Individual cognition is socially constructed through participation in different contexts, with the contribution of tools and signs, artefacts, and other actors. A second element in our analytical approach is the idea that the dialogic "other" (Linell, 2009, p. 13) is an important contribution to individual growth and development. In dialogism, persons are social beings that are interdependent with others. According to Linell (2009), the concept *other* has three meanings; specifically, it can refer to one's partner in direct interaction, a generalized other in means of who we relate to in thinking and acting, or more peripheral others, such as third parties. For analysing the role of the "dialogical other," we use Vygotsky's (1978) ZPD notion as an analytical lens.

The object of this paper is two-fold as we approach our phenomenon of dialogic feedback both theoretically and empirically. We begin our paper by reviewing literature on dialogical theory. Based on the review, we suggest four quality dialogic dimensions which are important in supporting students' learning. We use these four dimensions as our point of departure for the analysis and discussions. Second, we present the results from our empirical study where we investigate oral feedback dialogues. We then use the findings from our study to discuss the four quality dimensions and how our findings add and elaborate to the four theoretically derived dimensions. Finally, we sum up our paper by proposing a model for dialogic feedback which holds four potentialities for student learning.

2. Literature review

2.1 Feedback in higher education

In the literature on feedback in higher education, authors frequently argue that students should be active participants in feedback activities and that the communication should be dialogically organized (e.g., Hounsell, McCune, Hounsell, & Litjens, 2008). Nicol (2010) claims that students require a more participatory role in feedback, allowing them to expand on their ideas, ask questions, and seek clarification. Others argue that we need to pay more attention to feedback as a process of communication (Higgins et al., 2001) and dialogic interaction (Carless et al., 2011), involving students in dialogues about learning which raise their awareness of quality performance. Moreover, researchers argue that dialogic feedback should emphasize engagement in collaborative processes to support dialogue in learning processes (Nicol & Macfarlane-Dick, 2006), and that feedback can help students understand and interpret feedback (Williams & Kane, 2009). Gravett and Petersen (2002) claim that dialogic feedback involves relationships in which participants think and reason together, and that shared understandings encourage opportunities for further development (Blair & McGinty, 2012). While most studies do not define the term *dialogue* in particular, Carless (2013a) defines dialogic feedback as "interactive exchanges in which interpretations are shared, meanings negotiated and expectations clarified" (p. 90). The literature in the field typically states that dialogue supports learning; however, there are different views on how dialogue can do so. Maclellan (2001) claims that engaging in dialogue can be problematic due to the use of academic terminology and students' lack of understanding of such language. O'Donovan, Price, and Rust (2004) argue that meaningful understanding of assessment standards requires both tacit and explicit knowledge. Having tacit understanding of assessment criteria and standards means that students may know what the assessment criteria are, but they find it difficult to articulate this knowledge in words (Rust, Price, & O'Donovan, 2003). However, tacit and

implicit knowledge is transferred from expert to novice through joint participation in learning activities (Sadler, 1989; Wertsch, 2007). Price, Rust, O'Donovan, Handley, and Bryant (2012) point out that explicit knowledge standards are easily made available to students by teachers in dialogue and are important for students' understanding of quality performance. Nonaka (1991) claims tacit knowledge often is experience-based and shared through social processes, such as dialogue and interaction. Involving students in learning activities where explicit and implicit assessment standards are used and applied can enable students to create their own meaning and develop their higher cognitive functions (Vygotsky, 1978). Along these lines, Price, Handley, and Millar (2011) argue that the process of feedback is a relational one, where students and teachers are influenced by the interaction taking place, for example in feedback dialogues. Telio, Ajjawi & Reher (2015) claim the relational aspects of feedback are under-explored, and Boud (1995) argue that assessment and feedback are deeply emotional practices, where students invest time and effort in preparing assignments and therefore generate emotional expectations as to the feedback they will receive (Higgins et al., 2001). Positive and negative emotions are likely to affect students' active participation with feedback as well as engagement in feedback dialogues. Positive emotions can encourage deep learning approaches such as selfregulation and flexible strategies, while negative emotions can trigger external regulation including over-reliance on teacher guidance and limited strategies; causing the students to practice surface approaches to learning (Pekrun, Goetz, Titz, & Perry, 2002). A central argument for formative assessment in higher education is that formative assessment and feedback should be used to empower students as self-regulated learners (Nicol & Macfarlane-Dick, 2006). Self-regulation refers to proactive learners who can set goals, monitor their work, and adapt their strategies depending upon the task (Nicol & MacFarlane-Dick, 2006).

Students often perceive that assessment relates to their personal identity. This can reinforce feelings of disappointment, anxiety, and failure (Crossmann, 2007). Boud and Falchikov (2007) argue that emotions in assessment are a function of both judgements and how these are made. They claim that emotional responses in feedback are a function of relationships between students and their teacher. They further maintain that the unequal power relationship between teacher and students affects the relational dimensions of feedback, and that the teacher's dual role of both supporting and passing judgement is bound up with the issue of power and authority. Hence, Carless (2006) argues that teachers should show awareness and/or sensitivity to students' emotional responses with feedback because negative feedback can be threatening to students' self-perception and engagement with feedback.

In existing literature on dialogic feedback, a discussion or even definition of the term *dialogue* is very rare. Since it is well-documented that the quality of students' interaction with feedback is important for their learning, and that dialogue is central in interaction, we find it important to elaborate and discuss the term *dialogue* in this paper. We will now turn to this.

2.2 Dialogue and dialogic feedback

The term *dialogue* builds on the Greek *logos* and *dia*, which mean "speech" and "two," respectively. Traditionally, dialogue is understood as a conversation between two or more persons. In Bakhtin's (1981) work, the dialogic principle is central because it sheds light on how dialogue is part of our thinking and language, which in turn shape our cognitive development. For Bakhtin (1981), the term *dialogic* refers to the ways in which meanings are created and understood, in both written and spoken practices. It is not just about general dialogues individuals conduct in everyday life. A main point in Bakhtin's dialogue – with others and everything in the world. Therefore, he argues that dialogue is a relational principle. Linell (1998, 2009) builds on Bakhtin's understanding of dialogue and uses it to explain human

cognition and development. Linell defines *dialogue* as "any interaction through language (or other symbolic means) between two or several individuals who are co-present" (Linell, 1998, p. 13). Moreover, Linell (1998) claims that dialogue is a social activity to which coordination is fundamental, meaning that there must be some degree of coordination, reciprocity, and mutuality in verbal interaction. Linell further argues that dialogue occurs not only in interaction with others but also in interaction with the self, artefacts, and contexts (Linell, 2009). This argumentation is consistent with Bakhtin's (1981) dialogic principle, meaning that when one is engaged in dialogue with oneself, one's thinking is oriented to a recipient, against the context in which the individual is part of, and in relation to artefacts. Linell (1998) says that dialogue is "any interaction through language (or other symbolic means) between two or several individuals who are co-present" (p. 13). Exposure to academic language through dialogue is valuable for learning because it gives the individual an opportunity to make use of academic terms before she/he fully understands them. In this way, the transformation of cultural knowledge becomes, as Vygotsky (1978) puts it, internalized in the individual.

