International Journal of Mentoring and Coaching in Edu

Online (web-based) education for mentors of newly qualified teachers: Challenges and opportunities

Göran Fransson

Online (web-based) education for mentors of newly qualified teachers

Challenges and opportunities

Göran Fransson
Department of Educational Studies,
Faculty of Education and Business Studies, University of Gävle, Gävle, Sweden

Received 16 December 2015
Revised 20 January 2016
19 February 2016
8 March 2016
10 March 2016
Accepted 10 March 2016

Abstract

Purpose – The purpose of this paper is to report on a research project concerning a web-based (online) course for mentors of newly qualified teachers (NQTs).
Design/methodology/approach – A mixed-method approach with questionnaires and interviews was used to collect the data.
Findings – Positive attitudes towards online education were discerned and initial concerns about the use of technical tools were dissipated during the course. It was found that the mentoring-related content of the online course could be mediated. The most significant difference in the participants' meaning making and ability to "connect theory and practice" with "concrete knowledge" was between those with experience of mentorship before or during the course and those without.
Research limitations/implications – The study focuses on one cohort of mentor participants ($n = 18$) attending one mentor education course.
Practical implications – The paper contributes to the value of online education for mentors of NQTs and includes some practical recommendations for mentor education providers.
Originality/value – This paper reports on an under-researched area. Research on professional development programmes for mentors in general is limited, and even more so when it comes to online education for mentors.

Keywords Mixed methods, Online education, Mentor education, Mentor training, Newly qualified teachers, Web-based education
Paper type Research paper

Introduction

The purpose of this paper is twofold, namely, to report on a research project concerning a web-based (online) course for mentors of newly qualified teachers (NQTs) and to add to the literature on this subject. The research questions are:

RQ1. What are the challenges and benefits of a web-based mentor education course?

RQ2. What kind of challenges does the web-based design pose in terms of interaction and learning and how can they be understood and counteracted?

Although the mentoring of NQTs is a common educational practice in many countries, it is an area that requires further development, especially as in many cases the enactment and outcomes of mentoring seem to be inadequate for NQTs, who experience their first years of teaching as challenging and where schools experience a high level of teacher turnover (Harrington, 2010; Waterman and He, 2011). This calls for more advanced mentoring approaches such as educative mentoring (Langdon and Ward, 2015), an acknowledgement of mentors' roles as educational leaders and change agents (Thornton, 2014) and a content-based mentoring approach (Achinstein and Davies, 2014).

International Journal of Mentoring and Coaching in Education
Vol. 5 No. 2, 2016
pp. 111-126

2046-6854
DOI 10.1108/IJMCE-12-2015-0039

An obvious solution is to establish dedicated mentor education programmes and increase the number of qualified mentors. Against this background, it has been argued that mentor education courses that ensure mentors' professional development should be a priority for policymakers and teacher educators (Hobson *et al.*, 2009). Research has shown that trained mentors have better communication skills and are more likely to share their own experiences with mentees than untrained mentors (Evertson and Smithey, 2000). Studies also show that mentor education enhances reflection and critical thinking (Koballa *et al.*, 2010; Sinclair, 2003; Tang and Choi, 2005; Ulvik and Sunde, 2013), strengthens mentors' awareness of their role and reduces their beliefs in evaluative and judgemental mentoring (Lejonberg *et al.*, 2015). However, these findings are mostly based on mentors' self-reporting (Aspfors and Fransson, 2015), even though some researchers have arrived at these conclusions after studying mentoring contexts (Evertson and Smithey, 2000). Critical reflection on and the interrogation of mentoring practices have been found to be highly valued by the mentors undertaking mentoring education courses (Beutel and Spooner-Lane, 2009; Stanulis and Ames, 2009; Ulvik and Sunde, 2013). Notwithstanding the fact that mentor education is regarded as important, there is varying support from school principals, colleagues and administrators, in aspects such as time allocation, moral support, the financing of course literature and the employment of substitute teachers (Harrison *et al.*, 2005; Tang and Choi, 2005).

Despite this, research on mentor education in general is sparse (cf. Iucu and Stingu, 2013; Wang and Odell, 2002). In a meta-synthesis of mentor education for mentors of NQTs, it was found that only ten articles had been published on the subject in peer-reviewed scientific journals (Aspfors and Fransson, 2015). It was also noted that, in principle, all the research focused on face-to-face mentor education and that distance mentor education facilitated by web-based software, technologies and pedagogies was largely ignored. This is probably due to the fact that online education for mentors is not very common.

Two exceptions were found in the overview. The first was McCrary and Mazur's (2010) research on the design and functionality of a narrative online simulation. In the simulation, reflection and dialogic learning for mentors and NQTs were intended to be facilitated via decision points with user-selected multiple outcomes. Their research involved a quality review with six experienced mentors, although the simulation was not studied as "real-life mentor education". Some conclusions were that the narrative stories used seemed to facilitate reflection and decision making and were credible, and that challenges arose in communication with the web-designers. For instance, they found it difficult to be explicit with regard to the sequence and form of the narrative and the placement of the embedded didactic content. The second exception was Sinclair (2003, p. 89)'s study of a partly web-based mentoring education initiative. One of her conclusions was that developing a "mentoring relationship of trust and open communication" before expecting open and honest communication online was important.

In addition, research on interactions in web-based education in general has shown that e-learning cannot replace human interaction (Njenga and Fourie, 2010). Students' pass rates are also lower in online courses than in face-to-face ones, which many put down to lower motivation and a feeling of not being "connected" (Ali and Leeds, 2009; Richardson, 2012). This is where self-efficacy, meaningfulness and task value become important (Lee, 2015). Online courses also change the learning process (Alvarez *et al.*, 2009; Helleve, 2007) and the preconditions for communication and interaction, such as the absence of paralinguistic cues in body language (Price *et al.*, 2007).

