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talks in Australia, New Zealand, China, Dubai, Korea, Singapore, Africa, USA, South America, Europe, Israel and in her own country, Norway. Kari is a founding member of the International Forum for Teacher Educator Development (InFoTED). In this article she elaborates on the understanding of the concept 'research-based' teacher education, arguing that developing teacher educators' research competence is a neglected challenge, as also is the need for protected time for teacher educators to engage in research.

The role of research in teacher education

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ABSTRACT

The current paper will briefly elaborate on the understanding of the concept 'research-based' teacher education and discuss what type of research teacher education and teacher educators can chiefly benefit from. I argue that developing teacher educators' research competence is a neglected challenge and so is the need for protected time for teacher educators to engage in research.

KEYWORDS

RESEARCH-BASED TEACHER
EDUCATION
TEACHER EDUCATORS
NORWEGIAN TEACHER EDUCATION
PRACTICE-ORIENTED RESEARCH

INTRODUCTION

In Norway, as in many other countries, there is political pressure to make teacher education more research-based under the assumption that it is a means to improve teacher education. A 2014 governmental document, 'Lærerløftet' ('Lifting the teachers' – author's translation), reads:

As with any other higher education, teacher education shall be research-based. The content of teacher education shall be based on up-to-date knowledge. Research-based teaching also means that the education is characterised by scientific methods and oriented towards new ways of thinking and developing the practice field. (Norwegian Ministry of

Education and Knowledge 2014: 44) (author's translation)

Moreover, for teacher educators employed in higher education, research and publication is a main criterion for promotion and academic acknowledgement (Korthagen et al. 2005). Expertise in teaching is not enough to pursue an academic career. Cochran-Smith (2005) claims that all teacher educators have a responsibility to engage in research, which is seen as complementary to teaching. Many teacher educators have, however, come into teacher education with a background as successful teachers and acting as practice-teachers or mentors for student teachers. When starting to work in higher education teacher education they experience a

role conflict because inherent in their new role they are expected to engage in and produce research, of which they often have little or no experience (Murray and Male 2005; Smith 2011).

Currently there are also efforts to engage student teachers in research (Smith & Sela, 2005; Ulvik 2014), and, in emulation of Finland, political decisions have been made to place all teacher education at a graduate level. In Norway this will be the case for all teacher education programmes from 2017 (Norwegian Ministry of Education and Knowledge, press announcement, 2014). Following the Finnish example this implies that all Norwegian teacher education students will be required to write a research-based dissertation, which raises a serious issue of teacher

educators' competence to supervise a research-based master's thesis. In light of the above it seems that research plays a central role in teacher education.

RESEARCH-BASED TEACHER EDUCATION

When policy-makers and teacher educators use the term 'research-based' teacher education, I am not quite sure that they share the same understanding of the concept. I am certainly not in a position to say what others mean when talking about the need for a research-based teacher education, so various interpretations of the concept will be presented here. The first question is whether teacher education and the professionals working in teacher education should be consumers or producers of research. Teacher education in many countries, including Norway, is situated in higher education, and as such both teacher educators and students are expected to read research in the acquisition of required knowledge as well as skills. Reading lists are presented to the students at the beginning of each course or module, and teacher educators are likely to suggest research publications they themselves, as individuals or as teams, have found useful and explanatory in developing their own knowledge and understanding. The students are expected to read the items on the list and to refer to them in their own writing or in written/oral exams. They have to document that they have become familiar with the knowledge their teacher educators find relevant. Students and teacher educators in this case are consumers of research, which is, in most academic settings, a built-in role of actors within the academy.