Dialogic feedback is a process in which individuals learning can be activated because that others experiences, thoughts and utterances are made visible and available in concrete contexts. The parties in a dialogue appear as "co-authors of each other's' contributions" (Linell, 2009, p. 73). This means that the recipient (or rather the idea of them) are present already when the sentence is formulated. The idea of who we are talking to mediates the action of deciding how to formulate oneself. Co-authors can be both physically present and represented as third parties, like for example the author of a syllabus book.

Wertsch (2007) argues that exposing students to academic language before they actually understand it "unwraps" the language and, in that sense, provides a potential learning situation. Daniels (2016) argues along the same line of reasoning, when he states that students must play around with concepts and signs, explore them, and investigate the relationships

between them. By doing that, the newcomers are invited to "the stage" (Daniels, 2016, p. 14), but the newcomers are not alone on this stage. Others on stage already have a sense of what the play is about, enough of a sense to make interaction with a newcomer possible. In this case, the word others refers to teachers or other, more experienced students. When students in higher education are invited to the "stage," their experiences might form significant opportunities for meaning-making and cognitive development (Wittek, 2016). By opportunities, we mean possibilities to investigate the established knowledge within the disciplines, but also the relationship between spontaneous and scientific concepts on a personal level (Vygotsky, 1986). Established ways of thinking and acting are embedded in core tools within a profession or a discipline. However, they have more or less clear limitations for acceptable ways to build up a scientific argument and structure a text (Wittek & Habib, 2014). Moreover, students also encounter possibilities for negotiation and agency within the established frames when they are invited into feedback dialogues as active participants.

Inviting students into a dialogue can support opportunities for individual growth and development. However, not all dialogue necessarily supports individual growth. A dialogue is also an arena for different interpretations that may not be made accessible, for misunderstandings to remain misunderstandings, and for an individual's display of vulnerability. Individuals vary in their ability to carry out cognitive and communicative tasks, and some individuals can therefore be vulnerable in terms of achieving their best, or making use of the other's support and guidance. Also, the other's contributions may fail to do exactly that – contribute – because utterances and support are experienced as threatening, not supportive or even not recognized. Importantly, understanding feedback in a dialogic sense means that there must be a fundamental shift in the power balance of authority in the teacher and student relationship. Without this, feedback is simply traditional and transmissive in the way of the teacher listening for comprehension, and thus also of power that unbalances

dialogue. In Vygotsky's (1978) "zone of proximal development" (ZPD), the other, being more competent or more advanced, provides the necessary scaffolding for the newcomer to achieve individual growth. Although there is an asymmetric relationship between the participants in a disciplinary dialogue, Vygotsky (1978) asserts that the dialogue and its contributions make individual competences and development possible. Social interaction is transformed into cognitive structures on a personal level. However, this implies that they are supported by an other who is more competent, because carrying out an individual's potentialities means promoting and supporting what he or she is almost able to do, or even what he/she might manage within the right environment and with a supportive, communicative partner (Linell, 2009). Wegerif (2011) problematizes the concept of the ZPD and its appropriateness to a dialogic approach to learning, arguing that the ZPD is already envisioned as the desired learning outcome in the mind of the teacher (or curriculum), and is thus limited in its responsiveness to the students' utterances. Balancing this in a disciplinary dialogue requires a competent and qualified teacher (or more competent other) who has carefully considered and reflected on his/her and the students' role as contributors in dialogic feedback. Thus, generating supportive responses, developing opportunities for change, and avoiding power limitations in a dialogic feedback practice are demanding tasks.

Based on the literature review as discussed above, we derive four quality dialogic dimensions from dialogic theory which are important in supporting students' learning. These are: 1) emotional and relational support, 2) maintenance of dialogue, 3) students' opportunities to express themselves, and 4) the others' contribution to individual growth. These four dimensions will be extensively discussed in a later section in relation to the findings from our empirical study. First, we will describe the empirical context, methods and analysis procedure.

3. Empirical context, methods, and analysis

The current case study employed a longitudinal, ethnographic research design inspired by Alvesson and Sköldberg (2000). We drew on several data sources, including audio recordings of oral feedback dialogues, field notes, assessment templates, classroom observations, and recordings. This study is part of a larger study that was carried out at a university college in Norway on a first-year bachelor program in international business communication, led by the first author. In the present paper, we concentrate on oral feedback dialogues between 11 students and their teacher. This course attracts international students, and our participants are from Iran (n = 1), Germany (n = 1), England (n = 1), Russia (n = 1), and Saudia Arabia (n = 1). However, the majority (n = 6) were from Norway. The first author audio recorded and transcribed the oral feedback dialogues. The duration of the feedback dialogues varies from 4 minutes to 12 minutes. A total of 18 oral feedback dialogues were analysed in depth, according to the four dialogical dimensions referred to in the previous section. Contextrelevant aspects were noted, such as body alignment, for example, if a student folded her arms over her chest. When the participants made relevant artefacts available, such as the use of the teacher's assessment template or when the teacher noted speech phonetically on a blackboard while giving an oral explanation to the student, this was also noted. The recordings of the students' oral feedback dialogues overall are 113 minutes and 40 seconds, and their transcripts are 42 pages (Table 1). The data were supplemented with secondary data including assessment templates, observations and recordings of classroom activity, and field notes. Table 1 provides an overview of the data from the feedback dialogues.

[Table 1 near here]

During their first semester, the students give two presentations in class on an optional topic. The presentations have a maximum length of eight minutes. The students give their presentations in class, and their fellow students can comment and ask questions. However, giving feedback to their peers is optional, and the students are not involved in systematic peer feedback. The teacher observes the student and his/her presentation and makes notes on a predefined assessment template. Immediately after the presentation, the teacher and student go to a room nearby where the oral feedback dialogue takes place. The remaining students work on a group assignment during this time. Based on the overall analysis, the feedback dialogues are teacher-centred, and possible feedback from peers are more or less included in the feedback dialogue.

The academic goal for this activity is for the students to improve their presentation skills and proficiency in business communication. Every student completes two presentations during the first semester, with a subsequent feedback session. The students receive a tentative grade on their presentation. At the end of the course, the students hand in a portfolio including three written assignments. Their final evaluation is based on the portfolio combined with an oral presentation. Teaching, presentations, and oral feedback dialogues were all conducted in English, which was the second language for all the students.

The selection of informants was based upon purposive sampling (Jupp, 2006) and their interest in participating in the project. All students in the course were informed about the project, and 13 students volunteered to participate as key informants. However, one student quit school after a few weeks. This left us with 12 remaining students (eight women and three men). The students were informed in detail about what it meant to participate and that they could, at any time, withdraw from the project.