Even though research on education for mentors of NQTs is sparse, some challenges can be identified. First of all, not all mentors of NQTs receive training (Asada, 2012). Second, those education courses that are offered tend to vary in length, ambition and focus (Aspfors and Fransson, 2015). For instance, ten-week courses are offered in Norway (Ulvik and Sunde, 2013), whereas those offered in the USA may only last a few days (Carver and Feiman-Nemser, 2009). The focus can also vary. In Carver and Feiman-Nemser's study, they found that the focus was on teaching standards and how to support portfolio assessment rather than on the mentoring process itself and reflective conversations, both of which are important aspects for a mentor. In an English study, Haggarty *et al.* (2011) concluded that mentor education tended to focus on organisational procedures rather than the complexities of learning and the actual mentoring process.

The context of the course

The course was organised by the University of Gävle in response to a teacher registration reform implemented in 2011 that included a probationary year and mandatory mentoring of NQTs and preschool teachers. While 8,250 teachers and preschool teachers graduated from universities and teacher education institutions in 2012/2013, all expecting a probationary year and a designated mentor, very little targeted mentor education is provided in Sweden. In spring 2014, only five out of 18 (from a population of 22 institutions) surveyed universities and teacher education institutions offered some kind of education for mentors of NQTs. The course researched for this paper was from one of these five institutions.

The course in question was run entirely as a web-based university course, with no organised face-to-face meetings. The course was part-time (20 per cent of full-time), gave 7.5 credits within the European Credit Transfer and Accumulation System (acronym used, 7.5 ECTS) (European Commission, 2015), focused on mentoring for teachers and preschool teachers, and was run during the academic year 2013/2014. In total, 23 participants (22 female, 1 male) – 11 preschool teachers and 12 school teachers – began the course, of which 18 graduated in the allotted time. The preschool teachers had undergone a two-year training course and had teaching experience ranging from 15 to 33 years. The school teachers had two to four years training and between 11 and 30 years of teaching experience. The average number of years, as teachers, for the whole group was 21.

A learning management system (LMS) (Blackboard) was used as the digital platform for communication, on which documents, questions, blog posts and discussions were published. Lectures were published as recorded PowerPoint presentations embedded in the course's LMS. A total of nine recordings were uploaded amounting to 4.5 hours of instruction. Some YouTube films were also used as course content as a complement to textbooks or scientific articles about mentoring. During the course, live interactions took place as six 1.5-hour web-based seminars via the web conferencing platform Adobe Connect. Here, participants could choose between two different dates for each seminar that best suited their work situation. Thus, each mentor participated in six web-based seminars, while a total of 12 web-based seminars were provided with somewhat different constellations and numbers of participants. Numbers of participants in these seminars varied from 4 to 13, and discussions took place in online plenary sessions and in smaller "break-out" groups.

The six seminars (a-f) focused on five thematic content modules: (a) the political and practical background of the teacher registration reform, including mentors' tasks and

research on NQTs' situations, experiences and competences; (b) the roles, processes and relationships of mentoring; (c, d) communication, communication strategies, interaction and documentation; (e) mentoring and the discussion of graduation papers; and (f) the examination of graduation papers. These modules were specifically created to meet the needs of mentors in their own national and cultural context. Knowledge relating to the content and perspectives of such education has been well-documented in research studies (e.g. Hultell, 2011; Aspfors and Fransson, 2015), while other knowledge stems from practical experience. There is also an understanding that mentors' work is complex and that supporting NQTs and facilitating their professional development and learning has many different aspects to it. Additionally, as NQTs are also evaluated by the head teachers at the school in which they work, different kinds of assessments approaches and implications for mentoring need to be discussed in the course[1].

Prior to each seminar, participants were expected to read assigned literature, to view recorded lectures and to prepare and post questions or issues for discussion in blog posts. In order to graduate from the course, the compilation of a reflective diary, a summary of the questions arising from the seminars and a term paper in the form of a scientific essay were required. Depending on the participants' qualifications, ambitions and quality of work, it was possible to graduate at the first-cycle or second-cycle level of the Bologna system (European Commission, 2015).

The author of this paper organised the course, recorded the lectures and facilitated and moderated the web-based seminars. In these seminars, specific approaches for e-moderation, identified by Vlachopoulos and McAleese (2004), were used, i.e. a low or non-directive moderation style for intervening in discussions in order to facilitate reflection, and a high or directive moderation style for interventions concerning process and content. These styles were in line with the key aim of the course, which was to stimulate a critical and reflective stance and facilitate a mentorship that focused on strengthening the mentees' own professional stances in accordance with what Wang and Odell (2002, 2007) call a critical constructivist approach.

Methodology

A qualitative and interpretive methodological approach (Denzin and Lincoln, 2005) was adopted in order to understand both the underlying logic of the course and the participants' perspective. Thus, a mixed-method approach (Creswell and Plano Clark, 2011) consisting of surveys, interviews and analysis of seminar recordings was employed. The main data sources analysed for this particular paper were the interviews and surveys, with an emphasis on the former. The recordings were first analysed more tentatively in order to validate and broaden the picture emerging from the interview and survey data.

In all, 18 of the total 23 participants completed a survey questionnaire before the course began. Five participants joined the course after the first session and did not complete the pre-course survey. The survey included the participants' experiences of mentoring and web-based education, their expectations for the course and their views of mentoring. A post-course survey was completed by 16 of the 18 participants who completed the course in time. Here, the focus was on how participants perceived the content, the web-based design of the course, their views on mentoring, and what they had learned. They were also asked about things they would change, retain and develop in the course and what had motivated them to complete the course. Both surveys had a mix of open-ended and closed questions, with an emphasis on open questions.

