Chapter 9 Teaching About Teaching: Teacher Educators' and Student Teachers' Perspectives from Norway



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Abstract In this chapter we address the question of how to prepare student teachers for professionalism in teaching. We especially focus on higher education-based teacher educators and their role in promoting integration between theory and practice, which is frequently perceived as a challenge in teacher education (Korthagen F, J Educ Teach 36(4):407–423, 2010; Kvernbekk T, Informal Logic 32(3):288–305, 2012). The chapter draws on a study, in a Norwegian context, that investigated teacher educators' competence as seen from their own and student teachers' perspectives (Ulvik M, Smith K, Uniped 39(1):61–77, 2016). Competence is here understood as the knowledge and skills that teacher educators need to do their job.

9.1 Introduction

As a report from the OECD (2005) states, teachers matter! The importance of teachers and the quality of their work are things on which the public, teachers, researchers and policymakers share the same views. Good teachers are widely believed to have a positive effect on their students' learning and achievement, whereas bad teachers usually have the opposite effect. When students' achievements do not meet the expectations of educational stakeholders, teachers are held to blame – and so too is the teacher education system which has not produced 'good enough' teachers. One of the solutions for improving the school system therefore becomes to reform teacher education, often in technical ways, such as revising the curriculum, enhancing practical preparation for the practicum, lengthening programmes or making provision more academic and research based. However, the real issues to be discussed are as follows: what is a 'good teacher'? How can teacher education prepare for

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high-quality professional practice in teaching which enhances student learning? What does this require of teacher educators, and, in particular, what knowledge do they need to be able to educate 'good teachers'? There seems to be little agreement among stakeholders and practitioners on these issues.

In this chapter we will address a common criticism of teacher education, namely, the notorious gap between practice teaching (knowing how) and university coursework (knowing that) (Korthagen 2010; Wilson 2006). Acting professionally, teachers need to draw on knowledge from both fields (Smith and Ulvik 2010). They are constantly faced with new and unexpected situations and have to assess various solutions, prioritise and make their own decisions depending on the context in which they work. Independent decision-making, informed by practical and theoretical knowledge, as well as experience, is what makes teaching a profession. There is no right answer to the many not-planned-for situations that a teacher has to handle daily. It is therefore not sufficient to focus on predefined skills in teacher education; rather student teachers need to be supported to seek informed alternative solutions when they encounter challenges. As we see it, such professionalism in teaching requires the confidence to make independent decisions; it also means being able to explain and critically reflect on the decisions made. The main question raised in the current chapter is 'what is required of teacher educators to be able to promote that kind of professionalism in teacher education'? This question is discussed with reference to a Norwegian study. We focus here on higher education-based teacher educators, employed in teacher education at either universities or university colleges and teaching pedagogy (general didactics/educational theory) or subject didactics. This does not mean that we ignore the central role school-based teacher educators play in preparing a new generation of teachers.

In Norway there have traditionally been two different routes to become a teacher. University colleges have offered a four-year teacher education programme for primary and lower secondary schools (level 1–10, that is aged 6–16 years). Since 2010 this provision has been divided into two programmes, level 1-7 and 5-10. The universities have traditionally offered a 1-year postgraduate teacher education programme for secondary schools. Since 2004 they have also offered a five-year integrated teacher education programme that leads to a master's degree in a school subject (for teachers of levels 8–13, aged 13–19 years). This is still the main model, but the situation today is a little more complex, due to the fact that some university colleges have become universities. In addition, the new National Curriculums for schools and teacher education have been implemented with more similarity among the different programmes, but at the institutional level, they are kept totally separated. The emphases in the new teacher education programmes are on increased subject knowledge and teaching skills and the overall quality of teaching. There is also a greater emphasis on research. The programmes are expected by policy documents (see, e.g. Kunnskapsdepartementet 2013) to connect theory and practice by integrating coursework at the higher education institution with the students' fieldbased learning in schools and vice versa. In this way the two arenas for learning are viewed as equally important in the process of learning to become a teacher.