We chose interaction analysis for the in-depth analysis of the oral feedback dialogues (Furberg & Ludvigsen, 2008; Jordan & Henderson, 1995), an innovative methodological

approach that rarely has been used in previous research on feedback in higher education (Ajjawi & Boud 2017). Interaction analysis was chosen for its underlying assumption that knowledge and action are social in origin and, further, that knowledge is situated in social and material settings. As such, it aligns well with our theoretical framework for this study. The purpose of interaction analysis is to identify regularities in people's interactions, nonverbal and verbal, with each other and with objects in their environment (Jordan & Henderson, 1995). The use of interaction analysis gave us an opportunity to assess how meaning was created during the feedback dialogues, and gave us an understanding of how this is constituted interactionally. Thus, using interaction analysis provides deeper and more detailed insights into naturally occurring social interactions, such as feedback dialogues. The unit of analysis were the oral feedback dialogues as they occurred in interaction between the teacher and the student, and the analysis focused on identifying regularities and patterns in these. For the purpose of our investigation for empirical indications of the four dimension in the audio data, we operationalized the four quality dimensions as follows:

Emotional and relational support	If the teacher provided positive emotions, showed		
	empathy; was willing to listen to the students; was		
	encouraging; was supportive; acknowledging and		
	showing in words he valued the students		
Maintenance of the dialogue	Who introduced themes in the dialogue; who was in		
	charge of turn allocation (verbal and non-verbal); what		
	kind of initiatives and responses were displayed and how		
	follow-ups and progress developed		
Expressing themselves	Who took initiatives, such as beginnings and endings;		
	who introduced new topics; the students' utterances such		
	as explanations and analysis; the students' involvement		

	in words; and general reflective activities done by the		
	student		
The other's contribution to	Characteristics of the teachers' utterances; whether his		
individual growth	responses were developmental, supportive or		
	argumentative; if he was listening or inviting. Also, we		
	searched for artefacts that were in use during the		
	feedback dialogues and linguistic phenomena such as		
	written and verbal language.		

The process of analysing the data was validated through presentations and discussions in research groups. The feedback was used to enhance the reliability of the study findings.

4. Findings

In the following, we present the findings from the analysis and we illustrate by using excerpts from the transcribed material. We discuss and detail the oral feedback dialogues using the four dialogic dimensions as an analytical framework. We present our findings by using the four dimensions as separate themes; however, the richness of the data implies that some quality features may partially overlap. We begin our presentation of the four quality dimensions with a short summary of the core findings. All participants have been given anonymous names. We named the teacher Andrew.

4.1 Emotional and relational support

The overall finding from this quality dimension was that Andrew displayed emotional and relational support in both the classroom and the feedback dialogues. He was engaged and present, direct and supportive. Through personal and individualized feedback to each student in the feedback dialogues, Andrew supported and motivated students' development by using personal pronouns, supportive words, showing empathy and trust, and acknowledging students' emotional expressions.

Based on field notes and observations of classroom activity, Andrew appeared secure, confident, and interested in his students; additionally, he often told jokes. The classroom atmosphere was safe and Andrew would, typically, give of himself in the classroom. The following excerpt is an example from the field notes of this, where Andrew described the criteria for the oral presentation:

When the teacher presents criteria for the oral presentation, he does this by using PowerPoint, including writing the criteria on the blackboard. He explains and elaborates the criteria by giving concrete examples. One criterion is appearance in respect to customers. He takes off his shirt, displaying a stained t-shirt underneath. He says, "What impression does a stained t-shirt give?"

A different example from the field notes illustrates how Andrew stays in the classroom during breaks, and how the students use this opportunity to approach him:

The majority of the students go outside the classroom for a break; however, several students use the break to approach the teacher, asking different questions.

Giving personal feedback to students twice during a semester is time-consuming. However, the audio recordings, the field notes from the feedback dialogues, and the observations of classroom activity displayed a teacher who was gave of himself, was engaged and available to the students. In the feedback dialogues, transcripts illustrate how Andrew gave emotional responses. For example, Andrew often used personal pronouns in combination with supportive words. He would, for example, say "I want to see you improve" or "I know you can do better." This combination of personal pronouns and support is likely to motivate the students as it is showing positive emotions. As illustrated in lines 1–2 below, Andrew showed empathy by putting himself in the student's shoes, which is a classical dialogic approach, as identified by for instance, Bakhtin (1981):

- 1. 'Andrew: and believe me, you will improve (.) you just need practice (.) I've been
- 2. there myself, I've been <u>extremely</u> nervous (.) so it's just a matter of getting up there
- 3. and you know (.) I'll show you, right?
- 4. Shelly: mm'

This example shows how Andrew encouraged another student, Paul, by acknowledging his progress:

- 1. 'Andrew: okay? So continue working, this is this is going the right direction
- 2. Paul: mm'

Pekrun et al. (2002) argue that feedback can arouse negative as well as positive reactions, feelings and responses. Dialogic feedback can entail exposing yourself, showing vulnerability, and revealing misconceptions or misunderstandings. The following excerpt illustrates how Andrew asked Vicky to consider her presentation (line 1). Vicky responded emotionally (line 2), which surprised Andrew (lines 3 and 5). Andrew acknowledged her nervousness (line 7) and encouraged her confidence when he said '…that's impressive, because it didn't show (.)'

- 1. 'Andrew: have a seat (.) alright what do you think?
- 2. Vicky: I was very nervous
- 3. Andrew: you nervous?
- 4. Vicky: yeah yeah
- 5. Andrew: You were nervous?
- 6. Vicky: yeah
- 7. Andrew: I mean really nervous? Ok. That's (.) that's impressive, because it didn't show (.) to me'.

This interaction sequence shows how Andrew communicated support and trust to Vicky by acknowledging her nervousness (lines 3–7); a point discussed by Carless (2013a) when he argues for the importance of building communication trust in feedback practices. Developing trust is an important element of student–teacher relationships, he claims, because it can prepare the ground for dialogic feedback, making it easier for students to involve themselves in feedback, to be open, and to show vulnerability in the presence of the other.

4.2 Maintenance of the dialogue

Being present in an oral feedback dialogue, the participants have opportunities to influence the content, length, and development of the feedback through the means dialogue. Of the core findings, we found that the dialogue was dynamic and prolonging, and that Andrew and the students' both contributed to the maintenance of the dialogue. Typically, the teacher contributed by initiating new beginnings and asking meta questions; and the students' contributed by using minimal responses. We will exemplify this in the following.

The first interpretation of the in-depth analysis was that Andrew was dominant in the dialogue, characterized by the traditional asymmetrical power balance. We found, for example, that Andrew had the largest share of utterances in the feedback sessions.

However, after careful analysis of the relevant episodes, a clear pattern became visible. The analysis indicates that that the dialogue was dynamic and prolonging in its character, and that there was never a breakdown in the form of a halt in the dialogue or the like. Andrew initiated new beginnings, such as introducing topic-relevant feedback, and brought in new relevant feedback content, such as illuminating quality standards. The following excerpt shows Andrew giving feedback on achieved performance to Mathew:

- 1. 'You're adapting your (.) your message to the audience (.) ehh (.) so in that sense
- 2. think your communication with the audience is very good, you're involving them,
- 3. you have good eye contact, your smiling, I think that is always a good thing to do,
- 4. ehh (.) you are very good at speaking freely, you have a very good English
- 5. proficiencies, your structure is good, I think the pace was good as well (.)'

