

KARI SMITH AND MARIT ULVIK

14. AN EMERGING UNDERSTANDING OF MENTORS' KNOWLEDGE BASE

INTRODUCTION

Sara had just observed a lesson taught by May, one of the student teachers she had been given the responsibility of mentoring during their practicum. May had planned the lesson without conferring with Sara, and the lesson was planned far beyond the level and the competence of the class. When May put the pupils to work, they all sat quietly staring at the assignment they had been given and seemed to work on it. May sat next to her desk, she did not walk around in class to guide the pupils in their work with the assignment. Neither did she go over the assignment at the end of the class, she 'would do it in the next lesson, the pupils were so busy working'. At the end of the lesson May expressed her satisfaction with how successful the lesson had been, 'the pupils were busy working quietly all the time so they had really enjoyed the activity.

Sara was unsure of how and when she should tell May that she and the class were not interacting during the lesson, and that little or no pupil learning had taken place. If May is an unexperienced student teacher in her first practicum, she may need time to discover how her teaching works for students and to be supported and become more secure in her teaching role before being challenged. Furthermore, to nurture critical capacity and reflection by asking questions that make May think through her teaching from a new perspective and find out how to improve by herself, could be a better strategy than to tell her what to do. The dilemma for the mentor, however, is that she is both responsible for the student teacher and the class, and the class should be her main priority.

Another case is the following:

Per was a second career student teacher who had worked with young people for years. He was an experienced lecturer and had arranged conferences and had traveled around and talked to school classes about substance misuse. Additionally he worked in a project related to young people that hang around in the city center in their spare time.

At first in his practicum he seemed reserved and not especially engaged. During mentoring sessions he brought pen and paper and made notes, but he had no suggestions for topics to discuss. Initially he had made it clear that the one year post graduate teacher education was something he participated in only because he had to if he wanted to work as a teacher. He had no questions about the mentors teaching and thought everything worked okay.

Eventually Per took over more and more of the teaching and as if by magic he changed the personality the mentor had learned to know. He encountered the students with a cheerfulness and enthusiasm that they knew to appreciate. He entered into an agreement with students about behaviour and had a lot of creative suggestions for alternative teaching. He got on very well with the students and the topic he should cover was very well taken care of.

However, during mentoring sessions, the seemingly careless and disengaged Per was back.

Per has quite different needs than May. In his case emotional and practical advice does not work. His experiences from teaching young people make him more like a colleague than an unexperienced novice. The school could benefit from his experiences, but at the same time, he could learn from his mentor about the framework a teacher has to consider and how it is to teach a school subject. The mentor is supposed to mentor in the profession, and even if Per has a great deal to offer students, he does not fully know what it means to be a teacher. However, it is not easy to mentor someone who is not willing to be mentored. The mentor needs to know something about adult learning and learning more like equals. Per seems to go on well with the students. However, as a teacher he also needs to go on well with and cooperate with colleagues, and in his practicum he gets an opportunity to work together with an experienced teacher. The mentor and the mentee can learn from and challenge each other, but they both have to be open minded and not appear as the one who knows all the answers.

The above situations were recently presented to the students in our mentor course at the University of Bergen. They are all experienced teachers, mostly with some mentoring experience, but without mentoring education leading to mentoring qualifications. The cases initiated a lively discussion around the tables as many of them recognized the situation from their own experience as mentors or as student teachers, and also teachers. To focus the discussion, the task they were given was to discuss what kind of knowledge the two mentors needed to provide May and Per with realistic critical feedback which would not discourage them, but help them reflect on the lessons and their attitudes so May would understand her misjudgements and avoid similar situations in the future, and Per understands that it is enough for a professional teacher to go well on with his students. He is also supposed to cooperate with his colleagues. In other words, the mentor students were asked to discuss what pedagogical content knowledge (PCK) (Shulman, 1987) mentors need to have.

