

Collective and School-Based Mentor Education: Developing Professional Learning Communities of Mentors

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Abstract

Studies have documented numerous positive effects of mentoring, but few studies have focused on mentor education and mentors' professional development and learning. In Norway, the focus on mentoring and mentor education has been visible in political documents and teacher education for several years. However, the scale of mentor education has been small, despite official documents requiring mentor education for all teachers mentoring pre-service teachers and newly qualified teachers. This mixed methods study investigated four Norwegian schools in which all teachers and leaders took a university-based mentor education as part of a university-school project. The study aims to bring awareness to mentor education and what expectations teachers have of it, along with what experiences and benefits teachers express after completing mentor education collectively. The data were collected using a quantitative survey (N = 83) and qualitative focus group interviews (N = 9). The results show that, despite having few expectations when starting, mentor education was experienced as important and useful for teachers because the knowledge and skills acquired are relevant in all facets of the teaching profession. Moreover, the results provide an indication of the benefits of taking mentor education collectively and developing professional learning communities of mentors.

Key Words: Mentor education, mentors, school-based professional development, teacher education, mixed-methods design

Introduction

Internationally, there has been an increasing understanding of the importance and benefits of mentoring (Feiman-Nemser, 2003; Kelchtermans, 2019; Kutsyuruba, Walker, & Godden, 2019). Studies have documented the positive effects of formal induction programs and mentoring on teachers' commitment and retention, classroom teaching, and student achievement (Ingersoll & Strong, 2011; Kutsyuruba et al., 2019). Although the concept of mentoring is contested, the field of mentoring and the benefits mentoring has for mentees are well documented (Kemmis, Heikkinen, Fransson, Aspfors, & Edwards-Groves, 2014). However, few studies have focused on mentor education and mentors' professional development and learning (Aspfors & Fransson, 2015; Thornton, 2014). Although there has been a call for policymakers, teacher educators, and researchers to place greater priority and focus on mentor preparation, there are still countries with well-established mentoring programs that do not offer formalized or systematized mentor education (Hobson, Ashby, Malderez, & Tomlinson, 2009).

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Research on mentor education has been described as sparse, with knowledge of mentors' professional development and learning described as even weaker (Aspfors & Fransson, 2015).

The current study aims to bring awareness to mentor education and what expectations teachers have of it, along with what experiences and benefits teachers express after completing a university-based mentor education collectively. The current study poses the following research questions:

1. What expectations do the teachers have of participating in mentor education collectively?
2. What experiences and possible benefits do the teachers identify after completing mentor education collectively?

The present study was conducted within a university–school partnership project started in 2018, in which all the teachers and leaders at four schools attended and completed the mentor education program offered by one university. The research project is, therefore, unique in the sense that teachers seldom complete mentor education collectively and school based.

In the Norwegian context, the term “supervisor” is traditionally used in relation to initial teacher education and pre-service teachers, while “mentor” is used in relation to newly qualified teachers (NQTs). In the present article, the term “mentor” will be used for those providing mentoring to a “mentee” who may be either a pre-service teacher in initial teacher education or an NQT. In Norway, mentor education for teachers is offered at teacher education institutions and is designed for and aimed at both the supervisors of pre-service teachers and mentors of NQTs. Throughout the present article, the term “mentor education” will be used to refer to this program.

Theoretical Landscape

In this section, we focus on mentoring and mentor education within a broader perspective before looking at teachers' development in school-based professional learning communities. The context of the study will then be provided.

Mentoring and mentor education

In literature, three key approaches can be identified that support teachers' professional learning: 1) a skilled mentor; 2) a variety of learning activities, such as mutual lesson observations and feedback on teaching, teamwork, networking, peer support, mentoring, and so forth; and 3) contextual factors, including school culture and the management's interest in and support of NQTs (Long, Zhao, Yang, Zhao, & Chen, 2021; Wang, Odell, & Schwille, 2008; Williams, Prestage, & Bedward, 2001). Research has shown that mentors without mentor education tend to solely rely on their mentoring experiences and practices (Hobson et al., 2009). Moreover, the focus on

mentors' professional development is lacking, potentially resulting in mentors feeling isolated and inadequate, which can influence the quality of mentoring and mentors' motivation (Bullough, 2005; Orland-Barak, 2014).

However, studies have shown that educated mentors are more secure in their role as mentors, change agents, and leaders (Thornton, 2014). Through mentor education, mentors can develop a deeper understanding and knowledge of mentoring (Tang & Choi, 2005; Ulvik & Sunde, 2013), better communication skills (Evertson & Smithey, 2000), and a stronger professional identity (Hobson et al., 2009). Giebelhaus and Bowman (2002) find that mentor education does not only improve teacher education, but also impacts mentors' teaching skills. Castanheira (2016) describes the complexity of mentoring, explaining that "mentors have professional development roles (as educators, as role models, as professionals who introduce the mentees to the culture of the school and facilitators helping mentees gain access to resources), but also as psychosocial support roles" (p. 337). Bjerkholt (2017) adds that mentoring and mentoring competence need to be seen in a larger context regarding their benefits for learning cultures, collective learning, and incorporating students and new teachers into the profession's community and knowledge base.

