OUTLINES - CRITICAL PRACTICE STUDIES

The activity of "writing for learning" in a nursing program – trajectories of Meaning Making

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Abstract

A whole range of resources are introduced to students in higher education. These are picked up and developed by them individually and in collaboration with other actors. This text investigates these complex and multifaceted processes, and focuses in particular on possible functions of "writing for learning" in these processes. The questions at stake are: How can the relationship between writing and meaning making in an educational context be conceptualized from a dialogical perspective and what methodological entrances can be used for the purpose of investigating it? A dialogical perspective frames the text theoretically. Processes of writing in educational programs involve transformation and re-contextualisation of resources or tools. A range of signs, symbols and words are brought into play both at a collective and an individual level in and through student writing. I will suggest ways of conceptualizing the practices that students engage in to produce texts as well as ways in which writing practices gain their meanings and function as dynamic elements of specific cultural settings. I argue that these analytical entrances can contribute to bringing about important nuances to research on writing. Empirically, the article reports on a study investigating how portfolio writing worked as a tool for learning in a nursing program. Two student groups were followed during one academic year. The empirical study identified how activities of writing sat a whole range of different tools like theories, concepts, cultural, as well as professional norms and guidelines into play. The data set consists of audiotaped observations, field notes, submitted portfolios and other relevant documents. A total of 44 episodes relevant for the research question were selected for analysis, and the following categories where applied; themes discussed, tools set into play *and* patterns of interactions. *The article concludes that writing can form a most important tool in student trajectories of meaning making. However, to make it work for academic and professional purposes, there is a need for*

students to gain in-depth knowledge of how to deal with the acquired genre and the conventional characteristics of their field.

Introduction

Students write at all levels of Higher Education. During the last decades traditional genres such as the master's or PhD thesis have been supplemented by additional genres such as portfolio assignments, project reports and course work. New forms of student writing are often accompanied by the claim that "writing enhances learning". Fulwiller claims that writing represents a unique form of learning (1991, p. 128). Writing makes us manipulate our own thinking and renders us conscious about it. This, he argues, happens because we make our own thinking visible and concrete, so that we can interact with our own ideas. Such insights have been confirmed in a range of later studies (e.g. Dysthe, 2002; Lerner, 2007) that suggest that writing enhances processes of learning. Research in this field has shifted its focus from strictly cognitive accounts of learning to social influences on cognitive activity (Smagorinsky, 1994), and this text falls within the latter line of work. More specifically, I draw on a dialogical perspective (Bakhtin 1981, Linell 1998). From this point of view, written texts are not inert objects, complete in themselves as bearers of abstract meanings. They are "emergent, multiform, negotiated in the process, meaningful in the uptake, accomplishing social acts" (Bazerman & Prior, 2004, p. 1). Thus, processes of writing are constituted in interaction. Writing is a tool for learning which is unique to each educational situation.

The research questions addressed in this paper are: How can the relationship between writing and meaning making in an educational context be conceptualized from a dialogical perspective and what methodological entrances can be used for the aim of investigating it? Writing holds different functions simultaneously. It is a tool for learning on the one hand and a product of meaning making on the other. To be able to analyse relationships between writing and student learning from a dialogical perspective, we need data on practices where processes of writing unfold. I will suggest methodological entrances that make it possible to trace text creating activities and processes of learning in educational contexts. I will also suggest a way of conceptualising the practices that students engage in to produce texts as well as the ways in which writing practices gain their meanings and function as dynamic elements of specific cultural settings. I argue that such analytical entrances can contribute to bringing about important nuances to research on writing. Student texts and the processes of writing them will be conceptualised as reflections of student's inner speech (Linell 2009). By that I mean that activities of portfolio writing are interpreted as actions where processes of learning are played out in a specific practice, and thus made available to investigate for us as researchers. An important aspect of student learning is their re-conceptualizations of different types of learning resources (Vygotsky 1978). Examples of learning resources could be guidelines, the students' own drafts of assignments, theoretical models and concepts or physical devices like a computer. My focus is on collaborative and individual trajectories of learning (Dreier 1999). By using this notion, I want to underline that I see learning as being in some sort of motion. It reflects a more dynamic and fluid approach to student learning than static notions like "competence" or "expertise" (Lahn 2011). In addition, speaking of learning trajectories rather than knowledge development makes the diversity of learning processes more prominent and it also draws the attention towards the contextual resources that "frame" the

trajectories as well as the connections between the individual and collective dimensions of learning.

Empirically, I draw on a doctoral study investigating how portfolio writing was used as a tool both for learning and assessment in a nursing program (Wittek 2007). The main issue in this text is how student texts came into being, how the institutional tasks of portfolio writing interacted with each other and how different mediational means were sat into play within the realm of these activities.

Theoretical underpinning

Activities of writing as social and mediated acts

The concept of mediation is central in socio-cultural literature (Vygotsky 1978; Leontiev 1974, Wertsch 1998; 2007). According to Vygotsky (1978), a hallmark in human consciousness is that it is associated with the use of tools, especially "psychological tools" or "signs". People do not act in a direct unmediated way in the social and physical world. Rather, our contact with the world is indirect or *mediated* by various types of tools or mediators (Habib and Wittek 2007). Language has been described as the most important of all human artefacts (Linell, 2009; Leontèv, 1974). However, according to Barton (1994, p. 66), it is not so much the language in itself that mediates, but *people using language*. Language mediates our thinking and learning, and writing can do so in a most powerful way. Knowing is objectified in the tools of language and set into play when groups of people interpret and use them. "There is no such thing as pure cognition that can be assessed per se" (Säljö, 1999, p. 85).

Writing can thus be conceptualized as a set of actions that bring together different signs, symbols and words into new senses of "meaning", a process that is dialogic in its nature. Humans are social beings, thoroughly dependent on each other. The process of writing *is* interaction, not only with culturally developed tools (such as instructions on how to write a portfolio assignment), but also with a variety of others that have a more peripheral role and that we we may call *third parties* (Linell 2009). Dialogue partners can be physically present, as in situations whereby two co-authors sit side by side and work on the same text, or one supervisor going through an assignment together with a student. Secondly, *generalized others* can also take on the role as dialogue partners. Generalized others can be ways of arguing or modes of thinking that are typically embraced in any disciplinary or professional culture. Thirdly, dialogue partners can also be *speech genres* and *social languages* to whom the writer may relate in thinking and acting (Linell 2009). These can be defined as "dynamic, living activities, subjects to alterations as situations, cultures and time changes" (p. 198). Within the realm of their studies, when faced with a given assignment, students have to negotiate how to deal with the institutional task that lies ahead of them. In these negotiations they will search for support from previous experiences and a range of third parties originating from contexts and social experiences both inside and outside of their educational context and across time. Even when the student sits by herself in her study, she interacts with culturally developed tools representing certain voices and their historical paths.