In this chapter we will discuss the concept of PCK in relation to the scholarship of mentors' practice arguing that the concept in itself is transferable. Before going into mentoring, we will start with how Lee Shulman in his work discusses the concept pedagogical content knowledge in relation to teaching and the professional knowledge of teachers. He calls it 'the most powerful analogies, illustrations, examples, explanations, and demonstrations—in a word, the ways of representing and formulating the subject that makes it comprehensible for others' (1986, p. 9). Shulman includes in the PCK concept the expertise of the content specialist integrated with pedagogical knowledge and skills, which blends into each other in what is called teachers' pedagogical content knowledge. In other words, Shulman makes an attempt to define the professional knowledge of teachers by simply saying it is all about how to best teach their content to their students (Shulman, 1987). In an interview with Amanda Berry, John Loughran and Jan van Driel, the authors of an editorial which revisits the concept PCK, Shulman says that the understanding of teachers' PCK was developed in the search of finding the answer to the semantically simple, but conceptually very complex question 'How does somebody that really knows something, teach it to somebody who doesn't?' (Berry, Loughran, & van Driel, 2008, p. 1274). In the same interview Shulman discloses that through research with colleagues at that time, a growing understanding for the interplay between the way teachers' understood their subject and how the subject was taught emerged. Accordingly, the concept PCK, integrating content knowledge with pedagogical practical and theoretical knowledge, was introduced in 1987 (Berry et al., 2008).

Pedagogical content knowledge is situated within the scholarship of practice, and it is related to theoretical content knowledge and the practice of supporting students to get access to and personalise that knowledge. In a way a teacher's PCK represents a comprehensive view on teaching, the scholarship of teaching. However, whereas the scholarship of teachers' practice is widely discussed in the literature, the scholarship of mentors' practice is less known. In the next section we will therefore discuss the scholarship of mentoring in relation to relevant literature.

SCHOLARSHIP OF MENTORING

Orland-Barak (2010) claims that today mentoring has taken on an extended understanding referring to Zanting, Verloop, Vermunt, and van Driel's work (1998). Recent understanding of the scholarship of mentoring is grounded in the work of mentors which ranges from 'modelling and instructing to information sources, co-thinkers, and inquirers, evaluators, supervisors, and learning companions' (Orland-Barak, 2010, p. 2). Smith (2010) presents a similar view when discussing the many roles the mentor takes on, and which illustrate the complexity of mentoring (see previous chapter in this book).

Anderson and Shannon (1988) explain how a mentor is perceived by referring to Homer's *Odyssey*. The mentor is somebody with expertise who guides and instructs, as well as protects and challenges the mentee, the novice. *Odysseys* gave Mentor

the responsibility for Telemakos, his son, when he himself was busy fighting wars. Another perspective of examining the scholarship of mentoring is to look at how the word 'mentor' is translated into the culture of practice in various contexts. In Norwegian the most common understanding is that a mentor is usually a more experienced colleague who functions as somebody who shows the way (*veileder*) for somebody with less experience with a focus on activity and reflection (Smith, 2010; Ulvik, & Smith, 2011). In the Norwegian context the practice of mentoring is understood as somebody who is showing the way, which to a certain extent also implies that mentoring is not just showing and telling the mentee what to do. It also implies the understanding that the mentee has to walk the way herself, with the support of somebody who is familiar with similar roads. In Swedish the mentor is somebody who 'takes you by the hand' (*handleder*), whereas in Hebrew the mentor is a person who accompanies the novice and provides professional, cultural and emotional support (Israeli Ministry of Education). These brief glimpses into the understanding of mentoring in a few cultural contexts suggest that the practice of mentoring is to a large extent influenced by the culture in which it takes place, something that is also suggested by Orland-Barak (2010).

Brunstad (2010) compares the mentor to a nomad when presenting his view of the mentoring practice. He suggests that mentoring is largely an ethical enterprise and that mentors need to examine their power position in relation to the mentee when engaging in mentoring practice. He warns about misusing the inherent power in mentoring situations, and suggests that the mentor should see herself as a nomad who is a visitor to the world of knowledge and skills of the mentee. The language in which mentoring practice takes place is of utmost importance, according to Brunstad, who claims that when the mentor sees herself as a temporary visitor in the mentee's practice, the power position is slightly changed, and the mentor becomes the one who is seeking information from the mentee about her understandings of own practice. It is not only the mentee who is engaged in learning in mentoring situations, the learning dialogue opens for mutual learning. This awareness will form the communication and the language used in mentoring conversations (Brunstad, 2010).

