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Introduction to the conference

After the successful evaluation of previous Practice-Based and Practitioner Research conferences in 2006 and 2007, we were convinced of the necessity to organise a third edition of this event this year. What makes this conference interesting? It is clear that participants of the PBPR conference share a common interest in the promotion and development of educational practices in educational and business context. This conference provides an international opportunity to share experiences and research results which are closely related to the daily teaching and learning practice.

What is this conference about? The conference covers inquiry activities from different stakeholders within the broad field of education: practitioner researchers, educational developers, educational technologists, instructional designers, educational policy makers, people involved in organisational change in educational institutions, teachers, trainers, academic researchers in the field of applied education, and any other persons who wish to contribute to the development of education. Important here is that the focus on 'improvement' should not be misinterpreted. There should also be room for critical reflection about modern educational practice, policy and research, give a floor to possible alternative approaches.

An important foundation is the belief that knowledge creation and knowledge application are bound to one another, which is why the involvement of these different stakeholders and the promotion of interaction between these persons are seen as of utmost importance. Many disciplines, researchers, practitioners, policy makers and students create knowledge about education, this conference hopes to cross boundaries and open communication, providing learning and development opportunities for 'thinkers' and for 'do-ers'.

We hope that this conference will be an opportunity to link into an international network of co-learners, helping you to present the results of your work to colleagues, but also to communicate and discuss research issues with other colleagues from the field.

For this third edition, we have chosen to combine two key concepts as the main theme of this conference: 'Knowledge creation' and 'Optimal Teaching and Learning environments: What Works'.

The concept of **Knowledge creation** refers to the process that results in new knowledge, or organising current knowledge in new ways. **Knowledge** is the result of a learning process, the internalization of information, data, and experience. In that respect, the term knowledge creation is a conceptualisation of learning and teaching processes and it refers to research as a means to create new knowledge.

Optimal Teaching and Learning environments is a concept central to all educational settings. Core question here is 'What Works'? What are the ingredients of such an optimal teaching and learning environment? This conference wants to stimulate the sharing of knowledge between different stakeholders on what seems to be working in terms of optimising teaching and learning environments. But, as our conference theme illustrates, we cannot stop at this point. It is impossible to talk about knowledge on what actually works, without discussing the process of creating new knowledge in educational settings.

The conference committee

Members of the International Organising Committee:

Veronica Bruyns from The Netherlands,
Filip Dochy from Belgium,
Frank de Jong from The Netherlands,
Lynn Mcalpine from the UK,
Goele Nickmans from Belgium,
Kari Smith from Norway.

Local Organising Committee:

Kari Smith, Bergen University, Norway
Hege Ekeland, Bergen University, Norway

Members of the International Review Committee:

Veronica Bruyns from The Netherlands,
Filip Dochy from Belgium,
Frank de Jong from The Netherlands,
Kristien Carnel from Belgium,
Sari Lindblom-Ylanne from Finland,
Rob Martens from The Netherlands,
Lynn Mcalpine from the UK,
Goele Nickmans from Belgium,
Kari Smith from Norway,
Marijke Kral from The Netherlands.

Constructing knowledge in mentoring conversations: What for and for whom?

Setting the Scene

Consider the following excerpt from a student teacher's account of an English lesson that she taught in a sixth grade in a primary school in a Druze village in Israel (Mazor, 2003). The Druze people are a sector of the Arab population that shares language, food, work habits and social customs with the larger Arab population, yet distinguishes itself both religiously and nationally from the other Arab groups. The Druze school system operates separately from the Jewish and Arab school systems and reflects the national, religious and cultural beliefs of the Druze population they serve. Einat (the student teacher) comes from an observant Druze family. The mentor is a Jewish EFL teacher who is involved in both in-service and pre-service mentoring programs in Jewish and non-Jewish schools. The account constituted the starting point for the mentoring conversation between the mentor and the student teacher (the mentee):

1. Mentee: I was going to teach them this story about a blind girl, Shirley. So, in preparation for the reading I thought it was important not only for them to know the key vocabulary but also to have the context, the atmosphere of it. I thought it was important for them to experience the situation and express their feelings which would also allow me to practice the word 'feel' and 'how do you feel?' they needed for the story. I had planned lessons like this before in the college so I thought I knew how to structure the activity to help the pupils to communicate in English...so, I planned to ask them to stand up, close their eyes and perform some activities with their eyes closed. I wanted them to be in Shirley's shoes for a while (find their books, open to page 15, move around the class from one spot to another) so that they can get a sense of what kind of things are difficult for blind people to perform. In addition, this would have allowed them to use English to express their experience, feelings and thoughts. But I did not expect the chaos it created in class. They were following my instructions but it all turned into a joke - they were laughing and joking about doing these things with their eyes closed and I did not know what to do about it, I was afraid I was going to lose control of the class so I stopped the activity. I went home feeling angry and disappointed. I don't know why it didn't work with this class-I planned it carefully, practiced it several times before and on top of this I did not expect such a reaction. Kids here [the Druze school] are usually more obedient and respectful of the teacher...

2. Mentor: I understand that you felt you were going to lose control...

3. Mentee: Yes, there was a lot of noise in the class, they were all laughing and joking.

4. Mentor: So you stopped the activity...

5. Mentee: Yes, that's not what I wanted but I was not prepared to lose control with all that laughing and joking anymore.

6. Mentor: You wanted....

7. Mentee: I wanted them to feel and experience what it is like to be blind.

8. Mentor: What would indicate for you that the pupils actually experienced what it means to be blind?

9. Mentee: I wanted them to talk about it, how they feel, what it was like for them.

10. Mentor: And the laughter and joking signalled...?

11. Mentee: That they were having fun and they did not pay attention to the point I was trying to make...

12. Mentor: A lot of noise means to you that the class is not paying attention to the point?
13. Mentee: Of course, how can they learn if there is noise in the class...
14. Mentor: So the noise bothered you ...
15. Mentee: I got angry!! They were showing lack of respect... laughing...
16. Mentor: Lack of respect? Towards what?
17. Mentee: Towards me and towards blind people...
18. Mentor: I understand from what you say that you feel they were showing disrespect towards you and that bothers you.
19. Mentee: Yes, they are usually very respectful towards me. Besides, Druze children, especially in this class, are well behaved.
20. Mentor: I see...so their behaviour caught you by surprise. But let us think of other explanations for the children behaving this way at this point of the lesson...
21. Mentee: I don't really know...
22. Mentor: How about looking for sources outside your own experience ... are there any people you would want to ask for advice?
23. Mentee: Maybe hear from you...
24. Mentor: We could talk about that if that is what you think would help you most at this point...for example, one possible way of looking at it is interpreting the children's misbehaviour as reflective of their age level and of the specific situation they were put into ...any thoughts on this?
25. Mentee: Why? can't they relate to the limitations that blind people experience at this age? After all, they are already in the sixth grade. Besides, the story is in the textbook written for their age level!
26. Mentor: True, but I was thinking more in terms of their feeling of embarrassment and the unexpected task of being put in a situation where they have to walk around the class with their eyes closed. Did you listen to what they were saying when laughing and talking?
27. Mentee: I think they were joking. They were using the opportunity to talk to each other about other things besides English. I felt they thought I was giving them a break.
28. Mentor: I suggest you reconsider what I said before about kids feeling embarrassed...giving us the wrong impression that their behaviour is a sign of disrespect towards us.
29. Mentee: I don't really know. I didn't hear what they were saying but they usually do not behave like this!
30. Mentor: Look, I have had many similar experiences in my own classes which have taught me that my understanding of what I think is happening is not always the full picture. I still think there is something to be said about the children's sense of surprise with being put in a situation of experiencing blindness-maybe that's what they were talking about. So my suggestion is that in the future you pay attention not only to what they do but also to what they say to each other and talk about during the interaction. It might be the case that what caused the noise had to do with a certain aspect of your classroom management during the activity and we can talk about that, but it could also be the case that the noise had little to do with you and more with their emotional response towards the situation.

What kind of knowledge is constructed?: Reading into the mentoring conversation

By and large, studies on mentoring conversations at pre-service education reveal that conversations generally revolve around curricular and pedagogical concerns; issues related to pupil's evaluation and progress, classroom management issues and innovative methods (Edwards & Collison, 1996 ; Wang, 2000). Taken together, mentoring conversations focus on advancing the student teacher's understandings and performance of specific skills and competencies that are essential for their future functioning as teachers (Timperley, 2001).

Indeed, examining the above selected excerpt of a mentoring conversation we see how the mentor, acting as facilitator and critical friend, tries to push the mentee towards new understandings of the situation. At an observable, behavioural level, the mentor encourages the student to articulate her interpretation and to tell her story, as a springboard for reflecting on her fear to lose control of the class. Using supportive strategies such as mirroring, paraphrasing, and open ended comments and questions, the conversation develops as the mentee is led to think about other possible interpretations of her story. Thus, at 'surface reading', the mentor's strategies seem to reflect a bottom up /personal growth approach to mentoring, oriented towards supporting the mentee to arrive at her own personal meanings, as a way of constructing new knowledge about the situation. But is this the whole story? Let us consider a different 'reading' of the mentor's observable behaviour.

What kind of knowledge is constructed? What for and for whom?

A 'deeper' level of reading invites us to explore social and cultural considerations that remained unattended throughout the conversation. For example, being of a mainstream background, we wonder whether the mentor has identified the uniqueness of the Druze educational school system of the student teacher. Such a system follows an ideology of advancing Druze tradition and formal knowledge transmitted through frontal, deductive teaching and learning modes, and through a view of the role of the teacher as in full control of the classroom. Thus, we might ask whether the mentor has appreciated the tensions that might emerge between dominant orientations of the Druze educational school system and dominant discovery, inductive, learner centred methods advocated in mainstream Jewish teacher education colleges. Identifying and appreciating such gaps between these two 'dominant narratives', would allow for further framing of considerations of 'what to say' and 'how to intervene'. For example, one might conjecture that, being less familiar with inductive, experiential modes of learning, Druze pupils might experience difficulties in participating in activities around more 'informal' modes of interaction (moving around the class with their eyes closed and reporting on the experience to the class). We can also consider the importance attributed by Druze teachers to being respected by their pupils-a core construct guiding their reasoning and behaviour. Appreciating such difficulties, both at levels of pupil response [their source of laughter] and mentee's response [anger at their laughter], could allow the mentor to consider affordances and limitations that might underlie a desired local innovative pedagogy, as interpreted by the particular socio-cultural context.

A deep reading, then, raises questions of which agendas are being legitimated and served and what kind of knowledge, dispositions and narratives are validated throughout the mentoring interaction. In our case, although the mentor has a high reputation of being open, supportive and sensitive to issues of minorities, we might wonder whether she has considered both the costs and benefits of her mode of intervention for the mentee's learning from the situation. Put differently, whether the mentor is aware of her personal 'overt' choices and preferences as indicative of the 'covert' ideological and cultural agendas that guides her pedagogical reasoning. Such an exploration seems particularly relevant when examined against the mentee's comment on how she thought the mentor had assisted her: *'She gave me ideas and she suggested looking at my pupils' reaction in another way... But I still don't know how I should behave if I get this kind of noise again in my class. I am still worried ...that they will not respect me as their teacher'*

Moving beyond a 'surface reading' of the mentoring interaction as a case of a personal growth approach to mentoring, challenges questions of purpose and process of constructing knowledge in mentoring conversations (what for and how), and invites us to explore potential complexities that might arise in a 'deeper reading' of the conversation. Such a reading helps to uncover underlying messages in a mentoring text that are not attended to in a mentoring conversation and which might yield different interpretations of the purpose, outcomes and process of the conversation.

Constructing knowledge in mentoring conversations: Many readings into one text.

To engage in such 'deep reading', I draw on contemporary critical theorist Henry Giroux's treatise of the goals and purpose of education as addressing issues of knowledge validation, organization, transmission, access, underlying codes, cultural systems and interests legitimated and served (Giroux, 1996). These issues allow for critically examining 'beyond the observed', to illuminate on the roles, texts, types of communication and educational agendas that are often empowered or silenced in a mentoring conversation.

Specifically, I propose three leading interrelated criteria to be used as critical interpretative lenses for 'conducting many readings into one text':

1. **Type of 'text' prioritized:** What is the text about? Whose 'text' is attended ?
2. **Forms of access and communication:** How is communication legitimated and sustained? What roles are assumed and valued? What determines the starting point for a conversation? What is listened for and for what purposes? Who determines what?
3. **Value attributed to cultural and educational codes, systems and interests:** How are the various cultural and organizational systems significant to the practice of teaching and mentoring represented and attended to?

The above critical lenses allow for examining how moral and ideological dilemmas and resolutions 'interweave' to play out in visible behaviours in mentoring practices. In other words, they allow for establishing a 'critical language' (Bertrand, 1995, p.163) that can help expose unattended covert and overt moral values, ideologies and beliefs inherent in mentoring practices in a given context.

There is now a growing recognition of the role of the mentor as a professional role (Achinstein and Athanases, 2006; Little, 1990; Orland -Barak & Klein, 2005) that develops within complex interpersonal and social professional webs, considering their decisions and subsequent actions in terms of local dilemmas that carry global moral values (Benner,1982; Eisner & Powell, 2002; Feiman-Nemser, 2001). Such issues call for wearing multiple reading lenses to access a mentoring text, as a way of scaffolding a kind of learning that endorses the complexities and intricacies at the interphase between values , ideologies and local considerations.

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The teacher as researcher - or as teacher

The pupils in the 10th grade have been working on the theme ghosts and ghost stories. At the beginning of the lesson they take part in role play in pairs. The teacher then asks the pupils to find their book and turn to a specific text. They are going to listen to this new text on a CD and have been told to underline difficult words while they listen. The teacher tells the pupils that she will stop the CD player as they work through the story so they can talk about it along the way to check their understanding. The pupils are active during these reviews. The teacher also asks questions of pupils who do not take any initiative themselves. Thereafter she draws four squares on the board and asks the pupils what should be written in them. The pupils answer "who", "what", "where" and "when", and then the teacher asks them when they should use this strategy, to which they reply when they are going to retell, write and read. The teacher adds when they are going to remember a story, and the pupils also suggest that they can use the strategy when they are going to write a text. And that is exactly what they are going to do. They are going to write a ghost story.

This is what is taking place in the classroom during a lesson with the teacher in 10th grade English. In addition to the teacher who is leading the teaching there are two other English teachers in the classroom, from the 8th and 9th grades, and a researcher who is observing the teaching and learning processes and taking observation notes. The teachers are taking part in a research and development (R&D) work project in which I am the researcher. In a collaboration process the teachers and I worked out the thesis question which is as follows: *How can various work methods with the focus on learning strategies contribute to each pupil's subject and social development?* All the teachers from the 8th, 9th and 10th grades are taking part in the project. During the project I have found that it is vitally important that the teachers identify with the thesis question and that development thus comes from within and "from the bottom", from the teachers themselves. This also means that the R&D work has to be grounded in the teachers' daily practice (Postholm, 2008).

Before the observed teaching lesson, the teacher responsible for it has analysed the here-and-now practice within the framework of the thesis question, and has sent a planning document to the observing teachers and to me, the researcher. This document describes the subject/theme and the aims of the lesson, and the teacher includes questions about her own planned practice and what she wants feedback on. The expansive learning circle developed by Engstrom (1999, 2001) is used by all the teachers as an aid in the R&D work. The expansive learning circle prescribes a sequence where the teachers should reflect on the completed processes, and this was exactly what the teachers and I did together after all the observed teaching lessons.

The researcher's role will be to find a balance between supporting and pushing the teachers, always keeping in mind that this is the teachers' development project. When the teachers can identify with the project and perceive the usefulness or the meaning of a developed practice, they may internalize it into their daily work, as they actually did in this project (Postholm, 2008, in press). Thus development has to be based on the will to learn. If this is the situation, the motivation and the reasons for development will originate from the teachers themselves. But how can teachers become researchers in their own practice? What competence do they need to conduct research activities? Do they have this, and if not, how can they develop competence in changing and developing their own practice so that their pupils can learn even more?

In the keynote address I will discuss how teachers can become researchers in their own practice and, furthermore, show how action learning (Revans, 1982; 1984) can function as a method for improving teaching practice. Action learning implies learning from reflections on actions and, furthermore, means looking as much forward as backward. Revans claims this is about asking questions about one's own practice, and finding possibilities for change and development. Thus it is important for teachers to look

ahead and not get stuck in their experiences. Similar to Revans, Engestrom (1999, 2001) maintains that teachers have to see possibilities in their teaching and ask questions about it with the overall goal in mind. Thus they must have some ideas and foresee some consequences, as Dewey (1916) put it.

Teachers can reflect independently by using theory as an analytical tool in this activity. In this way teachers can use theory to analyse and understand their practice, to argue for their practice, and furthermore, to see possibilities in their practice that could lead to improvement. Polanyi (1967) talks about tacit knowledge based on prior experiences. This means that both theory and experience are part of the teachers' knowledge base. According to Tiller (2006), tacit knowledge based on prior experiences has to be put into words to be shared and reflected on. This means that teachers can be researchers in their own activity, developing practice on their own, or they can talk and reflect together with colleagues, which also makes them more aware of their own experiences, as they are reviewed through reflection.

However, some premises have to be in place if reflections in teacher groups are to be a positive activity for their practice. **Krogh, Ichijo & Nonaka (2000)** contend that development has to be built on confidence, trust, learning and dialogue, and according to Argyris (1990), an atmosphere that invites people to speak openly is a premise for progress in learning work. But, all the same, having the premises in place, how can teachers manage to develop reflection groups? What consequences does the notion of "teacher as researcher" have, meaning that having a researcher's eye should be part of a teacher's general competence, for teacher education institutions and for further education of teachers in practice. This will be discussed with the mentioned project as the frame of reference.

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Dilemmas in qualifying teachers

When scrutinizing programmes for teacher education in general content and structural elements can be identified representing relationships of tensions or dilemmas. What is a dilemma? A characteristic feature is a binary relationship or a tension between the poles within a phenomenon or between two related phenomena. Dilemmas in a teacher education setting tend to be complex and closely interrelated and thus difficult to capture and precisely define in a straightforward way. They can only be analytically separated because they appear in a constant flow in the daily activities. Despite this fact it can be fruitful to use dilemmas as a tool of portraying the dynamic elements constituting the programme aiming at qualifying professional teachers. An analysis of dilemmas, or at least about seemingly binary patterns, may lead to a deepened understanding of the dynamics of the multi-layered process of student teacher's professional growth.

Thus the aim of my presentation is to highlight some dilemmas that seem to follow teacher education. The ambition, however, is not only restricted to an analysis of existing binary relationships. My focus will instead contribute to an increasing awareness of how the work with existing dilemmas can be turned into a productive work thus enhancing teacher's professional growth. I have chosen three dilemmas which have been and still are vividly present in the tradition of teacher education I represent.

1. General didactics and subject specific didactics:

This dilemma refers to the interplay between pedagogy or didactics in the broad sense and to subject matter. In a research based approach students teachers are considered to get profound knowledge of the most recent research in the subjects they teach, cf. declarative knowledge. In addition they also need to be familiar with the most recent advances in research in pedagogy, or general didactics, cf. procedural knowledge about teacher action.

2. Theory and practice orientation:

This issue deals with how research-based teacher education is applied as "practical" educational decisions based on rational argumentation in order to integrate academic subject matter and professional pedagogical or didactical knowledge.

3. The organisation of teacher education within the university/university college:

Recent evaluations of teacher education in the Nordic countries reveal that there are several ways of organizing teacher education within the higher education institution. Roughly speaking we can distinguish two poles, one placing teacher education in a firm integrated organisation and the other position teacher education in a matrix organisation meaning that the main part of the qualification takes parts at several subject matter departments. The models have their advantages and disadvantages. My ambition is to highlight the fact that the organisational structure is not only a pragmatic and technical matter. Ways of organizing teacher education reflect ideologically permeated decisions about the value of pedagogy and subject matter in the qualification process and thus about becoming teachers' professional identity.

Paper pres.1:	26/11/08	13.00-13.40	Room Teatergaten
Presenter:	Michaela Brohm		
Title:	Creating social competence: Empirical findings and conclusions on optimal teaching- and learning environments on the base of data from a knowledge- and experience based student program.		
Theme:	Assessment/Evaluation		

Research question/problem

The central task for schools is to convey factual competences as well as personality-development. The core of personality-development is the development of social competences (empathy, problem-solving ability, ability to cooperate etc.), since it insures the coping of social and personal needs (acting in a context of globalisation and modernisation, fulfilment of the individual, psychically and physically unbiased, socially and job-market-related integrated way of life). The underlying question in this presentation is how to promote social competences of adolescents in an institutional framework (schools as well as enterprises), based on data from an experimental study (N=367).

Link to the conceptual framework/literature

Social competence is a subconstruct of the theoretical construct of "competence". The approach to social competence that we chose is based on the universal concept of competence of Franz E. Weinert (2001), as well as the "Quadripartite Model of Social Competence" of DuBois/Felner (1996/2006), which integrates the linked elements "cognitive skills and abilities", "behavioural skills", "emotional competencies" and "motivational skills and expectancy sets" (ibid. p. 126). In contrast to educational psychology, clinical psychology, organisational and personnel psychology, we face in educational research an extensive lack of experimental studies that focus on development of social competence in schools.

Procedure and/or instruments used to explore the question/problem

20 students of educational science performed a training of social competence of 60 hours on 15-17-year-old students of elementary and grammar schools (N=367). The program consists of modules and aims at the intrapersonal and interpersonal self-monitoring abilities of students by conveying socially related knowledge, opening social rooms of experience as well as to debating socially related values. The effects of the program were assessed with an experimental design by validated questionnaire (FASK/LMI-K) about social competence and of achievement motivation. Requested sociographic information were gender, age, socio-economic background (ISCO), cultural resources within the family and ethnic background of the students.

Findings/results

The data showed clearly and differentiated an increase of social competence at first, which could not be confirmed as sustainable over 6 months (Post-test 2). Furthermore specific topics of the program had in the first Post-test effects on specific subgroups, revealing that the socio-economic status is the most distinct predictor for impact of specific modules of the program. Students with lower socio-economic and cultural status improved on their intrapersonal self-monitoring abilities significantly at medium effect size, but showed close to none effects on interpersonal self-monitoring abilities. Students with higher socio-economic status had a more holistic gain from the program.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The findings seem to indicate that the development of social competences (1.) in schools is possible; (2.) cannot be achieved by one-time performance of programs (sustainability), but by long-term academic intervention (e. g. permanent integration into the subjects, social projects planned by the students themselves, mandatory curriculum of social competence). Finally (3.) differentiated interventions (diversity esp. in regard to socio-economic and cultural status) have to be offered to students. Children and adolescents coming from low socio-economic and underprivileged families have the greatest need for programs that encourage themselves (intrapersonal encouragement) before they can work on social interactions (interpersonal encouragement).

Paper pres.2:	26/11/08	13.00-13.40	Room Tärnplass
Presenter:	Louise Berkhout		
Title:	Video analysis of play in school - a quantitative and qualitative approach.		
Theme:	Research Methods		

Research question/problem

In the Netherlands, nowadays more emphasis is put on the cognitive subjects (mathematics, language) in the education of young children (4 to 7 years) than on natural play. The assumption is that an early introduction into cognitive subjects will help children become better learners. However, this shift in the kindergarten curriculum can have side effects: 1.the curriculum can be too demanding. 2. less time is left for natural play. Research questions: what does natural play contribute to the psychosocial development? Will psychosocial problems change in schools where teachers give an accent on play?

Link to the conceptual framework/literature

Our research is based on the theory that children before the age of seven learn in another way than older children (Piaget & Inhelder, 1969; Goorhuis-Brouwer, 2005; Bodrova & Leong, 2008). Natural play and especially 'make believe play' is a leading activity for young children in their way of learning and developing psychosocial competencies. In general psychosocial competency is defined as existing of both extrinsic and intrinsic behaviour aspects in which self-control is a stabilizing agent. In 'make believe' play children develop self-control (Vygotski, 1998).