Utterances are doubly contextual

Invisible dialogue partners are present in any utterance, but particular "here and now" situations require us to choose a proper way of using these resources in accordance with the contextual "rules". Vološinov states that "[to] understand another person's utterance means to *orient oneself with respect to it*, to find the *proper place for it in the corresponding context*" (1929, p. 102). Students' trajectories of learning bring together third parties in unique ways, for example when they use previous experiences from schooling to figure out how to write a self-critical essay as part of the portfolio: conventions and teachers voices from previous schooling form important third parties. These and other resources are brought into play through student writing, and the individual student can achieve new and creative forms of "meaning". These paths can be labelled as *inner speech* (Linell 2009), a term that underlines the close relationship between individual meaning making and social experiences. Writing thus is dialogic in nature like all human action and interaction.

Students' meaning making through processes of writing is closely connected to what Bakhtin labels as a *fleeting language* (Bakhtin 1981). When a student formulates a sentence or a paragraph in her assignment, her utterances are contextually produced *actions* occurring here and now. But utterances are also bound to other contexts, experiences, discourses and voices – both previous and future ones. Any utterance participates in several contexts simultaneously. Bakthin expresses this perspective as follows:

> Every utterance participates in the "unitary language", and in the same time partakes of social and historical heteroglossia (…) Such is the fleeting language of a day, of an epoch, a social group, a genre, a school and so forth. (Baktin, 1981, p. 75).

Utterances are *doubly contextual* (Linell, 1998, p. 71). When students formulate and reformulate sentences in their assignments, both content and form can be seen as responsive to prior contexts. However, they are also contributing to renewing contexts. Students are thereby transforming different resources from previous situations into tools that are relevant and adequate to deal with the "here and now" situation.

Every utterance brings about a range of meaning potentials, referring to different third parties. As parties to communication, we do not share all assumptions about the activity we involve ourselves in. We do not normally communicate from positions of equal opportunity, and therefore often have to resort to negotiations on what rules that should be followed here and now. Among shareholders in a collaborative writing process, certain conventions are gradually taken for granted as a result of negotiation. In a later section I will illustrate how such processes of negotiation occurred in a group of nursing students working together on one extensive assignment.

Asymmetries, boundaries and tensions are essential in communication (Linell, 2009, p. 113). When these conventions (that we orient our actions towards in a specific context) become the object of inquiry, a potential for creativity and meaning making is released. This is the case both for a person's inner speech and for his or her contributions to external dialogue. Asymmetries and tensions as they appear in discussions about interaction related to writing can thereby give valuable information about the complex activities of student writing, and meaning making, something I will return to later.

Individual agency and consciousness

Tracing processes of writing also means tracing the inner thoughts, perceptions, feelings and motives of the writers (Prior, 2004, p. 167). To conceptualise these complex processes, I will apply the concept of *"personal trajectories of participation"* borrowed from Dreier (1999). The term refers to the unique way an individual establishes structures for participation on the basis of his or her previous contextual experiences and makes them relevant to a new context.

The process of academic writing within an educational context *is* interaction with different types of actors, and can be defined as "dynamic, living activities, subjects to alterations as situations, cultures and time changes" (Linell 2009, p. 198). Students have to negotiate how to deal with the different institutional tasks that lie ahead of them. In these negotiations they will search for support from a range of third parties originating from different experiences from their past. Any single human being will, over time, become acquainted with many (partially overlapping) sociocultural communities and pick up many ideas, sometimes conflicting perspectives on the same phenomena or issues. When the students express themselves in an assignment, this is a concrete action of meaning making that appears at different levels simultaneously. Firstly it is an action related to unpacking and interpreting the institutional task at hand (like producing a written portfolio). Secondly it is an on-going collective action of developing the contextual conventions that frame the work here and now. Thirdly, it is a process of meaning making through personal trajectories of participation. When formulating sentences, the writer can hear her own voice, almost as she hears the voices of others. All these different activities and processes are intertwined in practice and they appear both at a collective and an individual level. Cognition must be given a form to be shared socially. Student cognition draws on cultural and contextual resources which are inherited, but also developed in the concrete context.

Processes of unpacking the professional ideals and core knowledge embedded in an educational program always involve a web of complex interaction. These interactional activities take place not only with third parties as mentioned above, but also with the specific culture they belong to and the core tools that are inherent to it. Student's trajectories of learning will somehow link to the knowledge concerns and cultural tools within the professional and academic culture of nursing as it appears to the students both during their studies on campus and within the realm of professional practice as experienced during their internships. It is the *movement* characterizing this trajectory that I take interest in here. It is important to underscore that the kind of movement that goes on in student trajectories follows the shape of more stable institutional or disciplinary cultures, and that these cultures are stabilized by *tools*. It is therefore of great importance to investigate what tools are involved in student activity and in what ways they are set into play.

Agency and *consciousness* are related in these trajectories (Linell, 2009, p. 113). Agency involves the individual will to intervene in the world. Action is, almost by definition, intentional and conscious. At the same time, one's own consciousness invokes the voices of others.

The empirical context

The context of the empirical study is a four-year part-time study program in nursing where the main activity throughout the program consists of writing of assignments that are gathered into a portfolio that forms the basis of assessment (Wittek, 2007). Portfolio assessment has been extensively introduced in higher education in recent years, as an alternative to the so-called testing and measurement tradition (Klenowski, 2001; Sluijsmans, 2002; Tigelaar, 2005). Portfolios for the purpose of assessment can be defined as being a purposeful collection of student works that tells the story of the student's efforts, progress or achievement in (a) given area(s). This collection must include **student participation** in the selection of portfolio content; the guidelines for selection; the criteria for judging merit; and evidence of student self-reflection. (Arter and Spandel 1992, p. 36). This definition is embraced by the responsible teachers of the current nursing programme. The reliance on writing as a tool for learning is very much present within the programme. According to the teachers responsible for the programme, even technical procedures like administrating a hypodermic injection can be learned through writing about. The main intention of using portfolio writing as the core part of the study structure is clearly stated by the designers of the study program (Wittek 2007) who consider that writing enhances learning for future nurses in a most powerful way.