Mentor education as school-based professional development

School-based development activities can foster teachers' continuing professional learning and lay the foundation for the further development of the school organization (Postholm, 2016). Professional learning communities (PLCs) and schools as learning organizations have drawn the attention of researchers exploring teachers' professional development (Brodie, 2021; Ertsås & Irgens, 2021). Successful schools have been described as being a result of the efforts of the whole schools, professions, and systems they are part of (Hargreaves & Fullan, 2012). Accordingly, Brodie (2021) synthesizes that "PLCs are groups of teachers who come together to engage in regular, systematic, and sustained cycles of inquiry-based learning, with the intention to develop their individual and collective capacity for teaching to improve student outcomes" (p. 560). Huijboom, Meeuwen, Rusman, and Vermeulen (2020) show that PLCs are more effective when activities take place at the workplace and collaboration with colleagues is integrated into teachers' daily practices.

Postholm (2016) explains that school-based development represents a new practice for teacher education and schools that aim at developing collective knowledge and skills in relation to learning, collaboration, and teaching. Sandvik and Fjørtoft (2022) suggest that a good model for school-based continuing education programs should consist of elements of new knowledge, reflection, and an investigative approach. In relation to mentoring, in a review of two OECD reports, Olsen, Bjerkholt, and Heikinen underline the importance of a collective approach when it comes to mentoring:

... it is important that induction and mentoring must not only be regarded as

an isolated measure to support new teachers in a demanding situation and ensure that they continue in the profession, but also as an integral part of a coherent system of initial teacher preparation that can serve as the foundation for a process of continued development throughout the full duration of a teacher's career. (2020, p. 18)

Aspfors and Fransson (2015) emphasize that when planning mentor education programs, it is essential to provide spaces for mentors to meet, interact, and share experiences to build open and trusting cultures. PLCs can be seen as one such way of organizing mentor education because they aim to produce collectively generated shifts in practice where teachers learn through collaboration (Brodie, 2021).

The Norwegian context—Mentor education and university-school partnerships

The importance of mentor education, teachers' competence in mentoring, and mentoring as a tool for competence development has been highlighted in several political documents [e.g., White Paper 11 (2008–2009) and White Paper 21 (2016–2017)]. In an effort to ensure quality mentoring in practice, the Ministry of Education and Research has set requirements of at least 15 credits in supervision and mentoring for all teachers supervising pre-service teachers and NQTs (Ministry of Education and Research, 2008, 2009a, 2009b). The responsibility for mentor education has been placed on teacher education institutions, and despite existing for several years, the scale and extent have been small and mainly connected to school-based mentoring (Ulvik & Sunde, 2013).

In developing a more coherent mentor education, a national framework for mentor education was put into place to inform and give direction to those institutions that offer mentor education (Ministry of Education and Research, 2010). The nationally mandated framework for mentor education for teachers' mentoring of pre-service teachers, NQTs, and colleagues was updated in 2018 with clear directions for 30 ECTS mentor education programs to be offered at teacher education institutions (Norwegian Directorate for Education and Training, 2019). The framework sets requirements for the structure, content, learning outcomes, practices, and assessments. Moreover, to offer coherent programs across teacher education institutions, the framework defines the content of mentor education as including the following: 1) mentoring, communication, and relations, 2) research and theories about professional knowledge and development, 3) organization and learning cultures, 4) the professions knowledgebase and professional ethics, and 5) philosophy of science and methodology (Norwegian Directorate for Education and Training, 2019). In the current study, the participants completed a mentor education program structured into two modules (15+15 ECTS) following the learning outcomes and assessment set by the framework.

Despite focus being placed on the importance of mentoring and more teachers taking mentor education, many students and NQTs are still being mentored by teachers without mentor education (Lejonberg, Dahl, & Brovold, 2021), and institutions have been unable to fulfill the goal of all mentors in schools receiving mentor education (Sandvik, Solhaug, Lejonberg, Elstad, & Christophersen, 2020). During five-year teacher education, all students are required to have between 60 and 110 days of mentored practicum, and all NQTs are to be offered mentoring during the first two years working in the profession (Sandvik et al., 2020). Norway is unique in setting requirements when it comes to both the mentoring of pre-service teachers and NQTs (Bjerkholt, 2017). However, despite all the efforts made, a recent study of 4,678 pre-service teachers found that 6 out of 10 were mentored by teachers without formalized mentor education (Pedagogstudentene, 2021). Moreover, in their own evaluation, the Ministry of Education and Research (2017) found that 4 out of 10 NQTs in schools and kindergartens were not offered mentoring.

In Norway, many teacher education institutions form diverse types of partnerships with schools where pre-service teachers have their practical training. The current study is part of one such partnership project in which four schools have applied to become university schools and, therefore, have a broader responsibility than other practice schools and more collaboration with teacher education.

In their international research mapping of partnership in teacher education, Lillejord and Børte (2016) describe partnership as a strategy to structure, organize, and strengthen teacher education while renewing teaching practices at all levels. Moreover, it has been emphasized that partnerships have ambitions regarding contributing to teachers' professional learning and development beyond initial teacher education (Lillejord & Børte, 2016). Smith (2016) defines partnerships in teacher education as "an agreement between teacher education institutions and stakeholders of education who work together toward a shared goal, to improve education at all levels" (p. 20). Partnerships can be seen as a tool in professionalizing and renewing teaching practices at all levels and can generate opportunities for the continual professional development of teachers (Lillejord & Børte, 2016).