However, further analysis revealed that the students varied in the way they used this opportunity and in what way they responded to the feedback. Some students made use of this opportunity by expressing themselves, building on the teacher's utterances; others, however, gave what Linell (1998) name "minimal responses," such as "mm." Minimal responses can express an understanding of a previous utterance and therefore maintain the dialogue. However, this utterance, "mm," does not elaborate upon the dialogue, leaving the initial utterance as the

meaningful one. Nevertheless, as minimal responses, these are essential components in dialogue because they give information on turn allocation and let the speaker know he or she is listening. They also encourage the speaker to continue. The following excerpt illustrates how Joanne's minimal responses, such as "mm," kept the dialogue going:

- 1. Andrew: so, this is of course eh this is of course (.) and then also something one could think even more about is transitions when you go from one to point to the next.
- 2. Joanne: mm
- 3. Andrew: but of course I understand it's difficult
- 4. Joanne: mm
- 5. Andrew: you have a [...]
- 6. Joanne: mm yeah
- 7. Andrew: your English is (.) proficiencies at this level I would say are between good and
- 8. very good
- 9. Joanne: mm
- 10. Andrew: eehh you make some mistakes, 'in 2004 I have been to Mich Michigan' [shh] this is a typical German error
- 11. Joanne: ok

Although Joanne's minimal response did not contribute to content development in this interaction sequence, it contributed to maintenance of the dialogue. Being part of the interaction sequence, this functioned as a confirmation for Andrew that the student was listening and encouraged the dialogue's development.

Excerpts show that Andrew asked meta-questions such as "are you with me now?" and "do you follow me on this?" in the oral feedback dialogues. The developmental potential in using such meta-questions is prominent, providing a possibility for the students to share their thoughts and reflections. Even so, the analysis showed that most of the students responded to this question by using a minimal response (Linell, 1998). No further elaborations were made by the students, leaving Andrew's meta-question as the last meaningful utterance:

- 1. Andrew: Because one thing I sort of I missed out on your topic sort of (.) when you
- 2. get there and to talk about opener, a strong opener ok [claps his hands] to get

- 3. peoples attention, clap your hands whatever, wait for silence, then ok my topic for
- 4. today is (.) then slow down. Are you with me now?
- 5. Vicky: mm

A main target of dialogic feedback is its opportunities for participants to contribute to the dialogue by bringing in new meanings and perspectives. This excerpt offers an example of how the dialogical potential was not fully utilized by the student because she responded by using a minimal response. However, although Andrews's use of the current meta-question in line 4 ("are you with me now?") did not trigger this student's contribution to the dialogue, further analysis of the feedback sessions displayed how the feedback dialogue gave the students other opportunities to express themselves, hence developing the dialogue. In the following third dimension, examples of how participants made better use of the dialogical potential are presented as the possibility for the students to express themselves in the feedback dialogue.

4.3 Expressing themselves

A third core finding from our overall analysis, was that the students were given the possibility to express themselves by using their own words. This supported students' reflection and displayed their current understanding of their performance, which gave the teacher a unique opportunity to adjust the feedback accordingly and based on that, guide further development. We identified this in every oral feedback dialogue, beginning with Andrew asking the following question: "Did everything go according to plan?" This initiative encouraged the students to talk about their performance, making their interpretation and assessment available for the teacher. All 11 students made use of this opportunity, and they all elaborated on this question. Mainly, the students reflected on how their initial plan for the presentation went according to their actual performance, as they perceived it:

1. Andrew: Ok, what do you think? Did it go according to plan? [making eye contact with the

- 2. student]
- 3. Mathew: no, not exactly, I talked a bit faster and I expected a bit more feedback from the
- 4. audience than I got (.) so it (.) ehh
- 5. Andrew: right, right, because you tried to involve them
- 6. Mathew: yeah

In this excerpt, Mathew reflected on his performance, saying he was not satisfied. Andrew responded to Mathew's reflection by acknowledging his own judgement of the presentation (line 5). This indicates that Andrew's acknowledgement served as a confirmation of Mathew's own interpretation of his actual level of performance, as defined in the ZPD. The following excerpt illustrates how the interaction sequence between Andrew and Eric gave Eric the opportunity to express himself:

- 1. Andrew: yes, because we've talked about, in Locker and [Germarrek]
- 2. ([textbook]) they talk about, paiboc (.) you have to think about the purpose, and
- 3. the audience
- 4. Eric: the audience is of course the students
- 5. Andrew: that's good
- 6. Eric: it's only the students who can
- 7. Andrew: good. And then the next question is what is the purpose, what is it that
- 8. you want them to do?
- 9. Eric: to get them interested
- 10. Andrew: exactly.

Andrew referred to a topic previously discussed, bringing a relevant theme to the foreground in the dialogue. Eric responded by acknowledging this when he said, "the audience is of course the students" (line 4), giving Andrew a possibility to enhance Eric's understanding by offering positive feedback ("that's good", line 5). However, lines 6–7 show how Andrew cut off Eric's ongoing reasoning, not supporting Eric's contribution in the dialogue. This indicates an asymmetry in the relation, showing unbalance in the dialogue (Boud & Falchikov 2007) which, in turn, limits the student as a contributor to the dialogue. We do not know how the dialogue would have developed if Andrew had let Eric go on with his reasoning; instead, Andrew posed

a new question (line 8). This interaction sequence contributed to the ongoing dialogue around the topic because Andrew brought in new topic-relevant aspects when he introduced a question. Eric responded to this question by saying "to get them interested" (line 9), and Andrew supported this understanding as he said "exactly" in line 10. In the section below, examples of the other's contribution to individual growth are discussed.

4.4 The other's contribution to individual growth

As underscored in an earlier section, a main point in dialogic feedback is to enhance and develop individuals' growth through collaborative processes with the contribution of others (Linell, 2009; Vygotsky, 1978). Core findings from the analysis of this dimension was that the students' individual development was encouraged and supported with the contribution of the teacher. Typically, Andrew challenged the students' understanding by asking questions that triggered the students to elaborate, reflect and articulate their own understanding. Andrew also introduced new knowledge and understandings, used non-verbal communication and artefacts in the dialogue. By doing so, Andrew contributed to bridging the gap between the students' current understanding and further development.