The final assessment takes its departure in the submitted portfolio every semester. It is the *individual student* who writes and submits the portfolio, but this is done according to a plan that is agreed upon by the study group as a whole. The study groups are set by the teachers every autumn and typically include between 5 and 8 students who will work intensively together for one academic year. The study was based on observation of two study groups during their second year of the four year program. The first group, which counted 7 students, was coordinated by a student that we choose to call Cecilie and is therefore labeled in this text as "Cecilie's group". There is one male student in the group, the rest of the group consists of female students. Two of the members (Grete and Turid) are about 20 years old, while the others are between 35 and 45. In the current text I pick all the illustrations from Cecilie's group to make the case as clear as possible to the reader. In order to highlight the contrasts between the groups I will briefly comment upon the overall patterns in the other group, named "Martine's group".

Detailed descriptions about the portfolio assessment and the ways students are supposed to work is presented in a 37-page booklet of guidelines. The portfolio structure has been developed over several years, and the guidelines have become more and more detailed every year. When students ask questions about what they are supposed to do, the teachers usually refer to the guidelines "where everything is explained". However, in spite of the existence of detailed, written instructions, the groups organize and solve the institutional tasks very differently.

The portfolio contains a whole range of assignments; here I will go into one of them. During the spring term, all the study groups are expected to conduct an extensive collaborative project (Wittek, 2007, p. 326): The project report is to be worked out following these frames:

1. Current health-related or preventive themes related to children /youth, adults and /or elderly in the urban district

2. The problem is approved by supervisor in collaboration with the contact person in practical training.

3. The connection to a practical context is to be clearly presented and documented.

4. All areas of knowledge must be included.

5. At least one research-based article must be used.

6. The report has to be in line with the ethical/juridical protection of patients and practical field used for study purposes.

7. A process log is to be attached.

8. The report is to consist of about 7000 words, including a process log within the 500-600 word range.

9. Minimum 6 supervision meetings with teacher

The illustrative excerpts will all be from the process where the students in Cecilie's group produced this specific report.

Methodology

In an earlier section, it was underlined that we need to explore the practices that people engage in to understand writing for learning from a dialogical perspective. Such entrances can help us shed light on how texts come into being as well as the ways that written practices gain their meanings and functions as dynamic elements of specific cultural settings.

I will now turn to the methodological entrance developed specifically for the purpose of investigating what production of texts do and how processes of writing can enhance meaning making in the portfolio study. The methodology is mainly based on Barab et al. (2001) and Linell (1998).

The empirical study examined a specific communicative practice, and focused on how processes of portfolio writing were sat into practice in a particular part-time nursing program (Wittek 2007). The aim was to uncover signs of social identities, institutions and norms as well as the means by which these social formations are established, negotiated, enacted and changed through communicative practice. The analyses of textual practices included:

> - Interactional analysis of the two study groups collaborative meetings of portfolio writing, normally one or two meetings pr. week. These meetings were audiotaped and the author took extensive notes, with a special focus on gestures and movements that would not be part of the audio tapings.

> - One year of e-mail exchanges within the two study groups, attachments included

> - The students' comments on transcripts from audiotaped observations, collected within the realm of group interviews with the portfolio groups

> - Pieces of texts (portfolio outlines and submitted versions)

> - Responses from peers and teacher, some of which were audiotaped and transcribed while other were sent by e-mail

Cecilie's and Martine`s study groups were followed closely during the second study year of the 4-year nursing program. Both groups met for at least two hours a week and all the

group discussions were audio-taped, in addition to field notes. Additional material included documents, the practical training of the students, e-mail and attachments distributed within the two study groups, student portfolios, assessment meetings with external and internal assessors present and interviews. It is the audio-recorded discussions and the notes resulting from the observation of those that will be at the core in this text. Altogether 49 hours of discussions among the two study groups were audio-recorded and transcribed. These took place within the time span of one academic year, from August 2003 to June 2004.

44 *episodes* were selected. An episode was, in this case, a student discussion or activity of some problem, issue or topic relevant to how portfolio as a tool for learning and assessment was implied in students learning activities. An episode always started with an initiator introducing a new resource that changed the focus of the group's interaction. An episode was defined as a period of discussion, a discourse event with a beginning and an end surrounding a spate of talk (Linell, 1998, p. 183). The 44 episodes were analysed in detail with regard to the following categories: *themes discussed*, which refer to the discussion's thematic concerns; *initiator,* which refers to the persons starting the episode by introducing a new resource; and *participators,* which refer to those who participate verbally. *Resources set into play* could refer to physical tools (e.g. a computer), concepts and real-life issues (e.g. bullying) or documents (e.g. assignment outlines). *Patterns of the interactional "style"* were investigated by looking into patterns of *initiatives*, *responses* and *follow-ups* (Wells, 1999, pp. 236-237, and 246). Initiatives were categorized into three types: informative, promoting and enhancing. Responses could be uttered verbally (audiotapes) or non-verbally (field notes), they could be direct answers to an initiative, and they could confirm or deny what was uttered. A high frequency of follow-ups (especially correcting and evaluative ones) and a high degree of overlaps were interpreted as indicators of engagement, intensity and explorative practice of dialogue, but they could also indicate that someone had a dominant position. To be able to make this kind of interpretation, the broad contextual understanding from one year of field work was used heavily. The preliminary interpretations were in some cases discussed with the informants, and their comments were used as additional data.

Portfolio practice – different patterns

According to the guidelines, an evaluation on the group processes and the contributions is to be commented on in a self-reflective essay and made part of the working portfolio. It is also the group that design how the portfolio is to be designed. During the course of the semester each individual student creates a written portfolio according to the group's plan. This portfolio consists of three parts: a reflection portfolio, a documentation portfolio and an academic portfolio. To illustrate how demands and limitations are specified in the guidelines, we will list below the criteria used to describe an academic portfolio for the purpose of assessment:

– Certain themes must be covered (e.g. geriatrics)

– Theory and practice must be integrated in 2/3 of the assignments

– There must be at least three assignments that are written individually and three that are the result of group work

– Altogether this portfolio shall consist of 10 000 words

– A documentation of the discussion that took place with supervisor must be included in at least two of the assignments

– Peer- response must be included in min. 2 assignments

– Different methods for study work must be used

– Criteria must be specified by the student (3-7 for each assignment)

– At least two research articles must be used and referred to in the portfolio

The patterns identified in the two groups as far as portfolio-related work is concerned are summarized in the following table:

