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Balancing teacher educators' researcherly and pedagogical dispositions – an example from Norway

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ABSTRACT

The role of research in teacher education is a widely discussed topic by policymakers as well as by researchers and practitioners. At the policy level, there seems to be a general claim that teacher education shall be research based (OECD, 2005; European Commission, 2013; Finnish Ministry of Education and Culture, 2021; Norwegian Ministry of Knowledge, 2020). The claims are strong, however, the interpretation and the operationalisation of the role of research in teacher education is, to say it mildly, vague. In this paper, I will briefly present voices of some international researchers with the purpose of illuminating the complex roles research plays in teacher education. A major part of this paper will present an example of how Norway has attempted to operationalise the complexity of balancing between teacher educators' researcherly and pedagogical dispositions by funding the National Research School in Teacher Education (NAFOL). The overall goal of the research school is to develop "researching teacher educators" with equal value of all the three words.

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Selected voices of international researchers

The understanding of the importance of research in teacher education among researchers and practitioners is more varied than what is found in policy documents. Jean Ruddock claimed already in 1985 that "Attitudes and habits supportive of research need to be encouraged in courses of initial teacher education" (Ruddock, 1985, p. 281). Among the six roles Lunenberg, Dengerink, and Korthagen (2014) identified for teacher educators, researcher is listed as the second, following being a teacher of teachers. Likewise, in an article reflecting an international perspective on teacher educators' work, Cochran-Smith, Grudnoff, Orland-Barak, and Smith (2020) conclude that

"If teacher educators are going to help teacher candidates recognize the cultural and other assumptions that shape practice and reproduce inequity, then there must be opportunities for teacher educators themselves to interrogate their own beliefs and assumptions" (p. 17).

In previous work Cochran-Smith together with Lytle (Cochran-Smith & Lytle, 2009) argue for the need to develop *Inquiry as a Stance* among practitioners, developing a critical perspective on their own practice. Tack and Vanderlinde (2014, 2016) introduce the

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concept *Researcherly Position* which they define “as the tendency to engage in research and involves an inclination towards research (affective aspect), an ability to engage in research (cognitive aspect) and a sensitivity for research opportunities (behavioural aspect)” (p. 301). Corresponding to the Belgian researchers’ concept is the interpretation of the concept *Knowledge of Practice* which Singh, Rowan, and Allen (2019) make in an editorial of the *Asia-Pacific Journal of Teacher Education*. They suggest that *Knowledge of Practice* means that all actors involved in teacher education are critical users as well as producers of research, taking on a stance of inquiry (Cochran-Smith & Lytle, 2009). However, Singh et al. (2019) propose to add “another dimension expecting teachers and researchers to question the performative

aspects of research, the ways in which research performs or generates practices of teaching, rather than simply describing or representing these practices” (p. 456). Biesta (2020b) refers to the concept intellectual engagement of teachers, modes of engagement that make teachers better teachers, or better teacher educators, which is relevant for this paper. The role of research in teacher education is not limited to produce core practices (see Grossman, Hammerness, and McDonald (2009) to be implemented by teacher educators when teaching teachers. The position taken in this paper is that teacher education should not be evidence based, but rather evidence informed as claimed by Lingard and Renshaw (2009). Research can be a lever for professional development for teacher educators and subsequently activating continuous improvement of teacher education in the respective context. Practicing teacher educators are those who are expected to take control of their own profession by generating knowledge about teaching thus developing the profession. They are models for a new generation of teachers who themselves need to take on a stance of inquiry (Cochran-Smith & Lytle, 2009) and become responsible professionals to avoid becoming technicians (Loughran & Menter, 2019) doing what other people tell them to do. This kind of research is closely related to practice with the main purpose of improving practice.