Procedure and/or instruments used to explore the question/problem

1. Video- recordings were made in 18 regular schools and in 30 Steiner schools during play time (about 60 minutes, continuously) to observe what children do, how they communicate and what aspects in play possibly contribute to the psychosocial development.
2. Parents and teachers filled out a questionnaire (CBCL 1 ½ -5 and TRF 1 ½ -5) about the psychosocial development (intrinsic and extrinsic aspects) of children who started school (age 4) in 2007-2008.
3. Teachers have been interviewed about their opinions concerning natural play in relation to psychosocial development.

Findings/results

At the time of the conference the 48 video recordings will be analysed. Until now 12 recordings are analysed by trained students. Differences in play behaviour between regular schools and Steiner schools are observed, probably due to the curriculum and time spent on play. Similarities are seen in the way children talk and listen to each other while playing, especially in make believe play. The results of the questionnaires will be presented at the conference. We will compare our findings with the outcomes of a country wide survey on the psychosocial well being of children in the Netherlands.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

1. Discuss the different ways in which video registration in an educational setting can be analysed.
2. Discuss the impact on the education of young children by changing curricula.
3. Exchange ideas concerning play in relation to learning and psychosocial well being for young children.

Paper pres.3:	26/11/08	13.00-13.40	Room Hodden
Presenter:	Peter Iserbyt		
Title:	Implementing self-evaluation in reciprocal peer tutoring: analysis of behaviour and verbal interactions.		
Theme:	Implementation of educational innovations		

Research question/problem

This research investigates the effect of implementing self-evaluation in a reciprocal peer tutoring setting with task cards as instructional tools on learning basic life support. In reciprocal peer tutoring, student work together in a defined doer-helper relationship and switch roles at given times or trials. It is investigated whether the formal implementation of reflection (self-evaluation) during learning can enhance learning outcomes. Furthermore, student behaviour and verbal interactions are analysed and linked to student performance. It is tried to discriminate significant behaviours and interactions which influence learning outcomes.

Link to the conceptual framework/literature

Recent literature suggests that instructional guidance is beneficial for student learning and understanding (Kirschner, Sweller and Clark, 2006, Mayer, 2004). Previous research in reciprocal peer tutoring indicated that implementing role switching and clearly defining roles enhances student performance. Also, educational and psychological research stresses the importance of self-reflection and self-evaluation for student learning. Therefore, this study investigated its effect on student learning in reciprocal peer tutoring. Furthermore, in social constructivist theories learning is influenced by interactions between the learner and the learning environment. Consequently, student behaviour and verbal interactions are worthwhile investigating.

Procedure and/or instruments used to explore the question/problem

A randomized controlled trial consisting of three experimental groups was set up in trying to answer the research question. 90 university students in Kinesiology were paired and randomized across three experimental groups, differing in the level of self-evaluation. In one group, no formal self-evaluation was added. In the second group, a cognitive self-evaluation and rehearsal moment was implemented. In the third group, a cognitive and motor self-evaluation and rehearsal moment was implemented. Student performance was measured individually before (baseline), immediately after (intervention) and two weeks later (retention). During intervention (20 minutes), students were continuously videotaped in order to allow analysis afterwards.

Findings/results

Results indicate that implementing a formal self-evaluation moment, whether it is cognitive or cognitive and motor, does not enhance student performance in Basic Life Support. Analysis of verbal interactions and behaviour indicate that self-evaluation and rehearsal is not beneficial to enhance student learning. On the other hand, rehearsing and evaluating in pairs seems to enhance student learning. This finding is based on a positive correlation between those variables and learning outcomes.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

It seems to indicate that self-evaluation in itself does not lead to better learning outcomes. Thinking about what you did and how it went is not beneficial for learning the given task in this experiment. It seems to suggest that students need to reflect/evaluate in pairs, or by checking appropriate instructional tools. Also, it reconsiders the importance of individual reflection and evaluation in student learning and understanding. Results from this study could lead to practical guidelines for educators who want to implement reciprocal peer tutoring in the field.

Paper pres.4:	26/11/08	13.00-13.40	Room Galgebakken
Presenter:	Mark Winterbottom		
Co-presenter:	Arnold Wilkins		
Title:	Lighting and discomfort in the classroom.		
Theme:	ICT		

Research question/problem

A number of studies suggest that classroom lighting may be important to pupils' learning, but it is difficult to establish causative links between the two. Hence, this study takes a different approach: namely, to assess the extent to which pupils in UK classrooms are exposed to aspects of classroom lighting and décor which have been shown to cause discomfort and impair task performance. These are imperceptible 100Hz flicker from fluorescent lighting, and glare induced by (1) daylight and fluorescent lighting, (2) interactive (IWBs) and dry-wipe (DWBs) whiteboards, and (3) patterns from Venetian blinds.

Link to the conceptual framework/literature

Interest in classroom lighting and pupils' education has existed for some time (Luckiesh & Moss, 1940; Wu & Ng, 2003; Woolner et al., 2007). Teachers and pupils have preferences about classroom lighting (Lang, 2002; Schneider, 2003). Small-scale studies propose associations with attainment (Heschong & Knecht, 2002), attendance (Hathaway, 1995), behaviour (Schreiber, 1996; Shapiro, Roth & Marcus, 2001), and learning (Chan & Petrie, 2000; Dyck, 2002; Lyons, 2002; Rittner & Robbin, 2002). Recommendations for best practice do exist (CIBSE, 2004; DfEE, 1999), but lighting has continued to change recently, whilst research has been neglected (Tanner, 2000; Woolner et al., 2007).

Procedure and/or instruments used to explore the question/problem

The sample included 90 classrooms in eleven schools. Flicker from fluorescent lamps was assessed with a servo-controlled rotating shutter (Princeton Applied Research Model 197). Illuminance was assessed with a lux meter (RS Components 610-815) under four conditions: lights on-blinds open/ lights off-blinds open/ lights on-blinds closed/ lights off-blinds closed. Whiteboard luminance was assessed with a Minolta (LS-110) photometer under the same conditions and Michelson contrast calculated. Luminance of IWBs in controlled conditions was also assessed. Reflectance was measured with the Monolite system. Spatial frequency of patterns produced by shadowing of Venetian blinds was estimated.

Findings/results

80% of classrooms were lit by 100Hz lighting, which can cause headaches and impair performance. Mean illuminance exceeded recommendations in 88% of classrooms, and in 84% exceeded levels beyond which visual comfort decreases. Lighting could not be adequately regulated due to classroom design and infrastructure. Specular reflection was visible as a glare spot on the IWB and DWB, with luminance high enough to cause discomfort and disability glare. Intensity varied between whiteboards. Ambient lighting, needed for close work at pupils' desks, reduced image contrast. Venetian blinds in 23% of classrooms had characteristics appropriate for inducing pattern glare.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

1. Replace low frequency fluorescent lighting with high frequency.
2. Avoid combining low frequency with lamps of high colour temperature (6000K).
3. Install automatically-dimming luminaires.
4. Modify switching to enable teachers to selectively control lighting levels across the classroom.
5. Install and maintain blinds so teachers can regulate lighting levels, and restrict glare on IWBs and DWBs.
6. Tilt IWBs and DWBs away from the wall by 5-10° at the base to reduce glare.
7. Never install a data projector with a DWB unless it little visible sheen.
8. Only purchase IWBs with no, or limited, visible sheen.

Paper pres.5:	26/11/08	13.45-14.25	Room Teatergaten
Presenter:	Juan José Navarro Hidalgo		
Title:	The dynamic assessment of specific domains: application of a dynamic assessment device of processes involved in reading tasks in people with special learning disabilities.		
Theme:	Assessment / Evaluation		

Research question/problem

The design of assessment instruments for reading tasks have not gone always with the new theoretical and methodological conceptualizations develop in this field. In fact, majority of tests have been focused on assessing the outcomes of comprehension. Even the study and evaluation of reading have participated of a static conception of reading aptitudes, quantitative approaches for measuring skills, individual and autonomous performance as the best possible assessment, and classifying students based on theirs results in standard tests.

Link to the conceptual framework/literature

The renew interest on Dynamic Assessment (DA) in specific domains contributes to reconsider its contributions to learning-teaching process (Ruijsenaars, Castelijns & Hamers, 1993; Lidz, 2000; Kozulin & Garb, 2001; Sternberg & Grigorenko, 2003). The higher attention on metacognitive and socio-emotional aspects, the prevalence of interactive models, and the relevance of socio-constructivist models (Coll, 2001; Cubero & Luque, 2001; Wells, 2001) make a different evaluation approach possible. Our work points out the relevance of the ecological validity and of the DA with people with learning disabilities (Campione & Brown, 1987; Carlson & Wiedl, 2000; Guthke & Beckmann, 2000; Swanson, 2000).

Procedure and/or instruments used to explore the question/problem

Piloting and expert validation
Teacher working group (WG). Training of teachers-applicators
Pre-test assessment in experimental and control group

- ECO 1 / ECOS (reading comprehension)
- APSL (Personal-Social adjustment)
- G-Factor, Cattell
- EIDAL / EIDAL-MP (Expectations and thoughts about difficulties in learning process of reading)

Applying EDPL (Dynamic Assessment of Process Involved in Reading) in experimental group
Monitoring and evaluation of application by WG
Post-test assessment
Analysis of EDPL and its application
Final survey. Analysis of results

Findings/results

After application, we found significant improvements in: reading comprehension, personal-social adjustment and intelligence. These gains were bigger among the students with more difficulties in reading tasks as well as in intelligence. The predictive value of EDPL on school achievement and progress was higher than outcomes in static tests of reading and intelligence. Analysis showed mediation process, made through Methodological Patterns of Dynamic Assessment (PMED), was especially relevant in students with bigger difficulties, and when we considered more complex processes (concerning whole sample).

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

We have systematized an instrument for DA of processes involved in reading tasks. This tool has shown to be useful in school context to get valuable information oriented to improvement. Teacher-applicators carried out an effective learning about how to use this instrument. This work has contributed with new strategies related to evaluation/intervention on reading difficulties. Finally, the approach we have carried out allow us to minimize problems related to implementation of DA procedures in school context. So, it could be an alternative to assess the reading difficulties at school.

Paper pres.6:	26/11/08	13.45-14.25	Room Tärnplass
Presenter:	Wolter Paans		
Co-presenters:	Jan Haijer		
Title:	What is the effect of the use of knowledge sources and what is the influence of reasoning skills? Discussion of a research method.		
Theme:	Research Methods		

Research question/problem

The aim of the study is twofold: (1) to determine the effect of the use of knowledge sources on the accuracy of the nursing diagnoses (2) to determine the influence of knowledge and reasoning skills on the accuracy of nursing diagnoses.

Link to the conceptual framework/literature

Nursing diagnoses is the basis for adequate provision of nursing care. An accurate nursing diagnosis is essential to provide transferable and high quality nursing care. The use of knowledge sources, knowledge and reasoning skills may be the basis of accurate diagnosis (Lee, 2006; Lunney, 2003).

Procedure and/or instruments used to explore the question/problem

A randomised controlled trial (nursing students: N= 100) was applied to determine the effects of knowledge sources. To determine the influence of knowledge, dispositions toward critical thinking and reasoning skills the following questionnaires were used: The California Critical Thinking Disposition Inventory, and The Health Science Reasoning Test.

Findings/results

The use of knowledge sources only has some influence on the accuracy of the nursing diagnoses. A significant relation was found between the accuracy of the nursing diagnoses and the domain 'analysis' of the HSRT. Students were unable to operationalize sources to derive accurate diagnoses and do not effectively use reasoning skills.

This study was used as a starting point for a follow-up study under graduated nurses in clinical practice.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

It seems to be necessary to improve study programs in nursing to be able to stimulate students to operationalize knowledge sources such as handbooks, protocols and pre-structured assessment formats. Improving students' skills in using knowledge sources and reasoning skills could be a step forward to accuracy in nursing diagnoses.

Paper pres.7:	26/11/08	13.45-14.25	Room Hodden
Presenter:	Annette Hilton		
Title:	Writing-to-learn using digital technologies in chemistry: The influence of multimodal text production on higher-order thinking.		
Theme:	Implementation of educational innovations		

Research question/problem

This study investigated the influence of producing multimodal texts using digital technologies on students' knowledge and understanding of chemistry. The intervention used digital resources to scaffold students' creation of multimodal texts to explain laboratory findings. It was hypothesized that writing-to-learn activities that required the use of multiple modes of representation, rather than primarily written text, would be more likely to engage students in critical and creative thinking and problem solving to identify and use the most appropriate modes for the representation of information. Such higher order thinking is an important element in knowledge transformation and construction.

Link to the conceptual framework/literature

Writing-to-learn is a well-documented strategy for helping students to construct new understandings (Prain, 2006), however, unless writing activities are appropriately structured, they may result in knowledge-telling (Bereiter & Scardamalia, 1987) rather than knowledge-transformation, which requires the promotion of deeper levels of thinking through interactions between content and rhetorical processing (Keys, 1999). Digital technologies are valuable cognitive tools in this context (Jonassen & Carr, 2000) because they allow students reflect on and explain the meaning of data by constructing and integrating their own multiple representations. This study extends the writing-to-learn framework to examine the influence of texts produced using emerging technologies.

Procedure and/or instruments used to explore the question/problem

Participants were students in two Year 11 chemistry classes in an Australian metropolitan secondary school. Mixed methods were employed within a modified crossover design. Students undertook two laboratory-based investigative inquiries. One class reported on Inquiry 1 using an electronic poster while the other class wrote a laboratory report. For Inquiry 2, each class created the alternative text type. Video and audio recordings were examined for evidence of higher-order thinking during text production for each inquiry. Student interviews, texts, and surveys were used to gain a deeper understanding of how the two text types differed in their support of higher-order thinking.

Findings/results

The findings indicated that asking students to report on laboratory inquiry using texts that limit the amount of written representation and consequently require integration of visual representations to elaborate on explanations encourages higher-order thinking. Students reported that this process was challenging and that the multimodal nature of the poster presentation required them to integrate visuals and limit written representations and required them to think more deeply about the relevance and meaning of the information. It promoted critical and creative thinking and required them to make decisions about the most appropriate way to represent and explain chemical data, entities, and phenomena.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

This study has implications for educational practice since it illustrates the efficacy of writing-to-learn strategies that encourage students to use digital technologies to integrate multiple representations to enhance explanations. These strategies have the capacity to engage students in higher levels of thinking about the nature and representation of data and its explanation in terms of theoretical concepts. The study highlights an innovative and effective use of information and communication technologies (ICTs) as cognitive tools to scaffold inquiry learning and to enhance students' digital and chemistry literacy, which has implications for the development of learning and instructional environments.

Paper pres.8:	26/11/08	13.45-14.25	Room Galgebakken
Presenter:	Vanessa D.I. Pfeiffer		
Co-presenters:	S. Gemballa, K. Scheiter, P. Gerjets and T. Kühl		
Title:	Novel ways towards knowledge acquisition in biodiversity: Dynamic visualizations on mobile devices vs. traditional learning with preserved specimens.		
Theme:	Implementation of educational innovations		

Research question/problem

One key competence of biologists is the ability to identify species in their natural habitat. Thus, one focus in the education of biologists is knowledge acquisition in biodiversity. In formal university curricula students learn to distinguish preserved specimens in a classroom setting which is occasionally expanded by guided tours in the field. One problem is that preserved species are distinguished by different methods than living species. Hence, students may have problems in knowledge transfer. This study asks whether dynamic visualizations on mobile devices can help to break up this problem and compares them to a more traditional learning scenario.

Link to the conceptual framework/literature

Field guide books usually used to distinguish species in their natural habitat picture animals statically (Hartmann 2003). However, there is some evidence, that learning success for beginners can be optimized with dynamic visualizations (Pfeiffer et al, 2008). Moreover, mobile devices seem to be promising tools in terms of teaching biodiversity (Rogers et al, 2002) and Naismith et al (2006) identified mobile devices as well suited to situated learning scenarios. However, little is known about the practical quality of mobile devices compared to more traditional learning scenarios. First studies support the use of new technologies (Chen et al 2004).

Procedure and/or instruments used to explore the question/problem

Two groups of students of Zoology passed two learning phases. In the first learning phase students were asked to learn the species in a classroom setting whereas in learning phase 2 they should distinguish these species in the aquarium. Group 1 (traditional) dealt with preserved specimens in the classroom setting and worked with their notes in the aquarium. Group 2 (dynamic) had a dynamic learning DVD with films of the certain species in both settings. Students' knowledge was tested by a first post-test after the classroom setting and a second one after learning in the aquarium.

Findings/results

An ANOVA with repeated measures showed a main effect for the post-test data, $F(1, 89) = 107.12, p < .01$. Students performed better in the second post-test. No differences between the groups were found. A significant interaction between both factors was found, $F(1,89) = 5.86, p < .05$, whereas knowledge gain in the traditional group exceeded that in the dynamic group. In the first post-test the dynamic group ($M = 3.61, SD = 2.13$) outperformed the traditional group ($M = 2.61, SD = 1.84$), $t(89) = -2.38, p < .05$, while they passed equal in post-test 2.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The results show that in the first post-test the dynamic group outperformed the traditional group, while after visiting the aquarium the traditional group could balance the difference in post-test 2. This could mean that learning with dynamic visualisations is more effective than learning with preserved specimens in a classroom setting with identifying species in their natural habitat in mind. But even if a real-world experience follows after the classroom-setting both learning materials are equal. Thus, dynamic visualisations on mobile devices are an adequate tool to teach biodiversity and they can replace more traditional forms.

Paper pres.9:	26/11/08	14.50-15.30	Room Teatergaten
Presenter:	Rutger Kappe		
Title:	Does matching and mismatching using learning styles have an effect on learning and learning outcomes?		
Theme:	Learner Diversity		

Research question/problem

Learning styles is an idea that receives much attention in the classroom, yet there is little empirical backing that learning styles have an effect on learning and learning outcomes. We examined if the learning style preferences of undergraduate students (n=99) changed over a period of two years and if students became more complete learners. We also examined if learning styles were linked to academic achievement and used, next to the multi-dimensional criterion measure Cumulative Grade Point Average (CGPA), specific GPA measures related to five different kinds of learning environments.

Link to the conceptual framework/literature

Empirical evidence concerning the development of learning styles can be derived from studies regarding stability. Test-retest studies show contradictory results (Coffield et al., 2004). Studies examining the predictive validity of learning styles sometimes report significant findings regarding learning in matched conditions (Busato, 1999; Cook, 1999; Ford & Chen, 2001; Vermunt, 1992), but the results are limited to minor correlations and only for specific learning styles. A lot of studies fail to report significant correlations between any learning style and learning outcomes (Zwanenberg et al., 2000).

Procedure and/or instruments used to explore the question/problem

Human Resource Management students (HRM) of the INHOLLAND College for professional education participated in this study (n=99). The program of this study is based on principles of social constructivism and competence based learning and consists of five different kinds of learning environments: courses, projects, training, work, and thesis. The data of academic achievement were based on the performances in these different learning environments during four years at college. The Learning Style Questionnaire (LSQ) of Honey and Mumford (1992) was used twice to assess (the change in) the learning styles preferences of the students (college year 1 and year 3).

Findings/results

Results indicate that learning in matched or mismatched conditions is not related to academic achievement. We find no significant correlations between learning style preferences and different learning outcome measures. We also find learning style preferences of students to be fairly stable, even though students were exposed to different learning environments during an intensive two year at college. Regarding the question if students develop a more integrated approach to learning we find that matching and mismatching does not lead to students becoming more complete learners.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

This study examines several aspects regarding learning styles. The study shows that learning style preferences are fairly fixed. Expectations that students learning styles can be strengthened by matching or mismatching their style to certain learning environments are not supported by this study. Perhaps more specific interventions can be more successful, but more research is needed. This study also shows no relationship between learning styles and learning outcomes. No learning style seems to be of more importance than any other. The use of learning style measures for selecting students at Dutch colleges is questionable.

Paper pres.10:	26/11/08	14.50-15.30	Room Tärnplass
Presenter:	Geoff Hilton		
Title:	The role of rehearsal in promoting learning for Year 7 students making science videos.		
Theme:	Implementation of educational innovations		

Research question/problem

A study was conducted to determine the learning benefits for Year 7 students using digital video production to represent knowledge gained during investigations into the workings of a balance beam. The writing-to-learn in science model by Prain and Hand (1996) was adapted to provide a framework for the study. Students produced videos to explain scientific concepts to a younger audience. One of the video producers' most prevalent behaviours was rehearsal of the concept explanation prior to filming each segment. This presentation discusses the various forms of students' rehearsal and the possible impact on their learning.

Link to the conceptual framework/literature

Targeting a specific audience is a key element of the writing-to-learn in science model (Prain & Hand, 1996). Student video producers rehearsed explanations of concepts in ways they believed suitable for their target audience. In doing so, students engaged with the scientific concepts multiple times, collaborating to clarify understandings (Burden & Kuechel, 2004; Osborne & Hennessy, 2003; Prain & Waldrop, 2006). Rehearsal allowed students to consider how to represent concepts with which they had physically and visually engaged during their investigations. This multiple engagement with concepts in different modes can achieve enhanced learning outcomes (Prain, 2006; Russell & McGuigan, 2001).

Procedure and/or instruments used to explore the question/problem

A mixed method design was used to study two Year 7 classes (n=23, n=24), working in groups of three (mixed ability and gender) as they investigated the workings of a balance beam. Findings from their investigations were prepared for a Year 5 audience; one class using a written text (poster making) and the other producing digital videos. Two groups from each class were video tracked throughout their investigations and were later interviewed. Transcripts from these data sources were analysed. Quantitative data was gathered using pre-tests, post-tests, delayed post-tests, and repeated question instruments.

Findings/results

Results of quantitative instruments revealed learning gains were greater for the video producers than poster makers. Analysis of transcripts showed student video producers frequently rehearsed their explanations whereas poster makers did not. The rehearsals of concept explanations were regular and often prolonged among the video producers. Rehearsals took a number of forms a) silent personal, b) spoken personal, c) group interactive, d) peer instructional. For the video producers, rehearsal of concept explanation was a prominent factor in the video production process and subsequently an influential factor on students' science learning.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Educational practitioners and policy makers must adapt to the demands that new information and communication technologies (ICT) bring to curriculum, pedagogy, and assessment. Often an ICT's presence in classrooms precedes the understanding of how to implement it to improve teaching and learning (Metiri Group, 2006). This submission demonstrates that video production can be embedded in science classrooms with legitimate learning benefits. Producing videos to represent science knowledge allows students to use an ICT which can in many ways match learning benefits of traditional texts but can also facilitate behaviours such as rehearsal that have the potential to enhance learning.

Paper pres.11:	26/11/08	14.50-15.30	Room Hodden
Presenter:	Amnon Glassner		
Title:	The teacher and the students in the computerized classroom.- innovative model of teacher training that involves; pedagogical researchers, technological experts and a dedicated trainer.		
Theme:	Implementation of Educational Innovations		

Research question/problem

Introducing ICT into teachers work require change of teacher's knowledge practices focusing on the role teachers takes with their students; from being the owner of the knowledge towards a triological approach to learning. Such change with teacher's knowledge practices can not be achieved without allowing teachers a training phase whereas they try new ways of teaching supported by pedagogical researchers and technological experts.

Following our training model our research questions focusing on:

- Did teachers change their knowledge practices in the classroom during the training?
- To what extend the design of the training affected teachers' knowledge practices?

Link to the conceptual framework/literature

Teachers' beliefs regarding their role as teachers are related to their willingness to implement technology in their classroom e.g Kolb & Fishman (2006).

Implementing new technology deserve change of perspectives to learning – from the individual learning to a group learning. Such change can be achieved while teachers design discourse-intensive pedagogical practices combining rigorous tasks with carefully orchestrated, teacher-led discussion. O'Connor & Michaels (2007)

While teachers design and teach learning activities with ICT they have the opportunity to experience the change with their role as well as adopting the suitable design principle for the success of such activities.

Procedure and/or instruments used to explore the question/problem

12 in-service teachers (elementary –high school) participated in 10 month course of 112 hours during the school year of 2007-2008. During the course teachers were exposed to various technological tools, and were asked to design curricular units and actually teach them to their students.