Seven of the 18 participants were also interviewed. The criteria for inclusion in the interviews were experience of mentorship before and/or during the course, and having

opportunities to reflect on changes in their mentoring strategies as a result of the course. In total, 12 participants meeting these criteria were invited to participate in the interview phase of the study. Four preschool teachers and three primary school teachers (six female and the only male) agreed to be interviewed and are hereafter referred to as the respondents (Table I).

As the author had organised the course, recorded the lectures and facilitated the web-based seminars, some methodological and analytical challenges and ethical dilemmas arose once the decision was taken to research the process. Participants had been informed that the purpose of the post-course survey was to facilitate the present course design and improve future course delivery. However, when the surveys had been returned and analysed, the research potential of the data and the idea of using it as the basis of a research project emerged. In this sense, the post-course survey can be regarded as an exploratory phase. At the beginning of the course, participants were informed about the course goals and that the online seminars would be recorded. Throughout the course the author made field notes on the challenges, impressions, questions and hypotheses that had arisen (cf. Fetterman, 1998). Primarily, this was done with the intention of improving the course and for the author's own understanding of mentoring and online mentor education. Once the participants had been examined and had received their grades, a final decision was taken to conduct the research analysis. The course participants were informed about this step, invited to complete a post-course survey and approached about their possible participation as interviewees. For ethical reasons it was important that the relationship of the participants, the course, and course tutor ceased. One participant, who had not completed the course in time, was therefore not included in the study.

Researching any phenomenon in which the researcher has invested time, effort and knowledge may lead to an analytical bias, particularly if critical distance to the research object is not maintained. An ambition to identify critical issues, important taken-for-granted assumptions and pre-understandings can bias the data collection and analysis. Taking account of these risks, a critical stance of reflexivity (Creswell and Miller, 2000) was actively adopted in an attempt to secure scientific rigour, trustworthiness, confirmability and authenticity (Bryman, 2012; Lincoln and Guba, 1985).

The interviews were semi-structured and lasted for an average of 42 minutes. They began with a conversation about the participants' experiences and then became more focused. Overall themes, such as challenges and opportunities and the advantages and disadvantages of online education were focused on, as were issues such as the use of technology, course design, mentoring, communication and learning. The transcripts were coded and analysed qualitatively using NVivo10 software,

Completed the pre-course survey	18 participants
Joined the course after the pre-course survey was completed	5 participants
Total number of participants in the course (22 female, 1 male; 11 preschool teachers and 12 school teachers)	23 participants
Non-completion of the course	4 participants
Did not finalise the course in allotted time, but later	1 participant
Finalised the course in allotted time	18 participants
Completed the post-course survey (out of the 18 that finalised the course)	16 participants
Did not complete the post-course survey	2 participants
Interviewed	7 participants

Table I. Overview of participants in course and how they participated in generating data

thereby facilitating a systematic sorting of the data and the construction of qualitative categories. The analysis and interpretation began with a content analysis of each respondent's experiences and positions and the identification of themes and overall positioning. In a second phase, a comparative analysis was conducted with the aim of identifying similarities and differences in respondents' experiences and positions. In a third phase, the analyses and interpretations of the interview data were related to the field notes, survey results and an overall analysis of the recordings of the Adobe Connect seminars. The tentative hypotheses generated during the course and addressed in the field notes were downplayed in the first and second analytical phases in an attempt to maintain an unbiased approach. In the third phase, these hypotheses were used as analytic and interpretative reference points in the validation or generation of new themes or interpretations. The 12 seminar recordings spanned 14.5 hours. However, as half of this time was spent in break-out groups, the recordings of the main meetings resulted in an empty screen with no interactions at all. Due to this, the recordings were used only for an overall validation of the interview claims and themes. The ambition to validate the analysis and interpretations by searching, for example, for disconfirming evidence (Creswell and Miller, 2000; Miles and Huberman, 1994), strengthened the analysis and led to some of the themes becoming broader and more nuanced.

Results

The major benefit of an online mentor course is that it facilitates studies at a distance. If the course had not been held online it is doubtful whether all the participants would have been able to participate, given that travelling to a university campus would have taken up too much of their time. This result emerged in the post-course survey ($n = 16$), in the interviews ($n = 7$) and during the course seminars. Five of the seven interviewed participants stressed that they would not have taken part in the course if it had not been held online, because they would have had to travel more than 100 km to attend a campus-based course at the university. Instead of allocating an entire working day to attending a seminar in a campus-based course, the seminars in the online course simply required 1.5-2 hours of participation in the late afternoon with a computer or tablet at home or at work.

Technical concerns – but in the end good experiences

Both before and at the beginning of the course the majority of participants raised concerns, even fears, about possible technical challenges due to their lack of experience with computers. This point was made by all seven respondents in the post-course interviews and was also highlighted in the seminars by virtually all the participants throughout the course. In total, 12 of the 16 participants were over 45 years of age and could be described as "digital immigrants" (Prensky, 2001), with almost no experience of web-based seminar technologies and having little technological expertise. The pre-course survey ($n = 18$) revealed that six participants had used Skype, but only one had used Adobe Connect. Thus, the technical challenges were profound and some participants expressed that they would have preferred a campus-based course.

However, during the course, with one or two exceptions, these technologically related concerns mostly vanished. Some of the participants encountered technical obstacles at the beginning of almost every Adobe session, especially at the beginning of the course. However, as the course progressed these challenges – such as working out the settings for microphones, speakers and web-cameras – were overcome and dealt with as the participants become more technologically savvy. Other challenges were

beyond the participants' control, usually because they were associated with the Adobe Connect system and included things like echoes, time delays when talking and so on.

Other positive factors included the possibility of studying at one's own pace, being able to listen to the recorded web-based lectures more than once, and being able to stop and start the recordings to reflect, or for taking notes. An overall interpretation of the interviews, field notes, analyses of the seminars and post-course survey is that, as the course progressed, all participants improved their technical skills, reduced their concerns, substantially increased their comfort zones and skills in handling the technology, and devised their own strategies for online learning.