But, even if it is a prescribed aim to connect practice and theory, teacher education in Norway has been criticised for being fragmented and for not preparing student teachers for the challenges they encounter in schools. What happens on campus and in fieldwork in schools are often perceived as two different cultures and representing different understandings of the profession (NOKUT 2006; Finne et al. 2014). The Norwegian government's White Paper 11 (Kunnskapsdepartementet 2009) addresses such challenges in teacher education and argues that teacher education should reinforce the quality of teaching practice and the relationship between the different parts of the programme. In Norway these consist of four main components – pedagogy, discipline studies, subject didactics and practice. Furthermore, teacher education programmes are research-based and development-oriented. In taking these approaches, the programmes also contribute to school development and to research on teaching, teachers and the school system as a whole. Enhancing the quality of teacher education is one of the government's means to improve Norway's ranking on international tests, for example, the well-known Programme for International Student Assessment (PISA). To improve teacher education in Norway, a reform was implemented in 2010 for levels 1-10 and in 2014 for levels 8-13. Another new reform will be implemented by 2017 when a 5-year teacher education at master's level will be introduced for all teacher education programmes.

9.2 Background

9.2.1 Teacher Educators

The term 'teacher educator' is vague; in some countries (e.g. Japan), the term is new as all academics involved in educating teachers were previously defined only in relation to their subject discipline. In other countries (e.g. England), the term 'teacher trainer' is commonly used when referring to teacher educators. In Norway, when typing the Norwegian word for teacher educators, 'lærerutdanner', the spell checker would mark it as a mistake. The blurred definition and understanding of the name of the teacher educator 'profession' make it less valued, and there is certainly a need to clarify what the profession should be, expected to know and be able to do (European Commission 2013; Smith 2009).

Across Europe then there is no shared understanding of the role of teacher educators and the competences and qualifications needed for teaching about teaching, and there is little agreement about whether teacher educators should have a teaching qualification and school teaching experience or if they should hold a PhD before working in higher education (Lunenberg and Hamilton 2008).

Different understandings of teacher educators mirror differences in views about how to educate teachers. The literature (Harrison et al. 2006) differentiates between two main approaches: a training approach in which student teachers achieve explicit standards and a more learning-centred, broadly educative approach. The first view

emphasises measurable standards for teaching, teacher education becomes teacher training, and a good teacher is someone who masters certain technical skills (Stephens et al. 2004). The second view is a more educative model based on scholarship and disciplinary knowledge. A good teacher is viewed as a professional who makes independent decisions grounded in a high level of reflection. Norwegian teacher education might be placed in this category because of its emphasis on theory (ibid).

The background of teacher educators differs from one country to another. In countries like England and the Netherlands, teacher educators have often been competent school teachers (Murray et al. 2011; Koster et al. 2005). In teacher education they encounter demands about conducting research and may feel insecure when it comes to meeting academic expectations around research (Murray et al. 2011). In Finland, the USA and, increasingly, in Norway, the way to get a permanent position in teacher education is by having a doctorate (Elstad 2010; Tryggvason 2012), as it is research and publications that are recognised in universities. Other qualities, such as teaching qualifications and experience, often become of secondary importance.

Research clearly identifies that teacher educators' expertise is different from teachers' expertise (Bullough 2005; Smith 2005). The parties may be referred to as first and second order practitioners, following Murray (2002). The job of educating teachers also differs from other positions in higher education. By teaching about teaching, teacher educators model the pedagogical skills and values of the teaching profession; how they teach and the processes they initiate become part of the message (Loughran and Berry 2005). It is important then to align personal practice to the practice the teacher educator wants to encourage in their student teachers and to provide a meta-commentary by explaining underlying pedagogical and philosophical choices and linking those choices to relevant theory (Ruys et al. 2013). Implicit modelling is seldom understood by student teachers (ibid.; Lunenberg et al. 2007). Several studies, however, state that teacher educators do not connect their own practice to theoretical conceptions but rather to personal experience, implicit theories and common sense (Ruys et al. 2013). It can then be hard for student teachers to be aware of the relationships between theoretical perspectives and practice teaching.

In England studies have found that all teacher educators are recruited, in part, because of their school teaching experience and many continue to perceive part of their identity as 'once a teacher, always a teacher' (Murray et al. 2011), even after years working in universities. In contrast, many teacher educators in Norwegian universities have no experience as school teachers. This can be a challenge when teacher educators are employed according to academic criteria only and student teachers ask for practical ideas about how to master teaching roles (Elstad 2010).