However, a research-based teacher education is, as I see it, more than merely using the research of others in the teaching and learning processes, there are also expectations that teacher educators and students become producers of research. As research-based publications have become a decisive criterion of academic survival and promotion, teacher educators themselves are required to engage in

research, and are pressurised to become producers of research, which is 'the rule of the game'. Krokfors et al. (2011) found that Finnish teacher educators perceived themselves as consumers as well as producers of research, and their findings align with Cochran-Smith's (2005) claim that university teachers, including teacher educators, are both teachers and researchers. However, the Finnish researchers also concluded that a major aim of teacher education was to support students' understanding and use of research during their education and later as teachers, and, not least, to empower students to conduct research during their studies and for their master's thesis so they would be able to integrate research into their own teaching practice, or 'to produce pedagogically thinking teachers' (Krokfors et al. 2011: 11). Neary & Winn (2009) link the issue of students as producers of research to the discussion of students' being perceived as consumers of the services and products of higher education; however, they also refer to a number of studies in their support of the pedagogical value of actively engaging students in research (see Neary & Winn 2009: 198–9).

The understanding of a research-based teacher education proposed in this paper is in strong agreement with the way Krokfors et al. (2011) describe Finnish teacher education: (1) the programme is structured according to systematic analysis of education; (2) all teaching is based on research; (3) activities are organised in such a way that students can practise argumentation, decision-making and justification when inquiring about and solving pedagogical problems; and (4) the students learn formal research skills during their studies' (Krokfors et al. 2011: 3).

WHAT KIND OF RESEARCH?

Research is a broad and complex concept, and a major question concerns the purpose of research and its value in contributing to the development

of new knowledge. Regarding teacher education, I would add, however, the value of research for educational practice, including changing practice at an individual, local and at a more general level. Research in teacher education should therefore be mainly (I do not say only) practice-oriented research. Practice-oriented is not the same as practice-based. The latter can be perceived as meaning that all research is based in practice. Practice-oriented research, on the other hand, is research that is relevant to the practice field, whether the practice is situated in school or in higher education institutions. Practice-oriented research is research that aims at supporting decisions or at developing new knowledge that contributes to solving a practical problem (Bleijenbergh et al. 2011). In practice-oriented research the researchers are often, though not always, the practitioners themselves; either they are teacher educators, teachers in school or students of teaching, and there are close links between practice-oriented and practitioner research. Common characteristics of practitioner research are, according to Cochran-Smith & Lytle (2009: 39), that the practitioner is the researcher and it is assumed that there are close links between knowledge, knowers and knowing. The contexts for study are professional practice which frames communities of practice and collaboration, and as such the boundaries between inquiry and practice are sometimes blurred. Practitioner research differs from positivistic research in that it has to develop new conceptions of validity and generalisability, but the rigour related to systematic data collection and analysis cannot be questioned. Finally, according to Cochran-Smith & Lytle (2009), practitioner research needs to be published beyond the local contexts and become subject to public and academic critique.

Research approaches often used in practice-oriented research are self-studies and action research; however, it is not possible within the scope of the current

paper to develop this further. Readers are recommended to look at the work of Borko et al. (2007), Loughran et al. (2004), McNiff et al. (2003) and Zeichner (2007), among others.

RESEARCH COMPETENCE AND RESEARCH FACILITIES

As previously discussed, many teacher educators come into higher education with a background in school teaching, and their first-order expertise (Murray and Male 2005) will therefore be teaching. Their research competence is not always rich, and for many it is limited to methodology courses and research in relation to their master's thesis if they have written a research-based master's dissertation. Research expertise for this group of teacher educators will be a second-order expertise (Murray and Male 2005), which is, in many contexts, the kind of expertise that counts when pursuing an academic career. Having said this, however, in some contexts, especially in university-based teacher education, including in Norway, the majority of teacher educators have a disciplinary doctorate, and research is their first-order expertise, whereas they might experience more frustration with the teaching component of their job (Smith 2011). Yet they are not always experienced in practice-oriented research. It is often emphasised that research competence is a built-in component of a teacher educator's job responsibility; however, there is less discussion around how teacher educators develop research competence, and how they are empowered to develop it within their students. Research is a requirement, yet teacher educators are not always supported in developing such a competence. Personally I believe it is the responsibility of leaders of teacher education at the institutional level to ensure that all teacher educators become involved with research communities from the very beginning. A prerequisite for such communities is that they are characterised by being supportive and

inclusive, in which less experienced researchers are acknowledged for their teaching expertise which can be useful in conducting practice-oriented research. Less experienced researchers work with more experienced colleagues and are invited to participate in discussions related to a research project, and given responsibilities such as researching relevant literature, collecting data and becoming involved with the analysis of data, and they are invited to co-present at conferences and act as co-authors of articles.