Initial discomfort with web-based interaction

Another challenge of the course that was emphasised in the interviews was the discomfort with web-based interaction in the seminars via computers or tablets. This was also highlighted in the field notes and was identifiable in the recordings of the seminars in Adobe Connect. A comparison of hypothetical face-to-face meetings with the virtual meetings in the "digital rooms" of Adobe Connect revealed challenges related to "non-physical presence" and limited or no access to non-verbal communication modes, such as body language. Even though the ambition was that every participant would use a web camera during the seminars to support communication and meaning making, this was not realised. The extent of camera use and moving videos varied, although still images were common.

These challenges in communication can be summarised by illustrative questions from the participants about things that were not very clear in their discussions: "Who is talking?" "Who wants to talk?" "What kind of guiding signs for the interplay are now available for me?" "When can I break into a conversation?" The respondents also had some difficulties expressing what they meant and often used metaphors or precise explanations. For instance, John tried to explain what was missing by calling it "that extra":

> A personal touch is tricky to create online. I think it is about "that extra", "the human aspects" that appear when meeting face-to-face. I don't think there is the same depth in the conversation […] when you don't see the interplay between people (John).

An overall interpretation of the interviews, but also of the analyses of the recorded seminars, is that it is possible to experience conversations during web seminars as being linear and somewhat disjointed, as people are often cautious and wait to see what will happen. When one person speaks the others listen, and each listener waits to make a comment. There is no doubt that, initially, participants did not feel fully comfortable with the web-based interactions, although it is also evident that they became more comfortable with these interactions over time. However, one needs to be cautious and not over-interpret the negative aspects of communication and meaning making shaped by technology and the Adobe Connect system. For instance, when in the post-course survey the participants were asked what they would change in the course, only four out of 16 wrote in the open-ended question section that they wanted one or two physical meetings to be included. This can also be understood as an adaption to or reconciliation with the online design. However, the overall interpretation of the interview-, survey- and small-talk data gathered during the course is that the majority of the participants would have preferred to combine the online design with one or two physical meetings – preferably at the beginning of the course and/or during one of the seminars focusing on communication strategies.

Meaning making

The web-based design of the course and the perceived discomfort in interactions raise questions about the extent to which the course design fully supports learning and meaning making and is suitable for the education of mentors. Some aspects of these issues are highlighted below.

Seminars using Adobe Connect. With regard to the web-based seminars and the consequences of these for learning, the respondents are vague in their expressions and conclusions. In the interviews the respondents speculate that the disturbances in the interactions and meaning making described above (probably) have a minor negative impact, although they struggle to give any concrete examples of how the learning could have been negatively influenced. This can either be interpreted as an assumption of negative impacts (that do not actually exist), or as difficulties in conceptualising and verbalising these negative aspects. The overall interpretation of the study is that the latter explanation is more plausible, and some evidence for this is given below.

The depth of the discussions is to some extent questioned due to the online format. These concerns, often expressed in terms of hypotheses or speculations, are highlighted during the interviews and reflect some kind of elusive feeling:

> The discussions may have been deeper if we had met face-to-face, but I'm not sure. Anyway, I thought that the discussions were good and were even inspiring (Carina).

Another aspect that may have influenced the depth of discussion is that there were no fixed groups in the course as a whole. As the participants were able to choose between two different dates for each seminar, it meant that different constellations of participants attended the seminars at any given time. This in turn was not optimal for continuity and thus, as reported in some of the interviews and observed during the seminars, for the depth of the discussions. However, being able to choose from different dates to fit their work situations was convenient for individual participants.

The recorded lectures. Satisfaction with recorded lectures uploaded to the course LMS, as indicated in the post-course survey, received a high-approval rating (mean 5.9 of a six-grade scale). During the interviews, and in some of the conversations during the course, comparisons between these asynchronous recorded lectures and synchronous face-to-face lectures were discussed. The recorded lectures were appreciated for their content and for the opportunity to decide when and where to listen to them. As previously noted, the possibilities of stopping and starting the recordings to make notes and listen to them again, later on, were also appreciated. However, some of the participants reported that they would have liked to have asked questions directly, when listening, as would have been possible with synchronous, face-to-face lectures in a university classroom. Annika expressed it like this:

> I sometimes felt when sitting and listening to your lectures that I would have liked to have been able to ask direct questions. […] I missed that possibility (Annika).

According to Annika, this meant that she "lost some aspects" because some of her questions had to do with her personal graduation paper, on issues that were not going to be discussed at the upcoming seminar. Even though this kind of disadvantage exists, the same thing can also happen during face-to-face lectures, as many of the responses

indicated, and the general picture is that there were more advantages than disadvantages with the recorded lectures. A quote from John illustrates this:

> Whatever you didn't manage to get or reflect on […] or thought that: "That sounded important, but what was it?" When you listened to it again it was obvious: 'Yes, that's it. Good! So being able to stop and go back is a good idea (John).

The fact that face-to-face lectures also open up for informal small talk before and after a lecture is not explicitly emphasised or highlighted in the dataset, but is perhaps implicitly included in the desire to have at least some face-to-face meetings during the course. On the other hand, as some of the respondents indicate, a web-based distance course allows more people to attend, yields a greater variety of experiences and perspectives, saves resources and enables more teacher-led activities – all of which can lead to better learning outcomes.

Experience of being a mentor. Interviewees were chosen from those 12 course participants who were mentors for either a school teacher or a preschool teacher. Four participants had no experience of mentoring. During the course it became evident that the experience of being, or having been, a mentor was very valuable for learning and making sense of course content, as well as for the ensuing discussions. This was largely because they had a more realistic, nuanced and developed view of mentoring and were able to address real situations, which, according to my interpretation, enhanced their understanding of being and of becoming a mentor. This was especially evident when mentors were able to compare their experiences of different kinds of mentorship relations:

> During the course I lived out many of the different roles one has as a mentor. And I recognised myself in them as well […] that you can do different things in a mentorship with different trainees who have different prerequisites, because I have mentored those who are young, new and who have worked as child minders for a long time. There are different angles of approach to all these. You have to think differently depending on who the mentee is and how you need to organise the work (Maria).