A recent report in Norway found that student teachers value fieldwork higher than campus courses and criticise teacher educators' teaching competencies (Finne et al. 2014). As indicated above, student teachers do not see a clear connection between fieldwork and the teaching that takes place on campus. They suggest, among other things, that teacher educators' knowledge about what is going on in schools should be brought up to date. Basically, there seems to be a gap between student teachers' expectations and what teacher education offers (Lid 2013). Whilst

Norwegian student teachers are mainly concerned with how to teach, teacher educators are more likely to want to emphasise the reasoning and ethical and political considerations that underpin practice (Fosse and Hovdenak 2014).

Even though there has been a recent emphasis on making teacher education more relevant for the practice field, Norwegian teacher education still aims to develop research-based knowledge, and there is a pressure on schools to implement research-informed practice. The current policy, referred to earlier, to implement a five-year master's degree for all teacher education programmes means that teacher educators will have to be research competent at a doctoral level since master's programmes in Norway are research focused and to graduate students have to submit a research project. Inherently then, all student teachers need to be supervised in their research by a teacher educator with a degree higher than the level they study for. There is a heavy pressure, if not panic, about how to prepare teacher educators without doctorates for these not-too-distant requirements. Overall then, teacher educators are increasingly expected to adapt to the research culture of the university, whilst still maintaining a sense of proximity to the practice field (Elstad 2010).

9.2.2 Theory and Practice

Professions draw on knowledge from different fields. Kvernbekk (2012) claims that all professions have a theory-practice problem. In teacher education the relationship between the two is sometimes described as a 'gap' that needs to be overcome, and it is argued that practice and theory should be brought into alignment. However, the notion of such coherence in teacher education has also been problematised. Some researchers, for example, claim that practice and theory derive from different epistemologies and understandings; both should be part of a teacher's competence, and the two should challenge each other (Christensen et al. 2013; Heggen and Smeby 2012). Thus, whilst efforts to link practice and theory are necessary, the two elements do not have to appear as a harmonic unit. Kvernbekk (2012), for example, finds that some gap is useful because it leaves theory with a critical, independent role in relation to practice. She problematises the view that practice does not need theory and that theory is theoretical and practice is theory-free; rather she argues that practice is fundamentally theory-laden. Kvernbekk differentiates between what she calls 'weak' and 'strong' theory. Theory in a weak sense comes in the form of preconceptions, prior beliefs, prejudices and so on that are shaping and guiding personal practice theory. Strong theory should provide other ways of understanding practice, alternative explanations and critical views. In order to criticise practice, strong theory should keep a distance from practice (ibid.). Such differences might also create new connections (Christensen et al. 2013).

Biesta et al. (2015) support the idea that teachers need access to the wider perspectives found in theory in order to evaluate their teaching. An important finding in this study from Scotland was 'the absence of a robust professional discourse about teaching and education more generally' (p.638). Rather teachers' beliefs were ori-

ented towards the here-and-now and influenced by current and recent policy. These researchers argue that teacher education needs to address the wider purposes and meaning of schooling, not be only geared towards the instrumental side of teaching.

9.3 The Study

9.3.1 Methods

The study reported here has 'grown on' from a larger project in England (see Murray et al. 2011). This particular study in Norway investigated teacher educators' competence as seen from both student teachers' and teacher educators' perspectives. The data was gathered through interviews with 20 teacher educators from 5 higher education institutions, a questionnaire, which was sent to 120 student teachers and 4 focus group interviews with 4 cohorts of the students. The majority of informants came from the universities' teacher education programmes for levels 8-13, which means they were studying either for a 5-year integrated master programme or a 1-year postgraduate programme. The informants were asked, among other things, how they defined teacher educators, what experiences they thought were crucial for them and which skills and attributes they valued in them. The student questionnaire consisted of a series of closed questions, using Likert scales (1–5), as well as opportunities for free-text responses to each question. The interviews with the teacher educators, as well as the focus groups with students, were based on a semi-structured interview guide, following up the questions in the questionnaire. The research instruments were translated from the English originals and adapted to the Norwegian context.

We followed strict ethical guidelines when collecting and analysing the data. The informants gave informed consent to participate and were told that their responses would be handled confidentially. Furthermore, the project was approved by the Norwegian Social Science Data Services, which in Norway is mandatory to get permission to gather personal data. Being teacher educators ourselves, we chose not to include our own students in the study. Furthermore, we interviewed teacher educators we could meet in person – some we knew, others we did not. In order to get multiple perspectives, we strived for a maximal variation sampling.