- Pre- and post-questionnaires (about teachers knowledge and experiences regarding technology and learning)
- Video of the f2f meetings in the course
- Videos of the classroom (content analysis of good teaching examples taken by the teachers with their students) .
- Interview with one teacher
- All course materials including chat
- Curriculum units designed by the teachers

Findings/results

During my presentation i will follow the story of two teachers in the training phase and in their classroom. Our (preliminary) findings point on a strong connection between;

- Teachers' designs of curriculum unites (with ICT) during the training phase,
- The way teachers presented the use of the technological tool to their students (in the classroom),
- The cultivation of a new knowledge practices (pedagogy).

During my presentation I will also emphasis on the special role of the pedagogical researchers and the trainer to "transfer" teachers' new experience to an explicit new knowledge practice

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The findings indicate that using our innovative model of teachers' training can facilitate teachers with implementing technology accompanied with the suitable pedagogy in the classroom. In light of the difficulties teachers face with implementing technology in the classroom, this model can advance and cultivate new ideas in this direction.

Paper pres.12:	26/11/08	14.50-15.30	Room Galgebakken
Presenter:	Niek Van Benthum		
Co-presenters:	Frank de Jong		
Title:	Student and teacher's opinions on how to improve the use of a Personal Development Plan for students' professional development in teacher training.		
Theme:	Mentoring/Coaching		

Research question/problem

1. What's the experience of students at Stoas Professional University, agricultural institute for teacher training in The Netherlands, on writing a Personal Development Plan within the program of study career guidance.
2. What are students' opinions on how to improve the coaching for writing a Personal Development Plan to make the plan useful for students' professional development in teacher training.
3. What are study career coaches opinions on how to improve the coaching in using a personal development plan to make the plan useful for students' professional development in teacher training.

Link to the conceptual framework/literature

From Kuijpers (2003) research data indicated that students have deficiency in reflection on motives and capabilities. This is problematic if we consider that society more and more put a claim on citizens to be able to self-direction on base of reflection. The PDP looks like to be an adequate instrument to stimulate students reflective self-directing behaviour. However in case students do not experience the PDP as a sense full instrument in this context the teacher training context actually miss a expected chance to enhance students' reflective self-direction. This is in line with Mittendorf et al (2008).

Procedure and/or instruments used to explore the question/problem

An online questionnaire on perception and usefulness of the personal development plan, was used to examine survey question one. The questionnaire contained 26 questions to be answered on a 4-points-scale.

To validate and add richer information to the survey question findings, study career guidance groups in different study phases and study routes were interviewed. The interviews are qualitatively analysed
To add the experience of the study career coaches to the survey question findings, study career coaches were interviewed. The interviews are qualitatively analysed.

Findings/results

Students have a negative perception on writing the PDP. According to a one-way-anova variance-analysis there were no significant differences between the student groups. Both students and study career coaches propose to create a PDP in dialogue between student and coach to motivate deeper thinking about student's goals and contents of the PDP and to make students intrinsic motivated to apply the PDP.

Students are not motivated to use structured PDP-formats and prefer to choose their own format.

To apply the PDP, repeatedly dialogue between coach and student is desirable.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Student's PDP needs to be created in dialogue with study career coach.

Study career coaches need to spent more time in talking with students about contents of the PDP

Study career coaches need to be trained in techniques to improve deeper thinking about goals and contents of the PDP during the dialogue.

Better use of the personal development plan improves students' learning and reflective competency in their study.

Paper pres.13:	27/11/08	09.00-09.40	Room Teatergaten
Presenter:	Sandra Fleming		
Co-presenters:	Gabrielle McKee and Sylvia Huntley-Moore		
Title:	Nursing Students' Learning Styles: A Longitudinal Study.		
Theme:	Learner Diversity		

Research question/problem

The results presented here are part of a larger study aimed at establishing the learning profiles of students at entry and exit from six Schools of the Faculty of Health Sciences by administering the Approaches and Study Skills Inventory for Students, Learning Styles Questionnaire and the Learning and Study Strategies Inventory.

Aim: To examine the learning styles of one cohort of nursing students' on entry to and exit from a four year Bachelor of Science (Nursing) Programme to see if these styles changed over time and if there is a relationship between students' academic achievement and their learning styles.

Link to the conceptual framework/literature

Learning styles indicate an individual's preferred way of learning and acquiring information (Felder and Brent 2005), and influences the way in which learners master the goals and objectives of an educational programme (Rassool and Rawaf, 2008). Linares (1999) found that learning style did not predict academic success but stressed the importance of students using all four styles when appropriate rather than relying solely on one preferred learning style. Honey and Mumford (2000) purport that being aware of one's preferred learning style is a prerequisite to becoming a better all round learner, and helps to optimise one's learning effectiveness.

Procedure and/or instruments used to explore the question/problem

The learning styles of nursing students were assessed using the Learning Styles Questionnaire (80 item version, Honey and Mumford, 2000). This questionnaire categorises learning into four preferred styles: activist, theorist, pragmatist and reflector. The questionnaire was administered to a purposeful sample of students in their first year of study (n=202 response rate 68%) and again in their final year (n=166 response rate 83%). Responses were excluded from analysis if the questionnaire was incomplete or students did not complete the questionnaire at both stages of the study, the sample number was 58. Ethical approval for study was granted by the relevant committee.

Findings/results

The predominant learning style in first(59%) and fourth(48%) year was reflector. T-Tests were used to analyse differences between student responses at each stage. There was a significant difference ($p > 0.05$) in the reflector ($p=0.000$), theorist ($p=0.009$) and pragmatist ($p=0.019$) scores between the two stages. There was a trend for all scores to come closer together by fourth year. There was a strong correlation between the students pragmatist score ($p=0.001$) and theorist ($p=0.022$) score and exam results in first year. There was no correlation between any of the learning styles and exam results in fourth year.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

An important implication for nurse education practice and policy is the need to be aware of students learning styles in order to help them to maximise their learning potential during their undergraduate and continuing professional development. The type of teaching and learning strategies utilised in higher education is different to that which students may have been previously exposed to, therefore we need to take cognisance of this in curriculum development and expose students to a range of teaching and learning experiences that will equip them in their professional development and enable them to develop into an 'all rounder' lifelong learner.

Paper pres.14:	27/11/08	09.00-09.40	Room Tärnplass
Presenter:	Amnon Glassner		
Co-Presenters:	Reuma de Groot and Chen Biran		
Title:	Evaluation of meta-knowledge creation in a "trialogical" learning environment which enhances collaborative learning and integration of theory, social awareness and emotional experiences.		
Theme:	Assessment/Evaluation		

Research question/problem

- What are the common tendencies of students' conceptual changes of three meta-concepts which were not explicitly discussed during the course?

- What are the relations between these tendencies and the design principles of the environment?

Trialogic learning environment invites students to be accountable for creation new knowledge and epistemic artefacts. We assume that creation of new knowledge will be expressed by conceptual changing of second degree (i.e. the transfer of the practice which has been experience into conceptual change of meta-concepts).

Link to the conceptual framework/literature

Preliminary findings of learning process indicate connection between conceptual change and knowledge building (e.g. Asterchan, 2007).

Concepts are a unit of meaning that constantly constructed by experience.

We chose to evaluate the creation of knowledge through conceptual change of "meta-concepts" which were not directly and explicitly discussed during the course. The learning environment was designed to enable suitable experiences for changing and elaborating these meta-concepts.

The course was designed according to the trialogical learning principles (Paavola et al., 2004; Hakkarainen et. Al., 2004; Davidson, 2001) and to the "Feedforward" principle which identify personal strengths (Kluger & Nir, 2006).

Procedure and/or instruments used to explore the question/problem

The data resources were:

- Observations on the course meetings in order to trace the design principles and to document the variety of interactions between the lecturer and the students and amongst the students while discussing about exercises and final project.
- Pre-post closed interviews with 5 students (e.g. opinions about the course and their roles as learners).
- Pre-post tests about the three meta-concepts: for each meta-concept the students were asked to write definition, to draw a concepts associations map (meta-concept with associations to other concepts), to write a metaphor, and to elaborate questions.

Findings/results

Preliminary findings unveil changes of the concepts which were associated with meta- concepts between pre and post tests: a. an increase in the total number of the associated concepts; b. an increase in the variety of the associated concepts' aspects; c. a large percentage of associated concepts that changed. Qualitatively, we found some tendencies in changes. For example, the number of "common objective" concept that was associated with the 'collaboration' meta-concept, was significantly increased. We carefully conclude that the experience with groups' work contribute the creation of new knowledge related to the importance of common objective for effective collaboration.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The preliminary findings indicate that integration between the design principles of trialogic learning and positive psychology (e.g. the Feedforward principle) should be used for the design of meaningful learning environment. These principles encourage the learners to take an active part in social learning process and interactions in order to create new significant knowledge, and new practical learning's tools. This kind of knowledge is expressed by conceptual changes of second degree. The identification of such changes can be used as indication for meaningful learning which include the transfer of knowledge that raise the potential for behavioural changes.

Paper pres.15:	27/11/08	09.00-09.40	Room Hodden
Presenter:	Darren Mundy		
Co-presenters:	James Proctor		
Title:	Getting W.I.L.D in the classroom		
Theme:	Implementation of educational innovations		

Research question/problem

The rapid advancement and convergence of technology is providing opportunities for the application of revolutionary new tools for learning in learner environments. The impact of convergence is resulting in 'read/write' and 'producer/consumer' scenarios in societal areas such as journalism. This project aimed to build on this shift from the passive consumer to the active consumer with the introduction of active learning concepts in the lecture room environment facilitated by new technology. To aid this, a tool for real time wireless annotation of lecture slides by the learners has been developed and evaluated in use.

Link to the conceptual framework/literature

Other educational institutions have focused on producing systems for interaction in the lecture room based on proprietary hardware or more standardised personal digital assistants (PDA's). In institutions where the use of this technology has been studied demonstrated benefits have been: increases in student participation, wider encouragement of the thinking process and improved student understanding of their own knowledge and its comparison to others. To advance this present state of the art this project aimed to provide a tool which integrated with popular presentational systems to allow for free text annotation to delivered lecture slides.

Procedure and/or instruments used to explore the question/problem

A system was developed which would take a Microsoft PowerPoint presentation output in xHTML and would embed interactive slides within the slideshow. Students could then annotate these interactive slides through the use of wireless devices in the classroom. Between September 2007 and May 2008, the system has been evaluated in two undergraduate modules. This evaluation has consisted of the technology being trailed and reviewed through selected participants (captured through individual questionnaires) and by the capture of group response (through the use of group questionnaires) to the affect of this technology on learning.

Findings/results

The findings are grouped into three areas, technological, pedagogical and student observations. Technological issues have included problems with the wireless devices (battery life, connectivity and configuration), the software, the presentational equipment and local network environments. Pedagogical findings have focused on adaptation to the use of the technology in the classroom and the positive effects of changing dynamics of student participation. Finally, the student response has been very interesting with comments ranging from "excitement, wanted to play with them" through to "omg [oh my god!] they now expect me to buy a pda to complete the module".

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

New technology such as the tool developed for this project has the power to change the way in which students can interact in the classroom environment. Finding ways through the use of new technology to promote discourse can have a beneficial impact on the learner environment. Traditional methods of promoting discourse can provoke issues surrounding identity and confidence. Technology can provide a solution to these problems for some students but can provoke similar issues in other students e.g. confidence in technology use. This presentation will provide an evaluation of trying to find a balanced approach.

Paper pres.16:	27/11/08	09.00-09.40	Room Galgebakken
Presenter:	Peter Roels		
Title:	Adaptive learning in cell biology using a computer-assisted instruction - Results of first evaluation.		
Theme:	ICT		

Research question/problem

The major goal is the evaluation of the effectiveness of a recently implemented computer-assisted instruction aiming at adaptive learning in cell biology.

The following questions are addressed:

1. Is the learning path during the computer-assisted instruction adapted to student's needs?
2. Is the learning effectiveness of the computer-assisted instruction comparable to a lecture?
3. How do students perceive the computer-assisted instruction?

Link to the conceptual framework/literature

The authors believe that understanding nuclear cell divisions conceptually implies knowledge of the relevant concepts and the construction of a mental framework of their multiple interrelations. Several teachers have already reported their efforts to encourage active learning of cell biology topics by using innovative didactic strategies in the classroom. However, few have discussed the possible educational advantages of computer-assisted instruction. In other domains computer-assisted instruction has been shown to have some benefits, such as emphasis on active learning, self-paced learning and the ability to represent content in a variety of media.

Procedure and/or instruments used to explore the question/problem

We developed a computer-assisted instruction with Question Mark Perception 3.4. Questions covering the subject were offered online. Feedback was answer-specific and the question path was automatically adapted based on earlier given answers.

127 students were randomly allocated to two groups and instructed using either a short introduction followed by computer-assisted instruction or a college. Log-files produced by Question Mark Perception made it possible to study the learning paths. The scores of post- minus pre-tests were calculated to compare learning effectiveness. Students also evaluated 10 items of a questionnaire using a six-point scale to express their appraisal of the instruction.

Findings/results

The log files indicated that the learning contents delivered to the students were effectively adapted to students prior knowledge of the subject.

In terms of learning outcomes the computer-assisted instruction was as effective as a traditional lecture (according to an unpaired T-test). Remarkably, the mean learning effects were rather small in both groups and several students gained negative post- minus pre-test scores.

From the questionnaire, it appears that students were encouraged to think actively during the computer-assisted instruction. Moreover, students performing the computer-assisted instruction preferred this method above a traditional lecture, but would like a more extensive preceding lecture.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

If the results of our study are further corroborated, they are nothing less than a call for blended learning, at least in those cases where conceptual knowledge is of uttermost importance. In this approach, a general, teacher-centred lecture would be followed by a more individualized, learner-centred computer-assisted instruction. In the future our attention will be focused on ways to optimize learning in this learning environment.

Paper pres.17:	27/11/08	09.00-09.40	Room Panorama
Presenter:	Anna-Carin Jonsson		
Co-presenters:	Dennis Beach		
Title:	The beliefs behind the preference for person-focused versus process-focused feedback praise		
Theme:	Classroom management strategies		

Research question/problem

Recent research shows that person-focused feedback praise has several negative effects on pupil achievement (Henderlong & Lepper, 2007) as it draws attention to the self instead of the learning process, creates a competitive climate in class and fosters an entity theory of intelligence (i.e. as a fixed, unchangeable, uncontrollable entity) with serious consequences for achievement levels (Dweck, 1986; 1999; Dweck & London, 2004; Trouilloud, Sarrazin, Bressoux & Bois, 2006; Leondari & Gialamas, 2002; Ommundsen, 2003; Kamin & Dweck, 1999; Mueller & Dweck, 1998). (frameworks here, research question below)

Link to the conceptual framework/literature

Because of this it is extremely valuable to know what theories and beliefs rest behind the preference of giving person-oriented feedback versus process-oriented feedback among pre-service teachers. We should discuss the effect of different types of feedback praise effects in teacher educational programs as well as in to-days schools. If we use less person-oriented feedback praise toward the pupils this could have a positive influence on the pupils learning environment and by this, achievement level. The present paper examines these issues and what implicit theories of intelligence, epistemological beliefs and beliefs in competition that may predict preference for feedback praise.

Procedure and/or instruments used to explore the question/problem

151 pre-service teachers' participated. From Henderlong and Lepper (2007) we developed a quantitative measurement for feedback praise and belief in competition with four items for respectively person, process and product. An exploratory factor analysis was conducted. This generated four factors with person and process feedback represented in first (4 items, Cronbach's alpha .818) respectively second factor (4 items, Cronbach's alpha .732). A Swedish version of Dweck's (1999) Theories of Intelligence Scale within math and social sciences and the Epistemic Belief Inventory (Schraw, Benedixen, & Dunkle, 2002) were also used. Measurements were altered to control for order effects.

Findings/results

Two stepwise multiple regressions were performed with the dependent variables person and process focused feedback. For the dependent variable person-oriented feedback the stepwise multiple regression first entered and explained 9% of the variance with the predictor variable an entity theory of intelligence within math ($F_{1,139} = 14.40, p < 0.001$). The second variable, the epistemological dimension Certain Knowledge, explained 12% of the variance ($F_{1,138} = 10.39, p < 0.001$) and the third variable, beliefs in competition, explained 14% of the variance ($F_{1,137} = 8.71, p < 0.001$). No other significant results were found.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Main findings were that the pre-service teachers who to a higher degree preferred to give person-focused feedback to future pupils also had a stronger preference of an entity theory of intelligence within the context of math, as well as stronger beliefs in Certain Knowledge (i.e. absolute knowledge exists and will eventually be known) and firmer beliefs that competition in the classroom stimulates learning and achievement. These findings complement and confirm previous research (Dweck & London, 2004; Trouilloud et al, 2006). However, the investigation failed in finding predictor variables for the dependent variable process-oriented feedback praise.

Paper pres.18:	27/11/08	09.45-10.25	Room Teatergaten
Presenter:	Bert Reijnen		
Co-presenters:	Peter Boshuizen and Frank de Jong		
Title:	The "Knowledge Creation Spiral" and knowledge building principles		
Theme:	Competence-based education		

Research question/problem

In 2006 a small group and one teacher started a knowledge building pilot in our teacher education competence based curriculum. More teachers were inspired to work with idea centred knowledge creation. Implementation and upscaling problematized because more tools next to Knowledge Forum were needed. Teachers and students were confronted with a different way of working to achieve knowledge creation in stead of knowledge reproduction. This explicated as a need of teachers' and students' tools 'how to do it' didactically and 'learn' this knowledge creation. How to develop a practical didactic from the rather abstract knowledge building principles (Scardamalia2002b).

Link to the conceptual framework/literature

People learn in a context and create individually and collectively knowledge. Knowledge creation (Bereiter) and triologic learning (Hakkarainen) link 1) acquisition of knowledge of individual 'learning'; 2) learning in a community by doing and getting to know; with 3) knowledge creation as a collective activity of building on and contributing to each others understandings resulting into new insights and understandings. Scardamalia's knowledge building principles refine and explicated this launch in a more detailed way. In building the 'knowledge creation spiral' our teachers linked it to the design principles of knowledge productivity (Keursten, Verdonschot) to advance the implementation in their curriculum.

Procedure and/or instruments used to explore the question/problem

The first group that worked with knowledge building was part of an inquiry about supportive learning. The way we tried to answer the questions when upscaling, is not embedded in scientific research although issues are researched in the teacher-research group. It is a matter of advanced understanding by discussing our teacher activities in the knowledge creation approach implementation context. Weekly meetings where fellow teachers, students and our professor in education discussed the praxis resulted in actions and adaptations for the next week. This resulted in modelling the praxis into workable didactical steps for teachers and students.

Findings/results

Reflecting this period we made conclusions about the needs of students and teachers/coaches in the knowledge creating process. Working with students in knowledge creation requires the set up of an inquiry in an authentic context: workplace learning combined with supportive learning. It is necessary to give more structure to process, translation of principles to skills, actions and tools for teachers to remain comfortable in their teaching and coaching. So beside the already mentioned didactical steps 'the knowledge creation spiral' it also resulted in an overview of process, principles and procedures (intervention methods) as a helping hand for teachers.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Our submission describes our experiences and the findings we discovered. It gives an overview of different aspects of knowledge creation and their relation with the teacher education praxis. It is an example of a knowledge creation implementation process; motivating for others to take notice of our experiences, and discuss our findings with other adventurers. On the other hand the 'knowledge creation spiral' didactical model and 'process, principles, procedure' overview can work as helping hand for teacher who want to start to improve their teaching toward a more knowledge creation way to improve students understanding and knowledge competency.

Paper pres.19:	27/11/08	09.45-10.25	Room Tärnplass
Presenter:	Janine Haenen		
Co-Presenters:	Ton Kallenberg		
Title:	Validating a new instrument used to evaluate the Professional Development schools' quality and designed as a self-evaluation tool		
Theme:	Assessment / Evaluation		

Research question/problem

A Professional Development School (PDS) is a school where (newly appointed) teaching staff is educated within the school, in collaboration with a teacher training college. The PDS and the teacher training college have a common responsibility for the training of new teachers. Because PDS is a relative new concept, there is a need for an instrument in order to evaluate the PDS' quality. Such an instrument has been developed, the so-called ZEK-instrument, which gives the school the opportunity for a self-evaluation of its PDS' quality. The goal of this study was to validate this new instrument.

Link to the conceptual framework/literature

In the Netherlands, more and more schools function as a PDS by creating a new learning environment aimed at educating (in collaboration with a teacher training college) new teachers within the school context itself. Due to this collaboration, the gap between theory (being taught at the teacher training college) and practice (being experienced at the primary school) can be reduced. However, how to evaluate the quality of a PDS, as such a school is not equipped itself for teacher education tasks? This new instrument has been developed and validated for this reason.

Procedure and/or instruments used to explore the question/problem

The developed instrument consists of a questionnaire with five different sections to be filled in by actors at the teacher training institute and the PDS: 1) trainers at the teacher training college, 2) training co-ordinators, 3) teacher counsellors, 4) students and 5) headmasters of the PDS. 40 training co-ordinators, 44 teacher counsellors, 41 teacher trainers, 46 students and 24 headmasters have filled in the questionnaire. Each section of the questionnaire consists of scales with items. The reliability of the scales is investigated by using SPSS and the validity is investigated on the basis of a Principal Component Analysis.

Findings/results

The first conclusion is that the five sections of the developed instrument are satisfactorily reliable. We noticed that the reliability of some scales in the questionnaires were somewhat high, due to the fact that the scales contained comparably formulated items. Therefore, we suggested to remove some of the items that were asking for comparable answers. The second conclusion is that this instrument is only partially valid: some scales are totally or partially found in the PCA, while some scales are not found in the PCA at all. A recommendation is to reconstruct the scales considering the factors of the PCA.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Due to the growing role of PDS in the education of new teachers, it is very important to guarantee the quality of a PDS. At this moment there is not such an instrument measuring this quality. Therefore, a reconstruction of the developed instrument can become an important contribution to the research of measuring the quality of PDS. This is important, as the PDS creates an enriched learning environment for newly appointed teaching staff.

Paper pres.20:	27/11/08	09.45-10.25	Room Hodden
Presenter:	Helga Dorner		
Co-Presenter:	Eva Major		
Title:	Developing common collaborative discourse – A model in teacher training		
Theme:	Implementation of educational innovations		

Research question/problem

The integration of ICT-based retooled environments in teacher training is in its infancy in Hungary although its significance is growing rapidly especially with the introduction of the Bologna Process which requires innovative training methods as well as a conceptual change of the agents involved. The usage of virtual learning environments (VLE) in teacher training mentoring scenarios is one possible way to bring about change in communities where the intellectual traditions are merely based on individual knowledge creation processes. Our research focuses on investigating collaborative knowledge practices with the help of analysing the collaborative discourse stored in the VLE.

Link to the conceptual framework/literature

Computer-mediated communication in VLEs offers new opportunities to support social construction of knowledge – constructing meaning actively and continuously in a social context (Vygotsky, 1978; Young, 1997) and can act as catalyst of evolving conceptual change. Thus, the VLE allowed for reflective discussion that does not only make individual achievement visible, but it also provides for tracking the processes of arriving at certain levels of advancement. Accordingly, mentoring events were based on the blended learning model. In the process of planning we followed the framework for designing for interactions in computer-supported group-based learning (Strijbos et al., 2004).

Procedure and/or instruments used to explore the question/problem

In order to be able to deliver a thick description (Geertz, 1973) of the conceptualisation of the communities' collaborative practices and evolving of conceptual change in social interaction (Vygotsky, 1978) the transcripts of interactions among the teacher trainees (n=20) and their two facilitators were analysed on micro level: by using content analysis focusing on tracking the potential stages of collaborative learning and knowledge construction within the micro-communities. Salmon's (2000) five-stage model of teaching and learning online and the model for examining social construction of knowledge in computer conferencing (Gunawardena et al., 1997) were used as frameworks for reference.

Findings/results

Evidence of group cognition (Stahl, 2006) was limited, however, by analysing the online interactions (stored in the CMS logs) we identified 9 phases of the evolving collaborative learning and the social construction of knowledge. We also observed course characteristics (course structure, pragmatic and functional ways of instruction, scaffolding etc.) that can influence this type of online learning.