In the present study, the partnership project had set the following aims: 1) ensure high-quality practice for pre-service teachers, 2) engage in research and professional development projects where students, researchers, and teachers participate, and 3) ensure competence development in the schools and teacher education. To engage with a broader responsibility both in mentoring pre-service teachers and engaging in research, the four schools that were approved to be university schools in this partnership took mentor education collectively. All teachers and leaders followed and completed a mentor education program with 30 ECTS offered by one university. Traditionally, mentor education has been taken by one or a few teachers at a school as a form of continued education. Such continued education courses for teachers can, according to Sandvik

and Fjørtoft (2022), result in little sharing of knowledge in the organization, and argue for more school-based continued education where teachers can learn and develop in PLCs connected to their place of work. In this project, a university-based mentor education was completed collectively and organized school-based with lectures held at the schools so that participants did not have to travel. In this way knowledge was shared and connected to the workplace.

Methodology

A mixed methods research design was used to explore mentor education and what expectations teachers have of it, along with what experiences and benefits teachers identify after taking mentor education collectively. This mixed methods study, which took an explanatory sequential design, was predetermined and planned at the start of the research process (Creswell & Plano Clarke, 2018). The design allowed us to compare and merge the results as a basis for overall interpretation. The first phase of this two-phase study was a quantitative survey including both scale and open-ended items. Analysis from the survey informed the interview guide in phase two, in which two focus group interviews with teachers were conducted. According to Morgan (1998), an explanatory sequential design can be useful when the researcher wants to follow up on the answers from a quantitative survey and has the possibility and time to conduct the research in two phases, which was possible in the current study. The intent of the design was to collect enough qualitative data so that meaningful themes could be created to provide an explanation for the quantitative results.

Sample

The sample consisted of teachers from four elementary and lower secondary schools in Norway collectively taking a university-based mentor education (30 ECTS). Eighty-three teachers answered the quantitative survey, which included a question about whether the participants were willing to be contacted for a follow-up interview. All the participants who gave their consent for an interview were contacted. Two focus group interviews were conducted with nine participants divided into two groups: five participants in one group and four in the other. The participants were both male and female and had varying experiences in both teaching and mentoring.

Quantitative data collection and analysis

The survey was developed and tested in a pilot study conducted in 2020 with 12 participants. Minor changes and revisions to the questions and categories were made before distributing a revised survey during fall 2020. The survey employed a 7-point Likert scale ranging from 1 (a low degree) to 7 (a high degree). Most questions also included option 8 (not relevant/don't know) because of the nature of the questions and to offer the participants' the ability to answer.

The quantitative data was analyzed using SPSS. The survey included questions about the participants' backgrounds and experiences, teacher education, practical training, mentoring of pre-service teachers, mentor education, and professional development. The survey also included five open-ended questions, in which the participants were free to write their thoughts and experiences in their own words. The survey items are presented in Table 1. The quantitative analysis was focused on descriptive analyses such as frequencies, mean scores, standard deviation, and percentages to look at central tendencies and triangulate these with qualitative data to get more detailed descriptions.

Table 1.
Survey items

Theme	Survey items
Expectations	36: I would not have taken mentor education if it was not offered as part of a larger project.
Experiences	29: Do you experience mentor education as useful and relevant? 34: To what degree do you experience mentor education as preparing you to mentor students in practice or newly qualified teachers? 35: To what degree do you experience mentor education as giving you the tools you need to mentor students in practice or newly qualified teachers? 37: I believe it is important to have mentor education if mentoring students in practice.
Benefits	38: To what degree do you believe that there is an increased benefit of taking mentor education collectively?

Qualitative data collection and analyses

The intention of choosing focus group interviews was to involve the participants in a group discussion to explore their expectations, experiences, and perceptions of the benefits of taking mentor education collectively. Another aim was to promote interaction between the group members with the researcher as a mediator to ensure that the participants stayed on topic (Stewart, Shamdasani, & Rook, 2009). Two focus group interviews were conducted, recorded, transcribed, and analyzed. During the interviews, the participants were given the opportunity to discuss and reflect on their experiences with mentor education based on an interview guide that included four topics: experience with mentor education, collective and school-based mentor education, professional development, and coherence in teacher education. For the present article, the first two topics are the focus. Qualitative interview data was analyzed inductively using thematic analysis (Braun & Clarke, 2006). After the interviews had been transcribed, the researcher (first author) read through all transcripts, searching for meanings and patterns in the data and highlighting parts concerned with mentor education. Next, open coding was conducted, and data was organized into codes and code groups.

Then, the researcher focused on the code groups to identify different aspects related to the research questions and categorized these into three categories: expectations, experiences, and benefits. During the analysis, themes were identified as representative of the qualitative findings and were exemplified with quotes from the interviews in the subsequent descriptions of the findings. Quotes were translated from Norwegian to English, and all participants were anonymized. Quotes from focus group interviews are marked with F1, F2, a in the text and quotes from the open-ended questions in the quantitative survey are all marked with Q.