The discussion of the role of research in teacher education is continuously expanding, and recently Bullough (2021) has argued that practice-oriented research, more specifically self-study, needs to go beyond the concept of training future teachers to work in an educational system, which is characterised by marketing goals. Self-study is not only about improving personal and institutional practice, but also time to focus on the “self” in self-studies. The researching teacher educator should explore the self- the personal “... and proclaim the importance of the person and the quality of that person’s life to the quality of practice” (Bullough, 2021, p. 258). Self-studies, systematic critical inquiries into practice, conducted by teacher educators can also promote the moral responsibility teacher educators hold to explore their own values and to support their students in developing goodness in those who will educate future generations. Similar thoughts are put forward by Biesta, Takayama, Kettle, and Heimans (2020) when they worry about teacher education having lost the “intellectual heart” (p. 455) having to relinquish to marketing and accountability demands, which have been damaging to education. If the role of research in teacher education is mainly to measure how policy goals are achieved, not only the importance of the moral values is in danger of being lost, but also the complexity of teacher education and education in general.

Finland, which is known for its achievements on international tests, such as Pisa and Timms, often accredit its success to the country's teacher education, which has a long history of being research focused. Krokfors et al. (2011) state that research plays a role in developing teacher education programmes, and in the pedagogy of the teacher educators. Furthermore, students of teaching should be encouraged to apply research in solving pedagogical and didactical problems, and they should develop research competence during their education. Various Finnish researchers praise the role of research, especially emphasising that the research-based programme supports future teachers in becoming innovative and professional, and ready to act on the autonomy Finnish teachers enjoy (Aspfors & Eklund, 2017). However, recently more critical voices have also surfaced, and in a study exploring teacher candidates' perspectives on their teacher education, Puustinen, Sääntti, Koski, and Tammi (2018) conclude that:

«According to our analysis, the main concepts of the Teacher as a Researcher and the Personal Practice Theory are unclear to teacher candidates and are appreciated differently. Subject teacher candidates in particular, who come from other academic cultures, might consider these concepts educational jargon that have no substance . . . These results challenge the claim that Finnish teacher education has resolved the demanding relationship between theory and practice,» (Puustinen et al., 2018, p. 170).

It seems that also in Finland balancing research and teaching in teacher education is a challenge at a systemic as well as at the practical level.

The role of research in teacher education in Norway

When looking at my own country, Norway, the politicians have stated a number of objectives for research in teacher education in a strategy plan from 2020 to 2024 (Ministry of Knowledge, 2020). First and foremost, research needs to improve in quality and increase in volume. Among the many stated goals, stimulating user involvement and increasing the volume of practice-oriented research are listed. This states that Norway has come a long way in the last 50 years as regards educational research. In the 1970s educational research was grounded in behaviouristic learning theories, it was mainly psychometric, often evaluating if specified goals had been achieved (Haug, 2022). However, a tension was created between the traditional perspective and claims stating that educational research is a value loaded social science, which requires a broad repertoire of research methodology (Haug, 2022). Today a wider research repertoire is accepted, and practice-oriented research is encouraged. However, when looking at the funding opportunities, there is still a tension between goal-oriented research seeking answers to systemic challenges (clearly defined goals in the calls for grants) and it is more difficult to get funding for open research in which researching practitioners themselves define the question to be explored to improve practice. The policy decided goals are quite explicit resulting in researchers complying to the clearly stated goals in the struggle for public funding. There are less chances to find funding the further the grant application moves away from the directives given in the call.

However, this does not mean that practitioner research does not take place in Norway. Much research at a smaller scale is conducted by practicing teacher educators, most often without external funding, but conducted within the earmarked time (45–50%) teacher