The quantitative data collected from students were analysed using SPSS; the qualitative data were analysed using an interpretative approach (Hatch 2002). For the purpose of this chapter, we address the main findings in the project that are relevant to the practice/theory perspective (for further details see Ulvik and Smith 2016).

9.3.2 Perspectives from the Teacher Educators

The vast majority of the teacher educators in our sample held a doctorate; about half of them did not have a teaching certificate and school experiences. Some saw themselves first and foremost as researchers, others as teachers and as teacher *educators*, not as *trainers*. One of them explained: 'Teacher trainer is a concept I know of, but I do not like it because I do not train people. It sounds a little like training dogs'. Those with both school experience and a doctorate seemed to feel confident in their jobs, and they were proud of working in teacher education. Others felt that being a teacher educator at the university had low status. Regardless of background, all felt that their level of competence was relevant to their work. 'I think it's important that students meet people with different kind of experiences', one of them said.

Whilst some teacher educators found that experiences of teaching were crucial and pointed at the importance of tacit knowledge developed through practice, others underlined that experience alone is not enough. Reflection, it was stated, needs input from more than personal experiences in order to achieve greater depth. But school experiences were seen as offering teacher educators legitimacy with student teachers and the practice field. As a consequence, some without such experience felt that their competence did not live up to the expectations of others, even if they felt qualified themselves. One such teacher educator said:

I've thought a lot about it, but I've to say that what's important is being close to the practice field. You cannot expect people both to have a full time job at the university and to have recent school experiences.

The quote expresses the tension in covering demands from two fields. Even if teacher educators found school experiences beneficial, many pointed out that lack of direct teaching experience might be compensated for by knowing what goes on in schools. One suggestion that some teacher educators made was that teaching experience should be considered as part of the competence possessed across a group of teacher educators rather than necessarily being seen as only an individual attribute.

Research was recognised as very important. It created a wider theoretical understanding which underpinned different practices and made teacher educators able to support student teachers in their research projects. One explained:

What is valuable is research that can offer student teachers categories and ideas and tools they need to think about and value in their own practice. I do not believe in research that offers good recipes and best practice. I believe in research that generates theory and concepts that help us to think.

However, teacher educators had several examples of colleagues who were not researchers and who still were good teacher educators. What was seen as important here was for the educator to understand research and be able to use it. Overall, to be connected to research in some way was regarded as essential for all teacher educators. And from the teacher educators' perspectives, it was not enough for students to have 'technical survival kits' in preparing for professionalism in teaching. Student

teachers were seen as needing theoretical knowledge to appreciate the breadth of teaching roles and be able to reflect on their practice.

9.3.3 Perspectives from the Student Teachers

When looking at the data collected from student teachers, we found a general awareness that being a teacher educator implied engagement in both teaching and research. In general, the student teachers wanted to downgrade the theoretical perspectives in their education and upgrade the practical elements. For example, they wanted to learn how to manage the classroom more than to gain theoretical or background knowledge about classroom management. They understood that research is important at the university but asked particularly for access to classroom-relevant research. Few reported positive experiences with research they saw as relevant or informative. Some students also showed a degree of scepticism about *any* research, finding it more relevant for experienced teachers. Whilst some said that they were not introduced to much research during their education, others claimed that teacher educators sometimes promoted their own research even if it was not relevant.

The table below shows how important student teachers find experiences from school teaching and from research on a scale from 1–5 (Fig. 9.1):

The data here shows that school experience is ranked far above research experience as an attribute for teacher educators. But, whilst the data from the question-naire showed that student teachers want teacher educators with personal school teaching experiences, the focus groups provided further nuances on this general picture. What was underlined there was that the students thought that at least one teacher educator in the staff ought to have school experiences. Furthermore, some students agreed that lack of school experience might be compensated for by teacher

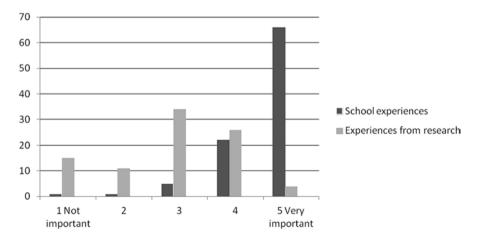


Fig. 9.1 Importance of school teaching and research. (Translated from Ulvik and Smith 2016)

educators' engagement in relevant research. One of the student teachers underlined the meaning of theoretical knowledge by saying that one always has to build teaching *on* something. Another appreciated research-based knowledge but found that the results of research are sometimes contradicted in schools. Overall, though, the various views expressed a perceived lack of continuity and coherence between the practice field and the university.