It is essential that leaders and experienced researchers recognise the need for colleagues to develop as researchers, and it cannot be expected that from day one they will initiate and conduct research just because they have been given a job in teacher education. I would strongly argue that, especially in teacher education, which does not have a long and academically respected research reputation, changes will be difficult unless leaders and senior researchers invest in long-term change processes of developing collective research competence within the staff. Another argument in favour of empowering teacher educators in research is the increasing pressure to educate research-competent teachers at a graduate level. A major condition for this to happen is that teacher educators themselves are engaged in research. Research competence becomes part of teacher educators' professional profile.

If research is a required component of teacher educators' work, then research must also be addressed in terms of research facilities, and, in addition to building communities of research in the department/faculty, time and resources are fundamental conditions for conducting research. As long as researching teacher educators are expected to engage in research on top of full-time teaching requirements, it will be difficult to create a research-based teacher education. Conducting research is time-consuming, and the demand

for research has to be highly correlated with the time and resources allotted to it, especially for new researchers who are also going through a process of learning the skill. The main responsibility for providing resources for research in teacher education lies with policy-makers and their decisions, and there are noticeable differences between England and Norway in this regard. In England the literature speaks of decreasing resources for research due to the lack of importance policy-makers attach to teacher education research (eg Menter 2013), whereas in Norway political priorities have provided funding for numerous research and development projects, as well as the establishment of a Norwegian National Research School in Teacher Education (NAFOL) (Østern & Smith 2013). The main goal of both initiatives is to develop, in a long-term perspective, a research-based teacher education to improve Norwegian education at all levels.

CONCLUSIONS

The claim made in this paper is that teacher education would benefit from being research-based, and that actors in teacher education, teacher educators and students of teaching act as consumers as well as producers of research. The role of research in teacher education is emphasised in the report on teacher education by the European Commission in 2013:

Both practice-based and theory-focused research can contribute to a deeper understanding of education and of educating teachers. However, in universities, practice-based research tends to be considered of inferior value, if compared with more traditional types of research, such as theoretical, subject-specific studies. (European Commission 2013: 12–13)

All research is useful for academic education; however, practice-oriented research, which is useful to the practice field and can lead to changes in schools

and teacher education, is of great relevance to the teacher education community, school teachers and leaders, and policy-makers. Becoming a researcher is mainly a hands-on learning process, and there ought to be opportunities for all teacher educators to engage in supported development processes as researchers. A strong linkage between the demand for teacher educators, as employees in higher education, to produce and publish research, and sufficient supportive initiatives at a national as well as institutional level has to be made and become visible to all education stakeholders. This does not seem to be the case in a number of European countries according to the report from the European Commission:

Teacher educators are crucial players for maintaining – and improving – the high quality of the teaching workforce. They can have a significant impact upon the quality of teaching and learning in our schools. Yet they are often neglected in policy-making, meaning that some Member States do not always benefit fully from the knowledge and experience of this key profession. It also means that teacher educators do not always get the support and challenge they need, for example in terms of their education and professional development. (European Commission 2013: 4).