educators with a doctorate have for research in their job description. A couple of many examples are Postholm's work on teacher professional development in school (Postholm, 2018) and Ulvik, Helleve, and Smith (2018) study on student teachers' learning during the practicum. These are studies rooted in the practice of teacher educators and disseminated through publication in national and international journals. Research is closely linked to practice, and publication of their research is significant for teacher educators, as for other academics. There is a pressure to publish as publication is still the most important criteria when aiming at career promotion in the Norwegian Academy, including in teacher education. As such, the role of research in teacher education is also closely related to the metrics, the counting of publications in highly ranked journals. The pressure of research and publication is strongly felt, creating an expressed need to strengthen research competence among Norwegian as well as among international teacher educators (Czerniawski, Guberman, & MacPhail, 2017; Ulvik & Smith, 2018). Recently, there is a debate within the academy in Norway reflecting a desire for change by reducing the importance of the metric system and including other academic accomplishment such as quality teaching and contributions to the discipline/field as equal factors in the career trajectory (Lie, Fanghol, & Tønnesen, 2022; Løkeland-Stai, 2022). For teacher educators, especially, it is important that other aspects of their work than publications are valued when pursuing an academic career.

Balancing between practice and research strongly aligns with my own position as regards the role of research in teacher education. My personal view is that research plays a central, yet complex role. Research can improve practice by being consumed and produced, and it might help students of teaching, school-based- and university-based teacher educators to develop a critical stance to own practice (Cochran-Smith & Lytle, 2009), including understanding the personal and professional self (Bullough, 2021; Kelchtermans, 2009). The concept "improved practice" is likely to be defined differently by different stakeholders of teacher education. For policymakers improvement is often related to efficiency, looking at student outcome, such as better scores, higher completion rates and increased publications. However, it can also relate to teacher educators being more confident in their work, act as good role models of the complex act of teaching or becoming aware of strengths and weaknesses in own practice within their own context. I think that teacher educators should constantly seek to improve practice, and it might also be they find that there is no need for change. However, this decision is also, as I see it, based on a systematic critical inquiry into own practice, and not just compliance with the way they teach. This might lead to development stagnation over time.

Thus, the concept 'researching teacher educators' encapsulates my own position. Teacher educators are first and foremost educating teachers, teaching the discipline of teaching, however, in a constant effort to improve practice, they engage in practice-oriented research and become researching teacher educators. This is the vision according to which the Norwegian Research School in Teacher Education (NAFOL) was established and has worked to implement from 2010 to 2022. In NAFOL our aim is to seek a balance between developing a researcherly disposition and strengthening the teaching disposition at the highest academic level. The students are researchers, teachers, and educators. In the main part of the current paper, the reason for NAFOL's establishments and organisation, its goal, theoretical backdrop, and activities will be presented.

NAFOL- The Norwegian research school in teacher education

The backdrop of NAFOL

Norwegian educational research was subject to various critical evaluations in the first decade of 2000. Norwegian Research Council (NRC) (2004) stated that there was a need to strengthen five specific areas to improve the quality and the amount of educational research; (1) research leadership and organisation, (2) internationalisation, (3) thematic efforts and prioritisation, (4) recruitment, and (5) national coordination and cooperation. As a result of this report, the Parliament issued a White paper (Norwegian Ministry of Knowledge, St. Melding 20, 2004–2005) suggesting that national research schools should be created to improve the quality in doctoral education. Moreover, in 2006 Norwegian Research Council (2006) published a report strongly criticising teacher education for primary and secondary level. The criticism led to an additional White paper from 2009 (Norwegian Ministry of Knowledge, St. Meld. nr. 11, 2008–2009, p. 26) in which the Parliament announced that national doctoral schools would be established to strengthen teacher educators' competence in research and development. NRC issued a call for funding for national research schools in teacher education for a six-year project in 2009. The political claim operationalised by the call for funding was discussed in the Norwegian Council for Teacher Education, a forum for institutional leaders of teacher education, and it was decided that instead of having institutions competing with each other by submitting several applications, 24 institutions decided to write a joint application, which was accepted and funding was granted. The research school was launched in 2010 as a national research school for teacher education. NAFOL was a response to the strong criticism of the quality of teacher education and aimed to contribute to making the education more research-informed by linking research to practice.