We intend to discuss the advantages and limitations of the applied research tools and suggest further research methodologies applicable in innovative mentoring models, as well as to share practical experience in order to frame basic guidance for similar courses.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Our research focuses on two innovative 'instruments' which both have a significant role in teaching and learning environments in the future. Both ICT based instruction and collaborative learning are relatively unknown in Hungarian classrooms, despite the fact that their theory is more and more widespread. We think that by experimenting within the context of teacher training, i.e. making an attempt to influence the attitude of future teachers is one of the most efficient ways of change management. We are also hoping to make students aware of their own educational traditions and practices and show them alternatives.

Paper pres.21:	27/11/08	09.45-10.25	Room Galgebakken
Presenter:	Marie-Reine Blommaert		
Co-Presenter:	Evelyne Namenwirth		
Title:	The Body, an Unaccounted for Dimension in (Language) Teaching and Learning?		
Theme:	Development strategies		

Research question/problem

That the body may in fact be an unaccounted for dimension in foreign language teaching and acquisition is a hypothesis that we formulated some years ago already. After many years of teaching we now know from experience that this is very much the case. Nevertheless, our intuitive hypothesis must still be put to the test. To achieve a more accurate picture of the situation we produced a questionnaire in 2006. The results of our enquiry, which involved 227 students, were submitted to a statistical analysis. The current presentation discusses the results of this analysis.

Link to the conceptual framework/literature

As we realized, the field is quite new, so that we mainly refer to our own production.

- Marie-Reine Blommaert en Evelyne Namenwirth, Interaktion von Körper und Stimme in sprechen, Zeitschrift für Sprechwissenschaft, Sprechpädagogik –Sprechtherapie–Sprechkunst, 2006
- Marie-Reine Blommaert en Evelyne Namenwirth Au-delà des lacunes purement langagières. Analyse et remédiation de déficiences posturales et pneumato-phonatoires dans la performance à l'oral, MACL Multilingualism and applied comparative linguistics, VUB, 8-10 februari 2006
- Evelyne Namenwirth ?*Corps insufflé, lecture inspirée in Französisch heute, Kallmeyer (verschijnt in 38.Jg. Heft 4, September 2007, 20 pp.)

More general works of reference include: Stephen D. Krashen, Constantin Stanislavski and others.

Procedure and/or instruments used to explore the question/problem

As we have already mentioned, we used a questionnaire. It includes 12 questions and sub questions. There are closed and open questions with room for comments. The questionnaire was submitted to SPSS treatment.

Findings/results

The answers and statistical analysis confirmed our intuitive hypothesis and even reinforced it. Results showed that 64.8 % of the respondents feel physical stress (located) in different parts of the body and experience such symptoms as tremors, sweating, rashes, shaky voice. etc. The origin of these problems is mainly the instructional environment (school, university), which is a judgmental environment with performance as a goal.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The results of our research show that there is an impact on practice, policy and learning.

Stress in performance-driven instruction has a clear impact on individuals and on their bodies.

These problems can be tackled. The way forward for an educational policy may well be to take into account the impact of the instructional environment on the body.

Paper pres.22:	28/11/08	09.45-10.25	Room Panorama
Presenter:	Sandra Kristina Kuska		
Co-presenters:	Anna C. M. Zaunbauer, Anna Südkamp, Jan Retelsdorf and Jens Möller		
Title:	Immersion Programs in German Elementary Schools: Benefit or Loss?		
Theme:	Assessment / Evaluation		

Research question/problem

One of the biggest concerns of parents of immersive educated children is the anticipated loss of competency in the native language or in math. However, there is no evidence for disadvantages in native-language reading or writing and math achievement so far. This study investigates whether these findings from international studies are replicable in Germany, addressing the following research questions:

1. How do immersion students perform in mathematics, reading, and writing tests in comparison to monolingual educated students?
2. What kind of impact do prior school performances and cognitive as well as motivational aspects have on achievement in grade 2?

Link to the conceptual framework/literature

Immersion education constitutes a very common form of bilingual education, being increasingly emphasized all over the world following the call for globalization and multilingualism. Students attending these programs receive between 50% and 100% of their schooling through the medium of a high-status second language, often English, while curricula are retained. The main goal is to promote additive bilingualism and biliteracy. Still, immersion education expresses itself in multiple forms. In this study, the focus is on early partial immersion programs which provide all classes in English with alphabetization in the mother tongue (German) starting in first grade.

Procedure and/or instruments used to explore the question/problem

The sample comprised $N = 139$ students attending elementary schools in the federal states of Hamburg and Schleswig-Holstein ($N = 69$ immersion students). At the beginning of grade 1, students' social and linguistic backgrounds (e.g. home language, country of birth, preschool skills concerning reading, writing, and calculating, parental support regarding assignments) were assessed as control variables. Performances in mathematics, reading, and writing as well as data regarding nonverbal intelligence, verbal memory, and subject-related interests and self-concepts were assessed at the end of grade 1 and 2. Data were analyzed conducting one-factorial or repeated measures ANCOVAs and regression analyses.

Findings/results

Immersion students' reading and orthography performance in grade 2 as well as the improvements from grade 1 to grade 2 were comparable to those of monolingual students. In contrast, immersion students reached significantly better mathematics scores than monolingual students in grade 2. Prior performance was the best indicator of school achievement. For mathematics performance, nonverbal intelligence also proved to explain a substantial part of variance. Motivational variables did not have explanatory importance for most aspects. Only for orthography performance self-concept reached significance. Despite of initial differences in intelligence, the intellectual development of the two groups resembled each other.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Our results suggest that fears of negative consequences of partial immersions education are unfounded. However, there might be other factors causing the academic advantages of immersion students that should be taken into account in further studies (e.g., class structure, teacher motivation). The implementation of immersion programs might still imply the danger of widening social gaps by selecting only well-situated children for the programs. Therefore, a lot of research is still to be done and existing or soon to be established programs should be aware of possible dangers as well as already known beneficial elements.

Paper pres.23:	27/11/08	14.50-15.30	Room Teatergaten
Presenter:	Quinta Kools		
Title:	Double knowledge creation: learning experiences from teachers doing their own practitioner research and experiences arising from the program for teacher practitioner research		
Theme:	Development strategies		

Research question/problem

In our professorship 'Learning Strategies' of the Fontys Secondary Teacher Training College Tilburg, we stress the importance of practitioner research for the professional development of teachers. To investigate our own beliefs, we started a project in which teachers learned to do practitioner research in their own schools. There were two questions we were interested in:

- 1) Which elements of the program are suitable to help teachers to learn do their own practitioner research?
- 2) What knowledge do teachers create in doing practitioner research?

Link to the conceptual framework/literature

Several authors mention the benefits of practitioner research performed by teachers (Loughran et al, 2004; Zeichner & Noffke, 2001; Cochran-Smith & Lytle, 1999; Cochran-Smith, 2005; Huberman, 2002; Anderson & Herr, 1999; Robson, 1993, 2002; Onstenk, Kallenberg & Koster, 2007). Doing their own research would increase their professionalism as teacher. Although the relevance of practitioner research is stressed by many authors, not many teachers in the Netherlands are already actively doing practitioner research. Among other causes, the lack of experience in how to do practitioner research might be a barrier.

Procedure and/or instruments used to explore the question/problem

We developed a program for teacher practitioner research, consisting of seven group sessions. In each session, attention was paid to theoretical backgrounds (formulation of a research question, choosing methods, obtaining and analyzing data, reporting on the findings) and to practical implications (participating teachers were advised by each other and by the supervisor). Most teachers worked together in a couple on their research project.

The supervisor kept notes about difficulties and experiences of the teachers during the process and interviewed the teachers after they finished their research project.

Findings/results

The answers to our research questions are:

- 1) The theoretical parts of the program were necessary for teachers to obtain knowledge about the (systematic) approach of research. The practical help of the supervisor was crucial during the process as the teachers were insecure about applying their newly obtained research knowledge in practice and needed help to do so.
- 2) Teachers obtained knowledge about performing practitioner research as well as knowledge about the problem they investigated in their school practice. Furthermore, they mention personal benefits such as 'another look at my profession', 'renewed motivation' and 'new insights'.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Our findings indicate that teachers can be trained to do practitioner research and that teachers appreciate to do practitioner research. They value the systematic approach of the research process and the insights they have obtained in their own educational situation. Several teachers mention that they would like to continue doing practitioner research and they recommend their school management to let teachers participate in a research project instead of more 'traditional' professional development programs. Schools can profit from teachers as researchers, as they develop a critical view on educational practice and actively search for knowledge to improve school practice.

Paper pres.24:	27/11/08	14.50-15.30	Room Tårnplass
Presenter:	Vibeke Solbue		
Title:	Possibilities and challenges with narrative research in a study of immigrant youth in upper secondary school.		
Theme:	Research Methods		

Research question/problem

The topic for this project is immigrant-youth with a non-Western background in Norwegian upper secondary schools. The research question is: How does immigrant youth experience their everyday life in school?

Narrative research is used to examine the research question. The aim of this paper is to reflect on the narrative method used in the study and to analyze and understand the findings. Another aim is to reflect on and analyze my use of narrative method and to examine my position when collecting the narratives from the youth.

Link to the conceptual framework/literature

A realistic way of exploring communication is to focus on the practical and theoretical problems that emerge from the interaction between the investigator and the subject. When interviewing it is important to reflect on the asymmetry between the researcher and the subject. In what way will the distance influence the narratives? It is also important to ask if the research will make an intrusion in the subjects lives, and on which level the researcher understands the lives of the subjects and to what extent the researcher is able to mentally put herself in their place (Bourdieu 1999, p. 607-613).

Procedure and/or instruments used to explore the question/problem

The fieldwork is done in an upper secondary school in Bergen, Norway, where I observed two classes for 10 days before I interviewed the immigrant youth in those two classes. In analyzing the possibilities and challenges, the method used in the research will be investigated. It is possible to look at the analysis of the text as a narrative. This leads to a new story that has further developed the story (Kvale, 2001). The story has a sequence of time, a social dimension and a new meaning (Mishler 1986).

Findings/results

6 immigrant youths told me their narratives about their everyday life in school. Many of the stories were positive and optimistic with hopes and dreams for the future. By analyzing the method used in this field, I will be able to understand more of my position in this study. My understanding of my own position is important to know when I am analyzing what kind of narratives the youth told me. Was it a glossy painting of their everyday life, their hopes and dreams, or a realistic narrative close up to the real situation?

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

In upper secondary schools in Norway many programs are under the supervision of the government. The main aim of these programs is to give immigrant youth a positive school-experience. Simultaneously many studies shows that immigrant youth get lower results than ethnic Norwegians get. They also quit school more often than native Norwegians do. My study can give us information about the effect of some of the programs at schools. It will also give us some narratives of some of the students. Moreover the information about the narrative method used in this field is important.

Paper pres.25:	27/11/08	14.50-15.30	Room Hodden
Presenter:	François Lombard		
Title:	Designs of teaching & learning environments that have worked : attempting to generalize?		
Theme:	Implementation of educational innovations		

Research question/problem

Can technology supported learning environments empower students to build their knowledge in a complex infodense world?

What characteristics of these environments lead to which effect (both in terms of cognitive processing and learning outcomes)?

Link to the conceptual framework/literature

Literature argues that simplifying complex subjects for students doesn't allow them to develop the competencies needed to be efficient in a complex world (Bereiter, 2002; Jonassen, 2003). Rather, appropriately scaffolded learning environments and structured teaching designs (Joyce, 2000; Scardamalia_Bereiter, 1996) can empower students to extract information, build knowledge, and create socially recognized productions that warrant professional insertion (Martinand, 1989). Developing such environments is still a challenge (Sandoval, 2004), and defining designs in reusable terms even more (Kobbe, 2006). Analysis of existing successful designs also should provide insights about how components of designs affect the educational outcomes (Sandoval, 2004).

Procedure and/or instruments used to explore the question/problem

In Design Based Research (DBR Collective, 2003), the design itself is the object of research, (Brown, 1992) extracting valuable insight into important research questions as the design is iteratively modified and the effects observed.

We implemented inquiry designs in a knowledge space with a Wiki (Schneider, 2003). The Wiki server records previous states of the pages : history data. The history of each Wiki document is analyzed, yearlong analysis, multi-year analysis reveal evolutions of the design (Lombard, 2007).

Surveys were administered to students, and later, at university (follow-up). In-class observers held journals. Data are analyzed by semi-structured analysis and triangulation.

Findings/results

The results show designs effectively allows students to produce texts with in-depth explanations of complex biological processes, based on information that they found autonomously in appropriate resources. Text quality increased (deeper, more synthetic, scientific explanations). Efficiency at synthesizing complex sources increased, students showed evidence of selecting and assessing the quality of sources, taking the responsibility of validating their own ideas. Owning an efficient inquiry learning strategy to face the knowledge learning challenges of higher studies was shown and confirmed by follow-up.

Insight about how components of designs affect the educational outcomes, and a few design rules will be discussed.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Analysis of designs gives insight about how components of designs affect the educational outcomes. Indeed the main focus will be not on the design itself but the more generalisable outcomes such as how design components affect educational outcomes and a discussion of their relevance and validity. At which level features of the designs should be analyzed (IT tools, activities, group structure, scripts, scenarios, classroom, school, ...) will be discussed. A few generalizable design rules will be discussed that can be taken into account by teachers, policymakers. We plan integrating findings into our science teacher education program.

Paper pres.26:	27/11/08	14.50-15.30	Room Galgebakken
Presenter:	Odd Eriksson		
Title:	Assessment of teacher skills in teacher education: Does our perspective on evaluation and assessment in the students' practical training increase the gap between theoretical studies and profession & practice?		
Theme:	Assessment/Evaluation		

Research question/problem

Teacher education are criticized in the NOKUT-evaluation for lack of coherence between the quality/content of student work on campus and in the practical training. This project looks into if the assessment is in line with the mandate of the education program and if there is coherence between what we regard as good student work on campus and in the practical training. In short: Is it the private concept of "the competent and good teacher" that constitutes the assessment criteria in the practical training, rather than a joint perspective on both theoretical competence, personal factors and practical teaching skills?

Link to the conceptual framework/literature

The project deals with challenges related to how assessment criteria and the process of evaluation affects the students learning and development of relevant theoretical and profession related competence. It deals with ethical and human challenges that arise when the teacher builds strong relations with the students, acts as a mentor and finally ends up as a judge: How can this assessment bring the students from a position of legitimate peripheral participation as a teacher student to a safe starting point as a teacher. Relevant literature are: Sundli, Liv: Veiledning i virkeligheten Wenger&Lave: Situated learning – legitimate peripheral participation.

Procedure and/or instruments used to explore the question/problem

Information is gathered from the main participants in the assessment process: Teacher students (First year students in the program: 44 of 59) and the headmasters (27 of 36) and relevant teachers (55 of 60) at the 36 schools that are responsible for the students practical training.

Document analyzes of the coherence between student grades in theoretical subjects, the assessments from the teachers in the practical training and the students self-evaluation in relation to their actions and results as student teachers: A pre-interview, digital questionnaires (with some open answer boxes, as well as document analyzes.

Findings/results

I found very different perspectives on assessment criteria in the theoretical and practical part of the study program: The students practical skills are mostly linked to personal factors such as social competence, relational skills and practical, work related success. These are important factors, but the findings also show that the students theoretical competence and efforts in the study work on campus, to almost no extent are regarded as relevant in the assessment of their practical training.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

It is important to develop a study program for teachers that can build a bridge between theory and practice. It seems that the different perspectives on assessment within the different parts of the program can be one of the main obstacles to this goal. It is also important to contribute to a more researched based practical training, that in a better way can support the students in their efforts to develop professional competence.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

See: "Research question/problem". Demands to develop research methods that bridge the gap between educational practice and educational research are increasing. First examples of research methods that answer these actual/urgent demand(as the research method developed by CINOP expert centre) are available. Further R&D is necessary to develop and upgrade these research methods, and increase the quality (and diversity) of techniques, instruments and tools. The presentation will include an offer to participate in a by CINOP expert centre organised European or international community of practice, consisting of researchers, who share the ambition to further develop the process from practice based evidence to evidence based practice.

Paper pres.27:	27/11/08	15.40-16.20	Room Teatergaten
Presenter:	Jenny Barnett		
Title:	Creating knowledge as a teacher researcher: The research-classRoom Teatergatennterface		
Theme:	Development strategies		

Research question/problem

Teachers studying in a professional doctoral program frequently create new knowledge both within their research and through classroom application. As a supervisor, I investigated the case of one teacher who applied her early research knowledge in a unit of learning and teaching on “Othering”. I wanted to find out more about the interfaces in her knowledge creation (a) in the doctoral research process, notably through data generation, analysis, writing and supervisory practices, and (b) in the 10 week period of the “Othering” unit, particularly in regard to the students’ own knowledge creation during that period.

Link to the conceptual framework/literature

In this study, I carry out practice-based research on practitioner research, with a view to better understanding and improving both supervisory practices and teacher development through practitioner inquiry. In reflecting upon her research-based learning and its application and continuation in the classroom, I make links to the literature on teacher cognition, and to Bakhtinian notions of dialogism. The discourses of multicultural education identified by McCarthy (1994) provided a conceptual framework for the teacher in locating her own practices and those of her colleagues, and similarly provide part of the conceptual framework for this dialogic study.

Procedure and/or instruments used to explore the question/problem

The candidate in the above-mentioned program is a consenting informant in a broader research project on research writing support within the academy, in which the author is principal researcher. Data for the study presented here derive from that project and comprise: recordings of supervisor-candidate interactions, candidate and supervisor notes from interactions, research writing by the candidate, one interview with the candidate reflecting on knowledge construction and research writing. Data analysis is initially thematic, supported by some lexical analysis, and is then taken deeper through selected Bakhtinian constructs, notably dialogism, answerability and unfinalisability.

Findings/results

The teacher’s new knowledge showed itself to be in some respects firmly grounded, and in others less so, allowing spaces for development in dialogue with her students, her supervisor and her reflective practitioner self. Adopting a dialogic pedagogy required her to ride with certain fears and uncertainties, to let go of content authority in ways that she had not previously done, and to allow more space and respect for students’ own creation of knowledge. The learning outcomes reported by students and evident in classroom artefacts showed shifts across discourses of multiculturalism and other, which in turn shaped the teacher’s cognitions.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

There are three main areas of impact within schools that I can see at this stage: taking the social issues in a school as curriculum content; developing and furthering a dialogic approach in classroom practice, thereby facilitating the construction of knowledge by both learners and teachers; and taking teacher research beyond the confines of the classroom. In regard to supervisory practice, I believe there are similar points to be made, particularly in regard to dialogic supervisory interactions.

Paper pres.28:	27/11/08	15.40-16.20	Room Hodden
Presenter:	Siebrich de Vries		
Title:	The challenge of an Academic School. Report of an evaluative study, consisting of an implementation and an outcome evaluation, of an Academic School.		
Theme:	Implementation of educational innovations		

Research question/problem

From 2006 until 2008, the "School of Education (SofE)", a cooperation of four secondary schools and two teacher education institutes in the northern region of the Netherlands, carried out a pilot scheme 'Academic School (AS)' of the Dutch Ministry of Education. In this pilot teacher education, continuing education, educational development and innovation, and action research (AR)(Ponte, 2002) were integrated.

In the evaluation study, the following research questions were central:

1. How did the implementation of the AS work out at the 4 schools concerned?
2. What did the AS bring the experienced and student teachers concerned, and which were the supportive and hindering conditions?

Link to the conceptual framework/literature

At the basis of the AS (cf the PDS in the US), the SofE has put AR (Ponte, 2002), as a combined strategy for the professional development of experienced and student teachers. AR integrates learning in the workplace, systematic reflection and collaboration, features which have been shown very important in the professional development of teachers (eg., Kwakman, 1999; Van Eekelen, 2005; Meirink, 2008, and AR ties in perfectly with school-based teacher education programmes (Buitink, Beijaard, 2007). Success factors formulated on the basis of similar AR projects by De Vries, Beijaard, Buitink (2008) were also taken into account.

Procedure and/or instruments used to explore the question/problem

Over the last two years, 11 sub-pilots took place at the four schools concerned.

For the implementation evaluation, data collection took place via half-yearly in-depth interviews with the project managers of the sub-pilots and the contact persons and principals (only once, the fourth round) of the schools and the institutes in question.

For the outcome evaluation, data collection took place in seven sub-pilots with in total about 30 experienced and 10 student teachers. At the start and at the end of the pilot period, they filled out a digital questionnaire. During the enquiry, they wrote bimonthly in their digital logbooks.

Findings/results

The results seem to indicate that:

1. At two of the four schools, the AS has partly been realised; at the other schools, it has not (yet) been realised.
2. The outcomes of the AS for the experienced and student teachers concerned are many and various. A survey of supportive conditions was realised as well.

A tentative conclusion is that, if whatever supportive condition hasn't been met, it turns into a hindering condition, and the whole sub-pilot gets stuck. In other words: the strength of the chain is in the weakest link, and that seems to be the ownership of the school management.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The impact of this submission could be important in the Dutch discussion about the measures to be taken to increase the quality of teacher education, of education in general, and of the attraction of the teaching profession in consideration of the coming teacher shortage. Our research revealed the crucial role of the school management, who, in principle, should be focused on educational improvement and innovation, and on the increase of the attraction of the teaching profession at their schools, but who, in practice, seems to frustrate both processes.

Paper pres.29:	27/11/08	15.40-16.20	Room Galgebakken
Presenter:	Anne de Jong		
Co-Presenter:	Ellen van den Berg		
Title:	Towards a knowledge creating teacher community		
Theme:	Learner Diversity		

Research question/problem

This PHD-research focuses on the explicitation of knowledge which is generated by a community of teachers in primary education while they are working on a project. Since there is very little known about teachers constructing knowledge, there is a need for a description of and experiences with this kind of process.

Research Question: how does a community of teachers successfully construct knowledge?

Link to the conceptual framework/literature

This study concentrates on knowledge as what Gibbons et.al. (1994) call 'modus 2'. This means that knowledge is created in practice and is then disseminated to other practitioners. Modus 2 calls for a shared responsibility which can be found in a community of practice (Wenger, 2002). Working within a community of practitioners, places teachers in a second-order organisation (Scardamalia & Bereiter, 1994). These organisations require reciprocal dependence, which requires members to make a contribution to, and develop a collective knowledge base, in order to keep progressing. This process of collective knowledge construction (Erden et. al., 2008) has the main focus.

Procedure and/or instruments used to explore the question/problem

A literature research that resulted in a conceptual framework with main concepts: characteristics of, necessary conditions for, and types of knowledge in, a knowledge constructing community.

For 6 months, five primary school teachers have been observed by making video recordings of the sessions they had every 3 weeks. Afterwards these videos were analyzed with the video annotation tool Transana, using the concepts that came forward from the literature research.

At the end of the school year, semi-structured interviews were conducted with the teachers. The data was analysed with the same concepts that came forward from the conceptual framework.

Findings/results

Among other things, the teachers turned out to be great team workers. They all had their own subjects they worked on, but also shared and felt a great commitment and responsibility for the group result. The 'good practice' that was visited worked as an important trigger for gaining ideas for their own practice. Externalising practical knowledge however proved to be a difficult skill, which the teachers didn't fully master. Balancing interdependence and personal agendas of the participants also proved to be difficult.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Very little information is available about how teachers make their practical knowledge base explicit, and eventually available and usable for others. This study strives to foresee in practical guidelines and activities on how this can be done.

For educational practice and policy these findings will present which conditions should be created in order to enable teachers to construct knowledge together. For the learning environment of teachers itself more can be said about the necessary activities to share knowledge in a group.

Paper pres.30:	27/11/08	16.30-17.10	Room Teatergaten
Presenter:	Lela Abdushelishvili		
Title:	Practical Application of Quality Control/Assurance Mechanisms in Teacher Education		
Theme:	Implementation of Educational Innovations		

Research question/problem

Being characteristic to business world, the term "Quality" proved to be equally important for the educational sphere. Quality assurance is one of the stated aims of Bologna process. Teacher training programs and their relevance to the needs of trainees, employers and society and organization and delivery of such programs play a key role. Therefore, quality assurance, use of resources, reflection on structures, which enable effective development and delivery of educational programs and teacher training are significant. Therefore, the presentation will focus on the aspects of quality with reference to teacher education.