The following excerpt presents Joanne's reflection on her presentation, as a response to Andrew's question on how she thought her presentation went:

- 1. Andrew: Ok, so what do you think? Are you happy with the performance?
- 2. Joanne: eehh (.) I don't know, I think it was different than last time
- 3. Andrew: in what way was it different from last time?
- 4. Joanne: eehhmm (.) cause I (.) got somewhat stuck from where I was standing and eeh
- 5. Andrew: ok
- 6. Joanne: because I always had to go around with the (.) last time I was standing closer
- 7. to the
- 8. Andrew: to the screen
- 9. Joanne: to the screen
- 10. Andrew: ok ok

This excerpt illustrates how Joanne used her own words and articulated her own understanding (lines 4, 6), making her a relevant participant in the dialogue. This exposure of Joanne's current understanding of her performance also "unwrapped" her understanding of assessment criteria for the presentation, giving Andrew a unique insight into what to further focus on in his feedback. In this excerpt, Andrew challenged Joanne's actual competence when he asked her to elaborate on her view (line 3), pushing her level of development further. Joanne then reflected on her presentation (line 4), which Andrew acknowledged (line 5), and Joanne fulfilled her reflection in line 9, again being supported by Andrew (line 10). From line 4 to line 6, Joanne analysed aloud why she believed her presentation was different from last time, making her interpretation available for Andrew to give feedback on. This is a central point in a dialogic approach to feedback because Joanne's interpretation was displayed and made available for the other to respond to. In our case, Andrew acknowledged Joanne's contribution (Linell 2009). The opposite outcome could be Joanne withholding valuable information on her interpretation of the feedback, which would limit the further development of the dialogue.

The students' oral presentations were responded to by the other: the teacher. The other offers a perspective that differs from one's own (Bakhtin, as cited in Linell, 2009). This allows for opposing views and disagreements between perspectives, leading to thoughts in the self. Others, in this case Andrew, introduce knowledge and understandings other than those the student had before. This may contribute to viewing things differently, forcing the student to reflect and try to understand. It gives the student the opportunity to internalize the more competent other's knowledge. In the following interaction sequence, Andrew questioned Eric's actual level of development by challenging Eric's understanding (lines 1–2):

- 1. Andrew: it could be more difficult (.) for example you say for example "the
- 2. effects of the division of elements" okay, what does that mean? Right?
- 3. Eric: and maybe I should explain what?
- 4. Andrew: I think that's a good idea, actually

By asking direct questions to Eric, such as "what does that mean? Right?" (line 2), Andrew encouraged further development of Eric's understanding of a concept he used. Because of this contribution, Eric realized he must explain the concept (line 3), which Andrew acknowledged in turn (line 4).

In the next excerpt, Mathew's response to Andrew's feedback indicated that he was aware of the area that needed to be improved:

- 1. Andrew: but you know, practice doing this, and look at yourself in front of the mirror,
- 2. because if you look at confident public speakers they will stand like this or like this,
- 3. not like this (.) right? [illustrating by holding his arms in different positions]
- 4. Mathew: yeah, I've heard that before (.) he-he
- 5. Andrew: yeah right and then (.) because automatically, you look much more confident
- 6. Mathew: yeah

Here the other, Andrew, brought in a perspective that relates to Mathew's current understanding, contributing to emphasize what Mathew needed to work on. Andrew reinforced this point by using nonverbal communication when he held his arms in different positions. The current use of nonverbal communication, as this excerpt illustrates, was conducive to Mathew's understanding, as he said, "yeah, I've heard that before". We also found indications of the use of nonverbal communication in the field notes:

When giving feedback, the teacher concretized with both body language and written words. For example: one student held his hands in his pockets during his presentation. In the feedback session, the teacher explained this as an insecure body language. The teacher used his own hands to illustrate how the student could change this.

Nonverbal communication was one of the core resources we identified from our analysis within this dimension. Andrew also made use of artefacts such as the assessment template in every feedback dialogue. He used the template as a baseline document for his feedback as well as to exemplify points in writing for the students. The exemplification was specific and concrete, and often a combination of verbal and written examples. The following excerpt illustrates how Andrew, by bringing sociocultural resources (the assessment template) into the situation,

elaborated on the correct pronunciation of the word "of" in his dialogue with Joanne:

- 1. Andrew: articulation is loud and clear, some Germanic interferences but that's
- 2. normal, say ov [off] in this is typically Germanic...you have this [...] say, tak, a
- 3. Norwegian would say tag, so you say... and then you say, you pronounce the word
- 4. word ov off
- 5. Joanne: off
- 6. Andrew: ov
- 7. Joanne: ov
- 8. Andrew: because that's the typical Germanic way of saying...
- 9. Joanne: [...]
- 10. Andrew: yeah, for example you would say [...] an Englishman would say [thought]
- 11. Joanne: [tougt]
- 12. Andrew: yeah yeah that's yeah yeah if you take [...] if you take the German word, if an Englishman pronounced this word he would say like, uh, this is an
- 13. [holding up the assessment template and writing phonetically the word 'of'] this is a v
- 14. [the teacher pronouncing v]
- 15. Joanne: oh, really?
- 16. Andrew: pronounce
- 17. Joanne: uh-huh, I didn't know that
- 18. Andrew: exactly. Because when you say off...with...some Norwegians would [...]
- 19. they could say ov course
- 20. Joanne: ov course
- 21. Andrew: exactly, so when they say, if you say off course [holding up his hand,
- 22. pointing it towards the end of the room]
- 23. Joanne: ok ok, I see it now

As we see in this excerpt, by making resources in the room relevant for the participants involved, the interaction in the feedback dialogue created opportunities for bridging the gap between Joanne's current understanding and further development. Even more interestingly, the excerpt illustrates how Andrew was a more competent other *because of* his exemplification, giving feed-forward to the student. At the beginning of the excerpt, Joanne (line 5), at her current level of performance, was repeating the incorrect pronunciation ("off"), but as Andrew introduced the correct pronunciation ("ov"), Joanne repeated it out loud (line 7). Andrew was scaffolding Joanne's development by exemplifying and writing phonetically on the assessment template. Joanne seemed surprised as she said "oh, really" (line 15), discovering new insight because of Andrew introducing new knowledge into the situation. Joanne even pointed out –

for herself and for the teacher – that she did not previously have this knowledge (line 47). Joanne summed up the interaction sequence by saying, "ok, I see it now", bridging from the current level of performance to the desired level, as articulated by Vygotsky (1978) in the ZPD.

5. Discussion

Through our previous presented literature review on dialogic theory, and our presentation of the empirical findings, we will in this section suggest a possible model for dialogic feedback. The model merges the four theoretical dimensions with the findings from our empirical case, which we sum up and present as four potentialities for learning. We use the term potentialities to describe an individual's opportunities for development and underlying capacities that can be actualized, activated, utilized and developed in contexts (Linell 2009).

1. Emotional and relational support.

Dialogic feedback is a relational and emotional process, where positive and negative emotions affect student's active participation and engagement with feedback and hence, their learning from feedback. Facilitating a safe learning atmosphere, using personal nouns and supportive words in dialogue with students, showing empathy and trust, acknowledging students' emotional responses has potentialities for student learning.