Furthermore, Norwegian educational research was also criticised in the Norwegian Agency for Quality Assurance in Education (NOKUT) (2006) evaluation for being conducted by a few "stars" and mostly disseminated nationally. Moreover, there was little international collaboration. It was, therefore, an explicit aim for NAFOL to strengthen internationalisation in Norwegian educational research and to collaborate with research schools and researchers outside Norway. Another important goal was to develop researching teacher educators by increasing the number of research competent teacher educators with a doctorate. As the politicians discussed raising teacher education from a bachelor level to a master level, there would be a need to increase the number of qualified teacher educators who could supervise students' research-based master theses. This was especially important to the smaller teacher education institutions. From 2017 all teacher education in Norway (besides pre-school) is a five-year degree at Master's level requiring a research master thesis. The fact that NAFOL's project period was extended with additional six years, till 2022, has been part of the plan to build the infrastructure for teacher education at the master level.

Structure of NAFOL

When NAFOL was established, the majority of Norway's teacher education institutions (24) joined the network, and no institutions have left the network. However, due to the significant merging process of Norwegian higher education institutions (HEI), today

NAFOL's network consists of 17 HEIs. The Academic Head of NAFOL is a professor appointed by the Board. Members of the Board represent the academy, including an international professor, representative from the users of teacher education (teacher union) and two doctoral students. The Board is informed about the programme and activities, past as well as planned, discusses, and usually approves of the budget, and has had the responsibility of selecting the NAFOL doctoral students. Each network institution is represented at the NAFOL Council, which meets once a year. The Council is informed about the NAFOL activities, reports on the progress of the NAFOL students from their respective institutions and advice the Academic Head regarding future planning. The seminars, which will be described later in this paper, are hosted by the various network institutions. The research school employs two people in administrative positions and a part-time webmaster.

Students

NAFOL's doctoral students are school-based or higher education institutions (HEI)-based teacher educators who hold a research fellow appointment in one of the network institutions or by the local school authorities. They have been granted a four-year fellowship with 25% teaching responsibilities, or a three-year full research employment. The majority work in pre-service teacher education programmes from pre-school to upper secondary programs, and they have cross-disciplinary backgrounds, including music, arts, and sports. Most of the students have experience from school teaching and teacher education, and the average age is between 35 and 40. In other words, the NAFOL students are mature students with practical experience. This is an advantage, as they in their approach to research, as well as in defining their doctoral projects, the relevance to practice is natural. Examples of doctoral projects are: *An inquiry into how collaborating in teacher teams can enhance teaching practice* (Liebeck-Lien, 2022) or *Pedagogy is just common sense – a case study of student teachers' academic learning practices*, (Sjøløe, 2014). However, it is a challenging process for practitioners (and Ph.D. – supervisors) to develop a research position (Tack & Vanderlinde, 2014, 2016), acquiring not only the language of research, but also thinking research, in addition to strengthening research skills and competence. The goal is not to lessen the importance of high-quality practice and teaching, but to complement it with research competence with the purpose of developing researching teacher educators.

NAFOL accepts students as yearly cohorts, and each cohort has an experienced teacher educator and researcher from one of the network institutions as coordinator who acts as a kind of "homeroom teacher." The coordinator is involved with planning of the seminars, and first and foremost, acts as an easily accessible contact person for the students.

In 2010, the interest of teacher educators to engage in doctoral education was unclear and the network worried about not having enough candidates when NAFOL was established. When starting, each network institution had to promise to finance a specific number of doctoral students. However, this soon became unnecessary. Already in the second year, when the students were selected by the Board in January every year, NAFOL had more applicants than what could be accepted into the planned cohorts of 20–25 students. NAFOL as a network does not award the Ph.D. degree, this is the responsibility of the respective HEIs. A pre-requisite for applying to NAFOL was to have been

accepted into an institutional doctoral programme. Therefore, NAFOL does not feel it ethically appropriate to quality evaluate the project descriptions of the candidates accepted by a network institution. Other criteria have been used in the selection of students, such as the project's relevance to teaching and teacher education and motivation to be active in NAFOL, committing to a more intensive doctoral education. The Board also sought to accept students from all network institutions in each cohort and to secure a cross disciplinary and cross-teacher education level. Diversity within the mandate of the research school has been a central criterion in selecting students. The gender balance is a challenge, as there have been more female applicants than male, which is representative for teacher educators in Norway.