The above discussion points first of all at the complexity of understanding the scholarship of mentoring, and that the practice of mentoring is not uniform, but influenced by the context in which it takes place. The practice of mentoring is coloured by the mentor's understanding of the scholarship of mentoring, as in Shulman's explanation of the concept pedagogical content knowledge. Therefore, it is now time to look at the pedagogical content knowledge of mentors.

MENTORS' PEDAGOGICAL CONTENT KNOWLEDGE (PCK)

As already mentioned, we know little about the mentors' PCK, what is the theoretical content of mentoring, and what skills are needed to impart that knowledge and make it accessible and useful to the mentees? In our work through a number of small

studies we are trying to create an understanding of mentors' PCK. Being aware that to a large extent this was a phenomenological project, we wanted to get insight into the mentors' perceptions of what knowledge they drew on when practicing mentoring. So we have asked mentors to discuss the types of knowledge mentors need to have to solve dilemmas in mentoring situations, we have collected data by the help of questionnaires, and we have examined the curricula of mentor education programs offered by in Norwegian teacher education institutions. In the following a brief presentation of some of the studies is given.

KNOWLEDGE ESSENTIAL TO SOLVE MENTORING DILEMMAS

On the very first day of the mentoring course January, 2014, the mentor students were (n=14) were presented with various authentic dilemmas from other mentors' experiences. The situation presented in the beginning of the chapter was one of them. The mentor students discussed the dilemmas in groups, not necessarily to find a solution to the dilemmas, but by addressing the knowledge needed to solve the situation in a professional way.

The initial situation with Sara and Per can be used to exemplify the PCK of mentors as discussed by mentor students. The data collection was done through note taking by the two course leaders during the group discussions, thus this small, informal study is a qualitative study using observation and note taking as the main. The notes were compared and we learned that in this group of mentor students there was strong agreement that *content knowledge* was needed, in other words, Sara needed to know the subject taught in the lesson (the teaching subject was not given) in order to help May plan the lesson and to help her adjust the subject teaching to the pupils' level. Per would benefit from developing better his communicative competence. In our research on novice teachers' experiences the first year of teaching, we found that a number of novices preferred the mentor to have the same subject expertise, as they often needed guidance in how to teach the subject (Smith, Ulvik, & Helleve, 2013).

Another type of knowledge that was frequently mentioned by the mentor students was *communicative knowledge*, how to develop a learning dialogue in a situation where Sara's and May's perceptions of the situation are miles apart. Within the umbrella title, communicative knowledge, or more exactly communicative skills, various central knowledge areas were mentioned, such as: understanding how adults learn from critical feedback, how to give critical feedback, and how to maintain motivation when things are getting difficult. When translating this into academic knowledge areas, *adult learning, assessment for learning, and motivation* are by mentor students viewed as essential to mentoring.

An interesting issue that came up in the discussions was that perhaps the mentoring session should not take place immediately after the observed lesson, to give May some time to reflect on what had taken place. However, to make the reflection focused and useful, Sara should give May some guiding questions to help

her analyse the lesson in a critical perspective. So, knowledge about how to promote critical *reflection* is, perhaps, one of the most important knowledge areas of mentors.