Link to the conceptual framework/literature

The increasing integration of Europe in social, economic and political terms makes education extremely important for all European citizens. The Bologna process with its emphasis on academic mobility and employability across territorial borders, highlights the importance of teacher education and demands are made on pedagogical skills and competencies of teachers, which leads to their training and development. This is the crucial component of the quality cycle in education.

Procedure and/or instruments used to explore the question/problem

Client-oriented teacher training programs should be evaluated to measure teaching and learning performances using such instruments as self-assessment checklists; peer observation, quality circles, trainee feedback, identifying best practice, establishing benchmarks, setting key indicators, teacher's action plans, oral/written reviews of progress toward pre-stated objectives, formal teacher evaluation results, sample lesson plans and records of participation in professional development activities. Data sources used in teacher evaluation process reflect program aims, staff experience, quality of management expertise and time devoted to evaluation in relation to other projects.

Findings/results

The role of teacher training in enhancing teachers' ability to evaluate and implement innovative teaching approaches is great. When trainees are given the opportunity to talk about and evaluate this role, it gives them a chance to objectively and openly talk about problems, positive and negative sides and for the trainer this information is useful to improve quality of training courses. So, emphasis on quality assurance/enhancement offers an ideal context for reasoned advocacy of teacher training as an integral component of quality cycle in teacher education

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Education in Georgia is in the reformation process. There needs to be a clear scheme of educational development. Educational institutions are challenged to make their trainees masters of their own learning to enable them to deal with their tasks independently. This implies promotion of competence in teacher education, methodology and social and personal competence. Well-prepared teachers are a pre-condition of the success of trainees and, in this respect, design and implementation of mechanisms of quality control of teacher development programs will lead to optimal learning outcomes.

Paper pres.31:	27/11/08	16.30-17.10	Room Hodden
Presenter:	Toni Alexander Ihme		
Co-Presenter:	Jens Möller		
Title:	Effects of cooperation in teaching on students' presentations		
Theme:	Classroom management strategies		

Research question/problem

Cooperation of lecturers or teachers and its possible effects has stimulated far less research than cooperative learning. The same is true for the effect of cooperation of students in planning and presenting papers in university courses on the audience (their fellow students).

Therefore, we conducted an experimental study to observe the effects of cooperation in a setting similar to students' presentations in university seminars, thus hinting at a possible effect of cooperation in teaching. Does cooperation of teaching persons increase motivation and learning of the students?

Link to the conceptual framework/literature

Cooperative learning is a well established concept of education. Its efficacy has been proved by numerous studies. Cooperation in teaching has been researched far less and most of the studies concentrated on the existence of cooperation in schools. An exception is team teaching, but its evaluation revealed no advantage in comparison to solo teaching (Carpenter II et al., 2007). However, it is important to note that the sample of courses was very small and quasi-experimental, therefore limiting the explanatory power of the study. That is why we took an experimental approach to analyze the effect of cooperation in teaching.

Procedure and/or instruments used to explore the question/problem

The experiment distinguished four conditions. In the single-teacher-condition one subject (as 'teacher') prepared a presentation, designed a poster and gave a lecture about learning disabilities to a subject who served as a 'student'. In group-condition 1 two subjects conceived the presentation together but designed the poster and were to give the lecture alone. In group-condition 2 the cooperation increased until in group-condition 3 they dealt with the complete task including the lecture together. The dependent variables were the quality of the poster and of the presentation as well as the motivation of the participants and the success of the teaching.

Findings/results

The data revealed more errors in posters under the single-teacher-condition. And while there were no significant differences between the quality-ratings for the posters and the perceived quality of the presentations, the motivation of all participants differed between the experimental conditions favouring the group-conditions. Most important, the analysis of the pre-post-differences of the 'student'-subjects' knowledge about learning disabilities displayed a higher learning in group-condition 3 in comparison to all other conditions. That means the 'students' in the condition with the highest degree of cooperation learned the most.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

It appears that cooperation in preparation for lecturing others as well as cooperation in presenting the lecture affects the motivation of all participants and the performance of the audience positively. That is, the cooperative work of university students in seminars does not only benefit themselves but also their fellow students who are the audience of their presentation. Translated into the school setting, cooperation of teachers might benefit the instruction and promote a better performance of the students. Further research will have to clarify how such a performance is promoted and which means can be used to improve cooperation in teaching.

Paper pres.32	27/11/08	16.30-17.10	Room Galgebakken
Presenter:	Lut Baten		
Title:	Changing and Emerging Needs in Business English for Graduating Masters in Business and Economics. A Pilot Study on the Use of Communities in a Virtual Learning Environment: Google vs Blackboard		
Theme:	Assessment / Evaluation		

Research question/problem

How does a project based approach offer valuable new opportunities for graduate students to equip them with the necessary competencies and skills for bridging the gap from university to company performance in English.

Link to the conceptual framework/literature

The project focused on the development of a learning community in a virtual learning environment (VLE) using GOOGLE by students of business and economics and the subsequent reporting by these students to each other and to external experts.

Procedure and/or instruments used to explore the question/problem

The class split up in groups to assume responsibilities for content, design, reporting, evaluation, maintenance of the site, management of the project and skill training (on presentation skills, intercultural competence, and writing skills). Students reported to visiting CEOs (Siemens and Google). A satisfaction survey (survey monkey) was conducted within the class. As such, the whole class and the tutor were involved in five different stages of project management: brainstorming, forming, setting norms, operating, and wrapping up. The final result was each group's accountability (individually reported on in a portfolio and a final appraisal talk).

Findings/results

Google doesn't score as well as on privacy and structure, but the questionnaire revealed it performs better as a learner-pulled VLE . Our Google community led to (i) intensive interaction in discussion forums in the target language, (ii) confidence building as to spoken and written performance in an international business setting, (iii) meaningful content learning, (iv) successful project management skills. Students discovered the opportunities modern technology, peer and self-assessment offer for a better output and a better quality in presenting and exchanging information. They insist on the human aspect of learning and a change in tutor's attitudes.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The strengths of building a Google community lie in user-friendliness, interaction, and the application of new technological means by the students themselves. They involve in social networking and social learning. The content of learning was indeed theirs in this Web 2.0 environment. Google communities are an excellent platform to communicate, interact and participate. Google's dynamic environment enables student collaboration. It allows and stimulates students to create, share and discuss content themselves. Thus the human aspect is well-developed, which is crucial for learning how to tackle interpersonal sensitivity in communication.

Paper pres.33:	28/11/08	9.00-9.40	Room Teatergaten
Presenter:	Oya Basaran		
Co-presenter:	Deniz Kurtoglu Eken		
Title:	Raising quality through an enriched understanding of perceptions on quality		
Theme:	Assessment / Evaluation		

Research question/problem

The presentation will focus on research with over 400 learners in a variety of educational settings in Europe with the aim of exploring language learners' perceptions of quality in language schools.

The research was undertaken with the motivation of addressing the following challenging questions: Why is 'quality' both easy and difficult to define? Can we arrive at a shared understanding of quality? What do different language learner perceptions of quality have to offer to our existing understanding of this challenging concept? What significance does this have on our efforts to enhance quality in our schools?

Link to the conceptual framework/literature

The concept of 'quality' is a challenging one to explore and to define. For optimal teaching and learning environments, however, it is essential for us as 'providers' of instruction to explore the concept in depth through the eyes of our students.

Quality for the professional teacher means being committed to different interpretations of quality, not only to improvement but to standards, fitness for purpose and fitness of purpose. Such a holistic view of quality needs to be embedded into any education institution. (1)

(1) Thomas, H. 2003. The arguments for and the meaning of quality in ELT Journal, 57: 3

Procedure and/or instruments used to explore the question/problem

The main data collection procedure was a questionnaire which was administered in 16 educational settings in 12 European countries and with over 400 students. The survey was also made available on-line:

http://www.surveymonkey.com/s.aspx?sm=z_2f10F3b52uZMGjTygbuyLw_3d_3d
and in five different languages in addition to English.

In several settings interviews were also used to support the data collection process. The questions consisted on experience and opinion-based questions and also included a question where students were asked to consider what they would want to ask to reassure themselves of the quality of courses offered by a school.

Findings/results

"The quality of the teachers determines the quality of the education we get." (a respondent)

Respondents unanimously mentioned teaching, teachers or ways of teaching as the most important factor/aspect contributing to quality. Books and materials used in instruction were also among the commonly mentioned ideas related to quality.

Key concepts that seemed to emerge from the data regarding students' perceptions of quality related to the following ideas: success; satisfaction; knowledge; standards; efficiency; and value for money.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

It is impossible to know about what works for learners without investigating what their beliefs, views and expectations are regarding effective teaching and learning environments. This is where the concept of quality comes in. Why is it, for example, that learners choose one school over another? What are their criteria?

We believe that our findings will have a useful impact on our understanding of what - in learners' views - contributes to effective teaching and learning environments as well as on our policy-making decisions in schools.

Paper pres.34:	28/11/08	9.00-9.40	Room Tärnplass
Presenter:	Kerryn McCluskey		
Title:	An example from the edge: The effect of positioning in the teaching environment		
Theme:	Development strategies		

Research question/problem

In Queensland, Australia there is no legal requirement for beginning teachers to be allocated a mentor in their schools. Policy documents informing the profession of teaching explicitly refer to the necessity of nurturing those new to the profession. Key to the development and growth of newcomers to the teaching profession is the informal exchange of ideas and knowledge between colleagues – essentially through the functioning of a community of practice. The larger study, on which this paper has drawn, investigated how beginning teachers, specifically those from a non-English speaking background were positioned within an English speaking community of teaching practice.

Link to the conceptual framework/literature

The sociocultural theory of learning provides the link between learning and the social environment in which that learning occurs (Wertsch, 1991). The theoretical framework of communities of practice (Lave and Wenger, 1991; Wenger, 1997) has been used. To support the argument for the framework, interaction has been identified as a crucial element of communities of practice especially in the development of practice.

Very little research into the professional experiences, beyond the classroom, of NESB teachers in Australia appears to have been conducted. That which has been done, focuses on classroom experiences (e.g. Seah & Bishop, (2001); Reid (2005).

Procedure and/or instruments used to explore the question/problem

Participants' accounts were collected through focus groups, interviews and electronic diaries. The major theme of interaction emerged as the macro proposition in the data. Four sub-themes were identified as recurring across the accounts: skin colour, appearance, worldliness and conversational participation. The extract presented in this paper was taken from an interview, representing a participant's account within the sub-theme of "appearance". This account has been interrogated using critical discourse analysis adapted from van Dijk (2001) and Titscher, Meyer, Wodak and Vetter (2000) to investigate the research question.

Findings/results

In this extract, the participant accounts for non-acceptance into the community of practice. The analysis shows that the participant has self-positioned herself at the periphery of her community of teaching practice. A discourse of Race has been identified in the analysis of this extract which affects this teacher's imagination and engagement (Wenger, 1997) with respect to her specific community of teaching practice.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Policy makers in Queensland need to implement a system of support beyond one day seminars, for beginning teachers particularly those of minority groups to ensure the meeting of professional and ethical obligations set down in their policies in order to optimise both the teaching and learning environments to benefit teachers and students.

On a local level, schools need to ensure the teaching environment is conducive to enhancing the learning environment of their students. Teachers need to develop professionally through improving their techniques, strategies and knowledge of teaching and their students. This can be on a formal or informal basis.

Paper pres.35:	28/11/08	09.00-09.40	Room Galgebakken
Presenter:	José van den Berg		
Title:	From "practice based evidence" to "evidence based practice" in vocational education in The Netherlands		
Theme:	Research Methods		

Research question/problem

Classic scientific research methods: 1) deliver evidence on small topics; 2) need long period of research to get to evidence. Context of education asks for research methods that respond social demands: 1) bridge the gap between educational practice and educational research; 2) develop evidence based practice in relation to complex educational changes like the implementation of competence based learning. The presentation shows a research method answering these demands, developed by CINOP Expertcentre, R&D centre for vocational education (Netherlands) Research model and findings/results in different vocational educational reform programmes is part of the presentation.

Link to the conceptual framework/literature

The study of Broekkamp & Van Hout-Wolters (2005) handles problems, causes and solutions concerning the gap between educational practice and educational research. Different conceptions on development of knowledge 'colours' problems as well as solutions. Conceptions vary from positivistic to social-constructionist. The author's conclusion is that the solutions are partial, because every solution refers to a specific kind of knowledge development process. Nonaka en Takeuchi (1995) make the difference between formal knowledge and experience based knowledge. They state that these types of knowledge not only can exist besides each other, but can be connected with each other in perspective of knowledge accumulation/transformation.

Procedure and/or instruments used to explore the question/problem

The presented research method copes with two issues: 1) connection of different processes of knowledge development: local specific knowledge, general national knowledge and discipline-oriented domain knowledge; 2) cooperation between communities of knowledge of 'reflective practitioners', 'co-research designers', 'practical or action researchers', scientific researchers'. The research method presented includes:

- presentation conceptual design;
- presentation operational design;
- examples of research techniques and tools used in different vocational educational reform programmes;
- examples of research roles and tasks as carried out in these programmes.

Findings/results

The presentation shows the findings/results of the research method, based on evaluations that were carried out in different vocational educational reform programmes. The presented findings/results handle:

- the different 'levels' of evidence in the process from practice based evidence to evidence based practice;
- the broadening of the role of the researcher to 'critical' friend, as counterpart for the 'reflective practitioners' in the operational field of vocational training;
- the co-designing and development of methods, instruments and tools used for data finding, data-analysis and data-presentation;
- development of 'research mindedness' in the practical educational community and the commitment to participate in research activities.

Paper pres.36:	28/11/08	9.45-10.25	Room Teatergaten
Presenter:	Jeroen Imants		
Co-presenter:	Mirjam Nijveldt, Helma Oolbekkink, Janneke van der Steen, Arjan Dieleman, Bert Zwaneveld		
Title:	Teacher research and instructional knowledge creation in professional development schools		
Theme:	Development strategies		

Research question/problem

This paper reports about the data that were collected during two years of a teacher and student teacher research pilot in three schools for secondary education (2006-2008). The focus of teacher and student teacher research was on instruction, guidance, and student learning. Three questions are

- how conditions and processes of teacher research in these schools develop
- if and how this teacher research results in knowledge creation on learning and instruction that is meaningful within the school context
- if changes in research minded attitudes and enhanced research skills among teachers and student teachers can be identified.

Link to the conceptual framework/literature

The pilot builds on a model with several levels. The assumption is that, to be meaningful for teacher researchers and colleagues, teacher research should focus on daily processes of instruction and student learning. (Student) teachers participate in design / action research in which improvements in instruction and guidance are developed and tested. School management monitors the progress of teacher research. At the pilot level the conditions for research in school-university collaboration are explored. This model starts from literature on design, development, and practitioner research, collective professional development and teacher change, organizational learning and learning communities, and school-university partnership.

Procedure and/or instruments used to explore the question/problem

30 teachers and 20 student teachers participated. They completed two questionnaires during the pilot. Teachers were interviewed three times. Student teachers were interviewed once. Research plans and reports were collected. School management was extensively interviewed at the end of the pilot years, and produced written reports of school development.

To answer the first question process descriptions of each school were constructed. These descriptions were analyzed with methods for comparative case study (Miles & Huberman, 1984; Yin, 1984). To answer the second and third question all reports of teacher research and interviews were analyzed with adapted quality indicators for research.

Findings/results

Results show:

- favourable conditions in schools and in the school-university partnership for successful teacher research
- diverging stages in the teacher research process, specific problems teachers encounter in these stages, and stimulating actions and structures for instruction and coaching by senior researchers and research assistants
- the development of ownership by teachers of their research project, and of their attitudes toward teacher research on learning, instruction and guidance
- the specific qualities that are realized by teachers in their reports
- the gains of teacher research for professional development and school development.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Recently in the Netherlands the Academic School was introduced: professional development schools with special attention to the roles of teachers as developers, innovators, and researchers. It is assumed that the attractiveness of teachers' work will be enhanced by these roles. Schools and universities started partnerships in which teachers, school managers, teacher educators, and researchers experiment with these new roles for (student) teachers.

This paper yields insights in conditions, processes, and results of these partnerships, (student) teacher learning regarding their own research on learning and instruction, and the type of information on learning and instruction that is produced in teacher research.

Paper pres.37:	28/11/08	9.45-10.25	Room Tärnplass
Presenter:	Anne Kristin Sjø		
Title:	Criteria development amongst teachers		
Theme:	Assessment / Evaluation		

Research question/problem

How can teachers construct a verbal awareness of assessment criteria and hence their own assessment practice? In this paper the focus will be on reflective writing and discussion as tools for joint criteria development. The hypothesis is that writing is an important part of the process whereby the teachers become aware of their own assessment practice.

Link to the conceptual framework/literature

Within current research on formative assessment explicit criteria are seen as important for student performance (Dysthe 2008, Klenowski 2000, Tillema, Smith 2007), yet many teachers find criteria development challenging. Experienced teachers have developed an understanding of the criteria they assess by, but Sadler (1998) points out that the criteria often exist as unarticulated knowledge. This makes it difficult for the students to know what they are measured by. The fairness of the assessment may also be affected since the teachers may find it hard to discuss the criteria in order to establish a joint understanding of them.

Procedure and/or instruments used to explore the question/problem

During a period of four months nine teachers and five researchers discussed a set of 30 criteria for good assessment practice. After a selection process, the list of criteria was down to 13. The teachers will continue working with the criteria and incorporate them in their teaching. The teachers will every second week write a reflective summary related to the criteria they have been working with. The summaries will be used as background for teacher interviews. The focus of the interviews will be how the teachers describe their own development related to verbal awareness of assessment criteria and practice.

Findings/results

Preliminary findings show that the discussion and rewriting process considering the development of criteria for good assessment practice increased the engagement amongst the teachers. They had an ownership to the 13 criteria they ended up working with, and made an effort on the implementation of them. The interviews are still not finished, therefore I will not prescribe further conclusions.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The study can be used to show how teachers through continuous reflection and discussion with each other both in oral face-to-face situations and in writing can develop a more explicit conceptualization of different criteria. Instead of keeping the criteria existing as unarticulated knowledge, as Sadler (1998) points out, the students can have the opportunity to gain knowledge of what criteria they will be measured by.

Paper pres.38:	28/11/08	09.45-10.25	Room Galgebakken
Presenter:	Sarah Heinzer		
Co-presenters:	Corinne Joho, Fritz Oser and Patrizia Salzmann		
Title:	One role (trainer), three function and various competencies – a way to make them visible		
Theme:	Competence-based education		

Research question/problem

Despite the fact that more than 75% of the Swiss youths choose the dual way of education in form of an apprenticeship, little research attention has been drawn to the quality of vocational training. In order to overcome this lack, the current project deals with quality aspects and focuses especially on competencies needed of in-company-trainers but also line managers. We try to model and formulate competence profiles for them by means of a Delphi-Study a quantitative survey and a film study.

Link to the conceptual framework/literature

The discussion about competencies and their measurement is not new, even though the development and determination of important competencies, especially of teachers, are frequently investigated topics. In fact, it is a challenging aim to measure the quality of competencies and to develop a reliable and valid diagnostic instrument as a self diagnose that activates once competence development. However, the very first step is to understand the situated learning processes. Therefore the linked literature is Greeno 1998, Lave and Wenger 1991, but also Frey 2006, Baumert 2006, Oser 2002, Shulman 2007, etc.

Procedure and/or instruments used to explore the question/problem

The results of the pilot project, obtained by means of a semi-structured interview study, have given some evidence of important challenging situation and action competencies, trainers are confronted with. In order to comprehend the triple function of the trainer's role, competence profiles will be developed by means of a Delphi-Study and in a second step be validated through a representative sample. Additionally, the line managers that educate the trainees most of the time will be accompanied and filmed. The film material will deepen the understanding of the in-service training and offers a basis for deep discussion about quality.

Findings/results

By virtue of the comprehensive research project we are able to present results from the pilot project, the Delphi study, the film analysis and the quantitative survey. We will show how vocational trainers cope with their triple function, what competence profiles they apply in order to successfully act and react, how they give and explain assignments to their apprentices. Based on the results of the survey study we will check if the developed competence profiles are approved by a representative sample of vocational trainers and if there are any differences among them in relation to important dimensions like self-efficacy.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The project affects political but also pedagogical topics. In 2006 the Federal Office for Professional Education and Technology (OPET) launched a broad reform of vocational education. A lot of new or revised curricula for the education of trainees have been developed. But still the perspective of the trainer remained unseen, they just complete one week of pedagogical education in order to be able to train their learners. With the development of needed competence profile the vocational trainers will be lighted and there will be a possible impact on the trainers' education in its content but also structural organisation.

Paper pres.39:	28/11/08	13.30-14.10	Room Teatergaten
Presenter:	Shelley Dole		
Title:	Building connected knowledge across mathematics and science through the promotion of proportional reasoning skills.		
Theme:	Implementation of educational innovations		

Research question/problem

Key ideas from mathematics and science form the basis of essential knowledge for future citizenship (Millar & Osborne, 1998), yet the difficulties students encounter with the study of mathematics and science in the middle years of schooling (generally Grades 5 – 9) are well-documented (e.g., Donovan & Bransford, 2005). Science and mathematics in schools are typically taught as two separate subjects, yet many topics in science and mathematics share conceptual links. In the wave of middle years curriculum reform, this project explores integrated science and mathematics curriculum that stimulates and engages young people in making sense of their world.

Link to the conceptual framework/literature

Proportional reasoning is fundamental to topics in both mathematics and science (Lamon, 1994), underpinning topics including fractions, speed, scale drawing, surface area, probability, molarity, force and motion, algebra, trigonometry. Despite its centrality to mathematics and science, research has continually revealed that many students in the middle years struggle with proportion-related topics (Lo & Watanabe, 1997). In this project, integrated learning experiences designed to promote students' proportional reasoning are being trialled and evaluated to advance curriculum reform at the grass-roots level. Teachers' knowledge of the structural relationships across mathematics and science is promoted.

Procedure and/or instruments used to explore the question/problem

Working with project teachers, and using a design-based research approach (Design-Based Research Collective, 2003), an integrated unit on density was developed and trialled in a number of middle years mathematics and/or science classrooms. The unit spanned 8 classroom episodes and included predominantly hands-on, investigative activities. A specific set of classroom material, referred to as the 'density jars' was created to support students' conceptual understanding of density and meaning of the density formula. The unit of work included diagnostic and investigative assessments to determine students' entering and developing conceptual understanding of mass, volume and density. Classroom Teatergaten interactions were video-taped and analysed.

Findings/results

This unit has been fully implemented in two project classrooms to date. Results indicate that both Fifth and Seventh Grade students in this study had limited knowledge of density, with developing understanding of mass and volume. Through a series of carefully planned and implemented teaching episodes, students explored the concept of density. At the end of the unit, students could describe how an object might sink or float in water by simultaneously considering both its volume and mass. Seventh Graders could verbalise the concept of density better than the Fifth Graders. Greater student awareness of units of measure was noted.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Results of this study provide evidence of the capacity of targeted, integrated mathematics and science units for the development of connected mathematics and science knowledge and promotion of proportional reasoning skills. One of the major features of the unit of work was its hands-on, activity-based teaching approach, as well as its alignment to subject integration without compromising one subject over another. Further, students' understanding of density and real-world applications suggests the capacity for early exploration of complex ideas to provide a strong platform for further mathematics and science knowledge development.

Paper pres.40	28/11/08	13.30-14.10	Room Tärnplass
Presenter:	Shoshana Keiny		
Co-presenter:	Noa Avriel-Avni		
Title:	Practice-based learning as a means of developing students' "Practical Wisdom"		
Theme:	Implementation of educational innovations		

Research question/problem

How to develop teachers' practical wisdom?

Link to the conceptual framework/literature.