Theoretical backdrop – and its implementation

When establishing NAFOL the founders wanted to have a different type of research school due to the student target population, practicing teacher educators, and the aim to strengthen the connection between research and practice. However, the underlying perspective was that NAFOL should not train emerging researchers, but educate academics and scholars, and the individual student was in focus. Seeing the whole person, and not only a future competent researcher has been the core of NAFOL's structure and activities. The aim has been to provide NAFOL students with experiences of what Yorks and Kasl (2002) call a "learning-within relationship"

"... a process in which persons strive to become engaged with both their own whole-person knowing and the whole-person knowing of their fellow learners. Engagement with one's own whole-person knowing requires critical subjectivity while developing capacity for the skillful practice of multiple ways of knowing. Engagement with the whole person of fellow learners requires interacting with others through the same balanced mix in ways of knowing – through affective and imaginal modes of psyche, as well as conceptual and practical. To share with another one's own experiential knowing, which is grounded in the affective and imaginal, requires striving to nurture a field of empathic connection. Such a field of empathic connection establishes a group habit of being" (Yorks & Kasl, 2002, p. 185).

The cohorts provide the frame for the relationship, and the diversity within the cohort allows for multiple ways of knowing. Additionally, acknowledging the importance of the affective aspects of learning, NAFOL emphasises creating social as well as cultural learning arenas. Within the cohort close relationships characterised by openness, mutual trust and respect are developed, which opens for mutual support and constructive feedback to strengthen the individual's learning process. This is how one of the NAFOL alumni said about being part of a cohort.

"I do not know if it is like this in all cohorts, but I felt really safe and, ... yes, I was part of a group of people who wanted my best, yes, in every way, The fellow students became more and more important" (NAFOL alumni, Sunde, 2020, p. 28).

Throughout the 12 years of NAFOL the work of Gert Biesta (2009) on the purposes of education; qualification, socialisation and subjectification, have been central in working with NAFOL. Biesta states that qualification is the main purpose of education, to provide students "with the knowledge, skills and understanding and often also with the dispositions and forms of judgment that allow them to 'do something'" (Biesta, 2009, p. 40). The

main aim of NAFOL is to support the doctoral students' learning and research processes to fulfil the requirements for a Ph.D. qualification. In Norway, doctoral students must take a minimum of 30 European Credit Transfer System (ECTS) points of coursework in addition to the dissertation, which can be a monograph or an article-based dissertation. The latter is a hybrid form of dissertation as it includes a minimum of three published or publishable articles and a metatext of the whole project of between 60 and 100 pages (depending on the discipline and the institutional requirements). The articles document research and publications skills, whereas the meta-text reflects a broader and deeper knowledge and understanding of the phenomenon explored. Many doctoral students find it more challenging to write the meta-text than to acquire the more technical skills of writing articles.

As mentioned above, NAFOL does not award the Ph.D. degree. The students are enrolled in an institutional doctoral programme, and most programmes offer required doctoral courses, often in research methodology and educational science. The required courses do not, however, make up 30 ECTSs, and the students can choose, in discussion with their supervisors, relevant elective courses. NAFOL students take their elective courses within the research school, and four 5 ECTSs courses are integrated into the NAFOL activities; 1) teacher education research, 2) theory of the profession, 3) dissemination, and 4) academic writing. All courses are planned to meet requirements for qualification at a doctoral level.

