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Classroom interaction challenges as triggers for improving early career teachers' pedagogical understanding and competencies through mentoring dialogues

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Abstract

This chapter reports the study that explored challenges that early career teachers experienced in the classroom interaction and the mentoring dialogues linked to these challenges. Early career teachers' experienced challenges in the classroom interaction served as vehicles for the dialogues and opened up possibilities for learning and development as teacher. Mentoring can effectively support early career teachers' professional understanding and development as teachers when it is tightly linked to the practice of teaching. The results showed that early career teachers identified both academic challenges (61%) and social challenges (39%) in the classroom interaction. The mentoring dialogues linked to these challenges varied: most of the dialogues were appraising (42%), one third of the dialogues emphasized understanding (33%) and the rest of the dialogues were solution-seeking (25%). In the dialogues, early career teachers and their mentors reached different levels of understanding the challenges and seeking to overcome the challenges. The study confirms that by focusing on the challenges in classroom interaction in the mentoring dialogues, both early career teachers and their mentors can extend their perspectives of the complexities of classroom interaction, perceive the challenges as possibilities for learning professionally and reach shared understandings that can be utilized for the development of the whole school community.

Keywords (5): early career teachers, classroom interaction, challenges, dialogue, mentoring

1 Introduction: objectives and research questions

The research on early career teachers' professional concerns, challenges and strengths as well as mentoring has grown significantly during the last decades (Kagan, 1992; Feiman-Nemser, 2001; Beck & Kosnik, 2014, Gordon, 2020). Early career teachers have been shown to be enthusiastic and capable of doing teachers' work, interact with pupils as well as having potential to renew the school's professional community and promote pedagogical innovations at school. While early career teachers are able to notice routines and challenges that may hinder their professional learning and development in their school communities, they are also in vulnerable position during their first years in teaching (Savill-Smith, 2019). Especially complexities in classroom management, demanding interactions with pupils, colleagues and parents as well as experiences of professional inadequacy are shown to be challenging during the early years (Heikonen et al., 2017). These encounters can develop so serious that novice teachers may become unsure about their work and even consider leaving the profession (Kelly, Cespedes, Clarà, & Danaher, 2019). Previous research has discussed the relevance of pre-service teacher education, how it prepares early career teachers for the work of teaching (DeAngelis, Wall & Che, 2013; Lejonberga, Elstada, Sandvikb & Solhaugb, 2018), and what kind of professional and collegial support teachers learn to receive and provide (Väisänen et al., 2016), as well as what they still need when they enter the profession (Louws, Meirink, van Veen & Driel, 2018; Wexler, 2019). The findings raise questions of, how early career teachers can better learn such a reflective and proactive stance towards their work in order to be able to perceive both successful and challenging classroom interactions and experiences as further starting points for their professional learning and development.

This chapter focuses on early career teachers' professional concerns and needs for mentoring identified from their classroom practices. We aim to clarify mentoring dialogues by addressing the following two research questions:

- 1) What challenges do the early career teachers identify in their classroom interaction?
- 2) How do the early career teachers and their supervising mentors in teacher education explain challenges in classroom interaction in dialogue?

Our focus on early career teachers' teaching concerns and challenges (Fuller, 1969; Bullough & Draper, 2004), and experiences and responses the early career teachers share with their mentors in teacher education (Cochran-Smith & Lytle, 2009; Orland-Barak & Wang, 2020)

aims to connect mentoring with early career teachers' pedagogical understanding and competencies, and further their professional agency (Toom, Pyhältö & Rust, 2015).

The chapter opens up perspectives on the professional potential among early career teachers, and how it can be enhanced and encouraged through mentoring during teacher education (Stanulis & Bell, 2017; Stanulis et al., 2018). Adding to the previous research, the chapter shows how the mentoring activities matter in the early career teachers' learning to teach processes, and how the early career teachers can be supported to overcome their professional concerns (Rodríguez et al., 2020). The chapter also presents what experienced colleagues and school communities can learn from early career teachers through collegial mentoring activities (Schwille, 2016; Bressman, Winter & Efron, 2018). We give examples how early career teachers in school communities process information and make shared decisions, especially in situations they face uncertainties and confusion, which often address whole communities and require all teachers to deviate from prevailing practices. These educative experiences can push the whole school community towards inquiry and growth (Eros, 2011; Bennet et al., 2013).