The students expected teacher educators to make visible the relevance of theory to practice or to illustrate theory with practical examples. One of the student teachers said that postgraduate students know much theory but they need help with practical skills and knowing how to link practice and theory. Student teachers also expected to find exemplary practice demonstrated in teacher education. Sometimes they reported experiencing a discrepancy between what teacher educators said and what they did, that is, from student perspectives, the educators did not always practice what they preached. However, student teachers seemed to understand that it was difficult for teacher educators to meet all their demands. The personal attributes of teacher educators played a crucial role in their work, and according to some students, the personality of the teacher educator might compensate for limited school experience. Some student teachers also mentioned teacher educators who had proximity to the practice field, were good teachers in higher education and were good at analysing practice teaching, even though they lacked personal teaching experience.

In the questionnaire the student teachers (n = 120) were also asked about how important it is for teacher educators to provide practical tips and to promote critical thinking. As Fig. 9.2 shows, here student teachers expected teacher educators to do both.

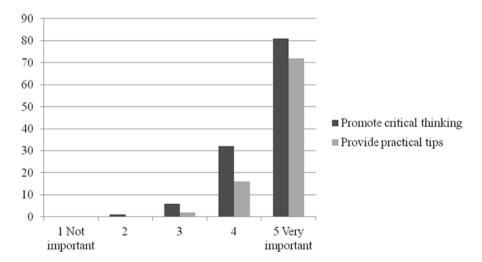


Fig. 9.2 Importance of practical tips and promoting critical thinking. (Translated from Ulvik and Smith 2016)

9.4 Discussion

In preparing students to become professional teachers who can make independent decisions and explain and critically reflect on the decisions they make, teacher educators need to connect practice and theory and to develop strong interactions between the two. It is the integration of practical skills (techne) and abstract understanding (episteme) that together with experience creates practical wisdom (pronesis) (Eisner 2002; Korthagen et al. 2006). Practical wisdom is crucial when dealing with the unexpected, and in teaching one will never stop asking: 'What am I going to do next'? Teachers need an abstract understanding of their experience that gives it 'transfer' value, from situation to situation. Relating their understanding to theory can expand the transfer value of their experiences, accompanied by an awareness to constantly search for informed alternatives; through an increased conceptual knowledge, the understanding of the situation can develop (Smith and Ulvik 2010). Reducing teachers' professional knowledge and wisdom to a checklist of behaviours reflecting imposed standards will not lead to development (Rodgers and Raider-Roth 2006). Teacher education is today seen as the start of a career-long education, with the drive and motivation for professional learning and development starting in pre-service programmes.

Whilst the teacher educators in our study experienced tensions between teaching and research, the student teachers, as in other studies (see, e.g. Murray et al., in this volume), wanted pre-service education to help them manage the classroom and therefore prioritised the importance of teacher educators having practical experiences (Fosse and Hovdenak 2014). The student teachers seemed to perceive the practice field as something they were supposed to master, more than an arena for learning where they could engage in critical reflections. Their responses to the questionnaire indicate that they were oriented towards the here and now and saw teaching in the main as a practical job that had little relationship to theoretical knowledge. This picture was, however, not as simple as it seemed. The student teachers also expected teacher educators to engage in dialogues about teaching and to promote critical thinking. Yet it may be argued that these are not meaningful activities if there are perceived there were fixed answers to every teaching situation.

Biesta et al. (2015) suggest that teacher education should present different educational discourses to provide students with a superior view on education. The teacher educators in our study had similar perspectives. The extent to which student teachers can and will appreciate a meta-perspective in a phase of teacher education where they are struggling to develop teaching skills, might be questioned. However, we regard a meta-perspective on education as a vital component in pre-service teacher education to be followed up in further professional development.

The attributes identified by teacher educators and student teachers to different kinds of knowledge and experiences depend on their perceptions of the teaching profession and on the interactions they perceive between theory and practice. As in other studies, cited above, we found discrepancies between student teachers' and teacher educators' perceptions. Both parties regarded school experiences as

important for teacher educators. However, in the study reported here, school experiences could, to a certain extent, be compensated for by other experiences, attributes and skills. What seemed to be important is that teacher educators were familiar with the school as an arena of learning for student teachers. University-based teacher educators said they experienced a closer relationship to the practice field than student teachers thought they had; this finding is supported by a recent Norwegian report (Finne et al. 2014). Criticisms were also raised against teacher educators with outdated school experiences as students stated that schools have changed and the pupils of today are different from previous generations. The student teachers clearly stated that a few visits by teacher educators during the practicum were not enough to establish a close relationship to the practice field; rather university-based teacher educators need to spend more sustained time in schools.