The second purpose of education according to Biesta is socialisation. "The socialisation function has to do with the many ways in which, through education, we become members of and part of particular social, cultural and political 'orders'" (Biesta, 2009, p. 40). In NAFOL the aim is to socialise the students into the academic world and the community of researching teacher educators at several levels, from the micro level of the cohorts, to a meso level nationally, and to support socialising the NAFOL students into the international community of researching teacher educators at a global macro level. Socialising, as perceived in NAFOL, is about understanding the language and culture of the academic community within the respective field, and beyond. The academic world is tough, and giving and receiving critical feedback, managing revisions and rejections of articles, presenting at academic conferences, and acting as chairs and discussant are areas emphasised during the four years the students are in NAFOL. Moreover, NAFOL activities include shared social and cultural experiences, such as dinners, concerts, museum and gallery visits, historical lectures and guided walks, and as Norwegians, hiking tours. During the Covid lockdown, NAFOL had to, as all other organisations, change to online seminars. The number of seminars and the academic activities did not change, technical facilities solved that. But the students missed the social and cultural part (we even had shared online concerts), as is expressed in the feedback from one of the students after an on-line event; "This was better than I had expected, and the academic aspects and level are maintained, but I really miss the social aspects. Good to know that this is a plan B solution." The strong emphasis NAFOL has in supporting socialisation into a broad understanding of the academic culture, is, perhaps, one of the unique characteristics of NAFOL.

Subjectification, says Biesta

"... might perhaps best be understood as the opposite of the socialization function. It is precisely not about the insertion of 'newcomers' into existing orders, but about ways of being that hint at independence from such orders; ways of being in which the individual is not simply a 'specimen' of a more encompassing order" (Biesta, 2009, p. 40).

In NAFOL subjectification is not seen as the opposite of socialisation into the academic community. We see it more as a continuation of the educative process of becoming an academic with a strong and independent voice within the relevant academic community to which the merging researcher and teacher educator wants to belong. Requirements for qualification have to be fulfilled, rules and norms are to be respected, yet, at the same time supporting the students in developing an independent critical voice and position is consciously integrated in the NAFOL activities. The students meet national and international researchers who are known to push the limits of their field, and students themselves are encouraged to have a critical perspective in their reading and develop a researcherly disposition (Tack & Vanderlinde, 2014, 2016) to their own work as well. Subjectification has become one of the main aims of educating emerging researchers in NAFOL. Thus, the NAFOL interpretation of subjectification might seem to be closer to precision of the concept made by Biesta in a more recent paper of his (Biesta, 2020a) where he says that the subjectification must be seen in relation to “an existence in and with the world” (p. 95). Transferring this to the education of doctoral students, we aim at empowering the student to feel free and strong enough to decide who he/she is or what voice to have in the academic community, and it is not the others, the academic community, which decides how he/she should act and what to say. It is up to the individual to position her/himself within that community and to be able to distance the I from the me and see oneself, including values and morals, in the eyes of the others (Bullough, 2021). Biesta (2020a) claims that such a process takes time, and in NAFOL we hope to start the subjectification process during the four years the students spend with us in NAFOL. It is, however, an ongoing process, and if it ends, the concept of subjectification is lost, as I see it. It is an ongoing developmental process related to holding a stance of inquiry (Cochran-Smith & Lytle, 2009), not only in relation to practice, but also critically examining personal morals and values, who one is as a person, throughout the career.

Another theoretical backdrop we have found useful in NAFOL is Bandura’s (1977) work on the concept of self-efficacy. A doctoral education is a long and challenging process, and in Norway the figures of non-completing the doctoral thesis is high, nearly a quarter of those who start a Ph.D. education leave, and in educational studies the figures are much higher (Statistics Norway, 2020). In NAFOL, we have succeeded in reducing these depressing figures, and less than 6% of the NAFOL students do not complete their doctoral education. NAFOL emphasises working with the individual student who is unique in the larger group of doctoral students. When they engage in doctoral studies the assumption is that they believe in their own capacity to complete. However, the many hurdles on the way are not always expected and might sometimes be experienced as an impossible wall to climb. When challenges are faced, the students need to maintain a positive dissonance to overcome them and proceed to the next phase in their education. They must believe they are capable of reaching the next milestone, or cairn, as we would say in Norway. Thus, within the cohorts, the students provide feedback to each other on texts related to the phase of the project work in which a specific cohort would find themselves. Feedback is also provided by experienced researchers. As mentioned above, within the cohorts, an atmosphere of mutual trust and respect is developed, and there is a safe space, which allows for critical and constructive, yet, not demotivating feedback. Smith (in print) describes how NAFOL strives to support the students by focusing on providing and receiving feedback.