2. Maintenance of the dialogue

Dialogue is part of our thinking and language, which shape our cognitive development. Engaging students in dialogue can support individual growth and development through sharing of meanings and understandings in interaction with others. Initiating new beginnings, asking meta-questions, and using minimal responses contributes to a prolonging and dynamic character of the feedback dialogue, which has potentialities for student learning.

3. Students' opportunities to express themselves

Letting one's voice be heard in the presence of the other is an important dialogical move. Encourage students' to express themselves by using their own words and asking questions that make students' reflect on their understanding and misunderstandings, supports student's active participation in a feedback dialogue.

4. The others' contribution to individual growth

Creating opportunities for displaying one's experiences, thoughts and utterances with the feedback, form potentialities for individual cognitive development through the support of a competent other. Challenging student understanding by bringing in new knowledge and understandings, and asking questions that make the students elaborate, reflect and articulate their own understanding. Using non-verbal communication and relevant artefacts that support individual growth.

Model 1: Dialogic feedback. Four potentialities for learning.

In the following, we discuss and detail our model of dialogic feedback we argue that it has a strong potential to support student learning from feedback.

5.1 Emotional and relational support

Emotional responses are a part of students' general learning experiences, and feedback is a deeply emotional practice (Boud, 1995). Assessment and feedback are influenced by the relationship between teacher and student; likewise, how the feedback dialogue develops and potentially supports student learning is dependent upon the trust between the teacher and the student (Boud, 1995; Carless, 2013a; Higgins et al., 2001; Pekrun et al., 2002; Price et al., 2011). Andrews' personality was easy going, relaxed and he would often tell jokes in the classroom. The class atmosphere was relaxed and safe. Carless (2013a) argue that students' uptake of feedback is likely to be enhanced when the participants have faith and confidence in others, within a supportive atmosphere. In our analysis of the feedback dialogues we found that the teacher listened to the students, was available and used supportive and emotional words. Andrews' use of personal nouns ('I want to see you improve', 'I believe in you') was particular dominant in our data, and are personal and strong statements communicating trust and encourage student engagement with the feedback. Andrew also displayed his own previous experiences with negative emotions giving presentations in one feedback dialogue (p. 18, excerpt with Shelly) and illustrate the assessment criteria for the presentation with the use of himself (p.17, from the field notes). These are all potentialities for learning that contribute to building 'a trusting relationship' between the teacher and his students, as discussed by (Carless 2013a). However, we argue that our findings; using personal nouns, being available to the students, and using supportive and emotional words, are relevant emotional and relational support that contribute to the development of trust, in dialogic feedback situations and as such, add to Carless (2013a) notion of trust in dialogic feedback.

5.2 Maintenance of the dialogue

The interaction, responses, and utterances displayed in dialogue can maintain or break off the dialogue. Engaging in disciplinary dialogue can be vulnerable and difficult as well as an arena for misunderstandings. Important aspects of a disciplinary dialogue are maintenance of the dialogue and preparing the grounds for meaningful interaction that supports student learning from feedback (Bakhtin, 1981; Carless, 2013a; Linell, 1998, 2009; Nicol & Macfarlane-Dick, 2006; Price et al., 2011; Vygotsky, 1978; Wertsch, 1991, 2007).

As the findings illustrated, Andrew was in charge of turn allocation and he did introduce new topics into the dialogue. The feedback dialogues were teacher centred, however, Andrew's being in charge of turn allocation and introduction of topic relevant elements does not imply that these students were passive recipients of feedback. Instead, we argue that Andrew provided necessary scaffolding for the students by doing so, carrying out his role as a more competent other, as defined by the ZPD. In doing so, Andrew invited the students as newcomers to the "stage," as discussed by Daniels (2016). Having said that, we do not know if this actually led to the development of students' knowledge. We cannot know if the feedback dialogues contributed to the students actually acting on the feedback, a central point in formative theory for closing feedback loops (Black & Wiliam 2009). However, we argue that although the students' minimal responses did not contribute to the dialogue's content, the analysis showed that it contributed to maintenance of the dialogue. Being part of the interaction sequence, this functioned as a confirmation for Andrew that the student was listening and encouraged the dialogue's development. The discovery of this finding was made possible by our use of interaction analysis, applied on audio data. However, given the theoretical framework underpinning this paper, participation and minimal responses in interaction are not sufficient to enhance students' learning. Students also need to take concepts and ideas into use, and explore their potentialities for meaning. In the feedback dialogues, Andrew asked meta-questions such as "are you with me now?" and "do you follow me on this?", which is a useful way to start a dialogue. The developmental potential in using such meta-questions is prominent, providing a possibility for the students to share their thoughts and reflections. Even so, the analysis showed that most of the students responded to this question by using a minimal response (Linell, 1998). No further elaborations were made by the students, leaving Andrew's meta-question as the last meaningful utterance. In other words, we do not know if this actually led to students' learning in the future.

5.3 Students' opportunities to express themselves

A key element in dialogic feedback is the point of letting one's voice be heard in the presence of a more competent other (Carless, 2013a; Carless et al., 2011; Linell, 1998, 2009; Nicol, 2010; Nicol & Macfarlane-Dick, 2006; Vygotsky, 1978; Wertsch, 1991, 2007). Student learning and development are influenced by the social and cultural context in which they engage (Vygotsky, 1978). Learning is basically social in origin, where a student's cognition is

constructed through participation in different contexts – through artefacts and in particular through linguistic artefacts. This supports learning and development and is therefore valuable for the individual's further action with the feedback.

Our findings illustrated that Andrew was in charge of turn allocation, and introduced the largest amount of new topics and initiating beginnings. In some cases, Andrew did not give the students pertinent time to reflect in the situation, which can restrain individual competencies and development, a central point in socio-cultural theory (Vygotsky 1978). As such, the feedback dialogues were teacher-centred and the power balance of authority related to the teacher; which does not sit well with dialogic feedback and the discussed dimension. Although the minimal responses did not contribute to the development of the dialogue, the findings indicated that the students were active in the feedback dialogues because they had a chance to express themselves. Andrews' use of meta-questions triggered students' elaborating and evaluating their presentation, which gave Andrew a unique opportunity to check for understanding. All of our participants used this opportunity to express themselves, a strong indication of a reflective activity undertaken by the student. These empirical findings support the dialogical point of co-authoring each other's contributions in a dialogue, as discussed by Linell (2009).

5.4 The other's contribution to individual growth

The role of the other is important in a dialogic approach to feedback because it renders individual growth and learning. The other can contribute to developing understandings and meaning making, and thus mediate individuals' learning from feedback (Bakhtin, 1981; Daniels, 2016; Linell, 1998, 2009; Vygotsky, 1978; Wertsch, 1991, 2007). However, taking the role as the other in a disciplinary dialogue, such as the feedback dialogue, demands reflectivity and careful considerations, as initiatives and developments in a feedback dialogue can be interpreted in many ways.