Our conceptual framework is based on Arendt's notion of action as a liberating activity, where people create their own identities through dialogue with others. Accordingly, Collaborative Action Research (CAR), carried out in 'communities of learners' (COL), can serve as optimal medium for teachers to develop their practical wisdom. To develop their "Ecological Thinking" namely, as both actors and reflectors, able to conceptualize their activities to a theory of action. Thus CAR carried out within COL, could serve as optimal site for teachers to become fully aware of their selves as well as their capacities, through action.

Procedure and/or instruments used to explore the question/problem

Our case study is based on a CAR project termed: "Environmental citizenship". It consists of a group of teachers engaged in developing an interdisciplinary practice-based curricular unit. The aim of the unit was to develop the students' awareness towards their environment, as well as their responsibility and commitment.

Implementation of the curricular unit was carried out in the teachers' classrooms. Accordingly, students in small teams, identified authentic environmental problems, (which are interdisciplinary by nature) and worked out their resolution. Evaluation of the project was carried out on two levels: the teachers' professional development and the students environmental responsibility

Findings/results

Data for the teachers' evaluation taken from the conversation within the community of learners, and analyzed by Discourse analysis, indicated they have undergone a process of conceptual change. In terms of their teachers' role, they changed from 'instrumental teachers' who transmit knowledge, to 'developmental teachers' responsible to develop their students as active initiative learners.

Using the methodology of Semiotic evolution, a significant development was shown in the students' sense of responsibility towards their environment as well as towards their learning.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

I hope to arouse the awareness of teachers, curriculum developers and those responsible for educational policy, to the primacy of action over theory, and to the potentiality of practice-based learning.

Paper pres.41:	28/11/08	13.30-14.10	Room Hodden
Presenter:	Frank de Jong		
Co-presenter:	Dian van Limpt		
Title:	What do teacher educators use as competence directed didactics in a competence based teacher education curriculum		
Theme:	Competence-Based education		

Research question/problem

Stoas Professional University is the bachelor in education for agricultural education in The Netherlands. In 2005 we started with a competence-based curriculum. The vision of learning is based on active learning and constructivism. Further students' learning on the work place takes a very central activity, 3 of the 5 days, in the students' learning. Having a curriculum based curriculum and a vision on learning with clearly stated assumptions is one. Second is how teacher educators manage to operationalize the competence based and constructivist assumptions in their day to day teaching practice?

Link to the conceptual framework/literature

The didactical concept in our teacher competence based curriculum is based on constructivism Piaget (1968) (cognitive constructivism), Bruner (1996), Vygotsky (1978), and Papert (1980) (social constructivism) (Duffy & Jonassen, 1992). This approach (Duffy and Jonassen, 1992) presupposes that people, behaviour and environment interact in a reciprocal manner (Schunk, 2000). It enhances the link between acquisition of knowledge of individual 'learning'; participating in a community where learning is an activity of doing; with knowledge creation as a collective activity. Jonassen (1991, 1999) abstracted principles from the constructivist educational praxis and formulated principles showing the commonalities in the cognitive and social constructivist approach.

Procedure and/or instruments used to explore the question/problem

Document analysis for exploring a stated vision of learning besides a didactical vision, assumptions and procedures. In a group of 6 teacher and two students the Developmental Work Research and Cultural Historical Activity theory approach was used in combination with action learning. In two seminar meetings and 6 change lab meetings we build an activity model of the daily didactical practice, the desired practice and the one of the stated assumptions. Meetings were video recorded and analysed with the activity model. We compared the activity systems of the assumptions, desired and present worlds on differences and commonalities.

Findings/results

The results show commonalities between the three activity systems on the development of students, the atmosphere to create and the assumption 'teach what you preach'. Differences concern the institutional and workplace learning, Students experience a kind of 'chaos didactic', teachers experience a kind of loneliness in making cheese of the assumptions and reaching a higher education level with the consequence of a high experience of workload. Nice practice constructivism were explicated.

An also very important result is that the DWR-method turned out to be a pleasant way for teacher to talk about and work on their didactical praxis and vision.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Teachers are marginally supported in their daily practice to realize rather abstract formulated educational assumptions. It is necessary to have a good description of didactical basic way of how to teach with enough degrees of freedom for teachers to make cheese of it. Shared notions are also necessary of educational terms like 'authentic', competence, workplace learning. This in order to be sure not only having a good competence based curriculum but also to have it in the 'classroom'. The formative intervention research is very productive and gives teachers the opportunity to talk, interact and improve their daily educational praxis.

Paper pres.42:	28/11/08	13.30-14.10	Room Galgebakken
Presenter:	Annemie Winters		
Title:	What are vocational training conversations about? Analysis of vocational training conversations in Dutch vocational education from a career learning perspective.		
Theme:	Mentoring/coaching		

Research question/problem

Research evidence shows that a powerful learning environment for career learning requires a dialogical context. In the career dialogue in vocational training, there are three important parties: the student, the teacher and the mentor from practice. In this study the communication between these parties in the context of vocational training is investigated from a career learning perspective. Research questions include: (1) How is the triologue (communication between student, teacher and mentor in practice) organised in vocational training conversations? and (2) Do vocational training conversations stimulate career learning in students?

Link to the conceptual framework/literature

Meijers, Kuijpers and Bakker (2006) recently finished a large-scale study on the learning environment, based on questionnaires in (pre)vocational education in the Netherlands. Results showed that career competences and a professional identity only develop in a learning environment that is characterised by a combination of problem-based and inquiry-based methods, and where a career dialogue can be held about the student's experiences in practice. The fact that the number of schools that actually provide this powerful learning environment is very small, was the starting point for this research (as part of the research and development project 'Career learning in competence-based education').

Procedure and/or instruments used to explore the question/problem

Because of the exploratory nature of this study and the lack of prior research in this particular context, we chose case studies as a starting point. We recorded 24 randomly selected vocational training conversations (cases). For the analysis of the data/recordings we developed a framework based on theory and our research questions. Conversations were analysed from a career learning perspective for formal characteristics, content, form and relational components. The results are presented as quantitative measures of description (percentages and means).

Findings/results

The results suggest that the potential of the dialogue (or triologue, as it concerns three parties) is hardly utilised: vocational training conversations discuss the most successful way to a degree and not necessarily to a career in practice. As for the first research question, the findings show that there is no real 'trialogue' in vocational training conversations: students have a marginal role in the conversation while teachers (school's agenda) dominate. The answer to the second research question is more subtle: while career learning is addressed in the conversations, the traditional culture prevents the conversations from being stimulating.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The results of this study and previous research address the importance of the context in which educational innovations take place. Enthusiasm about the introduction of competence-based methods and career guidance as a holistic approach to education in institutes for vocational education and training must not blind policymakers for the potential pitfalls. This submission is an eye-opener on the challenges to coaching and mentoring in modern education.

Workshop 1:	26/11/08	15.40-17.10	Room Teatergaten
Presenter:	Lily Orland Barak		
Title:	questions/dilemmas in qualitative research.		
Theme:	Research Methodology		

In this session, Prof.dr. Orland Barak, keynote speaker at this conference, discusses questions/dilemma's in qualitative research.

Workshop 2:	26/11/08	15.40-17.10	Room Tärnplass
Presenter:	Ann-Sophie De Pauw		
Title:	How to compose a dream team: introduction of the online Team Scan		
Theme:	Assessment/Evaluation		

Research question/problem that underpin the research project leading to this workshop

Organisations frequently ask themselves how to compose a team effectively. Research learns that teams often don't reach their full potential because not enough attention is paid to the effective and efficient composition of the teams (Van den Broeck & Debussche, 2007; Vanderheyden, Cools, & Debussche, 2006).

The Team Scan online tool helps leaders and members to compose and evaluate their teams. Only then creativity, innovation and implementation can go together.

Link to the conceptual framework/literature

Innovation processes consist of five essential phases: idea creation, idea selection, decision making, development and implementation. Each phase of the innovation cycle requires different core competencies of a team. Therefore effective team composition is crucial to a successful innovation.

Not only the team composition but also the fit of team members is essential. Is there a good atmosphere? How is the team leader being appreciated? Are the goals achieved?

Instruments or tools used and/or developed to explore the question/problem

The Team Scan is an online tool to compose and evaluate an effective team in an innovation process.

The tool consists of three parts:

- 1.The user composes his team and is informed in which innovation phase the team is.
- 2.The user completes two questionnaires. In this way he finds out if his team disposes of the essential core competencies and if the atmosphere, leadership and output of his team are in balance.
- 3.The user receives a concrete team profile, with useful tips and advices.

Structure of the workshop

1. Short theoretical introduction and background information
2. Practical use of the Team Scan: participants go through the tool step by step. A navigation menu marks on screen how the user proceeds. At the end of the workshop every participant receives a personalised team profile and some extra information about the five phases, a checklist for effective teams and team pitfalls, information about the core competencies for all innovation phases.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Educational policy is liable to constant innovation all around the globe. Teamwork is becoming increasingly important in the innovation processes of our educational society nowadays. Therefore an effective team composition and a fit of the team members are essential to successful projects.

The Team Scan is an online tool. Today, we can not ignore the evolution of e-learning and e-tools, which offer a different learning context.

Why should participants attend?

The Team Scan workshop goes beyond a plain scan of the user's team. Every participant can experience the tool live during the workshop and receives his personalised team profile with concrete tips and advices. This personalised team profile is a reflective instrument for the user to discuss a variety of team functionalities within his team/organisation:

-How does my team function?

-Is my team disposing of all essential core competencies for a successful innovation?

-Is there a good team atmosphere? How is the team leader being appreciated? Do we reach our goals?

Workshop 3:	26/11/08	15.40-17.10	Room Hodden
Presenter:	Mirjam Timmerman		
Title:	Knowledge Creation in the school: the case of developing professional learning communities.		
Theme:	Implementation of educational innovations		

Research question/problem that underpin the research project leading to this workshop

Sustained change in the day-to-day practice of schools asks for individual and collective learning processes of the teachers, investigating and improving their own practice. Professional learning communities (plc) offer a context for these learning processes and for building of capacity in the school. But we do not know very much about how to develop a school as a plc. The research questions are:

- How can schools be described as professional learning communities?
- What interventions contribute to the realisation of essential features of professional learning communities?
- What is the role of the school management in this process?

Link to the conceptual framework/literature

In the literature, the hypothesis is found that a school should develop into a plc in stages. But research shows also that there are exceptions. An important question is how to understand the development of a plc. In the literature, especially in the Dutch situation, there is also a lack of empirical based claims about how to develop a plc, i.e. which interventions leads to a sustainable school development. And although, in theory, one emphasises the role of the school leader, it remains unclear what school leaders are doing in building a plc.

Instruments or tools used and/or developed to explore the question/problem

The project combines supporting four schools and research about their development, during two years. With a new developed questionnaire, we measured the extent of being a plc. Using semi-structured interviews (some according to a story line approach), we investigate the development of the schools as a plc and the role of the school management and of other actors and factors. We made four within-case analyses and a comparative analysis. The schools received at different moment's systematic feedback concerning the results. We also developed some other diagnostic tools, to be used by the professionals in the schools themselves.

Structure of the workshop

1. Introduction: acquaintance - entry level and questions of the participants regarding development of a plc. Preview of the program - 15'
2. An outline of the project: context, research questions; methods and approach. 10'
3. Feed back form the audience 15'
4. Presentation of the main results 10'
5. Introduction to and applying of a new-developed tool: the plc-matrix (Audience fill in some parts of it). 10'
6. Discussion with the audience about the validity and applicability of the plc-matrix and about other questions. 30'

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The workshop reports about a practice-based research project, relevant to improve educational practice, i.e. the development of a structure and culture for professional knowledge creation in schools. The research is done in close contact with professionals in schools and leads to fruitful insights and improvements in their practice. It results in the description of processes that have some generic relevance. And it offers some tools to be used by practitioners in developing their own school. Also it leads to further questions for practice-based research.

Why should participants attend?

The workshop offer one of the very few research-based detailed descriptions of how to develop a plc. These findings are described in a way, suitable for educational practitioners. The workshop offers them concrete knowledge and tools to be applied in their own work. Furthermore, the topic of developing a plc is a topic of present interest, offering participants knowledge about so-called second order changes: profound changes in the school that improve the implementation of other (first-order) changes. Besides that, the workshop is highly interactive and offers practical experiences with a newly develop diagnostic tool.

Workshop 4:	26/11/08	15.40-17.10	Room Galgebakken
Presenter:	Steven Nijhuis		
Title:	Digitally supporting the creation of a plan of approach.		
Theme:	Mentoring/coaching		

Research question/problem that underpin the research project leading to this workshop

In daily practice, most students find that creating a plan of approach is something which distracts them from their real tasks: producing results. In the end students mostly learn that their plan of approach should have been better.

Frequent lecturer-student interaction in this stage can help but is hindered in two ways: there is limitation on how much time a lecturer can spend with the students and a high level of contact reduces the students' sense of self responsibility.

Is there a way to (digitally) support students (and lecturers) in creating a Plan of Approach?

Link to the conceptual framework/literature

The Faculty of Natural Sciences and Technology makes use of a developmental approach, based on Checkland (1999), modified by Van Weert and Andriessen (2005). This method intertwines research with solving an authentic problem and development of competences (Earli 2007, Earli 2006).

In all literature on project management, the importance of a thought-out plan of approach is stressed. There are several aids for creating a plan of approach, directed on research questions only (Pre Scriptum, Excellent Research), and require a high degree of skills. For novices there is no digital aid for creating a plan of approach (Nijhuis 2008).

Instruments or tools used and/or developed to explore the question/problem

Desk research created a long list of possible aids, which supplied a short list for testing. Necessary steps were taken to make some of it digital and/or interactive .

In the first test, experienced students laboratory tested the tools to find out which ones were the most qualified (criteria: students submit that the tested tool(s) would have helped).

The next and final test is where the best tools are 'obligatory' for selected student projects. The lecturers and students will review the results: "are plan of approaches and hence project results better than before, or is student lecturer interaction improved?"

Structure of the workshop

The setting of the workshop is a peer review. After a short introduction to the project and the supporting tool, participants will review the instrument, followed by a discussion.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The instrument will – when successful – drastically improve lecturer-student discussions on project approach. Furthermore if we really support students in creating a good/better plan of approach, it will help them in getting results in projects. It has the potential of being a digitally aid that students will want to take with them after their study.

Furthermore, even if the final test is not successful, it has taught us what direction we need to take in creating ICT solutions for students, which will help us in the future.

Why should participants attend?

Originality is obtained by the review purpose of the workshop.

Participants acquire insight in the supporting tool which they not only can take home, but they also can benefit from our experience with implementation (and possibly use the same steps in their own organisation). They are invited to discuss the pro's and con's of using this tool in their own setting.

Workshop 5:	27/11/08	13.00-14.30	Room Teatergaten
Presenter:	May Britt Postholm		
Title:	Communicating and publishing from a Research and Development work (R & D work) Project		
Theme:	Research Methods		

Research question/problem that underpin the research project leading to this workshop

The presentation and work during the workshop will take as a starting point a project with the title: The Lade project: A learning organization for the pupils' learning. This project conducted at a primary and lower secondary school in Norway, is funded by the Norwegian research council and will last for three years (2006-2009). The cooperation with the teachers ended this summer (2008)

The overall research question for project is: "With the students' learning as the starting point: How can teachers and researchers cooperate to develop the teaching and the school as a learning organization?"

Link to the conceptual framework/literature

The work is conducted in the framework of sociocultural theory and activity theory.

Instruments or tools used and/or developed to explore the question/problem

The R&D work has resulted in a model containing three levels. This model visualizes the development and the research process, and the researcher's complex role during R&D work is clearly expressed in the model. Furthermore, from the model we can see what texts the various levels make the basis for.

Structure of the workshop

First there will be an introduction focusing on the theme for the workshop

Next the participants are allowed to discuss in groups issues connected to the theme

At last there will be a summary section based on the discussions in the groups.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The workshop will both focus on methods used to develop practice, and at the same time emphasize how research can be communicated further. These matters can have consequences for both educational practice and policy.

Why should participants attend?

The workshop represents a structured plan for R&D work, and has concrete suggestions for publications on various levels.

Workshop 6:	27/11/08	13.00-14.30	Room Tärnplass
Presenter:	Gie Van den Eeckhaut		
Title:	Using mindmaps in a process of constructing self-knowledge in group-supervision		
Theme:	Competence-based education		

Research question/problem that underpin the research project leading to this workshop

Social Work students need to have a clear concept of the self and the own competencies. In our experience students construct a rather fragmentary concept of the self. It is difficult for them to integrate different aspects, different perspectives. Therefore, our question was: how can we develop tools for students to construct self-knowledge as a whole – as a 'gestalt'. How can we stimulate students to see their study as an integrated process of constructing knowledge about the self and the own competencies and of making meaningful decisions about the next steps in the learning process.

Link to the conceptual framework/literature

As a result of our experiences we developed tools using following frameworks:

- group-supervision
- associative thinking, metaphorical thinking
- mindmapping/conceptmapping
- reflective practitioner (Schön)
- iterative processes

Instruments or tools used and/or developed to explore the question/problem

Experience-based learning – we developed a concept in a team of teachers and we had different try-outs. We discussed our experiences en went through a learning process, fine-tuning the concept.

Structure of the workshop

In this workshop we start with a short introduction (defining the questions, picturing the search, presenting the outcomes). But mainly we try out and demonstrate the different elements of our method: group supervision – mind mapping – association/feedback – different stages in the process. At the end we discuss the relevance of our method.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

We are defining a useful method to strengthen the capacity of students to reflect on the self and the own competencies – very important in the context of lifelong learning. This method is combinable with portfolio, field practice, ...

Why should participants attend?

Not the elements themselves are new (mind mapping, group supervision, iterative process, ...) but what is new is the combination of this all to enhance the self-knowledge of students. And it is a method that works.

Workshop 7:	27/11/08	13.00-14.30	Room Hodden
Presenter:	Frank de Jong		
Co-presenter:	Cees de Jong		
Title:	4C your way: a language for competence grew (capacity) for moving up on secondary, middle, higher vocational education and University		
Theme:	Competence-based education		

Research question/problem that underpin the research project leading to this workshop

In the Netherlands a reform is going on in vocational education towards competence based or capacity directed education. Society needs these competent citizens in order to compete with new economic powers. The Netherlands in 2020 want to have 50% of its population on higher educational level. A potential population for moving up exist mainly in vocational education. Only 50% of the students move up to higher education in contrast to 83% in general secondary education. Moving up is hindered by the fact of missing a clear reference for competence grew related to educational levels. 4C is such an attempt.

Link to the conceptual framework/literature

Schools take responsibility beyond the exams by taking seriously that students are competent to function in practise on bases what they learned during their school period. In order to assess and rate students competence levels and educational moving up potential a qualification reference is needed. Bolonga Minister conferences 2003 and 2005 formed the bases for An EQF and NQF reference (for Higher education the Dublin descriptors). In 2006 EC reached a political agreement for implementation in 2012 EQF-LLL. 4C your way is a reference language based on Bartram(2005) great eight competencies and the assessment experiences of teachers.

Instruments or tools used and/or developed to explore the question/problem

A new framework for competence objectives in secondary (agricultural) vocational education was developed on the basis of SHL competencies in. Bartram great eight competencies was a point of departure. In an inventory research we collected all possible 'formal' competence qualifications reference in secondary up to university education. During 1½ year different teacher groups two educational levels where brought together building references. Teachers used their assessment experience and insight in student level. On these three date sources a language was developed. In two session a broad educational field was represented and the developed competence recognition reference was validated.

Structure of the workshop

During the workshop the EQF/NQF, political and economical context and the '4C your way' structure will be explained e.g. the 8 competence clusters, the 11 grew factors in relation to the 25 competencies in vocational education and the 11 different educational route-levels. In a '4C your way-game' groups of 3-4 participants can experience the use of the language. They will experience the possibility of such a competence recognition reference covering the whole moving up form secondary to university education. The workshop will close with a 'suggestions for application'-speed dating' which suggestions will be plenary discussed.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

In 2006 EC reached a political agreement for implementation in 2012 EQF-LLL. In order to improve transparency, credit transfer and coherence in education and training the development of an overarching national qualification framework is now considered. The overall aim is to support lifelong learning and to create a strong basis for the implementation of EQF. '4C your way is a competences recognition reference which can facilitate the construction of a NQF. 4C initial aim is to improve study career meetings between students and mentors on basis of a transparent recognition reference that

functions as the 'exchange rate' before the Euro.

Why should participants attend?

In the workshops organized in the Netherlands it turns out that 4C is good practice oriented research product useful for many on going other project related to the development of competence based education. That might be curriculum development, development of competence ratings but also determining the level of teacher assignments and competence level in the curriculum. Also in case of workplace learning and HRD suggestions are put foreword for applications. Besides that the 4C-game is fun to do. It gives people ground for talking about competence.

Workshop 8:	27/11/08	13.00-14.30	Room Galgebakken
Presenter:	Thomas E. Vibjerg Hansen, Maria-Carme Torras		
co-presenters:	Jørgen Blaabjerg, Therese Skarås Skagen, Lotte Stehouwer Øgaard		
Title:	The use of interactive e-learning in the creation of knowledge		
Theme:	Implementation of educational innovations		

Research question/problem that underpin the research project leading to this workshop

How can e-learning be used as a pedagogical tool in higher education when planning teaching to support students' construction of knowledge?

Link to the conceptual framework/literature

Our contribution is grounded in practitioner-based research. It builds upon a body of theoretical studies within the fields of academic writing (Dysthe et al. 2000; Dysthe 2001, Rienecker et al. 2005), information searching behaviour (Kuhlthau 2004, Heinström 2002), teaching and learning (Qvortrup 2001; Argyris 1978) and ICT (Rosenstand 2002). It further builds upon our practice experience as well as our cooperation with experts in various of these disciplines such as Kuhlthau, Heinström and Rosenstand.

Instruments or tools used and/or developed to explore the question/problem

Our contribution is grounded in practitioner-based research with a background in theoretical studies, as well as cooperation with experts. Our contribution is based on development projects whose outcomes have been the design of two online tutorials which provide new teaching contents and methods.

Structure of the workshop

The workshop will be structured as follows:

- Introduction to the workshop theme and to the session
- Hands-on activity. Exploring tutorials Søk & Skriv (www.sokogskriv.no) and SWIM2 (<http://swim.aau.dk>). Reflexion and discussion.
- Group activity. Designing an ICT-supported learning process. Idea development and didactic planning.
- Conclusion

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

It contributes to a more varied range of didactic tools which cater for a variety of student learning styles.

It contributes to the development of educational practices in HE which focus on student learning rather than the educator's teaching.

It shows how other stakeholders in the HE landscape can also support students' enhancement of academic competences

Why should participants attend?

This is a highly interactive workshop which first and foremost aims to facilitate the participants' development process in their design of teaching, as well as disseminating knowledge about e-learning educational practice which will widen the participants' teaching horizon. The workshop aims at setting in motion the participants' development process in order to enrich their teaching practices in practical and specific ways.

Poster/Roundtable 1:	28/11/08	10.45-12.15
Presenter:	Heikki Kontturi	
Co-presenter:	Sanna Järvelä, Hanna Järvenoja, Jonna Malmberg	
Title:	Self-Regulated learning process in science learning project – Students' and Teacher's perspectives	
Theme:	Classroom management strategies	

Research question/problem

This study is part of a larger research project (SCAMO), which will investigate the roles and forms of motivation in self-regulated learning. Specifically, in the project it will be analyzed students' self-regulation during studying in real contexts, and examine opportunities to support self-regulation with a computer-based regulation tool (gStudy).

The specific aim of this study is:

How different phases of self-regulated learning (SRL) appear when primary level students work with natural sciences?

Link to the conceptual framework/literature

Studying effectively by self-regulating learning is itself a skill powered by will. Unfortunately too few are experts in self-regulation, but fortunately learners can be taught to study more effectively (Boekaerts et al., 2000; Winne & Jamieson- Noel, 2002). In spite of strong understanding of SRL – there is still a limited understanding about how self-regulation develops in learning context and especially how motivation regulation contributes to it. Contextually linked research is needed to analyse the nature of effective classroom management strategies. Zimmerman (2008) suggests to create SRL based intervention to different kind of academic functions.