Table 1: Tools set into play and patterns of interaction

	Martine's group	**Cecilie's group**
Tools set into play, listed in terms of frequency of appearance	Plan for assignments and the assignment outlines The guidelines Concepts connected to study structure and formal aspects of the writing activities Disciplinary concepts (brought up by supervisor on several occasions)	Assignment outlines The guidelines Disciplinary concepts Professional concepts Laptop, used to have constant access to an updated version of the assignment
Patterns of interaction	Supporting Harmonizing Avoiding confrontations Few follow-ups Conflicts are dealt with using a generally harmonic style	Confronting Nuancing Explorative Problem-oriented Conflicts are dealt with using a generally confronting style

The two groups differ significantly both in terms of what tools they choose to bring into assignment-related activities and in patterns of interaction. The lack of confronting, shading, explorative and problem-oriented practice in Martine's group may be understood in relation to the lack of substantial discussions around professional and conceptual oriented themes. As we can see from the table, the most dominating tools in this group's collaboration are documents reflecting the formal aspects of the work, including the plan for portfolio assignments and the guidelines provided by the teaching staff. The formal aspects of their study work play a central role in their activities all through the whole study year, especially questions regarding how to interpret the guidelines. Disciplinary concepts are rarely discussed within this group, but when the supervisor is present, he brings them in as central resources in the interaction. The interaction in Martine's group is always supportive and harmonizing. Confrontations are consequently avoided – although

tensions and discontent do come up when the students are in subgroups. Just before Christmas, Martine states clearly that she does not feel comfortable about how a text she has produced has been used in the collaborative assignment. The response from the rest of the group on this is "a wall of silence". The frequency of e-mails is dramatically reduced for a few weeks, and also the physical meetings. When the group starts communicating again, it is evident that the quest for a harmonious group tone is still very much present, and team members simply avoid any topic that may bring about any kind of conflict.

In *Cecilie's group,* a significantly different pattern developed. The disciplinary and theoretical concepts often emerged as a topic of discussion, and the group members often deliberated about how to apply them in a practical nursing context. This can be seen in relation to the confronting, shading, explorative and problem-oriented practice that characterizes the dialogue of this group. It needs to be noted that questions about how to interpret the guidelines and the requirements regarding the content and form of the portfolio are central also in this group. I will at this point introduce a few episodes from the collaboration in Cecilie's group to illustrate how these patterns could be identified.

Excerpt 1 is picked from an early phase of the project work. Cecilie's group has decided to work with health preventive work in comprehensive schools. They will do this in collaboration with a school nurse. They have not decided yet on the more specific focus of their project, but bullying is one of the suggested themes (and the theme they end up with at a later point). The discussions in this group are typically intense and characterized by frequent changes of topics. Prior to this excerpt, the discussion has mostly focused on possible themes to investigate, but now they start discussing how to allocate the required number of words between the different parts of the assignment:

Excerpt 1: ALLOCATION of words.

1. Astrid: Then we actually have divided ...so that (...)

2. [reads from a file on her laptop] "The organization of educational programs for children in primary school, by Cecilie. Interdisciplinary and division-based collaboration by Fredrik and Turid. The functions and tasks for the nurse, by Anette and Grete, a sociological perspective on organisations by…"

3. Astrid: Is that okay?

4. All the others: Yes!

5. Anette: *I think we also should find out how big each of the contributions should be, what parts to highlight....maybe the point of Grete and myself is the most important one?

6. Cecilie: Maybe....because it is the perspective of nursing we are supposed to...

7. Astrid: * I think all of it has the same importance, I suggest that we divide the words similarly between the different parts.

8. (A lively discussion follows. Several persons talk at the same time for a few seconds, and then they continue with parallel dialogues in pairs. Turid does not participate in the discussion; she is calculating numbers on a sheet of paper in front of her. When she starts talking, the others listen.)

9. Turid: *650 words each. We end up with 650 words each.

10. Cecilie: * But introduction and summary don't need to have as many words as the others. If we estimate 250 words for introduction and summary, then we have a little tolerance of movement. It's okay to have that, isn't it?

11. Several voices: * Yes.

Astrid initiates this episode by raising the question of how to distribute the required number of words. The other participants are Anette, Astrid, Cecilie and Turid; the last two members of the group keep silent, but pay attention. The dialogue can be characterized as confrontational because of the frequency of promoting initiatives and demanding follow-ups. There is a high degree of involvement and also a high degree of overlap (line 5, 7, 8, 9, 10 and 11). The responses come so quickly that participants have to be highly assertive to be given the floor. The semiotic tools that are important in this excerpt are the concepts of *a sociological perspective on organizations* and *division-based collaboration*. A physical tool that has an important role is the *laptop* used, and we also see that students discuss the *written guidelines* for the program. A few syllabus books have been brought to the meeting, but even if they lay on the table, they are not referred to explicitly in the discussion. The dialogue splits up into parallel dialogues for a while (line 8), as is often the case when this group meets.

As the discussion continues for a couple of hours, the focus continuously changes between defining central concepts and identifying what they mean for the practice of nursing, and questions that relate specifically to the formal aspects of the institutional task (as we see in excerpt 1). The next excerpt is taken from a later point in the same meeting. The concept *health* is involved in the formulation of the problem, and Cecilie initiates an exploration of the concept (something she often does with different concepts). As we can see, this focus is replaced by a new discussion about how to perform the task ahead of them.

Excerpt 2: What is health?

1. Cecilie: But, then I wonder… what is health? Is health a judo club?

2. Grete: But, that might not be up to you to decide, Cecilie, because …

3. Cecilie: * No, that's Astrid's part, but I am thinking about the organization now…

4. Grete: But what is local public health service? The urban district might already have answered that.

5. Cecilie: *But, I can read about that… then we do not need to discuss that any further now, we can look at it on Tuesday – what everyone of us have found out…each of us. I will present an outline on Tuesday. But the rest of you, what do you think?

6. Turid: What do the urban districts offer children and youth, but not health then….dentists and speech therapy and things like that...

7. Several voices: * Yes

8. Turid: And how the collaboration between them is then…

9. Anette: * But Cecilie, it says the *organization* of the services of the urban district.

10. Cecilie: Yes, I have to read more about this.

11. Anette: How are those services organized, that's what you are supposed to write about?

12. Cecilie: *So, who is responsible for what, that is what I have to look into.

13. Several voices: *Yes!

14. Cecilie (towards Turid and Fredrik): And you are going to write about interdisciplinarity and collaboration between different sectors. Are you wondering about anything?