Summarising the PCK of mentors as suggested by mentor students in the beginning of their mentor education the following knowledge areas came up:

- Content “*The mentor should help the student teachers planning good lessons, and this can they do only if they know the subject*”.
- Communication “*It is not always easy to tell students they did not do very well without demotivating them. How should the mentor create an atmosphere in the meeting which allows for that?*”
- Adult learning “*I know how to teach children, but I am not quite sure of how to teach adults. I need to think of how I learn, so I can better understand how to help the mentee*”.
- Assessment/feedback “*It is so much easier to praise the student teacher. I really have to think twice before I criticise. I don’t want to be negative, and I have to know how to direct the mentee so the lesson will be better next time*”.
- Motivation “*Not all mentees are equally motivated, like Per, for example. He was not very motivated to start teacher education, and I have to help him understand it is important for him. Other mentees sometimes become demotivated when listening to some of the negative discussions about teaching in the staff room*”.
- Reflection “*It would not help much if I just told May what was wrong in the lesson, or that Per had to see the importance of learning to be a teacher. In a way the mentor must make the mentees understand it themselves, to help them look at themselves and their teaching from an outside perspective. This is, probably, what reflection is about*”.

PERCEPTIONS OF MENTOR ROLES

In another study we wanted to learn how mentors perceive their role as mentors and how they prepare for that role (Smith, Hansèn, Skagen, Aspfors, Helleve, & Danielsen, 2012). Data was collected in Norway (n=34) and Finland (N=12) with the purpose of getting a broader understanding of mentoring also across the two cultures, and to look for trends which might be more contextual dependent. A more formal data collection process than in the previous study was used as data were collected by the help of an open ended questionnaire. The study does not look at the PCK of mentors specifically, but some of the questions in the open-ended questionnaire provide information about how practising mentors perceive their role and the knowledge needed for that role.

The analysis of the data was first done by the Norwegian and the Finnish research teams separately, before the data were cross referenced in a joint meeting. The findings suggest that there are similarities in the Norwegian and Finnish data material. For example, mentors have to be capable of *handling the day-to-day pragmatics of school* and adjust mentoring to the current situation in which mentoring takes place.

This means that *improvisation* seems to be core characteristics of mentoring, as also discussed by Orland-Barak (2010). The ability to handle unexpected situations is an inherent part of any professional practice, and this issue has been elaborated in the previous chapter, where Brunstad's definition of acting out of professional wisdom is a characteristic of professionalism. Beneficial improvisation is only possible when the practitioner acts out of knowledge, skills, experience, and creativity (Barker & Borko, 2011). The Norwegian- Finnish data uses the term *day-to-day pragmatics of school* which is understood by the researchers as knowledge about the school and the organisation of the school in which mentoring takes place, so mentoring practice is in rhythm with school life in general.

Knowledge about *reflection* and how to support the mentee develop reflective skills was also in this data material found to be a salient aspect of the mentor's professionalism. The danger is that reflection has become a buzzword in teacher education with multiple local and even personal interpretations. When reflection and how to develop reflective praxis is introduced as a knowledge area within mentors' PCK and taught in formal mentor education, an approach which elaborates the concept theoretically, as well as how to engage in reflective practice, must be chosen.

Assessment was another knowledge area which was detected in the Norwegian as well as in the Finnish data. The respondents pointed at assessment as a core activity in mentoring and it was the informal aspects of assessment such as giving feedback, developing learning dialogues and encourage mentees to engage in self-assessment, critical analysis of own practice.

A final similarity to be discussed in the current chapter is, perhaps, the most challenging construct to define and translate into a teachable knowledge area, how to help mentees developing *teachership* (Hansen, 2008). Teachership is a comprehensive view on teachers' job, which goes beyond teaching the subject matter. It is about cognitive, practical and affective aspects of teaching, and beyond all, to connect to and develop relationships with children, colleagues and parents. In a way, it is possible to say that teachership is another word for teachers' PCK. Mentors do not only need to have an understanding of what teachership is, but also the ability to articulate it, break it down into handable parts, to make it accessible to the mentees. The findings do not lead to a clear definition of *teachership* and how to help mentees develop their own understanding, but it became clear that mentoring goes beyond mentoring how to teach a certain subject or how to write tests, it is about acting out the many different roles teachers have from being knowledge broker to social worker and caretaker.

There are several similarities in what mentor students at the onset of their mentor education and what experienced mentors think the PCK of mentoring consists of. Mentors' PCK seems to relate to disciplinary and pedagogical theoretical knowledge as well as practical knowledge, especially related to interpersonal communication.