Teacher education at a graduate level aiming at educating teachers who can systematically research their own practice requires teacher educators who themselves are research-literate as users and as consumers of research. The infrastructure for operationalising the lofty visions and aims of politicians cannot be ignored, and long-term perspectives, going beyond the period between political elections, are required. Some countries, including my own, Norway, seem to have made wise choices and investments in investing in education with a long-term perspective. The national research school in teacher education, NAFOL (<http://nafol.net/english/>), is an example of a how to

create a solid infrastructure for a long-term goal. Norwegian initiatives have already drawn international attention and are highlighted in the European report:

In Norway, the Ministry of Education and Research has started a research programme for teacher educators (PRAKUT), engaging them in practice based educational research in close cooperation with schools. This programme is supported by a national graduate school in teacher education (NAFOL), where teacher educators can join PhD programmes. While supporting the development of teacher educators' research expertise, this initiative also contributes to the development of the knowledge base on teaching, teacher education and teachers. (European Commission 2013: 23–4)

Norway, in the case of creating a research-based teacher education, might serve as an example of acting in the present in planning for the future. Perhaps this might be an example to other countries as well? ■

May 2021 Postscript

When being asked to comment on the paper written in 2015, I realised that most of the arguments made then, are relevant today, six years later. Research still plays an important role in teacher education, including the importance of teacher educators' being active researchers. In fact, I would claim that the role of research has increased in recent years.

In Norway, all teacher education is, since 2017, at a master level which requires a research-based master thesis according to the Norwegian regulations. In other words, all student teachers must engage in research, and all these students are to be supervised by research competent teacher educators. This has created a problem well known before 2017, and as reported in the 2015 paper, some national initiatives were taken, one of which was the National Research

School for Teacher Educators (NAFOL). The success of NAFOL has been widely documented (Vattøy & Smith, 2018; Smith, 2020), however, NAFOL alone has not been able to cover the need for strengthening research competence of the large number of teacher educators without a doctorate in Norway. A recent study examining the career development needs among teacher educators without a doctorate in a large Norwegian university revealed widespread experiences of not being valued and not supported in their career development, of which research and publication is an integrated part (Smith, Hakel & Skjelbred, 2020). Teacher education institutions should take measures to support teacher educators in developing competent research skills to strengthen teacher education at all levels.

Another claim I still voice is that the type of research student teachers and teacher educators engage in should be practice oriented research to develop knowledge to improve learning and teaching in schools and teacher education. Engaging in research takes time and it should be perceived as meaningful and relevant to the researchers either they are teachers to be or experienced teacher educators. Relevance to practice is, perhaps, a keyword here. An example of what I mean is a published paper by a teacher who has introduced a research and development (R&D) project in her own school aimed at strengthening collaborative learning with her colleagues so they could better practice it with their own students (Liebech-Lien, 2020). The research and writing process was supported by supervision. Other schools in the municipality have now become interested in learning more about collaborative learning. The teacher believes collaborative learning is important, and the heavy investment in the project was meaningful to her and relevant beyond her own setting.

There is, however, a new argument I would like to put forward in this 'update' of the 2015 paper. I am afraid that the balance between research and quality

teaching in teacher education is moving in the wrong direction, that the importance of maintaining and improving the quality of teaching is decreasing as research and publication take more place (Smith & Flores, 2019). Maria Flores and I conclude our paper on the Janus Faced Teacher Educator claiming:

“There is a need to find a good balance (Vanassche and Kelchtermans 2016) at the individual, institutional and national level, in which research and teaching in teacher education are intertwined. We strongly believe that the two main responsibilities of teacher educators which form the Janus face can melt into each other in the face of a researching teacher educator” (Smith & Flores, 2019:442).

The importance of quality teaching in teacher education has become even more urgent today as a result of increased online teaching during the Covid-19 lockdowns. Many teacher educators experienced being thrown into a reality in which they did not feel competent, and the focus shifted from investing in quality teaching to surviving in the new reality (Smith, et al., 2021). Teacher education post Covid-19 will be different from before the pandemic invaded the world, and we have been pushed to seek unexplored alternatives which will hopefully strengthen teacher education and make it more future related. However, to do this, research and practice must be intertwined and not develop in two different directions. ■

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