Joint displays

The quantitative and qualitative findings are presented in relation to each other, informing the research questions and relevant topics. Throughout, the quantitative and qualitative data were analyzed and connected through joint displays. According to Haynes-Brown and Fetters (2021), this forces the researcher to simultaneously think about both types of data. Through the process of building joint displays, the researcher not only presents the integrated results but also engages in a more integrational analysis of data (Haynes-Brown & Fetters, 2021). When using an explanatory sequential design, the joint display should provide an indication of how the qualitative findings provide a deeper understanding of the quantitative results (Creswell & Plano Clarke, 2018).

Findings

The findings have been organized according to the research questions guiding the study. First, the results regarding the participants' expectations are presented. Then, the experiences and possible benefits of taking mentor education collectively are introduced. Throughout this section, the findings are presented in joint displays showing the quantitative and qualitative results side by side before describing them in more detail. The qualitative themes are illustrated with rich and thick quotes from the focus groups to ensure the trustworthiness of the study.

Teachers' expectations of participating collectively in mentor education

Figure 1 shows the results related to the participants' expectations of taking mentor education collectively.

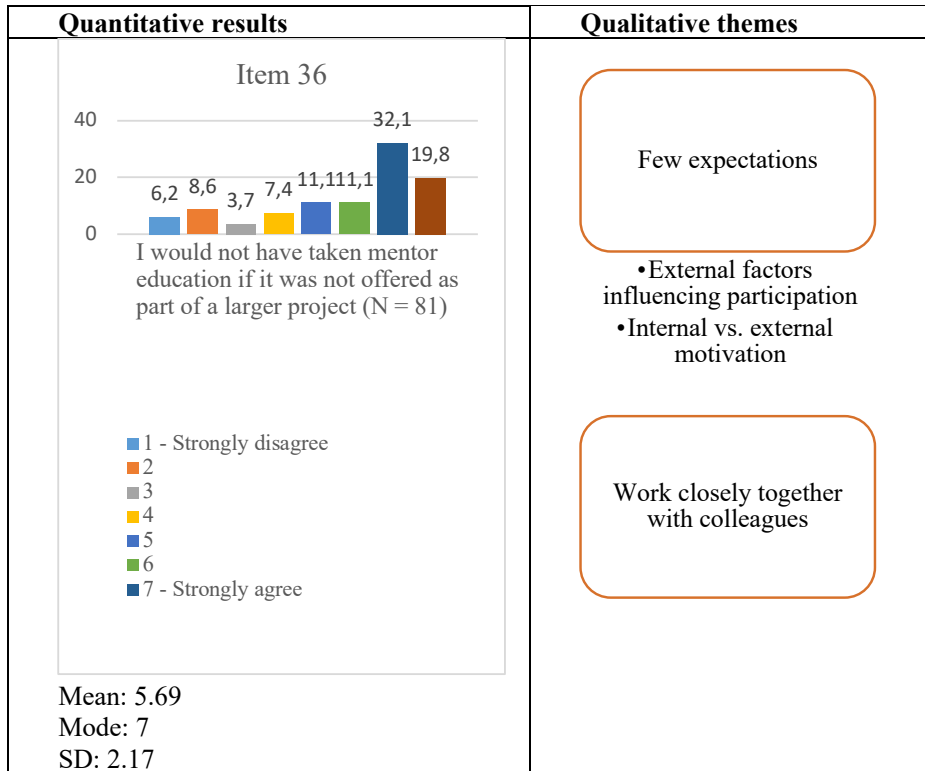


Figure 1. Participants' expectations of taking mentor education collectively

The results show that 43.2% of the participants strongly agreed (scores 6 and 7) that the reason for them taking mentor education was that it was offered to them, meaning they would not seek out mentor education on their own. This could be based on multiple factors, such as interest, time, or no aspiration to mentor pre-service teachers or NQTs. Only 14.8% strongly disagreed (scores 1 and 2), meaning that they would consider taking mentor education regardless of how it was organized.

The first theme of the qualitative data, *few expectations*, shows that because it was externally arranged and something that the schools were invited to join, the participants had few expectations before starting. The participants explained that they were part of the decision-making process, but external factors, such as being a part of a larger project and collective participation, influenced their decision. One participant explained this as follows:

I started with few expectations at all. It was not forced on us. It was our choice, but still it was a little like when the whole group of colleagues go for it, then you participate because that is where things are heading. I probably would not have done it if it had not come to us on a silver platter. (F3)

In line with the quantitative results, the qualitative findings show that participating in mentor education was considered because of the external factors guiding the project, not based on the participants' interest in mentoring or the experience of having time for continuing development. Because *external factors* were crucial in the participants taking mentor education, the participants explained that these influenced the expectations they had going into it. In Norway, mentor education has traditionally been taken as a continuing education for teachers by individual teachers, and the participants reflected on the possible differences in motivation or drive based on this. One participant reflected on the decision and the motivation for taking mentor education:

It was like “Do you want to take it?” and we thought, “We have a thousand other things to do, but yes we can take it if we can,” which is different than if one considers “I wonder if I should take it, it sounds interesting” and then goes in it with an inner drive because, now, it became an external drive in a way, and it might be interesting and we’ll do it, which was good in many ways, but it might have been even better if we had it in us. (F4)

Despite perhaps feeling some sort of external motivation to take mentor education, when it was decided that they would be taking mentor education collectively, the second theme shows that the participants expected to be *working closely with colleagues* and helping each other complete the course. Mentor education was described as more work than was expected in the beginning, and one participant explained this as follows:

This was something we were going to be a part of, complete, and we would work close together in a team and lift each other up and help each other to the finish line, and then, it became a lot more work than I expected when we started. (F1)

The results show that arranging mentor education collectively through a project influenced those participants who would not have considered taking mentor education to then take it. Moreover, in taking mentor education collectively with colleagues, the participants expected to work closely together and figure it out together, despite having little expectations before starting.