2 Theoretical framework

2.1 Challenges in classroom interaction among early career teachers in teacher education

Recent studies on early career teachers indicate that functioning classroom interaction plays a central role in teachers' work (Doyle, 2006; Spilt, Koomen & Thijs, 2011; Voss et al., 2017; Carstensen & Klusmann, 2020). Teachers do most of their work in the classrooms with students and most of their time is spent in the classroom in a variety of ways. During teacher education, several courses aim to enhance student teachers' capabilities for classroom interaction, for example mastery of various teaching methods, maintaining good learning atmosphere and classroom management techniques (Mena et al., 2016; van Tartwijk, Zwart & Wubbels, 2017). Maintaining classroom interaction is a basic teaching skill requiring a variety of possibilities to learn in teacher education (Vermunt, 2014). It benefits from theoretical understanding and hands-on practice (Janssen et al., 2015) and systematic, repeated reflection with experienced mentors (van Ginkel et al., 2016). Capabilities in maintaining

interaction with pupils are related to experiences of lesser inadequacy and turnover intentions (Heikonen et al., 2017). In turn, challenges in the classroom interaction may weaken teachers' self-efficacy and experiences of professional capabilities. This sets high demands for teacher education and mentoring practices to provide early career teachers with capabilities in managing classroom interaction successfully as well as overcoming both present and future challenges (Solheim et al., 2018).

During teacher education, teaching practice supported with sufficient and competent supervision and mentoring is a key arena for learning classroom interaction (Saariaho et al., 2016). Building supportive learning environments and engaging pedagogical practices for students requires teachers to put all their capabilities and skills in use in classrooms. While interaction develops as smooth and functioning, it further empowers teachers to develop teaching in line with students' needs (Broadley, Martin & Curtis, 2019). At some points, the process can also be difficult and tensioned, and challenge teachers' knowledge and views in many ways. Early career teachers' interpretations of the challenging situations often vary and their behaviors and strategies tend to be diverse. The research shows that novices tend to utilize reactive and rigid strategies, and end up solving the challenging classroom interaction situations quickly without much monitoring or searching for alternatives (Heikonen et al., 2017; Wexler 2020). This may further damage the classroom climate and make the early career teachers' work even more complex. Thus, for early career teachers' professional learning and development, it is vital how they can handle and overcome those challenges and difficulties in their classroom interaction (Gotwals & Birmingham, 2016; Heikonen et al., 2017). When they learn to perceive challenges as integral and unavoidable part of classroom interaction (Lampert et al., 2013), they are able to make use of them as learning opportunities (Ward et al., 2013).

2.2 Mentoring dialogues in teacher education: understanding early career teachers' challenges in classroom interaction

While critical events related to teacher learning and reflection with mentors and peers have been utilized as ways to broaden early career teachers' understanding of their practice, challenges in classroom interaction have been less in focus in research on mentoring dialogues (Heikonen, 2020). The emphasis is important because challenges in classroom

interaction capture both the teachers' and the students' mutual perspectives (Allen, 2009), and when enriched with different knowledge and practical views in mentoring dialogues, the classroom interactions are powerful vehicles for learning both for early career teachers and mentors in teacher education, and allow complementing each other's perspectives. They also make it possible to extend the impact of the solutions to the whole school community. As Milton and her colleagues (2020) state: "It takes a school to grow a teacher" (p.12) Honing (1994) speaks about "dilemmatic space" which highlights the wider context in which the incidents occur, instead of specific and disconnected situations. Teacher educators and student teachers often engage in conversations around incidents in classroom interaction during teacher education courses. However, the cases are often discussed as individual negotiations disconnected from practice – often taking place in practicums - as the space that generated them. Thus, this study aims to unpack those dilemmatic spaces to examine how negotiations of classroom interaction situations can support student teachers' agency and professional development.