Being or having been a mentor seems to be one of the most important factors for learning and for a capacity to connect "theory and practice". As one of the teachers who did not have a mentor stated:

> Since I have not been a mentor it is difficult to reflect on the mentor role in everyday life […]. I don't feel fully involved in the discussions (Anna).

Experience helps one understand theory and transform theory and strategies into practical action (as Maria above). Examples of learning that emerges from these kinds of reflections are that mentors, over time, develop different roles in their mentorship, that every mentee needs to be treated as an individual, how this is best achieved, how different strategies can be applied in order to meet an individual's needs and expectations, and that conversations may take different directions depending on the situation, expectations and the strategies used – all knowledge that might seem obvious but that, in reality, has many layers and depths.

Developing pedagogical strategies for online mentor education

The majority of the students on the course had not studied for some time, which meant that their study habits were rusty. For example, they found reading English research articles, writing scientific papers or applying modern e-learning approaches difficult.

However, these challenges were dealt with and only one person did not take the final exam, although she did participate in all the seminars.

The design of the course highlighted the need for some specific pedagogical strategies for both participants and the course tutor. First, the course did not provide participants with any natural space for the development of social relationships or informal discussions, which meant that they often had to motivate and discipline themselves. Motivation was indicated by the respondents with phrases such as, "the course gave me something" (cf. 29 per cent out of 48 comments in the survey, indicated by 14 of 16 participants), and "good discussions during the seminars" (cf. 19 per cent out of 48 comments in the survey). For participants with a mentee during the period of the course, additional motivation was generated through their contact with the mentee. Participants also had to be extremely self-disciplined, given that they all worked full-time and that the majority perception of the course was that it was tough, having regard to examination requirements and the amount of time and effort invested for 7.5 credits within the ECTS (European Commission, 2015). A typical comment in the post-course survey was: "It was much more extensive than I thought it would be".

Since the main communications and interactions took place during the web-based seminars, each of which lasted for 1.5 hours, there was little space for informal small talk. Instead the participants were asked in advance to prepare questions and issues they wished to highlight. These were also published in the course blog. The communicative nature of the web-based design also seems to have motivated the students to individually prepare in a similar way, and this is the second pedagogical strategy that emerged. Being alone in front of the computer or tablet, one cannot really get away with making sweeping comments. As a student one's contributions need to be well thought through and what one says or asks needs to be clearly formulated. When students meet face-to-face, and can see and read each other, this kind of interaction is made much easier:

> If there is just one session each month and there is limited time, and you are alone in front of the computer and your companions are on the Internet […] you have to prepare what to say, know what your opinion is, and which issues to address. You cannot slip away saying nothing, as is possible in other situations (Annika).

However, some of the participants used the preparation time more extensively in a goal oriented and pedagogical way during the seminars, which ensured that their issues were raised and their questions addressed. For some of the respondents (for instance Annika and John), this goal orientation was very strongly connected to questions that emerged when reading the literature, listening to the published lectures before the seminars, or to their present situation with the mentee.

The third pedagogical strategy that emerged during the seminars in Adobe Connect was the attempt to be as explicit as possible and address real events or conversations with mentees in order to create collaborative meaning making during the seminars. Such narratives triggered questions from the other participants although, as some of them expressed during the interviews, it also helped the storyteller in his or her own meaning making process by being able to verbalise experiences and thoughts and connect them to the theories and literature.

Mentoring-related content

The content of the course revolved around preparing the participants to be mentors. In the post-course survey, the participants were asked: "What is the most important

thing you have learned from the course?" This yielded a total of 57 thematic statements, of which 43 were content related and 14 activity related. Eight categories emerged from these statements. The most prominent categories in the content-related theme were: communicative skills (17 statements), the mentor's role and tasks (10), building confidence (9), issues characterised as meta-knowledge (6) such as historical background, implementation strategies used, etc.

The statements regarded as highlighting activity-related benefits focus on activities during the course (14). For instance, the prominent place of seminars (4) indicates the value placed on the discussions during the seminars. Responses relating to the literature and recorded lectures (5) indicate the important role of course content and related information. The category "other" (5) includes examination tasks, discussions with mentees and the ease of accessibility of education via ICT.

Notably, most of the valued aspects related to the participants developing their own communicative skills (17), the mentor's role and tasks (10) and relational aspects (9), even though the course did not include any face-to-face role play. Role play was not included in the course design due to the challenges of attempting role play in an online context (cf. Hrastinski and Watson, 2009). However, films of mentor-mentee conversations were available during the course, and the course literature and recorded lectures highlighted theories, models and common experiences, which were then discussed during the Adobe Connect seminars. None of the respondents directly suggested role play, but when the subject was raised during the interviews some liked the idea of role play being included in mentoring conversations. However, they also acknowledged that this was probably too complicated to be realistically "lived out" in an online course delivery.

Non-completion of the course

Most university courses experience student non-completion. Non-completion rates can be especially high when a majority of course participants work full-time and where courses are delivered online, not least because of technical challenges. As reported in the interviews, post-course survey and seminars, the course was also experienced as being more difficult than expected, mainly due to the amount of reading and subsequent discussions, and the production of a scientific examination paper expected to combine lived experiences and challenges with theory, models and research in an analytical, reflective and formally correct way – a writing genre with which the participants were unfamiliar. In addition, only a few participants were allowed to use their paid working time for their studies (they could use a maximum of three days during the six-month course). A clear majority studied in their leisure time but were able to use work time for seminars because these were held "late afternoon". One preschool teacher said that:

> I have one day [for the whole course] in which to study! I told my boss about my sleeping problem and that the course is killing me. Despite the niggles the course is interesting and fun. I have learned a lot, but don't have sufficient time and energy for it (Ann-Charlotte).