Procedure and/or instruments used to explore the question/problem

The data was collected during 8 weeks intervention with 4th graders (N=21) who worked for a science learning project. The teaching practices and pedagogical structuring were based on the ideas of SRL. The methodological focus is on qualitative analysis of interviews and the computer log trace data of students' SRL in gStudy -environment. By gathering multiple types of data, it is possible to see how students self-regulate their action and how they actually work, and relate this information to students' subjective situation specific interpretations that are involved in their regulation processes (Järvelä, Volet & Järvenoja, 2007).

Finding(s)/Result(s)

The data is under the analysis at the moment. The first results point to the positive relation in between the students learning outcomes, the activity level and metacognitive awareness. The results will illustrate qualitatively different phases of self-regulated learning and their links to the learning outcomes.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

By analysing the phases of self regulated learning process in real classroom situations, it is possible to understand the nature of the support that students need for their learning. The results of this research are discussed with teacher training to promote use of effective classroom management strategies.

3 propositions to be discussed?

1. How to deepen the system of categories in data analysis?
2. The next step is the teacher's reflective analysis of the findings in the context of the pedagogical environment. What kind of methods or approaches has been successful in similar cases?
3. The development of self-regulation seems obviously to be one of the challenges of the future school? What are the specific practical questions dealing with SRL at school in the air at the moment? What are the weak signals we should be aware of?

Poster/Roundtable 2:	28/11/08	10.45-12.15
Presenter:	Susanna Nuutinen	
Co-presenter:	Risto Mäkinen and Taina Mäntyranta	
Title:	An audit of General Practitioners' competence to act as training facilitators	
Theme:	Assessment / Evaluation	

Research question/problem

The Centre for Pharmacotherapy Development ROHTO has trained facilitators (n=250) to arrange practice based interactive interprofessional workshops at their own work places. The purpose of workshops is to implement rational pharmacotherapy in Primary Health Care Centres in Finland. Facilitators are general practitioners and nurses.

The aim of this study is to assess the effects of the training of the facilitators by auditing their workshops. Study questions are

1. How the facilitator arranges and facilitates the workshop in relation to the training provided by Rohto?
2. What are the results and effects of the workshop in relation to the workshop's goals?

Link to the conceptual framework/literature

We applied the framework of knowledge translation (KT) linking educational elements to the work of Health Centres' professionals. According to one model of KT knowledge uptake and improved health care outcomes depend on type of evidence, the context, the way process is facilitated, and clinician-learners among others. We consider learners through the constructivism, which is appropriate for the promotion of the knowledge and skills by KT.

In our context the method is an interactive workshop among workmates. Evidence based medicine is a basis for knowledge transferred in the workshops. The goal is to learn together and implement better clinical practices.

Procedure and/or instruments used to explore the question/problem

Rohto-facilitators' audit employed a mixed-method qualitative and quantitative research design. Sixteen workshops were audited during October 2007 – May 2008. The researcher took part in workshops as an observer. In order to validate two workshops were audited with another researcher.

The observation was made using a semi-structure form. The form was designed applying the main themes of facilitators' training: workshop's need, goals, target group, contents, methods, practicalities, responsibilities and results.

After audit the researcher interviewed the facilitator with semi-structured form, and the facilitator also filled in two questionnaires. After 1-4 weeks facilitator got written feed-back, and was interviewed by telephone.

Finding(s)/Result(s)

The target group analysis, setting the goals, and taking care of practicalities were done in all workshops. Workshops' structure was clear and facilitators choose relevant contents, used interactive collaborative methods and aimed at mutual agreement in workshops. Workshops were communicative, openly critique, and results were transformative into practice. Standards provided by Rohto for arranging and facilitating workshops were reached.

Only few facilitators specified responsibilities of follow-on, or co-operated actively with managers. Although many improvements were achieved all goals were not reached during four weeks follow-up. However, some unexpected improvements were realized.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

We verified that high educated health professionals used to use lectures as a learning method can be trained to use interactive workshops as a tool of education and developing. They design and perform well workshops on site. However, to achieve goals they need more competence in managing change and seeking commitment of managers and work mates.

Learning in workshops in practice is a useful way to change clinical practices, and it is challenging and requires a lot effort to reach results. Systematic auditing of educational events provides useful information for development and further research.

3 propositions to be discussed?

- Training the primary health care professionals to facilitate peer learning and improvement is effective.
- Auditing is an interesting and valuable method to evaluate transfer of knowledge.
- Corner stones for successful peer-to-peer improvement activities are based on knowledge translation theories.

Poster/Roundtable 3:	28/11/08	10.45-12.15
Presenter:	Rutger Kappe	
Title:	Student perceptions on formative and summative peer-assessment (centre)	
Theme:	Learner Diversity	

Research question/problem

The question that a lot of educational and assessment engineers, managers and practitioners in competence based education are asking themselves is how to make assessment centres more cost effective, without effecting quality?

Link to the conceptual framework/literature

Research in which students are involved in rating the work of peers (Beatty, Haas & Sciglimpaglia, 1996; Sherrard & Raafat, 1994) shows that this rating method is considered as fair (McIlveen, Greenan & Humphreys, 1997; McDowell, 1995; Strachan & Wilcox, 1996) and instructive (Orsmond, 1996) and has a positive effect on learning (Boud, 1988; Dochy, Admiraal & Pilot, 2003; Falchikov, 1986). De Volder and Kappe (2007) note that peer-assessment offers the opportunity of using the neglected teaching resource of the students.

Procedure and/or instruments used to explore the question/problem

1. Quantitative assessor evaluation research (n= 138)
2. Rating analysis (inter rater reliability)(34 < n < 59)
3. Quantitative assessee evaluation research (n=250)

Finding(s)/Result(s)

Table (1) results assessor evaluation. Student assessors do not regard rating with a summative purpose to be more difficult than rating with a formative purpose (summative $x=4.00$ $sd = .74$; formative $x=3.88$, $sd =.81$).

Table (2) Inter rater reliability (assessment year 1 (overall) $k=.88$, assessment year 3 (overall) $k=.81$. In a table the reliability per competence will be shown.

Table (3) results student evaluation. First year students that were rated by their peers with a summative purpose were equally positive about the assessment as the third year students that were rated with a formative purpose.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The question that a lot of educational and assessment engineers, managers and practitioners in competence based education are asking themselves is how to make assessment centres more cost effective, without effecting quality? If students (nearly graduates) can perform an active role in that rating process (peer-assessment) this will reduce the 'rating burden' on teachers and at the same time save managers costs.

3 propositions to be discussed?

1. Is the conclusion the peers are able to perform ratings valid?
2. If so, do you consider the results to be generalisable across disciplines (beyond HRM students) and across different types of assessments?
3. Should we give students a more central role in the rating process in education?

Poster/Roundtable 4:	28/11/08	10.45-12.15
Presenter:	Michaela Brohm	
Co-presenter:	Jörg Holle and Sabine Schmidthermes	
Title:	Humanising schools - factual and social learning in humanitarian environments	
Theme:	Implementation of educational innovations	

Research question/problem

Since PISA the personality development and the development of values in schools have taken a subordinate role in research as well as in education policy. The first study we conducted focussed on the development of social competences of students. Due to the problem of stable effects we concluded that there is a need for a shift of schools' culture to a mediation of humanitarian values, humanitarian knowledge (e. g. knowledge about social competences) and the enabling of trials of action in a social context. The development of a curriculum of social competence is one step to that direction.

Link to the conceptual framework/literature

The aggregation of multiple models of competence showed that factual and social competences are based on these factors: previous knowledge, experiences, values, skills, abilities and motivation (Erpenbeck/von Rosenstiel 2003; Kanning 2003, 2005; Weinert 2001). Transferred to teachings contexts we assume that there are three ways to promote the development of social competences in regard to a humanitarian school development: intermediation of knowledge, opportunities to experience values and enabling trial actions (cf. Brohm, in preparation). Curricula of social competence that take these three aspects into consideration help to humanise school culture and instruction and facilitate personality development in humanitarian societies.

Procedure and/or instruments used to explore the question/problem

Currently we conduct a study with 150 teachers that take part in a knowledge-, value- and experience-oriented program, so that they pass on the contents of the program to their students. We understand the participants of the round table as an international team of experts that share their knowledge and experiences to form a social competence curriculum that can be part of our long-term study. In that way we are able to present such a curriculum to the participating teachers.

Finding(s)/Result(s)

Presently we are engaged in the construction of a social competence curriculum which comprises the areas social competence based knowledge, social competence based values and social competence based trails of action. Our curriculum-construct is at an early phase and we hope to get additional impulses at the round table discussion.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The increasing importance of social competences due to globalisation and economisation imply the need for a widening of the focus on factual competences, turning the view to social competences. In order to enable the development of social competences for every individual we need schools as an ideal place for that task, since only there every student can be reached. The development of social competences may not be conducted arbitrarily but should follow a systematic curriculum. A value-based school provides the framework to educate students to be socially competent, politically mature and also to introduce them to a humanitarian society.

3 propositions to be discussed?

- Do any kind of approaches to social-competence-curricula exist in the school systems of the participants of the round table discussion? (Which?)
- What are the participants' opinions to our approach (knowledge-, value- and experience-oriented curriculum).
- The participants estimation of the future of humanitarian schools based on social competences.

Poster/Roundtable 5:	28/11/08	10.45-12.15
Presenter:	Petra Cremers	
Co-presenter:	Eddy Hekman	
Title:	Value in the Valley, a community of learners at work!	
Theme:	Implementation of educational innovations	

Research question/problem

The goal of the project 'Value in the Valley' is to educate students from different fields of study and different levels of education to become innovative professionals. Therefore a new educational concept has been developed: the Community of Learners (CoL).

The research questions are:

1. Which characteristics should the CoL have and how should it be designed in order to contribute to the development of competent and innovative professionals in an effective and an efficient way?
2. How can this educational concept (or parts of it) be transferred to other educational institutions and at the working place?

Link to the conceptual framework/literature

The overall model used is Illeris' (2007) triangle representing three dimensions of learning: Content, Incentive and Environment. Within the dimensions 2 processes take place: Acquisition and Interaction. Other theories used are: Lave and Wenger's situated learning (1991), Nonaka and Takeuchi's knowledge-creating company (1995), Campione and Brown's community of learners (1996), Gibbon's mode-2 learning (1994), Argyris and Schöns double-loop learning (1978), Damasio's neural research on the central role of emotions in social cognition and decision-making (1994), and Van Merriënboer's 4 Components Instructional Design (2007). For research question 2, literature on organisational development and systems thinking is researched.

Procedure and/or instruments used to explore the question/problem

The procedure is Action Research: recurring cycles of designing, implementing and evaluating the CoL.

1. Defining a frame of reference (desired learning outcomes, context): an innovative professional who can solve complex problems for clients in the field of sustainable development.
2. Designing the multi-level and multidisciplinary CoL in three dimensions: pedagogy, environment, personal development, based on theory and experience.
3. Implementing and monitoring the community during one semester.
4. Evaluating the results (learning outcomes, efficient and effective learning environment) after each cycle.

The evaluation instruments are: inter-colleague coaching and consulting, questionnaires, interviews with participants, clients and family/friends of participants.

Finding(s)/Result(s)

The findings for research question 1: The most important features of the CoL, attributing to the results, seem to be the professional and trans-disciplinary working environment, the senior staff consisting of lecturers as well as experts from industry, the working culture (students acting as employees), the coaching and reflective way of learning.

The results show that all participants have grown as professionals, have learned to value other disciplines and know how to enhance innovative thinking.

Research question 2 is not answered yet, a strategy for transferring (parts of) the concept to new contexts is currently being developed.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Our society faces challenges (fast changing technology, globalisation) which require trans-disciplinary, innovative ways of solving problems and an effective transfer of knowledge among different actors and stakeholders. Our current educational system is not attuned to this challenge: it is largely mono-disciplinary and aimed at knowledge acquisition, much less on knowledge creation or innovation. A new educational concept is needed in order to cross the boundaries between disciplines, between learning and working, between novices (students) and experts. This concept, the Community of Learners, can be applied within schools and at the work place, in order to educate the professionals society needs.

3 propositions to be discussed?

- Learning and working should be more intertwined; the difference between schools and companies gradually declines.
- The key to knowledge creation is: cooperation and co-creation by students, lecturers and experts from the working field.
- Implementing a new educational concept starts with transforming culture, bringing together the best of the worlds of education and work.

Poster/Roundtable 6:	28/11/08	10.45-12.15
Presenter:	Rod Neilson	
Co-presenter:	Nan Bahr, Peter Freebody, Tony Wright, Georgina Barton, Penny Van Bergen, Carol Christensen, Tim Allender	
Title:	Knowledge communication and disciplinarity in senior schooling: An exploration	
Theme:	Development strategies	

Research question/problem

A persistent issue in educational discourse asks the question as to whether cumulative, disciplinary-restricted content is more beneficial to students than engagement in authentic problem-driven, discipline unrestricted projects. An Australian Research Council project aimed to address the issue of disciplinarity in senior secondary teaching and learning and the variations that emerge in classroom epistemology, activity, and connectivity. The focus was on senior secondary Music and Biology, which together offer a range of epistemological procedures for relating activity to knowledge through language and other representational systems.

Link to the conceptual framework/literature

Disciplines are sets of propositions, dispositions, and communicative preferences about what counts as evidence, and how one moves between experience, speculation and knowledge (Freebody & Muspratt, 2007). Drawing on philosophies of Science and knowledge, and notwithstanding a recent trend towards interdisciplinary studies, we explore the disciplinary settings of the school as sites of acculturation (see Freebody et al., 2005). The argument is that both teachers and students (Lehman, et al., 1998) are acculturated to appreciate particular forms of evidence of truth and value, and they are both constrained and given agency by 'coming to terms' with their discipline.

Procedure and/or instruments used to explore the question/problem

Our project targeted Year 11 Music and Biology classes in three Australian schools of varying socio-economic settings. For each class, a unit of work (4-8 lessons) was video-recorded. In order to capture interactions occurring during student-centred work, six students wore lapel microphones and were audio taped. These six students were selected such that two were from the highest achievement band, two from a mid-level and two from lower levels. Each lesson was later analysed in phases, defined as a shift in the type of knowledge being built in combination with a change in either work configuration or activity.

Finding(s)/Result(s)

A working model of effective practice was developed from observing each of the data corpuses. Data showed disciplinarity differences across the following dimensions:

- 1 The Activity Dimension
 - 1.1 Dialogic interaction
 - 1.2 Open-ended pedagogy
 - 1.3 Student initiation
 - 1.4 Real-world relevance
- 2 The Connectivity Dimension
 - 2.1 Movement between specific/concrete and general/abstract
 - 2.2 Movement between the technical and the everyday
 - 2.3 Connections to other cognate and informing disciplines
 - 2.4 Connections to past and future learning
- 3 The Epistemological Dimension
 - 3.1 Discipline orientation
 - 3.2 Cumulative extended topical analysis ('depth')
 - 3.3 Problematizing of knowledge
 - 3.4 Portability across time and context

This poster will present this working model in detail.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Studies of classroom activity have focused largely on teacher-student relationships and the interactional features of classroom exchanges (e.g. Edwards & Westgate, 1994; Kuech, 2004), while a minority report demonstrations of useful within-domain strategies. Little attention, however, has been paid to the actual sites of learning in relation to the production of knowledge and its acquisition (McHoul & Watson, 1984). So there is presently a need to put disciplinary variation at the centre of classroom-based empirical enquiry.

3 propositions to be discussed?

1. The creation of disciplinary knowledge in senior schooling depends on the nature of communication established between teachers and their students.
2. Disciplinary knowledge is underpinned by specific ways of knowing and engaging with corpuses of information, requiring specific induction in senior schooling.
3. Senior Music and Biology require different classroom communication and engagement environments in order to effectively develop deep and principled disciplinary knowledge

Poster/Roundtable 7:	28/11/08	10.45-12.15
Presenter:	Raf Sondervorst	
Co-presenter:	Steven Janssens	
Title:	Criteria for a good in-service mentor training program	
Theme:	Mentoring/coaching	

Research question/problem

Teachers becoming a mentor, can follow a mentor training program that focuses on specific skills like coaching. A lot of organizations offer such a mentor training course. The content and the volume of these programs differ from one by one.

The main goal of this project was to formulate some quality criteria as a base for a solid framework for training courses for mentoring. The description and analysis of these criteria should give some indication of the quality of the learning- and teaching processes that take place in such a training and gives possibilities for other educational practice and policy.

Link to the conceptual framework/literature

In this project we put a theoretical link at:

- theories of learning (social-constructivism, types of learning, learning needs, adult learning) and theories of instruction.
- types of mentoring; roles and functions of a mentor into school practice.
- underlying theories of existing mentor training programs that mostly focused on the 3 different tasks of a mentor (ex.coaching).
- instruments for internal quality control (ex.PDCA-circle) in and out education.
- theories about training for mentors outside education

We checked if our criteria included in 4 topics were useful for practice. We asked several mentors who followed this training about the transfer value into their own practice.

Procedure and/or instruments used to explore the question/problem

The project lasted one year and was conducted within the framework of the School of Education in a close partnership with universities, university colleges and centres for adult education, all experts in mentor training programs.

We started by literature survey in and outside education, as there was less specific (scientific) literature about mentor training programs into education.

We analysed existing training courses for mentoring on their main subjects.

We asked for input of external experts in and outside education and did consultation of mentors/tutors in practice who recently followed a mentor training program.

Finding(s)/Result(s)

As an outcome of this project that lasted one year , we formulated 10 criteria for a good in-service mentor training program included in 4 topics :

1. Theoretical concept & mission statement of the mentor training program (3 criteria)
2. Goal of the mentor training program (2 criteria)
3. Methodological approach in the training program (3 criteria)
4. Internal quality system of the mentor training program (2 criteria)

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Our submission could be relevant for different perspectives:

1. related to the subject of mentoring : a lot of organisations offer courses in that field. These criteria could put a basis for internal quality control and improvement of existing courses.
2. We would strongly advise to transfer these criteria to other similar in-service trainings for teachers, adults in general.
3. In some countries policy recognises the role of mentoring in schools by financial support and linked at "compulsory training for mentors" without qualitative approach of these trainings. The outcome of this project suggests some standards that could be useful in further policy.

3 propositions to be discussed?

Possible topics for discussion

1. towards a competency profile for a mentor ?
2. what kind of follow up should we provide for mentors after a training program?
3. quality criteria measurable ?
4. possibilities of transfer of these quality criteria for similar in-service trainings.

Poster/Roundtable 8:	28/11/08	10.45-12.15
Presenter:	Jörg Holle	
Title:	A questionnaire for the assessment of social competences	
Theme:	Assessment / Evaluation	

Research question/problem

In regard to the importance of communication und globalisation (i. e. a need for cultural competence), it is necessary for every individual to interact in a pro-social way. Thus, there is a need for teaching social competences, in schools as well as in businesses. But prior to teaching it is due to learner diversity that the individuals' social competences are assessed.

Also, trainings that focus on the so-called 'soft skills' need assessment to learn about their efficiency. This questionnaire attempts to fill the lack of instruments for assessment of social competence that have a holistic focus on social competence.

Link to the conceptual framework/literature

The questionnaire will be based upon the quadripartite model of social competence (cf. DuBois/Felner, 1996, 2006), which integrates four "core elements": "cognitive skills and abilities", "behavioural skills", "emotional competencies" and "motivational and expectancy sets" (cf. *ibid.*, p. 126). While they apply their model in a qualitative way which derives from clinical psychology, this questionnaire attempts to assess the social competences quantitatively.

This approach focuses on ideas of organisational and personnel psychology (Erpenbeck/von Rosenstiel, 2003, Kanning, 2003, 2005).

Procedure and/or instruments used to explore the question/problem

The questionnaire will meet the standards of the classic test theory. Core domains of social competence in reference to DuBois/Felner (1996, 2006) will be operationalised by items, resulting in a prototype test. Their model was chosen because it offers a holistic view on social competences and can therefore be used in various contexts. These sample groups are destined to answer the prototype-test: Students (high school, college), teachers, apprentices and trainees in local businesses. In that way the acceptability of the items and the overall test can be ensured. By various statistical methods the questionnaire will be validated.

Finding(s)/Result(s)

There are no results yet, but the data will be analysed and interpreted within October. Desired results are that the questions are comprehensible, valid and represent the four dimensions of the model. Also, the tested groups should have different scores, so that it is possible to create profiles of social competences for each group.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

An important function of this questionnaire lies in the diagnosis of social competence, which provides information about training needs of students. In addition to this, teachers may use the results to design their teaching units and adapt them to the group.

It can also be applied as an evaluation tool for trainings and/or teaching units that aim to increase social competences of participants, when used as pre- and post-test.

3 propositions to be discussed?

The discussion of the round table could consider if the quadripartite model of social competence comprises every important aspect of social competence. It may also focus on how to use the questionnaire effectively in schools (e. g. designing teaching units). Finally, it is possible to discuss the method of construction and validation, which will be part of the poster.

Poster/Roundtable 9:	28/11/08	10.45-12.15
Presenter:	Filip Dochy	
Co-presenter:	Eva Kyndt, Maya Michielsen, Bastiaan Moeyaert, Hanne Nijs	
Title:	Investigating workplace learning in organisations	
Theme:	Mentoring/Coaching	

Research question/problem

This research examines individual employees' views on their non-formal and informal learning opportunities in their organisation. To what extent is the function of an employee related to opportunities to informal workplace learning and which personal characteristics play a role in this process?

Link to the conceptual framework/literature

Workplace learning has been accepted as a valuable educational and pedagogical project. Recently, the interest in this kind of learning has increased since most of the skills the workers develop in their working lives will occur through participation in work (Billet, 2002). For this reason, it is important that organisations offer continuously new challenges and learning opportunities to employees (Ashton, 2002, Heikkillä, 2006). Formal learning has been examined several times in the past. Informal workplace learning on the other hand gets too little attention according to Baert (2003).

Procedure and/or instruments used to explore the question/problem

An empirical study by means of a questionnaire examined over 1000 employees in different organisations. A quantitative analysis of the data gives us a clear view on the learning opportunities of employees in Flemish organisations and the forms of workplace learning frequently and successfully adopted.

Finding(s)/Result(s)

Factor analysis reveals that five factors do explain 42.77% of the variance.
 Feedback and knowledge acquisition ($\alpha=.90$) explains 12.93%
 New learning approach and communication tools ($\alpha=.86$) explains 9.76%
 Being coached ($\alpha=.82$) explains 7.92%
 Coaching others ($\alpha=.78$) explains 6.80%
 Information acquisition ($\alpha=.71$) explains 5.31%
 Anova's do reveal several significant differences.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Workplace learning is a mode of learning that is applied more and more in educational and corporate practices.

3 propositions to be discussed?

- WPL is a mode of learning that needs more applications in educational programs
- Research on WPL is scarce since implementation is far too difficult for low educated workers.
- Effects of WPL are not yet fully clear since WPL covers too many different formats of learning at the workplace.

Poster/Roundtable 10: 28/11/08

10.45-12.15

Presenter: Rita Riksaasen

Title: How are student teachers, during teacher education, socialised to work like school or pre-school teachers?

Theme: Development strategies

Research question/problem

The presentation is mainly focused on the following question: Is the teaching of pedagogy in teacher education a field of practice in which student teachers acquire professional identities and educational codes?

Link to the conceptual framework/literature

Basil Bernstein' theory of classification and framing of educational knowledge provides the main theoretical framework for the studies (Bernstein, 1990, Riksaasen, 1999). An educational knowledge code concerns legitimate and illegitimate communication in a pedagogic context (Bernstein, 1990). The form an educational code takes depends upon social principles which regulate classification and framing of knowledge. "Classification" can be strong or weak and refer to the relationship between categories (Bernstein, 1996). "Framing" is used to determine the structure of the message system, pedagogy. Framing can be strong or weak.