“Feedback from professors and peers relate to the individual student’s progress, and does not focus only on the final product, even though it is the goal, but there are several cairns on the way. NAFOL works from cairn to cairn instead of looking only at the peak of the mountain” (Smith, 2022 accepted for publication).

Within the safe space of the cohorts, the students are pushed out of their comfort zone, and the supportive environment of peers and trusted experienced researchers, allows for the learning zone to be stretched without moving into the anxiety zone, which often might reduce the students’ level of self-efficacy.

When describing the approach to doctoral studies in NAFOL, Schulman’s (2005) concept of *signature pedagogy* comes to mind. He defines signature pedagogy as “The types of teaching that organize the fundamental ways in which future practitioners are educated for their new professions” (p. 52). The aim of NAFOL is to educate researching teacher educators, professionals who will have to practice teaching and engage in research. To succeed, NAFOL changed the focus of a research school from the doctoral dissertation to the people who are to complete a doctoral dissertation. Thus, the signature pedagogy of NAFOL is not driven by the countable achievements (even though, these are certainly in our minds), but on how to support the individual student, the teacher educator who is going through a difficult change process from being an expert of teaching, to developing a complementary role as a researcher.

The structure of NAFOL’s activities

If students are to develop close networks characterised by mutual trust, respect, and friendship, it is necessary to create spaces for people to meet. In NAFOL, the students come from all parts of Norway, and therefore the students meet for four two-three days seminar per year over four years, amounting to 16 seminars during the NAFOL period. The seminars take place in the network institutions throughout the country, and there will always be students who need to travel long distances, which can best be made by flights. The students stay in hotels, and when finishing the academic aspects of the day, they have time to socialise and create friendships over dinners and shared cultural experiences. The coordinator of the cohort, the head of the research school and the administrative staff participate in all seminars, and the NAFOL team know each student personally (267 students from 2010 to 2019), including their project work. In 2019, the last cohort was accepted as a final date, 2022, for the research school was set.

Two of the 16 seminars are joint seminars with a research school in a foreign university, one in Norway and one in Europe. The purpose is to expand the students’ networks and to become acquainted with research and researchers outside Norway. To every seminar, either it is abroad or in Norway, prominent national and international lecturers are invited to give lectures, workshops and participate in the feedback sessions previously mentioned. A built-in part of each seminar is what is called master-classes. Many students work on article-based dissertations and writing articles for publication is a major task. When an article is fully drafted, the student can ask for a master-class with an external reader (not the supervisor), who acts as a reviewer, and discusses the article in a critical constructive manner with the students in a fishbowl situation where the other students listen and learn. The external reader is often one of the invited lecturers to the seminars. To

strengthen internationalisation NAFOL encourages students to spend some time with an international university and supports them financially and in finding relevant host institutions and host colleagues.

NAFOL organises a conference for all the cohorts every year, and the conference is an international conference every second year to which doctoral students from NAFOL's international partners are invited. The conferences are used as a teaching lab, as the students not only present their work, but also act as chairs, discussants and responsible for the conference dinner. The presenters are invited to submit an extended abstract, and if the abstract is accepted, to submit a paper of their presentation for blind review in a NAFOL book. We are now in the process of finalising the fifth NAFOL book published with a well-known Norwegian publisher. All contributions have gone through double-blind reviews and are written in Norwegian or in English. The foreign doctoral students are also invited to contribute to the anthologies.