In line with Biesta, Priestly & Robinson (2017), we analyze agency in an ecological sense, as enacted in relation to concrete settings and conditions where teaching happened. The incidents in classroom interaction can be seen as frames of practice, involving procedures that establish and maintain teaching and learning in schools and classrooms, and which also establish relationships with students teachers and mentoring teacher educators. As frames of practice, Giddens (1984) notes, classrooms incidents provide possibilities to extend practice both in practical and discursive ways. The former refers to the capacity to be aware of events that are happening during the instructional process, while the latter refers to being able to discuss those events and the ways of participation in the process. A combination of different frames of practice gives rise to different perceptions and enables participants to become involved and engaged in different meanings of classroom interactions (BurrIDGE, Hooley & Neal, 2016)

Mentoring dialogues focusing on challenges in classroom interaction require mutual trust and respectful relationships between teacher education mentors and early career teachers as different practical approaches, varied experiences, and theoretical understandings come in to play in the mentoring dialogues (Orland-Barak, 2003; Russell & Martin, 2017). In those conversations, constructive and open atmosphere is necessary as both parties want their

dialogues to serve their learning and professional development. The elaboration of the classroom challenges, understanding the threads in individual cases thoroughly, and transforming complexities into professional learning experiences can be a demanding task both emotionally and cognitively (Mena, Hennissen & Loughran, 2017).

For this reason, it is crucial how both mentors and student teachers approach the classroom challenges to be discussed: what kind of opening and additional questions they present, which aspects and how they comment the challenge, how they tackle on student teacher's role in situation, how they comment, sum up and conclude the dialogue, and whose interpretations of the situations are noticed and valued. All these elements contribute to the atmosphere of the mentoring dialogues. In the beginning of the mentoring relationship and dialogues, the mentors are responsible of the quality of the dialogue although the setting can become gradually more collegial. In case the dialogues are positive, both early career teachers and mentors may contribute equally to the process and make it a developmental pathway for their shared learning.

Successful mentoring dialogues are guided by student teachers' learning goals and support needs, which provide extensive possibilities to learn. In negotiations, the mentors have an important role in balancing how they show their open care and will to help, and at the same time, how they challenge student teachers and promote their learning (cf. Rajuan, Beijaard & Verloop, 2008). The dialogues are sensitive, since student teachers are learning new knowledge and skills, and thus may feel vulnerable in the middle of the challenges. Appraising student teachers' behavior, seeking solutions to challenges faced with pupils, and understanding the challenges thoroughly (cf. Mena & Clarke, 2015; Peercy et al., 2020) are all needed in the process of learning to become a teacher. In the best case, the mentoring dialogues build functioning conditions both for student learning as well as their own professional learning and development together with their peers and communities (Payne & Zeichner, 2017; Peercy & Troyan, 2017).

3 Methodology

Research context

The study was conducted among early career teachers and mentors in Finnish university level teacher education. All student teachers in Finland complete a five-year academic Master programme (300 ECTS), which includes orientating studies (25 ECTS), major studies in educational sciences (120 ECTS) teaching practice (20 ECTS), multidisciplinary studies in subjects taught at comprehensive school (60 ECTS) and optional studies (75 ECTS). This is a requirement for receiving a formal teacher qualification. Student teachers are intensively supervised and mentored especially during the teaching practice by the teacher of the class in the regular schools in which they complete their teaching practice periods. They do the teaching practice with their peer student, and thus, they learn to teach and support their peers already during teacher education. They take turns in their teaching, and every student teacher receives individual feedback and mentoring. In addition, they also learn to co-teach as well as provide and receive feedback with their peers intensively about their teaching.

Data collection

The video and video-stimulated mentoring dialogue (STRM) data were collected from 41 pairs of early career teachers (mean age 26 years; 36 females and 5 males) and their mentors (mean age 52 years; 39 females and 2 males). The procedure of guided reflection (Husu, Toom & Patrikainen, 2008; Toom et al., 2019) consisting of videoed lessons, choosing one challenging classroom event from the video and having mentoring dialogue on it allowed the participants to ground dialogues to practice of classroom interaction. The early career teachers chose the challenging classroom events from their video recorded lesson and thus defined it as challenging for themselves. The video helped the early career teachers and their mentors to elaborate the extracted challenging event in detail. The data consisted of challenging classroom events identified by the student teachers and the dialogues between the student teachers and the mentors which were linked to the challenging events.

Data analysis in three phases

The data analysis of challenging classroom events and related mentoring dialogues consisted of three phases. The challenging classroom events ($f=41$) early career teachers identified were extracted from the video material. The mentoring dialogues were transcribed and divided into the meaning units (1294 analysis units). In the first phase, the challenging events

early career teachers identified were analysed into two exclusive categories: *social challenges* and *academic challenges* (Pianta & Hamre, 2009). The core of the events were interpreted from the early career teachers' descriptions, and the aim was to find out whether the challenge was related to the social aspects and relations between the teacher and students or among the students, or was it related to the academic issues, learning and teaching. In the second phase, the mentoring dialogue data (1294 units) were analysed with a framework including the three aspects of dialogues: *appraising*, *solution-seeking* and *understanding* (Mena & Clarke, 2015; Peercy et al., 2020). In the analysis, the characteristics of the mentoring dialogue were especially analyzed, and the aim was to find out the main emphases and qualities of the dialogues. In the analysis of the dialogues, special attention was paid to the following four dimensions: 1) the way in which the challenging events were approached, 2) the quality of the questions and additional questions, 3) quality of the responses and 4) the quality of the conclusions that were drawn during and in the end of the mentoring dialogues. These aspects and how they emerged in the different dialogues are presented in the results.