Still, mentors' PCK is still, as we see it, a rather defuse concept, but in spite of that, nearly all teacher education institutions in Norway offer formal mentor education. The next step in the search for a clear understanding of mentors PCK, we undertook

a study which examined how higher education institutions offering mentor formal mentor education translate the mentor's PCK into course curricula.

CURRICULA FOR MENTOR EDUCATION

The data from this study is comprehensive as it is collected from 9 Norwegian teacher education institutions, 5 universities and 4 colleges, which offer mentor education (Smith, Krüger, & Sagvaag, 2013). The University of Bergen (UoB) was not included in the data collection as the researchers were involved with mentor education at UoB. The examined institutions were selected based on geographical criteria as we wanted to have representation from all over Norway. The data was collected in the autumn of 2012 and spring 2013 and online curricula and reading lists were examined. The findings were presented at the Nordic Educational Research Conference (NERA) in Iceland, March, 2013. We looked at the level (undergraduate or graduate level), European Credit Transfer and Accumulation System (ECTS), duration of the course, required reading, content, and examination forms. For the purpose of this chapter, discussing the PCK of mentoring, the focus of inquiry was the content of the courses, however, it is also useful to take a look at the reading lists and the examination forms. The below table presents a summary of the data in relation to the above domains:

Table 1. Overview of formal mentor education in Norway

	<i>Universities</i>	<i>University Colleges</i>
Academic Level	4 Master, 1 Bachelor	1 Master, 1 Bachelor, 2 'specialization'
ECTS	30, 15 ETCS per phase	30, 15 ETCS per phase
Duration	Partime, 4 semesters, 2 semesters per phase	Partime, 4 semesters, 2 semesters per phase
Required Reading	Norwegian, Nordic, some English	Norwegian only
Content differences	Internationally oriented, transmission from student to teacher, planning mentoring programs, group/individual mentoring, research	Mentoring in preschool/ vocational teacher education, didactics of mentoring
Examination form	Oral and written assignment in phase 1, action research on mentoring in phase 2	Take home exam in phase 1, take home exam and oral presentation of this in phase 2.

When taking a brief look at the differences between the curricula of the universities (mainly secondary school teacher education) and the university colleges (mainly

pre-school, primary school and vocational teacher education) we learn that the required reading is to a large extent Norwegian literature with a few other Scandinavian references. At the university programs we find some English literature with a broader international perspective. The national literature, with some exemptions, deals more with the practical aspects of mentoring than with more theoretical aspects and research based information.

The examinations forms are multiple, and the demands are increased at level 2. Some of the examination forms are traditional exams, but portfolios, oral group examinations, and written home exams are most frequently used at level 1, whereas project work, e.g. action research projects, are the most common examination form at level 2. This indicates that part of the PCK of mentors is conducting practice oriented research, especially as reflected in the universities' mentor education programs.

By examining the content of the courses a long list came up and there is to a large extent similarities across the institutions. Some of the differences, which seem to reflect the type of teacher education in the institution, are presented in the above table. Later in this paper a synthesis will be discussed in relation to the other two data sources described above. But first, the list from the curricula will be presented in full:

- Communication, interaction
- Professional knowledge and development
- Learning and teaching
- Organisation, culture and innovation
- Mentoring roles/ traditions
- Didactical perspectives in mentoring
- Ethics in mentoring
- Mentoring language/definition of concepts
- Mentoring student teachers/novice teachers
- Systematic reflection, models of reflection
- Action learning/research
- Communities of learning
- Organisation of Mentoring in school / preschool
- Mentoring in vocational education

Courses offered by the big universities seem to be more academically oriented with a stronger emphasis on theoretical aspects related to professional learning, reflection, and learning communities, for example. The research element is more salient, both in the course content, in the reading lists, and in the final assignment. Most university-based mentor courses have action research as the final examination form. In institutions which offer vocational teacher education and/or pre-school teacher education, aspects of mentoring in professional education stand central in the curricula. Common to all are areas such as communication and ethics in mentoring,

as well as discussions and literature about the mentor role, often in a national (Norwegian) perspective. Ulvik and Sunde (2013) found that becoming familiar with theory related to mentoring during mentor education was found useful by the participating teachers (students of mentoring).