15. Fredrik: Ehmmm….

16. Turid: No, I need to read a bit…

Cecilie engages the group by bringing in the concept of "health", and she invites the others to explore the term in relation to the problem of the project. The other participants are Grete, Turid, Fredrik and Anette. Astrid does not say anything herself, but she has her eyes on the computer screen and types down her interpretation of what is said (this is based on the field notes). This role is typically taken by Astrid in most of the episodes, and it gives her a special position within the group. Cecilie's participation is gently encouraging, first by addressing her question to the group as a whole (line 1), and later more encouraging by addressing a new question directly towards Turid and Fredrik (line 14). There are several responses and there is also a high degree of overlap here which indicates a high degree of involvement. Some follow-ups are *elaborating*, as when Turid suggests that they might look into the collaboration between the different actors (line 8). There are also examples of *encouraging* follow-ups (line 1 and 14) while others are more *problem-focused* (e. g. line 9). Another characteristic of the interaction is the pattern that utterances are interrupted, taken over and finished by others.

After a thorough analysis of all the 44 episodes, as illustrated in these two first excerpts, it was possible to look for patterns of interaction and the use of tools. Cecilie's group developed as already mentioned a confronting, explorative and problem-oriented interaction style, and it is interesting to note that two of the students (Cecilie and Astrid) pushed the rest of the group in this direction by acting as dominating initiators - for example, by contributing significantly to the interactive style and by introducing specific tools to the interaction.

Finally, we shall look at a third excerpt to illustrate how asymmetries and tensions heavily occurred in some of the episodes picked from Cecilie's group. We follow the same line of discussion as in the previous excerpts, but this excerpt is drawn from a session that took place two week after the ones from which the first 2 excerpts were drawn. The following episode starts (typically) on Cecilie's initiative. She illuminates a problem with a claim written in the final outline of the project report. The problem for Cecilie is how the view of humanity is described by the group ("edited" by Astrid as usual): "We build on a humanistic view of humanity". Cecilie says that she cannot accept this sentence. She thinks they should discuss this issue thoroughly. Just prior to this excerpt Astrid has read a definition of a "humanistic view of humanity", and everyone except Cecilie has nodded and murmured in agreement.

Excerpt 3: Humanistic vs. Christian view of humanity

1. Astrid: This is…I think absolutely…that we should take our departure point from this.

2. Turid: *I think we can use this.

3. Several: *Yes.

4. Cecilie: Well, you see… I cannot identify with this. I have a Christian view of the human being. I believe that God…

5. Turid: * Oh, yeah…right! Well, I don't!

6. Cecilie: * No, right. There, you see, we do not share the same view within the group.

7. Turid: But since there is only one in the group with a Christian view, we….

8. Cecilie: * A humanistic view of humanity view of man places *man* in the centre, while a Christian view of man places *God* in the centre.

9. Turid: * Yes, I know that, I know that very well.

10. Cecilie: But since I am among those who define a Christian view of man as a humanitarian view…..that's also what they do in our syllabus books….so that's okay.

11. Astrid: * But that can work as a good platform, for the whole group….

12. Cecilie (towards Turid): No, because…you don't want to stand for a Christian view of human life, do you?

13. Turid: NO!

14. Cecilie:* But I mean that… if you can't identify yourself with it…

15. Turid:* (Throws her arms out and nods) No, it's okay, it's okay, it's okay. Sorry!

16. Astrid: * No… that is, that is…

17. Cecilie*: Do you think it was unpleasant that I emphasized this?

18. Turid: *. No, no…we do understand your point, we fully respect that.

The excerpt illustrates asymmetries and tensions that become visible when Cecilie questions the claim that Astrid is about to pin down regarding how members of the groups relate to the issue of views on humanity. From the ensuing discussion, we gain access to an interesting illustration of conventions being made the object of inquiry. The use of a dialogical approach reveals a great potential to enhance contextual meaning making and to mediate processes of learning (Linell, 2009). During the interviews that I carried out and from informal conversations with informants, they reported several times that they often felt exhausted after group meetings. At times, this also emerged as a topic when the group was together. Turid stated the following in one meeting (after the discussion about view of humanity as illustrated in excerpt 3): "This is so typical for our group! We have to discuss every little nuance of everything. Sometimes I wish we could just….." She is interrupted by Cecilie, who brings up the question about how the rest of the group find the conventions of the group's collaboration and asks the other members of the group one by one; "and what is your opinion?" Such an example illustrates how demanding the set of

conventions developed by this group may have been. At the end of the year, all the members explicitly state that they have learned a lot, but that group work has been challenging and hard. From the analysis as a whole it is obvious that a lot of time and struggle is related to ways of organising the collaborative project work and to the collaboration in itself. Cecilie states in particular in an interview that it has been a tough way of learning. She experienced the critique towards herself as painful, and reflecting back on the past academic year, she reports that the year has been hugely challenging at a personal level. Let me underline that the intention of the study structure is to enhance ownership to the tasks and to recognize the interests held by the students. However, it is not the disciplinary concepts and the professional challenges that appear to be the core issues either in Cecilie's group, or in Martine's group.

Discussion

Only two out of seven core groups were followed in this research. However, there is reason to believe that seven significantly different portfolio practices developed in parallel during the course of this nursing program. Seven different core groups most probably develop different structures for participation during the year they work together. Most of the study work is supposed to be done within the core groups, and as I have illustrated in the previous sections, the space of interpretation and choices to make by the study group is large.

When I asked the responsible teachers about what the intended purpose of leaving so many important choices to the study groups was, they answered that being given such responsibility for their own learning would increase the students' potential for learning. From what could be gathered from the interviews, they believed that giving students the freedom to focus on the topics that they are most interested in would enhance their learning. However, in practice, this freedom mostly manifests itself as a continuous search for "what do they really want from us"? This is particularly evident for Martine's group. The study structure is significantly different from the type of study methods that they have been acquainted within the realm of their previous schooling experience. Due to a lack of relevant reference points and third parties, the study work ends up focusing primarily on the activity of establishing structures and conventions for how to interpret the tasks and how to collaborate.

It is important for future nurses to be able to interpret different sets of professional guiding principles, but there are other aspects that are even more important for learning the profession of nursing. Disciplinary and professional theories and procedures should be the main focus of the study group activities according to the guidelines. However, a lot of time is used on the formal aspects of how to interpret the institutional tasks and on processes of personal and collective processes (Wittek 2007), something I will return to later.

Even though the tool of writing for learning is pre-planned by the teachers in a most sophisticated and detailed manner, it is obvious that the concrete functions of portfolio writing are first and foremost constituted in activity by the groups through interaction.