Results

Early career teachers' experienced challenges in classroom interaction

The results show that early career teachers mainly identified *academic challenges* (61%) in the classroom interaction. The academic challenges focused especially on the organization of the learning environment in the classroom, use of teaching methods, instructing students, and individual guidance provided for students in line with the curriculum. The complexities in presenting curricular contents as well as challenges in using of learning and demonstration materials were also typical academic challenges. Early career teachers experienced these challenging to solve while trying to maintain functioning classroom interaction.

Early career teacher also experienced *social challenges* (39%) in classroom interaction. The category included challenges related to atmosphere in the classroom and classroom management. It also pointed out to disagreements and complex relationships with students that emerged in the interaction, some of them being longer term difficulties that appeared in the current lesson. Also, some of the transitions during the lesson were experienced as

challenges, because they made some of the students restless. The classroom interaction should be paced down before focusing on pupil learning.

Qualities of mentoring dialogues triggered by the classroom interaction challenges

In *appraising mentoring dialogues* (42%), early career teachers showed a tendency to evaluate themselves when analysing the challenging event, and found several aspects from their behaviour, presence, interaction with the students or work in the classroom that they perceived requiring improvement. Early career teachers pointed out various details from the event as they had experienced it and what they had felt in the classroom, and presented evaluations and sometimes relatively harsh judgements of it. Mentors' questions regarding the challenging event were either evaluative or descriptive, and they did not help the early career teachers to further analyse and understand the event. Despite the efforts, mentors did not succeed in changing the tone of the dialogue. In some cases, the mentors' questions and responses even strengthened the evaluative elements of the dialogue, which may have hindered both the early career teacher and the mentor to proceed further in the conversation. The dialogue remained on a relatively superficial level, and the possible reasons behind the challenges, more general understanding of the challenges or possible solutions to them were not grasped. Conclusions drawn from the challenging event and discussion related to it were thin. In the following excerpt, this kind of mentoring dialogue is demonstrated:

ECT: Here is the small group work situation, and I had remarked the group that they should concentrate on their own tasks. Their attention slipped and they had challenges in proceeding in their group work. I went to talk with them and tried to help in a very constructive way. I tried to help them in many different ways – asked the reasons for the challenges, guided in writing, guided with concept map, encouraged in reading the text – but nothing worked out. For some reason, it was extremely difficult. They only laughed for everything.

Mentor: But you really helped them then.

ECT: But then I just went away. The boys did not listen at all and I could not find any solution.

Mentor: What did you think in the situation?

ECT: I thought that I have to go back and get them focused. But then, for some reason...

Mentor: Did you think something ... you tried different ways...?

ECT: Well, I just watched – I did not know what was going on. Nothing worked out. I tried to be relaxed and refocus their work. But it did not... somehow I gave up.

Mentor: Did you think about the reasons behind the pupils' and your behaviour?

ECT: Yes, both the subject matter and group work were difficult for them. I do not know.

Mentor: When did you notice that you actually did not take care of the situation?

ECT: Yes, I noticed it during the lesson... but I also lost my concentration. But I have tried to improve my own behaviour in the similar situations in the class in order to help them to be more concentrated.

Mentor: Have you discussed this kind of classroom interaction situations in the theoretical courses?

ECT: Yes, to some extent. In principle I am aware of these, but they are always so different when you face them in practice.

The *mentoring dialogues emphasising understanding* (33%) represented a more comprehensive view of the challenges. Early career teachers were able to perceive and focus on more general aspects when analysing the challenging situations instead of sticking into the details of the classroom interaction. They pondered reasons behind their own behaviour, their decisions that had led to the current challenging situation, as well as underlying factors and reasons for students' behaviour. Mentors succeeded in presenting such questions, further questions and conclusions in the dialogue that encouraged early career teachers to analyse the possible contextual and backgrounding aspects related to the challenging event. These helped the early career teachers to observe the challenges from the broader perspective instead of mere superficial details. They were able to draw such conclusions from the discussion that broadened their understanding of the event in the classroom. The following excerpt demonstrates this kind of mentoring dialogue.