NAFOL has been an active research school, and the costs involved with its activities are all covered by NAFOL. Without the generous funding from NRC NAFOL could not have been able to implement its signature pedagogy as presented in this paper. Norway has invested in expanding and changing the role of research in Norwegian teacher education through NAFOL and by extending the project period from 6 to 12 years. Thus, the Government, through NRC, asked for an external evaluation of the research school last year, and in the comprehensive report the English summary says:

"The graduate school has strengthened collaboration and built networks between the academic environments related to teacher education. NAFOL has represented an effort for researcher education for teacher education. The school has contributed to building up the knowledge base in teacher education research and thus strengthened the teacher education's professionalism and research foundation. The PhD theses have added great added value to teacher education research, and in a broader sense to educational research" (Schwach, Bergene, & Carlston, 2021, p. 14).

Conclusion

After 12 years of work and solid national investment, a legitimate question to ask is what impact NAFOL has had in relation to the role of research in teacher education, and if the research has improved practice. Norwegian policymakers, through NFR, did not only talk about the importance of research in teacher education (Norwegian Ministry of Knowledge, St. Melding 11, 2008–2009), they also put it into practice by investing in a national research school in teacher education. The school became truly national with 24 teacher education institutions joining in the planning and administration of NAFOL. The students are practising teacher educators, and the acquired research competence expands their professional competence, they have become researching teacher educators with a researcherly position (Tack & Vanderlinde, 2014, 2016) which is likely to form practice in various ways, and thus complementing their pedagogical disposition. Research competent teacher educators are expected to be better informed consumers of research in their own teaching, such as elaborating their teaching repertoire inspired by research, and in recommending updated and relevant research literature to their students. In Norway, there has been a tendency to include mainly national literature, often in the form of textbooks, in the compulsory

reading lists (personal impression). However, when teacher education is at a master level, an extended perspective on what students should read, is required. Research competent teacher educators are also needed to supervise student teachers' master thesis, and NAFOL has contributed to a sustainable increase in the number of Ph.D. qualified teacher educators. Moreover, NAFOL has offered three seminars per year for teacher educators not aiming at a doctorate, but who still need to develop their research competence. Becoming research literate is found to be an expressed need among international (Czerniawski et al., 2017) and Norwegian (Ulvik & Smith, 2018) teacher educators. An explicit goal in teacher education at a master level is that the students shall develop inquiry as a stance (Cochran-Smith & Lytle, 2009) and be able to critically examine own practice and solve eventual problems (Krokkfors, 2011).

Additionally, an important role of research in teacher education is to develop the knowledge field by contributing with new perspectives and understanding of the pedagogy of teacher education. If the profession itself, practicing teacher educators, shall take ownership of the profession, they need to be equipped with informed and competent voices when engaging in discussions with institutional and national policymakers. NAFOL students have contributed with numerous publications nationally and internationally, they have extended meta-texts in their dissertations, and as the evaluation report says, the doctoral students' work has added value to teacher education research and to educational research in general (Schwach et al., 2021). Cochran-Smith (2021) claims that practitioners should be supported in developing their personal professional responsibility as an alternative to external pressure of accountability. To do that, there is a need to balance the researcherly and the pedagogical dispositions. In NAFOL, we have consciously tried to strengthen the professional voice of teacher educators individually as well as within the national community of teacher educators. Today many NAFOL alumni have taken on management roles and become involved in decision-making in their respective institutions, they participate in national and international projects, and are visible in the public discussion. They have a voice in forming teacher education.

NAFOL has played a role in creating an infrastructure of how to educate researching teacher educators, and it was a good model at the time it was established when research played a marginal role in Norwegian in teacher education. Today different initiatives are more appropriate, as the interest in research relevant to teacher education has increased jointly with the number of doctoral students. Working with cohorts led to NAFOL becoming an exclusive and unique research school, which has been able to richly support the students. A more inclusive approach is needed today when lessons learned from NAFOL can contribute to developing similar programs at the institutional and smaller collaborative levels.

When NAFOL was established, we had a dream, to make a difference in defining the role of research in Norwegian teacher education. Today, 12 years later, we like to believe that the dream has come true. NAFOL made a change, and today, hopefully teacher education institutions alone or collectively, in Norway and beyond, can learn from NAFOL's experiences in the continuing strive to improve education at all levels.

Disclosure statement

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