Procedure and/or instruments used to explore the question/problem

The presentation is based on data from two studies: That is my doctoral study of student socialisation in Norwegian primary and pre-school teacher education, and second on a comparison of Norwegian teacher education at Programme for Teacher education (PLU),NTNU with teacher education at University of Washington (UW). Both studies are qualitative and based on classroom observations of the teaching of pedagogy, and on interviews with lecturers teaching pedagogy.

Finding(s)/Result(s)

The studies demonstrate different training of students in Norwegian primary and pre-school teacher education as well as different training of students at PLU and UW. In general, the framing and classification was stronger in the practice of primary school teacher education than in pre-school teacher education. Briefly, the school practice was reproduced in the classrooms of primary school teacher education while the kindergarten practice was reproduced in pre-school teacher education. In a similar way the Norwegian school practice was reproduced in the teaching at PLU while the American school practice was reproduced at UW.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

If we look upon the teaching of pedagogy in teacher education as a field of practice, in which student teachers acquire educational knowledge codes and professional identities, the lecturers in teacher education have to work as models. According to Lave and Wenger, learning can be looked upon as a process between participants. Lecturers and students are participants in this field of practice. Since educational codes are tacitly acquired, we have to change the educational code in teacher education if we want to change the educational code in schools.

3 propositions to be discussed?

- Can the teaching of Pedagogy in teacher education be considered as a field of practice for student teachers?
- Should the teaching of Pedagogy in school teacher education change and be more case based and less lecture based in the future?
- Should the teaching of subjects like Language or Science be more integrated in the teaching of Pedagogy?

Presenter: Hana Kasikova**Co-presenter:** Josef Valenta**Title:** Teachers' Competences and Curriculum with Social Dimension**Theme:** Classroom management strategies**Research question/problem**

How to develop conditions supporting teachers' social competences for teaching curriculum with significant social-relational dimension?

Link to the conceptual framework/literature

School as learning organization

Theory of positive interdependence

Competence-based approach to institutionalized education

Philosophy of curricular transformation

Social competences of teachers

Johnson, D.W. & Johnsons, R.T. Cooperation and Competition. Theory and Research. Edina, MN: Interaction Book Company, 1989.

Kasikova, H. Kooperativní učení a vyučování. Teoretické a praktické problémy. (Cooperative learning and education) Praha: Karolinum, 2001.

Mortimer, P. Effective schools: current impact and future potentials. London: Institute of Education, University of London, 1995.

Senge, P. The Fifth Discipline. New York: Currency Doubleday, 1990.

Valenta, J., Osobnostní a sociální výchova a její cesty k žákovi. (The personal and social education and its ways to students) Kladno: AISIS 2006.

Procedure and/or instruments used to explore the question/problem

- a study of reciprocal theories
- an empirical research (direct and indirect observation of teachers' activities during pre-service and in-service training – operational research; observation and analysis of individual lessons; document analysis of teaching notes and class preparations)

Finding(s)/Result(s)

- Findings on conditions supporting the development of social competences in pre-service and in-service teacher training
- Findings on the level of teaching competences of teachers (including the pedagogical content knowledge) for teaching social competence education

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

- A New graduate minor for teachers of personal and social education at Faculty of Arts Charles University was set up
- A number of trainings for teachers based on the above-mentioned findings (including seminars for learning schools) took place
- Personal and social education has become part of the Czech national curricular framework
- New sub-disciplines such as the methodology (didactics) of personal and social education are being set up

3 propositions to be discussed?

- training social competence in pre-service and in-service (differences and similarities)
- training of disapproval
- methodology of personal and social education

Presenter: Han Blankert**Co-presenter:** Hanneke van Riel**Title:** Creating a learning environment for developing teacher's competencies**Theme:** Implementation of educational innovations**Research question/problem**

In a joint effort of staff and students, Avans University has defined her vision on modern learning and education. To support the implementation of this vision, we have developed an innovative development program for all incoming teachers. We have asked ourselves two questions:

1. How can the program be optimized to create the most stimulating learning environment for participants?
2. How can the program be organized to have the maximal impact on the teachers' competencies in effective learning and education?

Link to the conceptual framework/literature

The vision of Avans University focuses on the diversity and authenticity of individual students, on the diversity and ambition of teachers, on partnership with the working field, on the active process of learning, on the learning environment and on the transfer of information into active knowledge. The vision has strong links with the concepts of social constructivism as a theory for individual learning and learning in groups, and connectivism as a learning theory for the digital age.

Procedure and/or instruments used to explore the question/problem

The first group of participants consists of 18 teachers, most of whom have began their teaching 1-2 years earlier. The programme is organized around a total of 15 meetings. The following subjects are covered: interpersonal skills, learning psychology, didactics, assessment, educational development. Participants are challenged to monitor the development of their teaching competencies. All meetings are evaluated for their effectiveness by direct dialogue with all attendants. We ask the following questions:

1. What did you learn from this meeting? How can your learning be improved?
2. How does your learning affect your competencies and how will you implement what you learned?

Finding(s)/Result(s)

The preliminary outcome is that virtually all participants are highly involved in their daily work of teaching and that they are strongly motivated to bring alive the Avans vision. However, affinity with the conceptual basis of this vision appears very thin. Participants prefer to focus on the improvement of their daily functioning, without too much emphasis on theoretical concepts. They appreciate sharing personal experiences and they are looking for instant solutions. Further improvement of the attendants' assessment will provide us better insights into the actual impact of the course on personal development.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

"Teach what you preach" has become our motto in the teachers' development program. This means a constant challenge to bring alive the spirit of our vision in designing and executing the course. We create highly interactive sessions, interlarded with conceptual intermezzos, in order to have our teacher attendants involved and active in a way we would like to see our students involved and activated by their teachers. A digital learning environment which includes personal weblogs for reflection and developmental portfolios completes the setting in which we try to be maximally consistent with the vision.

3 propositions to be discussed?

We will bring out the views of the attendants on the competencies of a teacher in modern society and connect these with the teachers' competencies defined in our development program. We will invite the attendants to share their experiences in personal development programs and innovation strategies in their own organizations. We will link this outcome with the design, execution and evaluation of our own program and with our experience in the implementation of the vision of Avans University. We are enthusiastic to share our experiences, but we wish to share experiences and build common knowledge.

Poster/Roundtable 13: 28/11/08

10.45-12.15

Presenter: Emmanuel Mfanafuthi Mgwashu

Title: "English Studies and Language Teaching: Epistemological Access and Discursive Critique"

Theme: Implementation of educational innovations

Research question/problem

The purpose of the study was to investigate ways in which curriculum developers in the field of English Studies in higher education responded to students' educational needs between the period 1980 and 2005. The aim was to critically engage with theories that informed, first, module design and, second, pedagogic approaches in selected English Studies departments. My study was not about measuring competence. Rather, it represented an attempt to initiate a conscious and deliberate rethinking and re-theorisation of how university language practitioners can inculcate language skills in ways that draw on the field of English Studies' concerns with language.

Link to the conceptual framework/literature

The teaching of English language and English literature within one academic Department at most universities remains, as Janks (1990) puts it: "a contested terrain". This contestation is both in terms of English as a colonial language and as a discipline that is understood differently. Van Wyk-Smith (1990) encourages a focus on language features in addition to studying literature: "unless language studies are centrally concerned to show why it is important to know how complex discourse works, and literary studies return to their linguistic base, we simply end up teaching two distinct subjects under one roof" (9).

Procedure and/or instruments used to explore the question/problem

A mini-survey elicited qualitative data about ways in which participants responded to students needs. It provided preliminary, yet crucial baseline data for the study. Narrative-Style interviews "convey[ed] tacit and unconscious assumptions and norms of the individual or of a cultural group. At least in some respects, they are less subject to the individual's conscious control" (Wengraf, 2001:115). Documentary evidence such as module outlines and contents were also used. Often interviewees make claims that need corroboration to documents relevant to their narrative Recounts.

Finding(s)/Result(s)

The negative effects on students' learning brought about by the artificial separation between the teaching of English literature and English language. It shows that within the context of a society marked by decades of past racial inequalities, modules should not focus on a pedagogic practice that is either grammatical rules or academic writing and critique based, without an attempt to integrate the two. This artificial separation in English departments causes students not to learn to choose grammatical structures according to the purpose for which they construct texts. Findings show that the genre approach is the solution.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

I suggest that the narrowing of access to certain resources of meaning can be overcome through specific literacy pedagogies. I identify scaffolding as a strategy that could make accessible forms of meaning not accessible to other social groups. I argue, however, that in addition to scaffolding our students through complex texts, teaching about, and how to use, theories that inform the construction of such texts, is also crucial. Students need to learn to "respond to the informational and organisational demands of various settings"(Reppen, 1995: 35-36). This is significant for educational practice & policy.

3 propositions to be discussed?

If students are afforded opportunities in which the rhetorical structures peculiar to the discourse of a discipline are discussed as one of the formal aspects, students epistemological access will be enhanced; If the theory that informs engagement with the subject matter of the discipline of English literature is taught, students will acquire the metalanguage necessary to write effectively;

If academics in the discipline of English literature raise students' awareness of the relationship between grammatical choices and the purpose for constructing a text, then English Studies is better positioned to enable students to access disciplinary discourses across other disciplines.

Symposium 1:	27/11/08	15.40-17.10	Room Tärnplass
Symposium Chair:	Erik Knain		
Title:	Knowledge building in open inquiry environments		
Theme:	Implementation of educational innovations		

Link between the presentations:

The contributors participate in the project "Students as researchers in school science". In this project university researchers cooperate with science teachers in action research designs. The main objective is to develop practices that promote "the Budding Researcher" in the Norwegian curriculum. The "basic skills" in writing, reading, arithmetic, ICT and oral presentations are considered tools for inquiry learning. Learning by engaging with discursive tools (such as the laboratory report) sometimes mediated by ICT, as well as scientific instruments is a common theme in the sub-projects. The presentations build on "work in progress".

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

The work reported in this symposium is innovative in its focus on inquiry learning in school science practices, implementing learning principles commonly held as important to good learning environments (dialogue, student driven knowledge building with a variety of discursive tools such as different oral and written genres) and focusing on skills in reading, writing, listening, talking, ICT and maths as tools for learning and as learning goals. While such learning environments are often advocated, less is known about how they are implemented and may be developed in classroom life, as part of school cultures.

Presentation 1:

'How to stimulate students to reflect on theory to be learned when engaged in activities in the classroom?

Presenter:

Stein Dankert Kolstø

Abstract

Research question

The use of student activating teaching methods is highly valued. However, several studies, including the PISA-study, indicate that student activity not necessarily leads to the hoped for concept-learning. Regarding practical activities in science teaching, this experience have been coined 'hands on – mind off'. In this study we explored the hypothesis that the use of local contexts providing unique observations makes it possible to formulate science inquiry questions which stimulate learners to negotiate relationships between theoretical concepts and observation made during an activity.

Conceptual framework

Within theory of language and learning, Keys claims that learners' writing of experimental reports is effective if students make measurements which are unique, and that this uniqueness motivates for inquiry and reflection. Within genre theory, Bazerman claims that the experimental report in professional science involves argumentation. In such arguments theoretical positions and empirical data are linked. By designing science inquiry questions where students are asked to produce and defend a unique claim, writing of argumentative experimental reports might become meaningful and realize Dewey's philosophy about experience and thinking.

Method

As part of an action research project, a full day teaching sequence was designed in collaboration with two lower secondary science teachers. 93 learners (5 classes) were asked to collect freshwater animals in a nearby lake, choose one animal, and to make a report where they constructed a supported claim about which type of animal they had. A framework for the report where offered. Data: field observations were analysed for students' use of literature and theoretical concepts in conversations;

reports were analysed for arguments; information provided by the teachers were analysed and categorised.

Findings

All but a few students participated fully in the inquiry. The teachers focused on practical information and did not try to communicate the crucial purposes involving argumentation and learning through interpreting observations using relevant theory. All but a few non-engaged students inspected handouts and books about animals in fresh water and discussed with peers and with their teachers possible interpretations of different observations. A few students constructed arguments in their reports, but most students made the kind of report they were used to with separate and unconnected sections with observations and theory (exact numbers are still to be validated).

Consequences for educational practice

We hypothesise that the teachers' lacking focus on the purpose of the report and the hoped for learning outcome, accounts for the absence of argumentation in most learners' reports. We believe inquiry with unique data needs to be supplemented by arenas for collective and individual reflections on purpose and content. The study indicates that teachers' awareness of this needs to be increased through further negotiations, and learners' recipe-focused way of working need to be challenged and changed.

Presentation 2:

'Concern and issues in an open inquiry project at upper secondary level'

Presenter:

Birgitte Bjønness

Co-presenter:

Erik Knain

Abstract:

Research questions

In this paper, we identify and discuss issues that emerged in an action research project in a Norwegian upper secondary school, with 15-year-old students participating. One of the teachers in this school has several years of experience of conducting a 10-week project that he labels "the scientific method".

The link to the conceptual framework/literature

We focus on the interaction between practice and theoretical knowledge, being somewhere between a case study and a design experiment. What we want to achieve is knowledge at an intermediate level – "intellectual tools for reflective mastery of practice" (Engeström 1999).

We follow Wells in his fusion of Halliday's social semiotic theory and activity theory according to Engeström where discursive tools as well as scientific instruments have a mediating role between individual use of language, community of practice, and purpose. Our analytical focus is on the use of various tools at different levels of practice (action/genre vs. task/register).

Procedure/instruments used to explore the question(s)/problem(s)

We had meetings with the teachers both prior to, during and after the project period. In order to develop future practices, the university researchers wrote a short discussion paper. Several issues emerged. These tentative findings were then to be tested and developed by a detailed data analysis, before again being discussed by the teacher group and deciding for future action in the next run of the project.

Preliminary issues and findings

- Students found the project engaging and were grateful that they got the opportunity to investigate a question coming from themselves.
- However, this also meant that the class dissolved into a group of different projects, largely losing the class as dialogue community. A whole-class theme and driving question is a possible solution.
- The teacher framed "the scientific method" as a clear-cut hypothesis testing, with little emphasis on dialogue and theory underlying data. This overall framing was consistent with students focus on "doing"

with little focus on reflecting.

- Some students showed an increasing understanding of the pitfalls and challenges encountered in experimental work. Students need tools for designing proper procedures in order to get reliable data.
- Assessment criteria need to be better integrated in various phases of the project and across discursive tools.

Relevance to educational practice/policy

In this project, students get the opportunity to experience practices of science, using the tools of science in investigating a question that they do not know the answer to. By so doing, rich opportunities for learning supported by current understanding of "good learning" may be offered. However, there are several critical issues experienced by teachers and students, and identifying these and how they may be encountered are important for improved practice in the future.

Presentation 3:

Building knowledge together – students collaborating with students in Spain using 'Knowledge Forum'

Presenter:

Ola Erstad

Co-Presenter:

Bente Klevenberg

Abstract

The ultimate goal of the study is to cast light on the ways in which students become active contributors of new knowledge, what ideas the students might have about the nature of knowledge and innovation, and whether these ideas may help or hinder in embracing the new cognitive stance of responsibility as a knowledge community member. Thus the primary focus of the research is on distributed cognition, collective responsibility and communicative processes in knowledge building and inquiry-based learning.

The context is students in science education at Upper Secondary level. In this project we use the platform Knowledge Forum, developed by Marlene Scardamalia and colleagues in Canada. This project is part of a broader initiative linking research and development communities in different countries, building on the knowledge building principles developed by Scardamalia and Bereiter (2005) in Canada.

Key research questions are: How does knowledge building look like? What are the hindering or helping factors in knowledge building? What role does the technology play in the process? What role does the teacher play in the process? What is the nature of the collaboration between students and how it may foster or hinder knowledge building?

In the research part we use qualitative methods, primarily observations and interviews, combined with analysis of online activities. We are following the principles of 'design research' (Brown, 1992; Collins, 1992). For example, Hakkarainen, Palonen, Paavola and Lehtinen (2004) suggest this approach to be the most appropriate for investigating knowledge building (creation). Central to this methodology is an idea that the researcher remains an active partner in the educational intervention, helping to refine the project based on continuous assessment of the progress.

In this paper we present results from one project where students in one school in Norway collaborated with students in one school in Barcelona on the theme of 'global warming'. The study showed how the two student groups negotiated both between themselves and in collaborating with the students in Barcelona about different issues of the overall theme. In this paper we will present a few case stories of how this collaboration took part and the knowledge building that took part both of the different issues of global warming, but also about the collaboration with the Spanish students. All in all this raises questions of the relevance of the knowledge building approach in a Norwegian school setting and how different technological tools might support such processes.

Symposium 2:	28/11/08	09.00-10.25	Room Hodden
Symposium Chair:	Freddy Veltman		
Title:	Making the workplace an effective learning environment		
Theme:	Implementation of educational innovations		

Link between the presentations:

Central focus of the three papers is on learning at the workplace followed by students, coached by teachers and triggered by practical assignments of external stakeholders. Due to the often encountered problematic efforts to change the design of effective learning environments often manifested in major gaps between ideals and outcomes (van den Akker, 2005), the critical factors from the three research projects are analysed on the three levels of the 'intended', 'implemented' and 'attained' levels of learning at the workplace. A collaborative process that raises the awareness and joint responsibility for learning outcomes is a key element.

Impact of this submission and findings for educational practice and policy/on the learning and instruction environment?

Knowledge creation by learning at the workplace is of eminent importance within the current knowledge economy. However practical guidelines how this theme can be translated into learning of professionals or which evidence-based strategies enhance learning outcomes, are insights that are rather scarce. Critical factors and underlying mechanisms of the integrated model will be discussed and will offer educational professionals strategies to enhance the effectiveness of learning at the workplace. Based on international models of optimal teaching strategies we answer questions such as:

- how knowledge creation demands commitment of all stakeholders?
- how to stimulate sustainable learning?
- which promising strategies are revealed?

Presentation 1:

'Learning networks as effective workplaces'

Presenter:

Odile Keulers

Abstract

Complex problems of large-size cities require sustainable solutions. To deal with these problems it is evident that just one discipline or one organization is no longer sufficient, so learning networks and integral ways of service are being developed. Public-private co-operation (including knowledge institutions) is needed. In a practical way professionals learn how to integrate new theoretic concepts in existing ways of work.

Does knowledge-circulation in learning networks contribute to renewal structures in large-size cities and in education?

Do learning networks offer inviting learning possibilities?

What is the level of learning in these networks towards (educational) learning processes, i.e. towards the current organization structure and culture so that internal and external colleagues can improve their professional development?

Groen & van der Sijde (2002) discern levels of knowledge-circulation between universities and their context. Complex social problems need intensive co-operation and a high level of knowledge-circulation, also for integrating this new knowledge in education.

Action-network theory: Many interests play a role (Callon, 1992), therefore co-operation and learning processes need to be organized and directed, especially in large and complex projects. Just-in-time specific input of relevant actors is being included and shared with all stakeholders: from the beginning to the end evaluation of good implementation.

Fourth generation evaluation as strategic evaluation requires an agreed and planned action orientation which stimulates stakeholders to include this in their innovative practice and to generate new

commitment (Guba and Lincoln, 1989). The result, the so-called reconstruction, is being negotiated in order to carry it out correctly in a satisfying way.

Several on-going experiments are monitored in order to see if practice matches with the strategy of University of Rotterdam to become a knowledge centre for the region. With the assistance of the monitor results, administrators and the daily programme management will be advised, as necessary, regarding the continuation of co-operation projects.

The characteristics of learning networks are the following.

1. from implicit to explicit way of learning to create a shared knowledge-base
2. from individual to collective learning: informing and sharing of knowledge
3. from problem solving to sustainable development
4. from project co-operation to research and innovation
5. complex problem solving needs high-level knowledge-circulation.

Students are being trained to become innovative professionals and universities, in their capacity as society-responsive institutions, should support the development of the region.

Universities experiment how to co-operate with external parties in learning networks. With the participation of teachers in learning networks, they learn how to align curricula with developments in the working field. So students can prepare for their profession in the near future.

This alignment is much appreciated by governments, companies and social institutions and has led to a growing number of co-operation agreements.

Presentation 2:

'Case study factors as input for design guidelines for effective work related learning arrangements'

Presenter:

Josephine Lappia

Abstract:

University of Rotterdam investigates how the powerful learning possibilities of the workplace (Streumer, 2006) can be used with partners in the working field to bridge the gap between theory and practice. The educational innovation that is taking place in all forms can be designated as work related learning arrangements. It requires mutual understanding between stakeholders to decide what has to be learned by the students and to create learning situations that are as similar as possible to the working situations. Authentic assignments tend to address students with a learning readiness to solve innovative problems while meanwhile developing themselves as knowledge professionals. Coaches with an educational and practical background support students in their 'learning-to-collect' sufficient conceptual knowledge and in 'learning-to-connect' their knowledge with their practical experiences.

This research project reconstructs two good practices to answer the research question:

Which factors do influence the quality of work related learning arrangements and how these factors influence work related learning by students?

This research project will supply educational advisors and instructional designers with procedural design guidelines that support an efficient set up of work related learning arrangements.

It is expected that the substantive design guidelines will enhance the quality of work related learning by students.

The research project can be characterized as an educational design based research (Van den Akker, 2006). The arrangements are reconstructed by qualitative data analysis of documents, interviews and field notes during observations when students had meetings or were executing job tasks.

Inspired by Kessels (1993) this research defines quality of work related learning environments as a combination of internal and external curriculum consistency. The collected data is analyzed in line with the aspects of external and internal curriculum consistency.

According to findings of Kessels (1993, 1999) the successful application of procedural guidelines that follow a relational design approach were also in these case studies a better indicator for effective work related learning by bachelor students within work related learning arrangements, than the successful application of the substantive guidelines that follow a systematic design approach. In both

case studies substantive aspects should be worked out in more detail to enhance the quality of work related learning of students.

Teaching staff of new work related learning arrangements is recommended to enlarge their social engineering competences and entrepreneurial skills that fit with the procedural guidelines. To anticipate on successful implementation of complex educational innovations it is important that partners develop mutual understanding and aspirations during the process. The guidelines will be tested within a learning group of teachers and staff. According to the conclusions of Kessels (1993) and Visscher-Voerman (1999) the successful implementation of new arrangements starts right at the initial stage of its design.

Presentation 3:

'Learning for the future'

Presenter:

Freddy Veltman-van Vugt

Abstract

The professional practice of teachers is subject to permanent changes and as a result so are the requirements set for (future) professionals. It is no longer sufficient to merely follow an education prior to the actual professional practice. These fast developments require different skills and knowledge which has consequences for professionals. Safeguards disappear, the complexity of tasks increases and not only a higher qualification level is expected but also different forms of skill development and the necessary pre-conditional knowledge.

Views on what a learning process should look like change alongside the changing opinions on the professional practice. This is directly related to ideas on how learning and learning routes should be incorporated. Since professionalization is as much work related as job related the question is explored what effective ways could be.

How can work related flexible training arrangements be designed to achieve competences enabling (future) teachers to function in an innovative environment.

The chosen research methodology is "Fourth generation evaluation" (Guba & Lincoln, 1989). This is a social constructivist research theory whereby a planned and phased interactive process of forming opinions takes place between groups involved in the evaluation and the central issue at hand.

Ultimate goal is to reach agreement with the stakeholders on:

- claims, concerns and issues which they share in relation to teaching and professionalising teachers;
- areas which require strengthening;
- ways in which this may be realized,

to make it clear how learning routes may be strengthened and how skills can be acquired.

Existing research results to be tested in this research project:

- Knowledge development needs to be closely intertwined with other activities in the existing professional practice
- Avoidance of sequence, linear programming and indirect knowledge development
- Focus on the principle of knowledge construction rather than knowledge reproduction
- Design learning routes as such that broadly deployable knowledge is gained with a focus on the knowledge of principles
- Opportunity to active participation in the process of knowledge development

A professional study needs to prepare for the actual professional practice and the complexity involved therewith (Education Council of the Netherlands, 2003).

A fundamental shift is necessary to prepare students for a role in the knowledge society. A shift in the way to learn how to create knowledge, the way in which students examine questions which are of interest to them. A shift whereby the students themselves will then contribute to the progress in how learning can be done the best in relation to solving problems in the professional practice and society as a whole and the progressive theoretical understanding (de Jong, 2006).