Teachers' experiences of taking mentor education collectively

The participants indicated that they had few expectations when starting mentor education and took it because it was part of a larger project. Despite this, they reported positive experiences in taking mentor education and having more competence in mentoring. Figure 2 illustrates the participants' experiences of taking mentor education collectively.

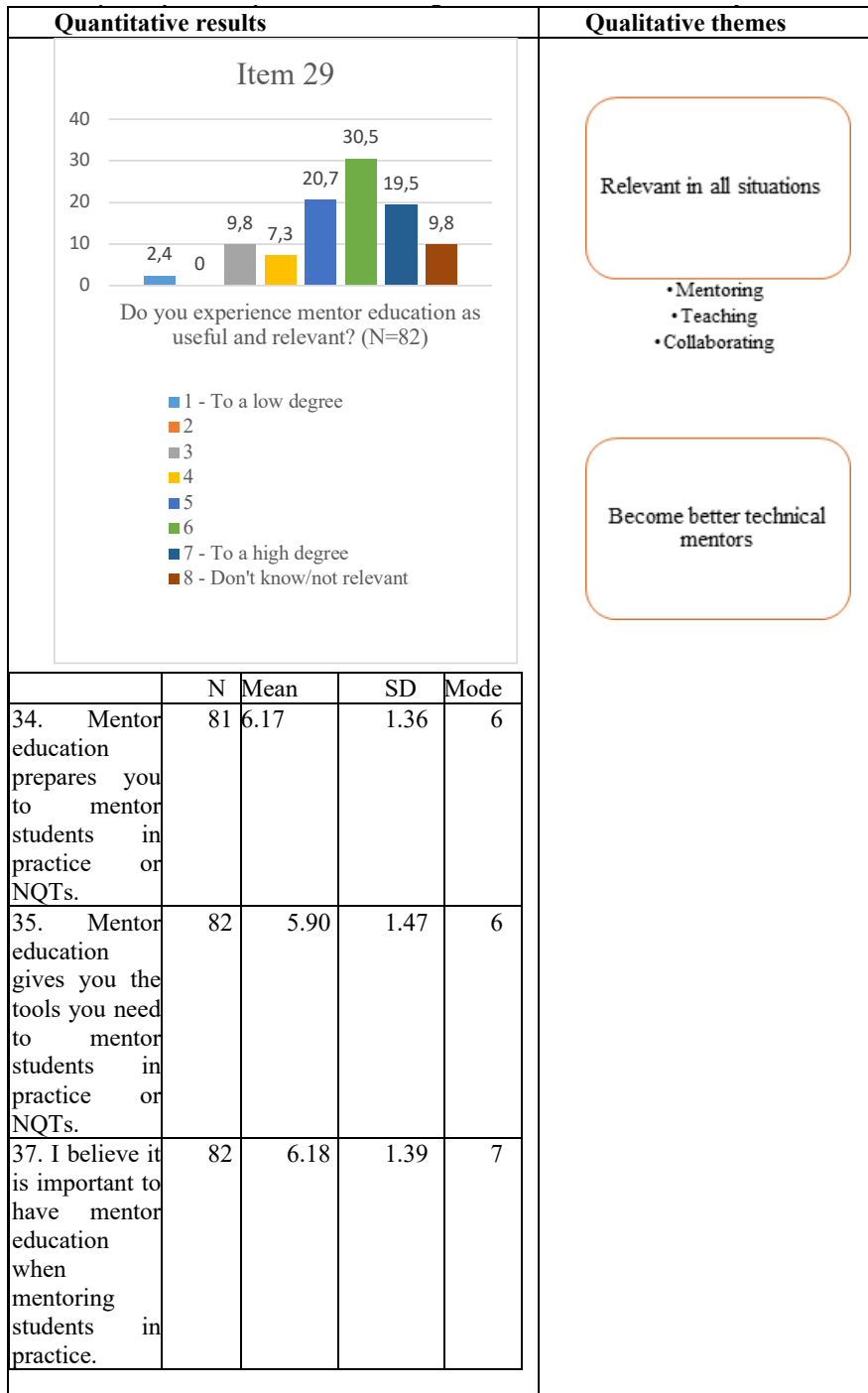


Figure 2. The participants’ experiences of taking mentor education collectively

The results show that 55.5% of the participants experienced mentor education as useful and relevant to a high degree (scores 6 and 7), while 13.5% of the participants experienced mentor education as of low or no relevance to them (scores below 4). The first qualitative theme shows that mentor education was described as relevant in all situations the participants might face as teachers, making the participants feel more secure in different mentoring situations. The experience of using mentor education in different situations was described in the following way:

I believe that I have landed on [the fact] that this has been useful for me as a person and most certainly for the children in my classroom and for our school as an organization, that I am sure of ... and of course pre-service teachers! (F1)

This description shows that the participant experienced the use of mentoring in everyday work as a teacher. Another example of this can be seen in a different participant's reflection:

It has absolutely been useful. If you don't get students to supervise during practice, you absolutely have the joy of this in relation to pupils. And therefore, I think it is good for teachers to have this study, but it is extra valuable if you have students, of course. (F3)

Mentoring pre-service teachers during practice is something that happens in periods throughout a school year, but as the participant reflected, the skills and knowledge in mentoring are something of use throughout the year. The participants described mentor education as relevant to their everyday work as teachers, explaining how they have used mentoring when working with pupils, parents, and colleagues, in addition to pre-service teachers and NQTs. Experiencing the skills and knowledge acquired in mentor education as useful shows the broad impact of mentoring and is of significance when discussing the overall positive experience participants have of mentor education.

In line with the second qualitative theme, becoming better technical mentors, a clear tendency in the quantitative data is that the participants strongly agreed that mentor education is important, and 68% of the participants strongly agreed (scores 6 and 7) that mentor education prepared them for mentoring in practice. As one participant explained, "I would not be comfortable being a supervisor or mentor without this education" (F7). During the interviews, the participants noted that mentor education provides a toolbox with skills and knowledge for mentoring pre-service teachers and NQTs. Moreover, mentor education was described as contributing to development both at the individual level and for the school as an organization.

Benefits of taking mentor education collectively

Figure 3 shows the results regarding the participants' experienced benefits of taking mentor education collectively.

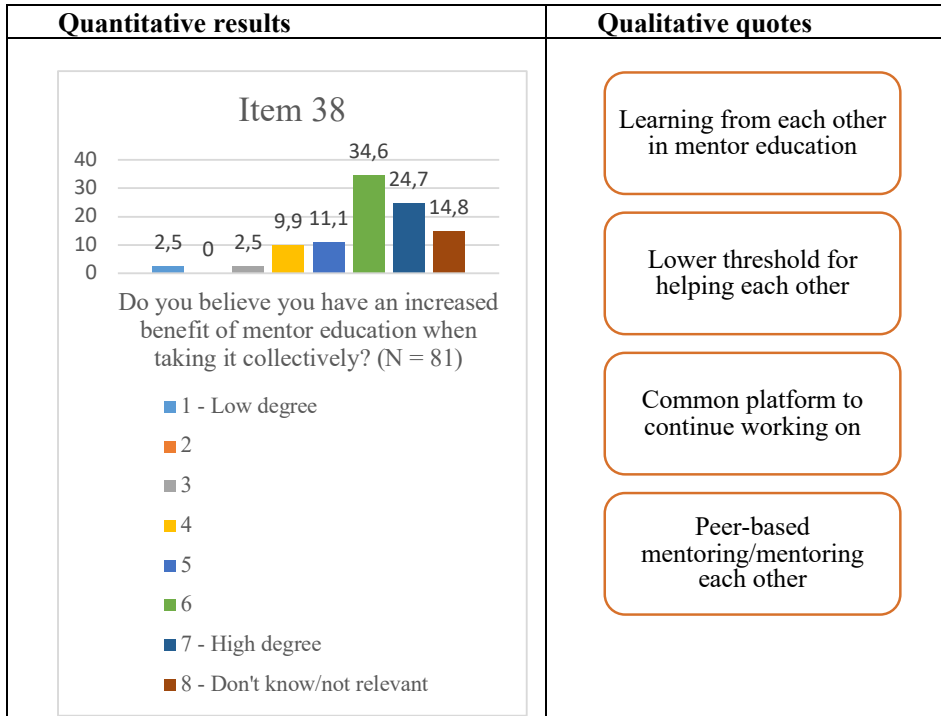


Figure 3. Participants' experienced benefits of taking mentor education collectively

With a mean score of 6.04 (item 38), the results clearly indicate that the participants believed that they have an increased benefit of taking mentor education collectively, with 59.3% of the participants answering, 'to a high degree' (scores 6 and 7). The qualitative results include descriptions of taking mentor education collectively to strengthen the participants as a collective group. The first theme, learning from each other, revealed that most of the participants felt that taking mentor education collectively was beneficial because they learned from each other. Written comments from the questionnaire exemplify the positive experience of learning from each other in mentor education; one participant explained that it is "nice being able to do it with colleagues. We learn from each other." (Q). Similarly, another participant experienced learning from each other by being able to reflect and discuss with colleagues. During mentor education, the participants had various assignments and work requirements, and one participant described the experience of different assignments in the follow-

ing way: “Great benefit from collaborative assignments, little benefit from individual work.”(Q). These comments show the positive experiences of working together and learning from each other. However, one participant expressed that working on mentor education with colleagues can also be experienced as challenging and explained, “It would have been easier doing practical mentoring exercises with people who are not colleagues whom you work with closely every day.” (Q).