SYNTHESIS OF FINDINGS IN THE VARIOUS STUDIES

The data collected from the varied studies described above indicate that there is an emerging understanding of mentors' PCK. In this section we will try to make a synthesis of the data.

We have grouped the findings from the various studies into three main dimensions of knowledge which might give us a framework of what represents the PCK of mentors. To be more specific the emerging dimensions are: structural/practical, theoretical, and inter-personal knowledge and skills. Each knowledge dimension is presented below:

1) Structural/Practical Knowledge

Mentoring takes place in a specific context, nationally, regionally and in a given school. Each of these systems functions within a structural/practical framework, such as national steering documents and regional structures of schools. The mentees, either they are student teachers or novice teachers, must be induced into the educational system at large, including regional applications of the national framework. In Norway, for example, there is a national framework for assessment, however each region has developed different ways in the application of the rules. The mentor should be well informed about both systems and guide the mentee through the often confusing territory of rules to follow. In addition to the broader frameworks, the individual school's culture and micro-politics (Kelchtermans & Ballet, 2002), are, perhaps, the most challenging aspects to become familiar with. Much of the school culture is tacit, and there is often a local language which newcomers have to become familiar with. Expressions such as 'the Friday meetings', 'coffee making-duty', and 'our special student' alongside rules about turn taking during breaks, mean little to the outsider who is in the process of becoming an insider. In addition each school has its own power struggle of which the new colleague is unaware, yet it might have a crucial impact on the way the mentee experiences and perceives the new work place. A trusted mentor who is well acquainted with the local context is likely to be valuable to the mentee searching for her own position and identity within the school.

2) Theoretical Knowledge

In addition to theoretical knowledge about the content of mentoring, knowledge about adult learning, and more specifically work-place learning, is central. Adult

learning differs from children learning, there are different types of social and motivational aspects that have to be taken into consideration, in addition to knowing how to use previous experiences the adult learner brings into the learning situation when supporting in understanding new experiences. Work-place learning differs from formal learning, and experiences, positive and negative, become the textbook that initiates the learning process. The mentor's task is to exploit the mentee's as well as own experiences, and make them relevant to the mentee's learning processes. Thus theoretical knowledge about motivation, feedback and self-efficacy are all knowledge areas the mentor will draw upon during mentoring. Knowing how to detect and exploit moments of contingency (Black & Wiliam, 2009) becomes a central aspect of the mentor's work in supporting the mentees to construct meaning from their experiences (Brodie & Irving, 2007).

3) Interpersonal Knowledge and Skills

In mentoring situations which is essentially situated in practice, theoretical knowledge by itself is not sufficient to create useful mentoring activities. The theoretical knowledge must be implemented in practicing mentoring, both in the language used in mentoring conversation as well as in understanding the mentee and her situation, showing empathy. The mentoring discourse is thoroughly discussed elsewhere in this book, and other aspects of interpersonal skills are discussed in this section.

There is often a delicate balance between pushing through critical constructive feedback and being open and empathetic to the mentee's challenging learning processes. The first step is, perhaps, to establish a relationship characterised by trust with the mentee. People are more open to accept and use feedback when the receiver of the feedback trusts the provider's professional competence as well as believing that the intention is to support development and learning (Hattie & Timperley, 2007). A central aspect of interpersonal skills is to be able to develop a mutual learning dialogue in the mentoring relationship. The understanding of dialogue here is the process of understanding each other, not necessarily to agree and develop a shared understanding, but to be able to draw on each other's perceptions, experiences and knowledge to develop personal as well as shared knowledge about the complexity of teaching, and the many roles and responsibilities a teacher holds (Besley & Peters, 2012).

TRANSLATION OF MENTORS PCK INTO MENTOR EDUCATION

In the final section of this chapter the translation of the emerging understanding of the PCK of mentoring into a mentor education program is presented.