Five of the 23 who started the course did not complete it by the target end date. The 11 preschool teachers remained throughout the course, while five of the 12 teachers did not complete the course. Due to a high workload, three participants applied for a pause in their studies, and none of these have two years later resumed the course. One went on sick leave due to the death of a relative, and one followed the course but did not take the examination, explicitly stressing that the paper was too complicated to undertake.

Thus, the course non-completion rate was 20 per cent, which may be compared with 35 per cent in a Norwegian face-to-face mentor course of 15 ECTS (Ulvik and Sunde, 2013).

The driving forces for the participants completing the course were surveyed by questions with six fixed alternatives with a force choice of the "three most prominent reasons", yielding 54 responses. In descending order, these were: "It gave me something" (29 per cent); "the discussions with other participants" (19 per cent); "the course was necessary for being a mentor" (19 per cent); "What I have started, I will finish" (17 per cent); "higher salary" (8 per cent); "I want the credits" (6 per cent): and, in the category "other", "Would like to support colleagues" (2 per cent).

Discussion and implications

Although limited in its generalisability, this study raises important issues for teacher education and has implications for the education of mentors of NQTs. Some of these issues and implications are discussed below.

First, concerns about the use of technical tools were identified, although during the course these concerns changed to a mainly positive attitude towards online education. Some of the participants perceived the technical challenges to be more problematic and comprehensive in terms of extent, time and difficulty than they really were. However, for a teacher following a mentor education course, all concerns or frustrations are to be regarded as "true experiences" and should be dealt with accordingly.

Second, an online course not only changes the teaching and learning prerequisites for the participants and their tutor(s), but also poses questions about how to communicate, learn and study. During the course, initial technological concerns proved to be unfounded as online communication became familiar. Some of the issues raised included technological and communicative aspects, although for participants as a whole, issues such as study skills and pedagogical strategies also became evident. Non-completion rates are often higher in online courses than in campus courses (Ali and Leeds, 2009). According to Lee and Choi (2011), a lack of self-regulated learning is a major reason for this, which makes it important to find fruitful pedagogical strategies and ways of keeping students motivated. Throughout the course motivation was maintained by feelings that the course and accompanying discussions were "giving something". In this regard, intrinsic goal orientation emerges as an important issue (cf. Cho and Chen, 2013; Xie and Ke, 2011). Goal orientation also emerges as a pedagogical strategy to get as much out of the web-based seminars as possible, given that small talk is not as frequent as it is in face-to-face meetings. This implies an elaborative learning process for participants, such as preparing for the course and deciding in advance what kind of information is necessary, or which areas should be penetrated and discussed during the web-based seminars. This would indicate varying possibilities or asynchronous learning between those who have an understanding of interaction processes in web-based seminars and those not having this understanding. In this respect, having an initial understanding or some experience of the mentoring process, and thus being able to apply a goal-oriented approach in the web-based seminars, would seem to be important.

Third, it was possible to mediate the mentoring-related content of the course online. However, as in every type of course, course design, planning and student preparation before the seminars are important. The possibility of re-watching recorded lectures and seminars in Adobe Connect was regarded as beneficial. Learning and meaning making occurred, although some participants expressed a vague and elusive feeling that the web-based format may have had a negative influence on learning and meaning making,

mainly due to limited interpersonal access and non-verbal communication modes, such as body language. As in any face-to-face meeting, meaning making was mediated by sharing stories about real events and asking questions. The power of stories in the process of meaning making has been shown in research (e.g. Bruner, 1990). It has also been shown that the emotional and aesthetic qualities of stories may overshadow their content (Pulvermacher and Lefstein, 2016). In this sense, participants asking questions and being focused helped them to concentrate on their meaning making.

The most significant difference with regard to the participants' options for meaning making and expressing signs of "connecting theory and practice" or "concrete knowledge" was between those who had experience of mentorship before the course or during the course, and those who had not. The former group's accumulated knowledge was expressed as narratives of lived situations and cues for learning, whereas the latter group had no access to this kind of knowledge. The implication of the above is an emphasis on course tutors' endeavours to make the participants' narratives as contextualised and targeted as possible.

As a tutor of the course, the author would liked to have included some role play of mentoring situations in order to facilitate the embodiment of knowledge, meaning making and discussion, but decided against doing this online. However, role play was not requested by any participant, perhaps due to the inclusion of filmed mentoring sessions to reflect on. Nevertheless, as the course designer, the author regards the absence of role play as a major shortcoming (cf. Hrastinski and Watson, 2009). It would also have been possible to allow some participants to upload videos of themselves acting as mentors, for instance, in a recording of an actual mentoring session. Ethical issues notwithstanding, recording of mentoring sessions would have provided valuable real-life situations for analysis and reflection as an integral part of the course.

Fourth, teaching an online mentor course not only requires competence in mentoring but also competence in designing and facilitating online learning and being able to deal with the technical challenges encountered by participants. For instance, dividing into small discussion groups while attending to individual participants' technical hiccups is one example of a pedagogical strategy for addressing such technical challenges. If participants are not used to online education, it may be beneficial for the teachers of the course to know how this might influence participants' learning processes and what the advantages and disadvantages of online education are. For instance, to what extent do concerns, emotions, taken-for-granted assumptions or encountered challenges affect the learning process, and what kind of impact do they have on the web-based education? Some aspects, situations or events can be over-emphasised, as we have seen in this study, and others downplayed. The recommendation would be to take all the aspects discussed above seriously and talk about them openly with course participants. It may also be beneficial to discuss possible challenges in advance. Other issues that could be discussed in advance include the importance of having a positive attitude, the dangers of over-estimating the impact of technical challenges or disturbances, and having realistic and nuanced expectations of online mentor education and its limitations. The results also indicate that there is a need to discuss online study skills and pedagogical strategies, such as how to prepare and follow up a web-based seminar session or how to ensure that one's own interests are being considered. However, a key competence for course designers and teachers is the ability to design a course that is interactive, flexible, engaging, and in which feedback is provided.