The second theme describes how participants experienced *the threshold for helping each other becoming lower*. Several of the participants explained that the threshold between colleagues was lower because of mentor education because they had become more equipped to discuss with and help each other when facing difficult cases or situations. One participant explained this in the following way:

I think what is good about the way we have done it is that the threshold for helping each other has decreased, and when things are difficult, we have practiced talking together. (F1)

Moreover, taking mentor education collectively was described as providing a common platform for continuing development. One participant described that mentor education offered a “common platform from which to continue working.” (Q). By taking mentor education collectively, several participants expressed that, moving forward, they had more common ground to continue developing as a collective school. The participants expressed that discussing, reflecting, and learning together might have a positive impact on further organizational development.

The last theme revealed that the participants experienced mentor education as providing opportunities for more peer-based mentoring. The participants described the benefit of being able to mentor each other, expressing the hope that there would be time for more peer-based mentoring at the schools.

We have talked a lot about students, but during this, we have mentored each other, and I am thinking that what we have learned can be used if you have a challenge that you want mentoring on. There is a whole bunch of educated mentors here ready to help. (F8)

Being able to mentor each other in difficult situations and seeing the benefits of more formalized mentoring in contrast to asking a colleague for advice indicate that competence in mentoring and mentor education can have an impact on professionalizing the teacher profession.

Discussion

The current study has aimed to bring awareness to the significance of mentor education and what expectations teachers have of it, along with what experiences and benefits teachers identify after completing mentor education collectively. The results

show that nearly 70% of participants felt that mentor education prepared them for mentoring. Mentor education was described as providing teachers with the tools needed to mentor pre-service teachers and NQTs. This is consistent with the research on the benefits of mentor education because mentors develop a deeper understanding of mentoring, better communication skills and a stronger professional identity (Evertson & Smithey, 2000; Hobson et al., 2009; Tang & Choi, 2005; Ulvik & Sunde, 2013). In the following, we discuss two important themes permeating the results: the relevance of mentor education in all facets of the teaching profession and the benefits of mentor education collectively.

According to the first theme, *the relevance of mentor education in all facets of the teaching profession*, the results reveal the extended use and relevance of the knowledge and skills acquired in mentor education going beyond mentoring pre-service teachers and NQTs. Knowledge about mentoring and becoming better technical mentors was linked to the experience of mentor education being relevant for teachers in all the situations they face in the profession. Similarly, much like the findings of Giebelhaus and Bowman (2002), the current study has found that mentor education cannot only improve teacher education, but also has an impact on mentors' teaching skills. The results show that competence in mentoring was useful in situations with pre-service teachers, NQTs, pupils, parents, their own children, and colleagues. The scale of mentor education is small in Norway, and there are more students and NQTs than educated mentors. Bjerkholt (2017) has emphasized that mentoring and mentoring competence should be seen in a larger context because of their benefits for learning cultures, collective learning, and incorporating students and new teachers into the profession's community and knowledge base. Thus, mentor education and mentoring competence need to be considered as relevant beyond supervising and mentoring during practicum periods or NQTs' first time in the profession and be seen as an important part of the school and teaching profession. Perhaps, there is a need to rethink how to recruit teachers to mentor education by shifting the focus from the benefits mentoring has on the mentee to the benefits it can have for the professional development of mentors.

Maloney and Konza (2011) argued that a significant factor in developing supportive learning communities with positive outcomes for teachers relies on teachers having the desire to participate and extend their knowledge and skills. In the current study, the initiative for taking mentor education was found externally because it was arranged as part of a partnership project. The results show that most participants would not consider taking mentor education on their own initiative but participated because it was arranged as a part of a larger project with the premise of collective participation. There is a need for more mentors in Norway; despite a strong political focus, the scale of mentor education has been small, and many pre-service teachers and NQTs are mentored by teachers without formalized mentor education (Lejonberg et al., 2021; Ulvik & Sunde, 2013). The ambition to increase teachers' competence through continuing

education has been visible for several years (Norwegian Ministry of Education and Research, 2015), but because programs such as mentor education are often attended by individual teachers, there has been little sharing of knowledge in schools (Sandvik & Fjørtoft, 2022), which means that not enough teachers have taken mentor education. Rethinking and, to a higher degree, embracing school-based continuing education programs, such as in the present study, might be one step further toward achieving this.

The current study has shown that mentor education and mentoring are relevant beyond pre-service teachers and NQTs and are relevant for the participants both as mentors and teachers. Seeing mentor education through a wider lens and the complexity of a mentor's distinct roles in the classroom, as teacher educators and as part of a school might show the relevance of mentoring for the teaching profession in general. Many teachers in schools do not consider themselves to be teacher educators (Smith, 2016); therefore, investing time in taking mentor education is perhaps not a priority. In a study with a similar context, Amdal and Mastad (2022) have found that, unlike what other research has suggested, the participants did not express uncertainty in their role as teacher educators. This can be seen in connection to the participants coming from university schools, which also focus on participation in mentor education. The current study has found that being able to develop as mentors by acquiring new knowledge and reflecting with colleagues was described as providing a sense of security in mentoring and providing a platform for further development. Questioning how to increase the number of teachers taking mentor education to ensure high-quality mentoring in practice needs to be on the agenda for policymakers, teacher education, teachers, and school leaders in Norway and internationally.