Different possible conventions for interaction also need to be constituted by the groups. The "rules" for collaboration, interaction and how to fulfil the institutional tasks are shaped through negotiations. These rules gradually turn into common reference points that structure the collaborative activity as illustrated in the previous sections; acts of writing

are doubly contextual (Linell 1998). When students formulate and reformulate sentences in their assignments, both content and form are responsive to prior contexts. At the same time, they are also contributing to renewing contexts; students are re-conceptualizing resources from previous situations into proper tools for the contextual tasks they are facing here and now.

It should be noted that there are patterns in both of the groups that are in line with the intentions articulated by the teachers, like the engagement every member shows, and the ownership that the members of the groups develop towards their own study work. But there are also crucial mismatches between the teachers' intentions and the actual practice, especially in Martine's group. Despite their supervisor's efforts to make conceptual and professional tools central in the interaction, they keep on discussing the formal aspects of their portfolio assignments. A friendly tone and a general readiness for compromise dominate the interaction, while challenging discussions exploring theory and practice of nursing nearly never take place. In contrast, the interaction in Cecilie's group is characterized by a high frequency of conceptual and professional discussions. Cecilie reads the syllabus carefully, challenges the others and "forces" them to work hard. She also checks out the guidelines systematically, and asks the supervisor when she has questions about how to interpret the statements in it. When she presents her interpretation of the guidelines, the rest of the group seem to generally accept it, and spend relatively little time discussing those issues (for example compared to Martine's group).

Processes of collaborative portfolio writing in this nursing program direct the attention of students to specific objects and concerns. The process of producing texts depends on using other texts. As illustrated earlier, *how* portfolio as a pedagogical tool enhance learning is very much a question about *what tools are set into play in the activity*. As mentioned above, the two groups differ a lot in this aspect. Students have a large space of freedom to make their own theoretical references and to follow their own interests. In Martine's group, this freedom seems to bring about a continuous focus on the formal aspects of the guidelines, which is, to some extent, also the case of Cecilie's group. Writing is a way of using language that forms a powerful mediational means in processes of learning (Barton 1994). However, as I have illustrated above, processes of writing are constituted in contextual activities, and are thereby complex and multifaceted. The production of the portfolio assignments in addition to processes of unpacking the institutional task seems to be the most important object for both of the groups followed in this study.   of like that also for the other groupther.rofessional challenges that appears to be the core issue in Ceciles g

The analysis as described above enabled me as a researcher to look into how individual and collaborative portfolio writing influence student beliefs and actions, how students actually produced their texts and how the social systems of the groups depended on and promoted particular kinds of texts. In both of the groups, the students became heavily involved in collaborative work related to building the portfolios. However, it is obvious that they had no choice, since portfolio work was explicitly defined as being group work. As illustrated above, some students experience frustrations about having to collaborate with others, for example Cecilie who claims having "to do all the work on behalf of the group". However, it is interesting to note that all the students involved in the study explicitly state that they learn a lot from working in groups, even those students who expressed feeling huge levels of frustration from time to time. An interesting question is *what* they learn, or to put it in other words: *in what ways does the conventions developed*

by the groups mediate student learning? Cecilie states clearly that she has learned a lot. She has been reading the entire syllabus, told the others about the core points and all the time she has been highly motivated to work hard. But a lot of the time has been used to inform the others, to "challenge" them and to support them in their work. Martine's group, on the other hand, spend most of their group work time discussing how to interpret the guidelines. Professional and disciplinary concepts are seldom involved as tools in their interaction. An important question to ask in light of this is: Is portfolio writing, the way it is used in this context, an adequate catalyst for learning for future nurses?

After two (out of four) years, Martine summarises her experiences by saying that she learns a lot from working with portfolio assignments as an on-going process all through the nursing programme. She reports that it is a lot easier to *remember* the professional information *when she has to work on it*. Martine considers that forcing students to write all the time for the purpose of learning is a clever idea:

Excerpt 4

> I can see that I learn a lot … because I have to read all the time and I walk along with all this outlines inside of my head. I'm not the kind of person that sits down and does the writing at once, but I do have outlines in my head, and they make me read about different things. I make the assignments in my head before I start writing.

Personal trajectories of participation (Dreier 1999) have earlier been introduced to identify the unique way an individual establishes structures for participation. Any single human being will, over time, be acquainted with many (partially overlapping) sociocultural communities and pick up many ideas, sometimes partly conflicting perspectives on the same phenomena or issues. Cecilie writes for example about a practice that diverges very much from the ideals presented in the syllabus. This is in an assignment reporting from an internship in a nursing home. One patient suffering from dementia got really upset and started shouting for help. The staff did not pay attention to her, but kept on with their private conversation. Cecilie describes how she took care of the patient, but also her disappointment about how the professional caregivers acted. Social experiences invoke the voices of a range of third parties, and students need to make meaning from relating them towards one another. Students in this nursing program have ideas about nursing from different contexts, like Martine utters in an interview. She has always wanted to become a nurse like her mother, and she expresses that having the opportunity to follow this nursing program in very positive terms as we can see in Excerpt 4. However, she also has critical comments. Martine thinks it has been difficult to unpack the portfolio task since she started. The study structure does not look like anything she has experienced from her earlier life, and sometimes she wishes that they could have some traditional exams, just to "give her the feeling of being a real student". She also says:

Excerpt 5:

> I think the teachers should give us a course in study techniques. They could tell us how we are supposed to think instead of [telling us] that we should figure it all out ourselves. I think it was hard to use more than a year to find out how we are supposed to do things.

Asymmetries, boundaries and tensions are essential in communication, and when conventions are made the object of inquiry, a potential for creativity is released both for

the self's inner speech and his or hers contributions to the group. Let's look back on Cecilie's role in her group to illustrate: Cecilie really takes charge of her study group. She organizes meetings, sends out agendas and assigns tasks to the others. In October this creates a dispute. Anette says that she speaks on behalf of several in the group when she criticises Cecilie for being too dominating (Wittek, 2007, p. 198). In an interview, Cecilie reports that she felt hurt about these comments. She really wants to study hard and she is eager to learn what it takes to be a good nurse. She puts a lot of work into the portfolio assignments, and she thinks that the others should work harder than they do:

Excerpt 6 (from interview)

> Sometimes the others do not increase their knowledge. It might be negative to say that, but when we have our discussions in our group....I just know that the others have not read too much. And if you have read very little, what you write easily becomes sheer copying...and then you have to re-write it. I am the one that has done a lot of the work that had to be done this fall, and finished it. I view things from a critical viewpoint and I make huge demands. I could have done so much more than I do, and I think the others could have done more......reading and stuff (Wittek, 2007, p. 244)

After facing criticism in October, Cecilie decides to "change her behaviour" and be less bossy. However, the observations show that she continues to take the organizer's role, though it appears in a less direct manner. If we look back on excerpt 2 again, we can see that Cecilie takes good care to avoid requesting too directly from the others that they should do what they are supposed to. But instead of saying that everyone must read on the topic they are responsible for, she carefully informs the others of what *she* will do herself, hoping that the others will follow her example (Excerpt 2, line 5):

I can read about that, then we do not need to discuss that any further now, we can look at it on Tuesday – what everyone of us have found out…each of us. I will present an outline on Tuesday. But the rest of you, what do you think?"