Most Norwegian teacher educators regarded research as a very important part of their job. This positive emphasis is different from the defensive stance of research engagement as 'keeping the wolf from the door', as found in Ellis et al.'s 2014 study in England (p 39) and the often ambiguous attitudes found in Murray et al.'s work (2011). However, even in Norway, research often seems to play a vague role in teacher education, and the greatest difference between the teacher educators' and the student teachers' responses was related to the usefulness of research. The findings suggest that the students had limited experiences with what they saw as relevant research, whilst teacher educators saw a great deal of research as relevant and beneficial for students.

Action research or enquiry-based learning during teacher education are both ways to create a closer connection between practice and theory and to make student teachers see themselves as actors, changing their perceptions of the immediate and wider practice field (Smith and Sela 2005; Ulvik 2014). The current study, supported by other studies, suggests that teacher educators do not make it sufficiently clear to the student teachers how research and theoretical perspectives might contribute to developing a critical view of the practice field (Fosse and Hovdenak 2014; Lid 2013). However, this might change as we in Norway see an increasing emphasis on research and development activities in schools involving both teacher educators and teachers.

Teacher education builds on different fields of knowledge, and it is, perhaps, unrealistic to expect every individual teacher educator to cover all fields in the profession. One solution is therefore to regard teacher educators as a team in which individual types of expertise complete each other. There would then be a need for extensive cooperation between the different stakeholders in teacher education, real partnerships which go beyond rhetoric (Smith 2015). To utilise different competences like this does not seem to be happening in Norway today where teacher education is criticised for being even more fragmented and less coherent than some years back (Finne et al. 2014; Lid 2013).

The importance of teacher educators acting as role models is underlined in the research literature (EU 2013; Loughran and Berry 2005). It is rightly expected that teaching in teacher education should be of high quality. Teacher educators' teaching provides them with the opportunity to model how practice and theory are connected.

The student teachers in this study did not experience that teacher educators always practised what they preached, yet connecting practice and theory is usually seen as a competence which teacher educators should have, as part of their pedagogy (Loughran 2006).

If teacher educators are expected to act as role models, their high-level teaching skills should be part of recruitment criteria, and all teacher educators need to be conscious of this responsibility (Ruys et al. 2013). This implies critical reflection and theorising of their own teaching, something that other research also shows is not always the case (Lunenberg et al. 2007). In Norway, two recent reports (Finne et al. 2014) show that student teachers are dissatisfied with teacher educators' teaching competence. We suggest developing communities of practice as a recommended way to develop teacher educators' teaching practice and their ability to theorise personal pedagogies.

Whilst the student teachers emphasised teacher educators' teaching skills and personal attributes, these qualifications play a minor role in recruitment criteria where academic qualifications are prioritised. The lack of expertise teacher educators have when starting working in higher education can, however, be developed through continuous professional learning. This is also important from the student teachers' perspectives. The aforementioned European Commission report (2013) suggests different ways for teacher educators to develop. One is good induction arrangements for teacher educators; another is to establish network among teacher educators. The Norwegian National Research School in Teacher Education (NAFOL) is also mentioned as an example of how to provide practising teacher educators with clear research identities and skills through doctoral study (EC 2013).

It is often said that teacher educators have to live with the tensions between theory and practice, but perhaps an alternative is to understand the role of teacher educator as a unique profession in which being an active researcher and a model teacher are both integral parts of the job.

9.5 Conclusion

To be a teacher educator and to contribute to educate professional teachers are different from being a school teacher or a discipline lecturer in a higher education institution. It is not enough to be a good teacher and to know the school or the discipline. Teacher educators should be research literate and able to talk about their own teaching drawing on relevant theoretical concepts. Neither a doctorate nor school teaching experience in itself is then sufficient for teacher educators. Furthermore, student teachers also want teacher educators who are skilful teachers with relevant personal attributes; they perceive that these things impact on the extent to which they as learners can benefit from the experiences and research of teacher educators.