In accordance with the second theme, the *benefits of taking mentor education collectively* and school based, the results of the present study show that even though the participants had few expectations before starting mentor education, their experience was positively influenced because it was taken collectively. The aim of school-based professional development is to develop collective knowledge, skills, and attitudes in relation to learning, collaboration, and teaching (Postholm, 2016). These environments for working and collaborating closely with colleagues can be created through PLCs (Huijboom et al., 2020). As mentor education in the current study was taken collectively, it is suggested that there are benefits in creating the PLCs of mentors at schools to develop collective capacity and collaborative cultures for learning (Ertsås & Irgens, 2021). The results demonstrate two things. First, taking mentor education together with colleagues means working closely together, helping each other, and being a part of something together. Being able to learn, discuss, and reflect together with colleagues has mostly been described as something that strengthened them as a group. These findings are consistent with Sandvik and Fjørtoft (2022), who suggest that a good model for continuing education for teachers contains elements of new knowledge and reflection. Second, taking mentor education collectively was also described as pro-

viding a common ground at the school to continue working and developing as a collective. By taking mentor education together, the collective capacity (Ertsås & Irgens, 2021) that should provide a platform for continuing work to create environments for collective learning and development (Brodie, 2021) can be beneficial for all involved in a school, which this study confirms. School-based development activities, such as the mentor education program in this project, can according to Postholm (2016) lay the foundation for further development of the school organization. Building capacity and knowledge collectively need to be seen in relation to capacity for organizational learning. Because mentor education was completed by all teachers and leaders at the schools, the importance of educational leadership needs to be discussed as it can enable or inhibit further development. How school-leaders choose to make use of the collective competence in mentoring can and probably will influence how mentoring is further implemented. The role of educational leadership has consequences both for different mentoring situations, but also for implementation of mentoring in individual and collective practices and for continuing organizational learning.

The current study has shown that the participants expressed comfort in knowing that other teachers also have mentor education because they can mentor each other both as colleagues and when working with pre-service teachers and NQTs. The significance of mentors' competence in relation to peer-mentoring is shown in this study as participants emphasize the benefits of formalized mentor education when mentoring each other. As this study shows, having a collective approach to mentoring, facilitating, and providing time for peer-mentoring need to be considered of importance as it can serve as a foundation for the continued professional development through a teachers' career (Olsen et al., 2020). The benefits that mentoring has for mentees have been well documented (Aspfors & Fransson, 2015). Research has identified that skilled mentors and contextual factors such as school culture are the key factors for the support of NQTs (Long et al., 2012; Wang et al., 2008; Williams et al., 2001), and that mentors without mentor education tend to rely on their experiences and practices in mentoring (Hobson et al., 2009). Because of a lack of focus on mentors' professional development and preparation, mentors have reported feelings of isolation and inadequacy (Bullough, 2005; Orland-Barak, 2014). Regardless of how mentor education is organized, the importance of providing spaces for mentors to meet, collaborate, and share experiences needs to be considered a goal of mentor education (Aspfors & Fransson, 2015). PLCs aim to collectively produce generated shifts in practice, where teachers learn through collaboration (Brodie, 2021), and as the current study shows, regardless of having few expectations of mentor education and having to participate collectively, the majority experienced mentor education as useful and relevant when having completed it for them as individual mentors and for the collective school.

Because the qualitative sample size of the present study was small and bound to a specific context, any conclusions that could be drawn may be limited. The qualitative

data were collected from two focus group interviews with a total of nine participants. The interviews were conducted in the last semester of mentor education, which may have influenced the number of willing participants and, in turn, might have influenced the possibility of a more randomized sampling selection. The timing of the study needs to be considered because both the quantitative and qualitative data were collected during the final semester of taking mentor education. Therefore, the study cannot provide knowledge about the benefits or effects of mentor education in teachers' practice or school culture over time. Nevertheless, the current study provides a snapshot of teachers' experiences and benefits when completing mentor education collectively over a two-year period. The current study cannot make assumptions about the long-term effects of mentor education, but the broad implication is that mentor education needs to be a priority for all stakeholders involved in teacher education. The results are worth discussing in relation to the call for more knowledge focusing on mentor education and mentors' professional learning and development (Aspfors & Fransson, 2015).

Conclusion

The results from this mixed methods study show that, despite the participants having few expectations when starting and taking mentor education, mentor education was experienced as important and useful because the knowledge acquired in mentor education was seen as relevant in all facets of the teaching profession. This suggests that mentor education prepared the participants for and gave them the tools needed to mentor preservice teachers and NQTs, as well as the tools they used in relation to pupils, parents, and colleagues. Moreover, the results have shown evidence of the benefit of taking mentor education collectively at schools and the benefits of developing PLCs for mentors within schools. Forming strong PLCs at schools through school-based and collective mentor education for teachers can be one step toward sharing knowledge and counteracting isolated mentoring practices.

Mentoring in teacher education and the induction of NQTs are highly important in discussions about teacher retention (Olsen et al., 2020). The benefits of mentoring and mentor competence for the mentee have been well documented, but more attention needs to be paid to mentors' preparation and knowledge. More research is needed to understand the complexity of mentoring and the outcomes this type of education has over time for teachers, schools, pre-service teachers, NQTs, and pupils. In addition, studies on schools or communities with a high density of educated mentors and their effects on how pre-service teachers and NQTs are welcomed and integrated in schools could help to further develop the field.

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