The limitations of this study must be acknowledged. For example, the number of participants is limited and the study is based on one particular course that was

designed and facilitated by the author of this paper. The digital technologies used for the course also contributed to the opportunities and limitations of the interactions and pedagogical design. It could be that other technical applications and platforms may be more advantageous and facilitate different circumstances and processes, which in turn might result in new or additional perspectives on web-based mentor education.

Finally, the technological and pedagogical landscape is in constant flux. Many open educational resources and web2.0 solutions offer options for web-based interaction. For instance, it is possible to use text, audio and video to make layers of comments that potentially enhance learning and thereby extend the pedagogical options when designing a mentor education course. Thus, online course design and construction necessitates a greater awareness of the technological and pedagogical possibilities and how changes open up new options and limitations. All this requires partly different skills then designing traditional face-to-face courses. It may be unreasonable to expect one and the same teacher to have extensive subject knowledge of mentoring and at the same time be able to design and teach an online course using the latest technical tools and pedagogical strategies (cf. Alvarez *et al.*, 2009; Fransson and Holmberg, 2012). Here, cooperative course design and team teaching may be workable options. A greater emphasis on how an online course can improve the quality of mentoring would also be advantageous.

Note

1. The evaluation of NQTs were operative 2011-2014, then abolished.

References

Achinstein, B. and Davies, E. (2014), "The subject of mentoring: towards a knowledge and practice base for content-focused mentoring of new teachers", *Mentoring & Tutoring: Partnership in Learning*, Vol. 22 No. 2, pp. 104-126. doi: 10.1080/13611267.2014.902560.

Ali, R. and Leeds, E. (2009), "The impact of face-to-face orientation on online retention: a pilot study", *Online Journal of Distance Learning Administration*, Vol. 12 No. 4, pp. 1-9, available at: www.westga.edu/~distance/ojdla/ (accessed 26 April 2016).

Alvarez, I., Guasch, T. and Espasa, A. (2009), "University teacher roles and competencies in online learning environments: a theoretical analysis of teaching and learning practices", *European Journal of Teacher Education*, Vol. 32 No. 3, pp. 321-336. doi: 10.1080/02619760802624104.

Asada, T. (2012), "How do mentees evaluate their mentor's competencies in Japanese induction program?", paper presented at The European Conference on Educational Research (ECER), Cadiz, 18-21 September.

Aspfors, J. and Fransson, G. (2015), "Research on mentor education for mentors of newly qualified teachers: a meta-synthesis", *Teaching and Teacher Education*, Vol. 48, pp. 75-86.

Beutel, D. and Spooner-Lane, R. (2009), "Building mentoring capacities in experienced teachers", *The International Journal of Learning*, Vol. 16 No. 4, pp. 351-360.

Blackboard. available at: www.blackboard.com (accessed 10 March 2016).

Bruner, J.S. (1990), *Acts of Meaning*, Harvard University Press, Cambridge, MA.

Bryman, A. (2012), *Social Research Methods*, 4th ed., Oxford University Press, Oxford.

Carver, C. and Feiman-Nemser, S. (2009), "Using policy to improve teacher induction critical elements and missing pieces", *Educational Policy*, Vol. 23 No. 2, pp. 295-328.

Cho, M.-H. and Chen, D. (2013), "Self-regulation in online learning", *Distance Education*, Vol. 34 No. 3, pp. 290-301. doi: 10.1080/01587919.2013.835770.

Creswell, J.W. and Miller, D.L. (2000), "Determining validity in qualitative inquiry", *Theory Into Practice*, Vol. 39 No. 3, pp. 124-130. doi: 10.1207/s15430421tip3903_2.

Creswell, J.W. and Plano Clark, V.L. (2011), *Designing and Conducting Mixed Methods Research*, 2nd ed., Sage, Thousand Oaks, CA.

Denzin, N.K. and Lincoln, Y.S. (Eds) (2005), *The Sage Handbook of Qualitative Research*, 3rd ed., Sage, Thousand Oaks, CA.

European Commission (2015), "The European higher education area in 2015: Bologna process implementation report, Publications Office of the European Union, Luxembourg.

Evertson, C.M. and Smithey, M.W. (2000), "Mentoring effects on protégés' classroom practice: an experimental field study", *The Journal of Educational Research*, Vol. 93 No. 5, pp. 294-304.

Fetterman, D.M. (1998), *Ethnography Step by Step*, 2nd ed., Sage Publications, NewburyPark, CA.

Fransson, G. and Holmberg, J. (2012), "Understanding the theoretical framework of technological pedagogical content knowledge: a collaborative self-study to understand teaching practice and aspects of knowledge", *Studying Teacher Education*, Vol. 8 No. 2, pp. 193-204.

Haggarty, L., Postlethwaite, K., Diment, K. and Ellins, J. (2011), "Improving the learning of newly qualified teachers in the induction year", *British Educational Research Journal*, Vol. 37 No. 6, pp. 935-954. doi: 10.1080/01411926.2010.508513.

Harrington, I. (2010), "IT support for the learning of beginning teachers in New South Wales, Australia", *Educational Research and Reviews*, Vol. 5 No. 6, pp. 273-281.

Harrison, J., Lawson, T. and Wortley, A. (2005), "Action research and the professional development of induction tutors: some unforeseen impacts and pitfalls. What do we learn?", *Journal of In-Service Education*, Vol. 31 No. 1, pp. 83-103.