Cecilie does obviously not get the response she wishes, and in line 16 she repeats her point addressed to Turid and Fredrik specifically, using an encouraging tone: "And you are going to write about interdisciplinarity and collaboration between different sectors. Are you wondering about anything?"

An important part of Cecilie's agency in getting the others to do a serious job, is that the assignment in its final version will be a part of her individual assessment. Just ahead of the submission in the fall term she states (Wittek, 2007, p. 241):

Excerpt 7 (from interview)

> I'm not willing to fail on the assessment because the others haven't finished their jobs. You see, we will not pass if everything isn't fully finished. So, then I have to remind them and make myself unpopular, or I will have to finish it myself.

This illustrates the complexity of "otherness" in utterances. Utterances are strongly other-oriented at a more general level: they are not only expressions of autonomous individual intentions, but have *responsive and anticipatory relations*. Third parties act as structuring forces here and now and they also have lines towards present and past. Cecilie's utterance mirrors how she struggles to balance and relate to different "others". This illustrates how the students' utterances are *doubly contextual* (Linell 2009): what they say or write will

always be in conjunction with other utterances, depending on what comes before and what comes after. In educational programs in higher education, the most important structuring forces are related to professional standards, conventions, dedicated tools and widely accepted modes of using them. As novice students are seldom capable of establishing these structures by themselves, collaborative portfolio work might enhance intended processes of learning, but it can also be that it enhances significantly different processes of learning, like we have seen in the two study groups described in this article.

Summing up

To understand writing as a *tool for learning* on the one hand and a *product of meaning making* to be assessed on the other, we need to explore the practices that people engage in to produce texts as well as the ways in which writing practices gain their meanings and function as dynamic elements of specific cultural settings. Meaning making is invisible. We can observe what students have learned by looking at what they write, do or say, but to "explain" when and how the making of meaning takes place, we need a conceptualization of these abstract processes. Building on a dialogical perspective, I have suggested ways of investigating the complexity of portfolio writing and its role as mediator for learning. Language and the use of signs are important resources when students transform cultural experience and professional knowing into personal trajectories of participation, but to know in what ways such tools mediate learning we need to explore the practices that students engage in. I have suggested a way of doing exactly this. Students never learn word meaning in a fixed form. They need to fill them with their own accents and their own intentions. Consciousness is always based on otherness. Self *is* dialogic (Holquist, 1990, p. 19); this kind of self-consciousness that can appear through the activity of writing. Writing is always oriented towards others and towards specific meaning potentials and contextual agendas, and these processes are extremely complex as illustrated above.

Dialogues always contain other dialogues when the actors set previous experience and meaning into play through their utterances; this is also the case with written utterances. In the aim of analysing this practice, we need to explore how writing *unfolds in interaction* and how the portfolio assignment tasks are being unpacked. Tracing the writing process also means tracing the inner thoughts, perceptions, feelings and motives of the writers (Prior 2004, p. 167). Exchanges where the content and the purposes of the texts are imagined and planned, in which specific language may even be "drafted" out in talk - as we saw in excerpts 1, 2 and 3 - are examples of interesting material to explore for this purpose.

The empirical study presented in this article illustrates how portfolio practices can establish a structure that puts a range of resources into play. Semiotic resources are especially important in the case of writing (Berge, 2002). In the previous sections, I have illustrated possible ways of illuminating what kind of resources students bring into play and how these resources are being used in different writing-related activities. These insights need to be related to the specific aims of the current study program.

Student texts are *reflections of* opposite and struggling forces that *do work* in society, and processes of writing transform mediational means and professional knowledge into personal trajectories of learning. To study the activity of writing for learning, we need information about *how resources appear and develop* and how they are involved in

processes of meaning making. How the activity of writing structures student meaning making and how resources are set into play can never be fully planned in advance by teachers or curriculum developers, since writing as a tool for learning is negotiated and constituted in specific contexts.

Through interviews and informal conversations, students in the present nursing program identified emotions, eye-openers and frustrations that they had experienced through the collaborative process of portfolio writing. One utterance made by Cecile above illustrates this (Excerpt 7):

> I'm not willing to fail on the assessment because the others haven't finished their jobs. You see, we will not pass if everything isn't fully finished. So, then I have to make them remember and make myself unpopular, or I will have to finish it myself.

From the analysis it seems that the portfolio structure in this program primarily supports personal development and relational skills. These are undoubtedly important skills in the profession of nursing, but according to the guidelines, this type of development should be a secondary focus, while the disciplinary and professional knowledge should be the primary. Portfolio writing can be a proper way of learning "how to go on" in future professional situations as suggested in Wittgenstein (1953), but to achieve such competence it is crucial that the university college teachers and supervisors in internship have a central role in the contexts where students trajectories of learning unfold and develop. These expert roles need to be acknowledged as the most important tool available in study work, their competence and capacity to demonstrate and teach core conventions of the profession of nursing as well as the portfolio genres cannot be replaced by novice students.

Student texts and the process of writing them reflect the students' inner speech, their own trajectory of meaning making and how they re-conceptualize core tools within the culture. I have suggested methodological entrances that can make it possible to trace text-creating activities within a disciplinary language and culture. These entrances can illuminate how texts are initiated and how their (collaborative) writers are motivated, how they emerge as suitable for a specific context, and how different – sometimes conflicting - third parties and other mediational means are made participants in the activity and processes of meaning making.

Pedagogical tools like portfolio assessment certainly have the potential to enhance student meaning making. As earlier mentioned, all the students that where involved in the study clearly stated that they had learned a lot. However, it seems like the disciplinary and professional aspects of learning are less present in the study work than collaborative skills and personal development.