Our findings showed that Andrew, as a more competent other, challenged students' current understanding by asking questions that stimulated the students to reflect on their own development. We also found that Andrew brought new knowledge and understandings into the dialogue, which made the student view things differently and reflect on their understanding. However, the utilization of this potential is not straight forward, but was, in our case, triggered by Andrew as he would ask direct questions encouraging student engagement. We found that Andrew used other than verbal resources in the feedback dialogues with his students. Typically, he made use of relevant resources to underline and support his arguments, which in turn, created potentialities for bridging students' gap between current and desired development (Vygotsky 1978).

6.Conclusions

In this article we have investigated dialogic feedback both theoretically and empirically. Based on out literature review, we have suggested four quality dimensions that are important in student learning. We then used these four dimensions as an analytical framework on our own empirical study. Furthermore, we have discussed and elaborated the suggested quality dimensions by showing how our findings add to the existing body of literature of dialogic feedback. We conclude our paper by suggesting a model of dialogic feedback holding four potentialities for student learning. These are: 1) emotional and relational support, 2) maintenance of the dialogue, 3) expressing themselves and finally 4) the other's contribution to individual growth. Based on our empirical findings, we have added nuances to the theoretically derived dimensions, and of particular importance in this regard, was the emotional and relational dimension.

The model we propose in this article, provides rich and nuanced descriptions of potentialities for students learning from dialogic feedback. The main contribution is to propose the model as a tool for analyzing in detail dialogic feedback and the potentiality for student learning in these kind of practices. A second contribution includes practical implications from the four potentialities for learning as ways in which teachers can facilitate for dialogic feedback.

Dialogic feedback requires interaction with others, and its' development and potential for student learning is subject to a degree of uncertainty because of the complex nature of dialogue. In our study, the feedback dialogues are teacher-centred but with ample opportunities for students co-authoring and contribution to the development of the dialogue. The teacher managed to establish the four quality dimensions; by encouraging a safe and supportive environment, by giving personal face-to-face feedback, by inviting the students into a dialogue and letting them display their understanding and finally by supporting their individual growth and development. However, the findings also show how elements of traditional teacher-student role take place in the dialogue, and an asymmetrical power balance is displayed. In terms of future directions for research, we encourage more research investigating in depth how dialogic feedback can enhance student learning; and in particular how students' learning potentialities can be utilized within the teacher – student relationship. We welcome researchers in applying our model in analysing oral feedback dialogues, and as such identify further improvements that ultimately can contribute to enhance students learning from feedback in higher education contexts.

Acknowledgements

In the period since the data for this article were gathered, the author was a PhD student at Østfold University College, Norway. The study was conducted with grants from the Norwegian Research Council (NFR). I am grateful to the informants who willingly contributed to this study.

References

Ajjawi, R., & Boud, D. (2017). Researching feedback dialogue: an interactional analysis approach. *Assessment & Evaluation in Higher Education*, 42(2), 252-265.

Alvesson, M., & Sköldberg, K. (2000). *Reflexive methodology: New vistas for qualitative research*. London: Sage Publications.

Alexander, R. (2006). *Towards dialogic teaching: Rethinking classroom talk*. Cambridge: Dialogos.

Bakhtin, M. (1981): *The Dialogic Imagination. Four essays*. University of Texas Press, Austin and London.

Beaumont, C., M. O'Doherty, and L.Shannon. (2011). Reconceptualising Assessment Feedback: a Key to Improving Student Learning? *Studies in Higher Education*, 36 (6), 671-687.

Black, P. (2015). Formative assessment-an optimistic but incomplete vision. Assessment in Education: Principles, Policy & Practice, 22(1), 161-177.

Black, P., & McCormick, R. (2010). Reflections and new directions. *Assessment & Evaluation in Higher Education*, *35*(5), 493-499.

Black, P. and D. Wiliam. (1998). Inside the Black Box: Raising Standards Through Classroom Assessment. *Phi Deltan Kappan*, 80 (2), 139-148.

Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational* Assessment, Evaluation and Accountability (formerly: Journal of Personnel Evaluation in Education), 21(1), 5-31.

Blair, A. and S.McGinty. (2012). Feedback – Dialogues: Exploring the Student Perspective. *Assessment and Evaluation in Higher Education*, 38 (4), 466 – 476.

Boud, D. (1995): Assessment and learning: Contradictory or complementary? In: Knight, P (eds): Assessment and learning in higher education. London, Kogan Page.

Boud, D. (2000). Sustainable assessment: rethinking assessment for the learning society. *Studies in continuing education*, 22(2), 151-167.

Boud, D., & Falchikov, N. (2007). Assessment and emotion: the impact of being assessed. In: *Rethinking assessment in higher education: Learning for the longer term*. Edited by Boud, D., & Falchikov, N., Routledge.

Carless, D. (2006). Differing Perceptions in the Feedback Process. *Studies in Higher Education*, 31 (2), 219-233.

Carless, D., D.Salter, M.Yang, and J.Lam. (2011). Developing Sustainable Feedback Practices. *Studies in Higher Education*, 36 (4), 395 – 407.

Carless, D. (2013a). Trust and its Role in Facilitating Dialogic Feedback. In: *Feedback in Higher and Professional Education*, edited by D. Boud and L.Molly, 90-103. London, England: Routledge.

Carless, D. (2013b). Sustainable Feedback and the Development of Student Self-Evaluative Capacities. In *Reconceptualising Feedback in Higher Education. Developing Dialogue with Students*, edited by S. Merry, M. Price, D. Carless, and M. Taras, 113-122. London, England: Routledge.

Crossmann, J. (2007): The role of relationships and emotions in student perceptions of learning and assessment. *Higher Education Research and Development*, 26 (3), 313-327.

Daniels, H. (2016). Vygotsky and Dialogic Pedagogy. In: D. Skidmore, K. Murakami (Eds.), *Dialogic Pedagogy: The importance of dialogue teaching and learning, multilingual Matters,* Bristol (2016).

DeNisi, A. S., & Kluger, A. N. (2000). Feedback effectiveness: can 360-degree appraisals be improved?. *The Academy of Management Executive*, *14*(1), 129-139.

Evans, C. (2013). Making Sense of Assessment Feedback in Higher Education. *Review of Educational Research*, 83 (1), 70-120.

Falchikov, N. (1995). Improving feedback to and from students. Assessment for learning in higher education, 1.

Furberg, A. and S.Ludvigsen. (2008). Students' Meaning-Making of Socio-Scientific Issues in Computer Mediated Settings: Exploring Learning through Interaction Trajectories. *International Journal of Science Education*, 30 (13), 1775 – 1799.

Gibbs, G. (2006). How assessment frames student learning. *Innovative assessment in higher education*, 23.

Gibbs, G. and C. Simpson. (2004). Conditions Under Which Assessment Supports Students' Learning. *Learning and Teaching in Higher Education*, 1, 3-31. Retrieved from http://www.itl.usyd.edu.au/assessmentresources/pdf/Gibbs%20and%20Simpson.pdf

Gravett, S. and N.Petersen. (2002). Structuring Dialogue with Students via Learning Tasks. *Innovative Higher Education*, 26 (4), 281-291. Retrieved from <u>http://link.springer.com/article/10.1023/A:1015833114292</u>

Hattie, J. and H.Timperley. (2007). The Power of Feedback. *Review of Educational Research*, 77 (1), 81-112.