The University of Bergen has offered mentor courses to mentors to our partner-schools for nearly a decade, and five years ago the course was developed into a

30 ECTSs course consisting of two phases running over two years. The course syllabus is under constant revision, as we use our experiences with the course in the ongoing work of improving the education. The syllabus represents the three knowledge areas which emerged from our studies and which have been presented above.

During the first year emphasis is put on the articulation of tacit knowledge, a skill which Smith (2005) found to be a major difference between teachers and teacher educators. As discussed in the previous chapter of this book, mentors act as school-based teacher educators and a central part of mentoring is to make the mentor's tacit knowledge accessible to the mentee. In the course ample time is given to sharing experiences and to practice mentoring each other, influenced by Wenger's (2006) work on communities of practice, especially for experienced professionals such as the mentor students. The course teachers' job is to present new information and to support the participants in developing a sense of ownership to the knowledge in the process of forming their own professional identity as mentors. In the first year topics such as theories and traditions of mentoring, research on the transition process from student to teacher, from education to the profession, mentoring in various school subjects, the ethics of mentoring, the mentor role, and interpersonal communication are discussed. At the completion of the first phase (15ECTS) the mentor students are asked to collect their various reflective assignments and mentor plans in an presentation portfolio which is assessed by an internal and an external (from another institution) examiner.

In the second phase of the course there is a stronger emphasis on mentoring novice teachers and collegial mentoring. The participants are first introduced to action research, as they are required to engage in action research of their own mentoring activity for the final assignment of the course. Other topics dealt with are research on novice teachers and their challenges, professional learning and critical reflection from a theoretical as well as practical perspective, and the role of mentoring in school development activities. In this second year the mentor students become familiar with international literature and the mentoring practice in other countries. Much time is spent on the participants' presentations of their action research projects, within which feedback and assessment in collegial situations is discussed. The final examination is an internal and external assessment of the candidate's action research project.

An explicit goal of the mentor education at our university is to educate mentors who are not only consumers of research on mentoring of NQTs, but also producers of research. Good practitioner research is an essential part in the work of continuously developing a knowledge base on mentoring, which is a central goal in our work. With this vision in mind, our next goal is to develop a full program at a master level in mentoring based on the emerging understanding of the PCK of mentors within the frame work of structural/practical, theoretical, and inter-personal knowledge and skills.

CONCLUSION

In this chapter we have shown that it is possible to claim an emerging understanding of the pedagogical content knowledge (PCK) (Shulman, 1987) of mentoring by referring to various local, national and international studies. Mentor students, experienced teachers, educated mentors, student teachers, as well as course curricula, have been used as resources in our ongoing work to understand 'How mentors, who really know about the complexity of teaching, teach it to student teachers, novice and experienced teachers' (Adaption from Berry, Loughran, & van Driel, 2008, p. 1274). At the current stage of our work, we argue that mentors' PCK is framed within three main areas, the structural/practical aspects of teaching, theoretical knowledge, and inter-personal knowledge and skills. The more specific content of the three main areas will, to a large extent, depend on the context in which mentoring takes place. The University of Bergen has developed a mentor education program of 30 ECTSs which reflects the Norwegian and the local context. The detailed content of the mentor education program is under constant revision as we are continuously in dialogue with the work and practice of international colleagues, our own research, national steering papers, and not least, with student teachers, teachers and mentors. A stronger focus on mentored practice of mentoring is one of the things we want to change in the future, as well as gaining more knowledge about and practice in group mentoring versus individual mentoring. The overall conclusion is, however, that mentors' PCK can be presented in general terms, such as the above framework, across contexts. The specifics, however, will always be context dependent, as good mentoring should, the same way as good teaching should, be adapted to the specific context.