To find out *how* processes of writing work as mediators, we need to investigate contextual and personal trajectories, how assignments are unpacked, and how tools that are set into play in text creating activities. Cecilie certainly learns, but there is reason to ask whether her personal development and struggles with leading and organizing the work of her study group is the best training to become a professional nurse.

Knowing about processes of writing is fundamental to understanding *teaching and learning writing*. Research, with its departure point in dialogic theories, can contribute important nuances to this line of work. Writing is not about learning and applying

formulas and making fixed kinds of texts, but about ways of working and ways of acting that bring writers, readers, resources and contexts into trajectories. Insights into these contextual trajectories can help us as researchers to understand the relationship between writing and student meaning making in a more nuanced manner. The students in this specific nursing program have a great space of freedom in their study work. Different cultures of writing and learning develop within each study group. In the different cultures, different types of mediational tools are set into play, tools that are more or less relevant for the profession of nursing.

Dialogues always contain other dialogues. The students' oral and written utterances are, just like all language, a *"ceaseless battle between centrifugal forces that strive to make things cohere"* (Holquist1990, p. xviii). As Berge (2002) underlines, education in general has one of its most important tasks in supporting the not-yet-socialized writer to develop their resources to create texts. But to make writing a proper tool for learning, it is necessary that certain resources are set into play in student work.

Student texts *do reflect* opposite and struggling forces in society, in various disciplines and in the institutions. In that manner *texts do work* in these contexts by articulating struggling voices again and again - slightly different than earlier and in that sense text creating activities has a great importance as a mediational mean in the processes of meaning making. These powerful processes certainly need to be scaffolded by professional teachers to make sure that the tools set into play are relevant for the study aims and to initiate and support disciplinary and professional discussions.

Thorough preplanning and detailed instructions are needed to enhance learning in higher education, but practices of studying in general and portfolio writing in particular are constituted in practice. In processes of unpacking and interpreting institutional tasks and constituting pedagogical tools, teachers and professional supervisors should play a central role.

From a dialogical point of view we need to understand contextual processes to gain our understanding of collaborative and personal trajectories of meaning making. Such information is not just useful for us as researchers to gain understanding, but also for practitioners; it can help us scaffold our students through processes of writing for learning in better ways. Institutional tasks in higher education imply a range of different demands like how to deal with specific genres and conventional characteristics. The nursing program presented here is structured around the basic idea that students learn best when they are active and when they can follow their own interests. However, personal trajectories of participation rely on student's previous contextual experiences on the one hand and the shape of more stable institutional or disciplinary cultures relevant for the profession of nursing on the other. These stable shapes are made available to the students through stabilized and central tools and by interacting with experts using these tools in ways that correspond with the ideals and conventions of a given discipline or profession. To enhance learning trajectories in higher education, we need to make sure that we clearly demonstrate the intended direction to students. Some space of freedom can probably motivate students in higher education, but as novices they need to relate their work closely to the experts and their way of interpreting and using the core tools within the profession.

References

Baktin, M. (1981). The dialogical imagination. In P. Morris (Ed.), *The Bakhtin reader: selected writings of Bakhtin, Medevedev and Voloshinov* (pp. 74-81). New York: Oxford University Press.

Bazerman, C., & Prior, P. A. (2004). Introduction. In C. Bazerman & P. A. Prior (Eds.), *What writing does and how it does it: an introduction to analyzing texts and textual practices* (pp. 1-10). Mahwah, N.J.: Lawrence Erlbaum.

Berge, K. L. (2002). Hidden norms in assessment of students' exam essays in Norwegian upper secondary schools. *Written communication, 19*(4), 458-492. doi: 10.1177/074108802238011

Dysthe, O. (2002). Professors as mediators of academic text cultures: An interview study with advisors and master's degree students in three disciplines in a Norwegian university *Written communication, 19*(4), 493-544. doi: 10.1177/074108802238010

Fulwiler, T. (1991). Skriving på tvers av faggrensene [Writing across the diciplines]. In E. Bjørkvold & S. Penne (Eds.), *Skriveteori* (pp. 128-143). Oslo: Landslaget for norskundervisning (LNU).

Habib, L., & Wittek, L. (2007): The portfolio as artefact and actor. *Mind Culture and Activity,* 14(4), 266-282

Holquist, M. (1990). *Dialogism: Bakhtin and his world*. London: Routledge.

Klenowski, V. (2001). *Developing portfolios for learning and assessment: processes and principles*. London: Routledge Falmer.

Lahn, L. (2011). Professional learning as epistemic trajectories. In: Ludvigsen, S. A. Lund, I. Rasmussen and R. Säljö (eds.). Learning across sites. New tools, infrastructures and practices. Routledge, Abingdon. p. 53-69

Lerner, N. (2007). Laboratory lessons for writing and science. *Written communication, 24*(3), 191-222. doi: 10.1177/0741088307302765

Linell, P. (1998). *Approaching dialogue: talk, interaction and contexts in dialogical perspective*. Amsterdam: John Benjamins.

Linell, P. (2009). *Rethinking language, mind, and world dialogically: interactional and contextual theories of human sense-making*. Charlotte, N.C.: Information Age Publ.

Prior, P. A. (2004). Tracing process: how texts come into being. In C. Bazerman & P. A. Prior (Eds.), *What writing does and how it does it: an introduction to analyzing texts and textual practices* (pp. 167-200). Mahwah, N.J.: Lawrence Erlbaum.

Sluijsmans, D. M. A. (2002). *Student involvement in assessment: The training of peer assessment skills.* Doctoral dissertation, Open University, Herleen, the Netherlands.

Smagorinsky, P. (1994). Introduction: Potential problems and problematic potentials of using talk about writing as data about writing process *Speaking about writing: Reflections on research methodology* (pp. ix-xix). Thousand Oaks: SAGE Publications.

Säljö, R. (1999). Learning as the use of tools. In K. a. L. Littleton, P. (Ed.), *Learning with computers. Analyzing productive interactions* (pp. 144-161). London: Routledge.

Tigelaar, D. (2005). *Design and evaluation of a teaching portfolio.* Doctoral dissertation, University of Maastricht, Maastricht.

Wells, C. G. (1999). *Dialogic inquiry: towards a sociocultural practice and theory of education*. New York: Cambridge University Press.

Wittek, L. (2007). *Mappe som redskap for læring i høyere utdanning: strukturer, kulturell praksis og deltakelsesbaner [Portfolio as a tool for learning in higher education-Structures, cultural experiences and trajectories of participation]* Doctoral Thesis, The Faculty of Education, University of Oslo.

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