Higgins, R., P.Hartley, and A.Skelton. (2001). Getting the Message Across: The problem of Communicating Assessment Feedback. *Teaching in Higher Education*. 6 (2), 269-274.

Housell, D. (1987). Essay Writing and the Quality of Feedback. In *Student Learning: Research in Education and Cognitive Psychology*, edited by J.T.E. Richardson, M.J. Eysenck, and D. Warren Piper. Society for Research into Higher Education and Open University Press.

Hounsell, D., V.McCune, J.Hounsell, J., and J.Litjens. (2008). The Quality of Guidance and Feedback to Students. *Higher Education Research and Development*, 27 (1), 55-67.

Jordan, B., and A.Henderson. (1995). Interaction Analysis: Foundations and Practice. *The Journal of the Learning Sciences*, 4 (1), 39-103.

Jupp, V. (2006): *The SAGE Dictionary of Social Research Methods*. London, SAGE Publications Ltd.

Juwah, C., Macfarlane-Dick, D., Matthew, B., Nicol, D., Ross, D., & Smith, B. (2004). *Enhancing student learning through effective formative feedback.*

Kluger, A.N., and A.DeNisi. (1996). The Effects of Feedback Interventions on Performance: A Historical Review, a Meta-Analysis, and a Preliminary Feedback Intervention Theory. *Psychological Bullitin*, 119 (2), 254-284.

Linell, P. (1998). Approaching Dialogue: Talk, Interaction and Contexts in Dialogical Perspectives. Amsterdam, John Benjamins Publishing.

Linell, P. (2009). *Rethinking Language, Mind, and World Dialogically. Interactional and Contextual Theories of Human Sense-Making.* Charlotte, NC., Information Age Publishing, Inc.

Maclellan, E. (2001). Assessment for Learning: The Differing Perceptions of Tutors and Students. *Assessment and Evaluation in Higher Education*, 26 (4), 307-318.

McArthur, J and M.Huxham. (2013). Feedback Unbound: from Master to Usher. In *Reconceptualising Feedback in Higher Education: Developing Dialogue with Students*, edited by S. Merry, M. Price, D. Carless, D. and M. Taras. Routhledge, Oxon.

Mercer, N. and C. Howe (2012): Explaining the dialogic processes of teaching and learning: The value and potential of sociocultural theory. *Learning, Culture and Social Interaction*, 1(1), 12-21.

Nicol, D.J. (2010). From Monologue to Dialogue: Improving Written Feedback in Mass Higher Education. *Assessment and Evaluation in Higher Education*, 35 (5), 501-517.

Nicol, D.J., and D.Macfarlane-Dick. (2006). Formative Assessment and Self-Regulated Learning: A Model and Seven Principles of Good Feedback Practice. *Studies in Higher Education*, 31 (2), 199-218.

Nonaka, I. (1991): *The knowledge-creating company*. The Harvard Business Review, November-December, 96-104.

O'Donovan, B., M. Price, and C. Rust. (2004). Know What I Mean? Enhancing Student Understanding of Assessment Standards and Criteria. *Teaching in Higher Education*, 9 (3), 325 - 335.

Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational psychologist*, *37*(2), 91-105

Poulos, A., and M.J. Mahony. (2008). Effectiveness of Feedback: the Students' Perspective. *Assessment and Evaluation in Higher Education*, 33 (2), 143-154.

Rust, C., Price, M., & O'Donovan, Berry (2003). Improving students' learning by developing their understanding of assessment criteria and processes. *Assessment & Evaluation in Higher Education*, 28(2), 147-164.

Price, M., Handley, K., & Millar, J. (2011). Feedback: Focusing attention on engagement. *Studies in Higher Education*, *36*(8), 879-896.

Price, M., C.Rust, B.O'Donovan, K.Handley, and R.Bryant. (2012). *Assessment Literacy. The Foundation for Improving Student Learning*. Oxford, England: The Oxford Centre for Staff and Learning Development, Oxford Brooks University.

Ramaprasad, A. (1983). On the Definition of Feedback. Behavioral Science, 33 (1), 4-13.

Sadler, D. R. (1989). Formative Assessment and the Design of Instructional Systems. *Instructional Science*. 18 (2), 119-144.

Sutton, P. (2009). Towards dialogic feedback. *Critical and Reflective Practice in Education*, *1*(1), 1-10.

Vygotsky, L. (1978). *Mind in Society: the Development of Higher Psychological Processes*. Cambridge, England: Harvard University Press.

Vygotsky, L. (1986). Thought and Language. New York: Plenum.

Weaver, M. R. (2006). Do Students Value Feedback? Students' Perceptions of Tutors' Written Responses. *Assessment and Evaluation in Higher Education*, 31 (3), 379 – 394.

Wegerif, R. (2007). *Dialogic education and technology: Expanding the space of learning* (Vol. 7). Springer Science & Business Media.

Wegerif, R. (2011): Towards a dialogic theory of how children learn to think. *Thinking Skills and Creativity*, 6 (3), 179 – 190.

Wertsch, J. (1991). Voices of the Mind: A Sociocultural Approach to Mediated Action. Cambridge, MA: Harvard University Press.

Wertsch, J. (2007): Mediation. In *Vygotsky*, edited by H. Daniels, M. Cole, and J. Wertsch, Cambridge, University Press.

Williams, J. and D.Kane. (2009). Assessment and Feedback: Institutional Experiences of Student Feedback, 1997 – 2007. *Higher Education Quarterly*, 63 (3), 264-286.

Wittek, A. L., & Habib, L. (2014). Quality teaching and learning as practice within different disciplinary discourses. *International Journal of Teaching and Learning in Higher Education*, 25(3), 275–287.

Wittek, A. L. (2016). Writing as a mediational tool in higher education. *Scandinavian Journal of Educational Reseach*.

Yang, M. & D.Carless. (2013). The Feedback Triangle and the Enhancement of Dialogic Feedback Process. *Teaching in Higher Education*, 18 (3), 285 – 297.

Yorke, M. (2003). Formative assessment in higher education: Moves towards theory and the enhancement of pedagogic practice. *Higher education*, *45*(4), 477-501.

Table 1.

Student	Feedback session one	Feedback session two	Transcribed
	(time)	(time)	(wordcount)
Margareth		04:02	755 words
Sandra	07:35	06:00	1988 words
Jennifer	07:35	06:30	2256 words
Shelley		04:20	932 words
Mathew	05:38	05:15	2049 words
Paul	04:24	04:00	1455 words
Vicky	09:04	05:21	2295 words
Joanne	06:44	04:40	1727 words
Eric	12:10	11:30	4535 words
Anne	04:26		845 words
Mary	04:26		1003 words
Total (all feedba	ck dialogues):	minutes 113:40	19840 words

Feedback sessions - recorded and transcribed