REFERENCES

- Anderson, E. A., & Shannon, A. L. (1988). Toward a conceptualisation of mentoring. *Journal of Teacher Education*, 38–42.
- Barker, L., & Borko, H. (2011). Presence and the art of improvisational teaching. In K. Sawyer (Ed.), *Structure and improvisation in creative teaching* (pp. 279–298). New York, NY: Cambridge University Press.
- Berry, A., Loughran, J., & van Driel, J. H. (2008). Revisiting the roots of pedagogical content knowledge. *International Journal of Science Education*, 30(10), 1271–1279. doi:10.1080/09500690801998885
- Besley, T., & Peters, M. A. (2012). Introduction: Interculturalism, education and dialogue. In I. T. Besley & M. A. Peters (Eds.), *Interculturalism, education and dialogue* (pp. 1–25). New York, NY: Peter Lang.
- Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*, 21(1), 5–31.
- Brodie, P., & Irving, K. (2007). Assessment in work-based learning: Investigating a pedagogical approach to enhance student learning. *Assessment & Evaluation in Higher Education*, 32(1), 11–19.
- Brunstad, P. O. (2007). Faglig klokskap (Professional wisdom). *PACEM*, 10(2), 59–70.
- Brunstad, P. O. (2010). Mentoren som nomade (Mentor as nomad). In K. Smith & M. Ulvik (Eds.), *Veiledning av nye lærere- nasjonale og internasjonale perspektiver* (Mentoring newly qualified teachers- National and international perspectives) (pp. 191–201). Oslo: Universitetsforlaget.

K. SMITH & M. ULVIK

- Hansèn, S. E. (2008, December). *Rapport från den koordinerande programsensorn för lärarutbildningen vid Universitetet i Bergen* (Report from external evaluator of the Teacher Education Program at the University of Bergen). University of Bergen, Bergen, Norway.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81–112.
- Kelchtermans, G., & Ballet, K. (2002). The micropolitics of teacher induction. A narrative-biographical study on teacher socialization. *Teaching and Teacher Education*, 18, 105–120.
- Orland-Barak, L. (2010). *Learning-to-mentor-as-praxis*. New York, NY: Springer.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4–14.
- Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1–22.
- Smith, K. (2005). Teacher Educators' professional knowledge- How does it differ from teachers' professional knowledge? *Teaching and Teacher Education*, 21, 177–192.
- Smith, K. (2010). Mentorrollen – norske og internasjonale stemmer (Mentor role- Norwegian and International Voices). In K. Smith & M. Ulvik (Eds.), *Veiledning av nye lærere- nasjonale og internasjonale perspektiver* (Mentoring newly qualified teachers – National and international perspectives). Oslo: Universitetsforlaget.
- Smith, K., Krüger, K. R., & Sagvaag, I. (2013, March). Mentoring in Norway. Paper presented at the Nordic Educational Research Association (NERA) Conference in Reykjavik, Iceland.
- Smith, K., Ulvik, M., & Helleve, I. (2013). *Førstereisen – Lærdom hentet fra nye læreres fortellinger* (The first journey. Lessons learned from newly qualified teachers). Oslo: Gyldendal Akademisk.
- Smith, K., Hansèn, S.E., Skagen, K., Jaspfors, J., Helleve, I., & Danielsen A. G. (2012, December). *Mentorship and mentor education – Finnish and Norwegian perspectives*. Paper presented at the World Educational Research Association (WERA) conference, Sydney.
- Tillema, H., Smith, K., & Leshem, S. (2011). Dual roles – conflicting purposes: A comparative study on perceptions on assessment in mentoring relations during practicum. *European Journal of Teacher Education*, 34(2), 139–159.
- Ulvik, M., & Smith, K. (2011). What characterise a good practice situation in teacher education? *Education Inquiry*, 2(3), 517–536.
- Ulvik, M., & Sunde, E. (2013). The impact of mentor education: Does mentor education matter? *Professional Development in Education*, 39(5), 754–770.
- Wenger. (2006). *Communities of practice. Learning, meaning and identity* (14th printing). Cambridge, USA: Cambridge University Press.
- Zanting, A., Verloop, J. D., Vermunt, J. D., & van Driel, J. H. (1998). Explicating practical knowledge: An extension of mentor teachers' roles. *European Journal of Teacher Education*, 21(1), 11–28.

Kari Smith
Department of Education
University of Bergen, Norway

Marit Ulvik
Department of Education
University of Bergen, Norway