Student teachers need to see the classroom and teaching in broader perspectives and to be able to evaluate current practice and act as independent, professional teachers. Pre-service teacher education provides a foundation for later professional learning, and it is therefore our responsibility as teacher educators to offer an education that addresses all these needs and where practice and theory interact and challenge and develop each other. We suggest two ways to make this happen and to make research-based and theoretical perspectives relevant. One is to provide student teachers with insights into and active engagement in practice-oriented research. Student teachers should be encouraged to develop an inquiry-based approach to teaching and to be able to conduct their own research projects to improve their own and their colleagues' practice. By being research literate, they will be able to access, interpret and adapt research findings to their own settings (BERA 2014). Research literacy can also promote school improvement. Second, teacher educators should be able to talk about their own teaching using theoretical concepts and modelling how practice and theory are related.

To make teacher education a meeting place for practice and theory, we argue that teacher educators need to feel confident, explaining practice through theory and exemplifying theory in practice. For this to happen, it is essential they are close to the practice field and are research literate as consumers and producers of research. Furthermore, they need to practice what they preach and to expose student teachers to inquiry-oriented practice. Finally, it might be difficult for every teacher educator to be the multifaceted teacher educator (Smith 2011), so as suggested above, we recommend that teacher educators form communities of practice with complementary competences so that they can work and learn together. The optimal context, as we see it, is that such communities of practice include school-based as well as university-based teacher educators.

References

BERA, British Educational Research Association. (2014). *The role of research in teacher education: Reviewing the evidence*. Interim report of the BERA-RSA inquiry.

Biesta, G., Priestley, M., & Robinson, S. (2015). The role of beliefs in teacher agency. *Teachers and Teaching: Theory and Practice*, 21(6), 624–640.

Bullough, R. V. (2005). Being and becoming a mentor: school-based teacher educators and teacher educator identity. *Teaching and Teacher Education*, 21(2), 143–155.

Christensen, H., Eritsland, A. G., & Havnes, A. (2013). Bru over gapet? En studie av grunnskolelærerstudenters erfaringer i utdanningens to læringsarenaer. In A. B. Reinertsen, B. Groven, A. Knutas, & A. Holm (Eds.), *FoU i praksis 2013 conference proceedings* (pp. 36–44). Trondheim: Akademika forlag.

Eisner, E. (2002). From episteme to phronesis to artistry in the study and improvement of teaching. *Teaching and Teacher Education*, 18, 375–385.

Ellis, V., McNicholl, J., Blake, A., & McNally, J. (2014). Academic work and proletarianisation: A study of higher education-based teacher educators. *Teaching and Teacher Education*, 40(1), 33–43.

Elstad, E. (2010). University-based teacher education in the field of tension between the academic world and practical experience in school: A Norwegian case. *European Journal of Teacher Education*, 33(4), 361–374.

European Commission. (2013). Supporting Teacher Educators for better learning outcomes. Brussels: European Commission.