Helleve, I. (2007), "In an ICT-based teacher-education context: why was our group 'the magic group'?", *European Journal of Teacher Education*, Vol. 30 No. 3, pp. 267-284. doi: 10.1080/02619760701486118.

Hobson, A.J., Ashby, P., Malderez, A. and Tomlinson, P.D. (2009), "Mentoring beginning teachers: what we know and what we don't", *Teaching and Teacher Education*, Vol. 25 No. 1, pp. 207-216.

Hrastinski, S. and Watson, J. (2009), "Designing and evaluating an online role play in conflict management", *Campus-Wide Information Systems*, Vol. 26 No. 4, pp. 287-297.

Hultell, D. (2011), *Lost in Translation? A Study of Newly Graduated Teachers' Experiences During the Initial Period of Employment*, Karolinska institutet, Stockholm.

Iucu, R. and Stingu, M. (2013), "Training induction mentors: alternative policy scenarios of romanian educational system", *Procedia – Social and Behavioral Sciences*, Vol. 76, pp. 931-934.

Koballa, T.R., Kittleson, J., Bradbury, L.U. and Dias, M.J. (2010), "Teacher thinking associated with science-specific mentor preparation", *Science Education*, Vol. 94 No. 6, pp. 1072-1091.

Langdon, F. and Ward, L. (2015), "Educative mentoring: a way forward", *International Journal of Mentoring and Coaching in Education*, Vol. 4 No. 2, pp. 240-254.

Lee, C.-Y. (2015), "Changes in self-efficacy and task value in online learning", *Distance Education*, Vol. 36 No. 1, pp. 59-79. doi: 10.10.80/01587919.2015.1019967.

Lee, Y. and Choi, J. (2011), "A review of online course dropout research: implications for practice and future research", *Educational Technology Research and Development*, Vol. 59 No. 5, pp. 593-618. doi: 10.1007/s11423-010-9177-y.

Lejonberg, E., Elstad, E. and Christophersen, K.-A. (2015), "Mentor education: challenging mentors' beliefs about mentoring", *International Journal of Mentoring and Coaching in Education*, Vol. 4 No. 2, pp. 142-158.

Lincoln, Y.S. and Guba, E.G. (1985), *Naturalistic Inquiry*, Sage Publications, Newbury Park, CA.

McCrary, N.E. and Mazur, J.M. (2010), "Conceptualizing a narrative simulation to promote dialogic reflection: using a multiple outcome design to engage teacher mentors", *Educational Technology Research and Development*, Vol. 58 No. 3, pp. 325-342.

Miles, M.B. and Huberman, A.M. (1994), *Qualitative Data Analysis*, SAGE Publication, Thousand Oaks, CA.

Njenga, J.K. and Fourie, L.C.H. (2010), "The myths about e-learning in higher education", *British Journal of Educational Technology*, Vol. 41 No. 2, pp. 199-212.

Prensky, M. (2001), "Digital native, digital immigrants", *On the Horizon*, Vol. 9 No. 5, pp. 1, 3-6.

Price, L., Richardson, J.T. and Jelfs, A. (2007), "Face-to-face versus online tutoring support in distance education", *Studies in Higher Education*, Vol. 32 No. 1, pp. 1-20. doi: 10.1080/03075070601004366.

Pulvermacher, Y. and Lefstein, A. (2016), "Narrative representations of practice: what and how can student teachers learn from them?", *Teaching and Teacher Education*, Vol. 55, pp. 255-266.

Richardson, J.T.E. (2012), "Face-to-face versus online tuition: preference, performance and pass rates in white and ethnic minority students", *British Journal of Educational Technology*, Vol. 43 No. 1, pp. 17-27.

Sinclair, C. (2003), "Mentoring online about mentoring: possibilities and practice", *Mentoring & Tutoring: Partnership in Learning*, Vol. 11 No. 1, pp. 79-94.

Stanulis, R.N. and Ames, K.T. (2009), "Learning to mentor: evidence and observation as tools in learning to teach", *The Professional Educator*, Vol. 33 No. 1, pp. 1-11.

Tang, S.Y.F. and Choi, P.L. (2005), "Connecting theory and practice in mentor preparation: mentoring for the improvement of teaching and learning", *Mentoring & Tutoring: Partnership in Learning*, Vol. 13 No. 3, pp. 383-401.

Thornton, K. (2014), "Mentors as educational leaders and change agents", *Journal of Mentoring and Coaching in Education*, Vol. 3 No. 1, pp. 18-31.

Ulvik, M. and Sunde, E. (2013), "The impact of mentor education: does mentor education matter?", *Professional Development in Education*, Vol. 39 No. 5, pp. 754-770.

Vlachopoulos, P. and McAleese, R. (2004), "E-moderating in on-line problem solving: a new role for teachers?", in Grigoriadou, M. (Ed.), *Proceedings of 4th Hellenic Conference with International Participation, Information and Communication Technologies in Education*, Vol. A, University of Athens, Athens, pp. 399-406.

Wang, J. and Odell, S.J. (2002), "Mentored learning to teach according to standards-based reform: a critical review", *Review of Educational Research*, Vol. 72 No. 3, pp. 481-546. doi: 10.3102/00346543072003481.

Wang, J. and Odell, S.J. (2007), "An alternative conception of mentor-novice relationships: learning to teach in reform-minded ways as a context", *Teaching and Teacher Education*, Vol. 23 No. 4, pp. 473-489.

Waterman, S. and He, Y. (2011), "Effects of mentoring programs on new teacher retention: a literature review", *Mentoring & Tutoring: Partnership in Learning*, Vol. 19 No. 2, pp. 139-156.

Xie, K. and Ke, F. (2011), "The role of students' motivation in peer-moderated asynchronous online discussions", *British Journal of Educational Technology*, Vol. 42 No. 6, pp. 916-930. doi: 10.1111/j.1467-8535.2010.01140.

Corresponding author
Göran Fransson can be contacted at: gfn@hig.se