- Finne, H., Mordal, S., & Stene, T. M. (2014). *Oppfatninger av studiekvalitet i lærerutdanningene* 2013. SINTEF-rapport, Trondheim.
- Fosse, B. O., & Hovdenak, S. S. (2014). Lærerutdanning og lærerprofesjonalitet i spenningsfeltet mellom ulike kunnskapsformer. *Norsk Pedagogisk Tidsskrift*, 98(2), 66–79.
- Harrison, J., Dymoke, S., & Pell, T. (2006). Mentoring beginning teachers in secondary schools: An analysis of practice. *Teaching and Teacher Education*, 22(8), 1055–1067.
- Hatch, A. (2002). Doing qualitative research in education settings. New York: State University of New York Press.
- Heggen, K., & Smeby, J.-C. (2012). Gir mest mulig samanheng også den beste profesjonsutdanninga? *Norsk Pedagogisk Tidsskrift*, 96(1), 4–14.
- Korthagen, F. (2010). How teacher education can make a difference. *Journal of Education for Teaching*, 36(4), 407–423.
- Korthagen, F., Loughran, J., & Russell, T. (2006). Developing fundamental principles for teacher education programs and practices. *Teaching and Teacher Education*, 22, 1020–1041.
- Koster, B., Brekelmans, M., Korthagen, F., & Wubbels, T. (2005). Quality requirements for teacher educators. *Teaching and Teacher Education*, 21(2), 157–176.
- Kunnskapsdepartementet [Norwegian Ministry of Education and Knowledge]. (2009). *Læreren, Rollen og utdanningen, Stortingsmelding 11 (2008–2009)*. Oslo: Kunnskapsdepartementet.
- Kunnskapsdepartementet [Norwegian Ministry of Education and Knowledge]. (2013). Forskrift om rammeplan for lektorutdanning for trinn 8–13. Oslo: Statens Forvaltningstjeneste.
- Kvernbekk, T. (2012). Argumentation in theory and practice: Gap or equilibrium? *Informal Logic*, 32(3), 288–305.
- Lid, S. E. (2013). PPUs relevans for undervisning i skolen. En kartlegging av studenters og nyutdannede læreres oppfatninger. NOKUT-rapport 2013-2
- Loughran, J. (2006). Developing a pedagogy of teacher education. New York: Routledge.
- Loughran, J., & Berry, A. (2005). Modelling by Teacher Educators. *Teaching and Teacher Education*, 21(2), 193–203.
- Lunenberg, M., & Hamilton, M. L. (2008). Threading a golden chain: An attempt to find our identities as teacher educators. *Teacher Education Quarterly, Winter*, 185–205.
- Lunenberg, M., Korthagen, F., & Swennen, A. (2007). The teacher educator as a role model. *Teaching and Teacher Education*, 23(5), 586–601.
- Murray J (2002). Between the chalkface and the ivory towers?: A study of the professionalism of teacher educators working on primary initial teacher education courses in the English university sector. PhD thesis. Institute of Education, University of London.
- Murray, J., Czerniawski, G., & Barber, P. (2011). Teacher educators' identities and work in England at the beginning of the second decade of the twenty-first century. *Journal of education for teaching*, 37(3), 261–277.
- NOKUT. (2006). Evaluering av allmennlærerutdanningen i Norge 2006. Oslo: NOKUT.
- OECD. (2005). Teachers matter: Attracting, developing and retaining effective teachers. Paris: OECD.
- Rodgers, C. R., & Raider-Roth, M. B. (2006). Presence in teaching. *Teachers and Teaching: Theory and Practice*, 12(3), 265–287.
- Ruys, I., Defruyt, S., Rots, I., & Aelterman, A. (2013). Differentiated instruction in teacher education: A case study of congruent teaching. *Teachers and Teaching: Theory and Practice*, 19(1), 93–107.
- Smith, K. (2005). Teacher educators' expertise: What do novice teachers and teacher educators say? *Teaching and Teacher Education*, 21(2), 177–192.
- Smith, K. (2009). Lærerutdanning i et internasjonalt perspektiv. In T. Bergem & S. Helgesen (Eds.), Soria Moria- neste. Perspektiver på skoleutvikling (pp. 207–230). Kristiansand: Høyskoleforlaget.

- Smith, K. (2011). The multi-faceted teacher educator A Norwegian perspective. *Journal of Education for Teaching*, 37(3), 337–349.
- Smith, K. (2015, August 26). *Partnerships in Teacher Education-Empty Rhetoric?* Keynote presented at the Association for Teacher Education in Europe (ATEE) conference, Glasgow University, Glasgow.
- Smith, K., & Sela, O. (2005). Action Research as a bridge between pre-service teacher education and in-service professional development. The European Journal of Teacher Education, 28(3), 293–310
- Smith, K., & Ulvik, M. (2010). *Veiledning av nye lærere. Nasjonale og internasjonale perspektiver.* Oslo: Universitetsforlaget.
- Stephens, P., Tønnessen, F. E., & Kyriacou, C. (2004). Teacher training and teacher education in England and Norway: a comparative study of policy goals. *Comparative Education*, 40(1), 109–130.
- Tryggvason, M.-T. (2012). Perceptions of identity among Finnish university-based subject teacher educators. *European Journal of Teacher Education*, 35(3), 289–303.
- Ulvik, M. (2014). Student-teachers doing action research in their practicum: why and how? Educational Action Research, 22(4), 518–533.
- Ulvik, M., & Smith, K. (2016). Å undervise om å undervise. Lærerutdanneres kompetanse sett fra deres eget og fra lærerstudenters perspektiv. *Uniped*, 39(1), 61–77.
- Wilson, E. K. (2006). The impact of an alternative model of student teacher supervision: Views of the participants. *Teacher and Teacher Education*, 22(1), 22–31.