ECT: We have just changed from one activity to another, it is a little bit chaotic and we are collecting things. Then it is time to calm down. I stand still and observe what is going on. Then when proceed to the task that takes time. I reflect on the benefits and relevance of the task, was it too long and boring, or was it functional for the students. I can see that I filter and weigh my thoughts.

Mentor: What are your aims in the situation? What are you trying to assure?

ECT: I try to be fully engaged in the students' activities and perceive what is going on. I try to notice those who need immediate attention in order to keep them on the track.

Mentor: What did you notice?

ECT: Many small things, pencils and books were missing. Someone needed more detailed advice.

Mentor: How do you perceive the atmosphere in the classroom?

ECT: It is quite good. For some reason, I was a little bit excited and tried to relax.

Mentor: How do the students work in the situation? What kind of observations you make based on the students' behaviors?

ECT: I did not make so many observations. I was so focused on my own behavior in the class. I noticed that I try to keep the balance between the students with needs for extra advice and the rest of the class. I somehow felt that the lesson will suffer if I focus too much on individual students.

Mentor: So you try to take care of the whole lesson and the individual students.

ECT: Yes, I try to notice single students who do not concentrate on the lesson or have not opened the books although the lesson has progressed. I feel that I could not take care of this effectively or reasonably enough.

Mentor: What do you mean by noticing here?

ECT: I am sometimes afraid that the lesson could extend so that I cannot manage at this point. I am really unsure about the substance of the lesson, and I try to compensate it. I try to stick to the basic things and the materials as concretely as possible.

Mentor: I am surprised about what you said because it cannot be observed from your teaching. The lesson progresses smoothly and the impression is that you balance between the whole class and individual students.

ECT: And actually here, the boy in green shirt, has often challenges in opening the books. I have tried not to point him out negatively and tried to reward him as much as possible. He raised his hand and I noticed that it has been worth rewarding him.

Mentor: Have your observations of him had influence on your behavior?

ECT: Well, I identify so many of my own characteristics in the students and try to not make them as problems. I try to find ways to support them on their own terms and avoid confrontations, and this requires understanding them.

Mentor: You skilfully and analytically elaborated the reciprocal relationship between teacher and students in the classroom interaction. And also, when your attention is focused on yourself, it is away from the students.

Only 25% of the *mentoring dialogues* were *solution-seeking*, where the emphasis was on formulating strategies to overcome the challenges and be prepared for teachers' work. Early career teachers together with their mentors were able to analyse and understand thoroughly the challenge in the classroom, but also find a variety of solutions to the situation from different perspectives. They were able to find links between the classroom challenges, their strategies and solutions and the theories, which allowed them to progress with the reflections even further. Mentors asked such questions that encouraged early career teachers to perceive the key aspects of the classroom events. Mentors did not push them with their own interpretations but rather tried to help in analysing, searching and finding solutions for the challenges. They also aimed at helping through emphasising the potential and strengths they perceived in student teachers' expertise, behaviours and elaboration of the situations. The mentors helped early career teachers to draw such conclusions from the analysis of the challenging events that would help them further in similar classroom situations in the future and also construct broader understanding of themselves as teachers in classroom interaction. The next excerpt demonstrates this kind of mentoring dialogue.

ECT: There is one girl who has slowly learnt to read, she has some mistake that I try to make her understand. What is said here and what should be there. She reads for a while, but then understands what is in the text.

Mentor: What did you think as a teacher when you realised the situation?

ECT: I thought that now I need to act in a way that she would understand herself. So that she would have the experience of understanding herself. I also thought that at some point, I will help her to overcome the difficulty if she does not understand. I thought that I just give the answer. And she can correct it. I thought about her motivation, about encouraging her, and her experience in solving the challenge and correcting the mistake herself. And having the feeling that "I can do this".

Mentor: Why is this so important to you? It clearly is.

ECT: I think that it is a starting point for learning, You cannot learn if you do not receive experience of efficacy when doing things.

Mentor: You worked for quite a long time with the student. How did you try to help and advice her?

ECT: We hyphenated it together, I tried to articulate it, I mad her listen to the hyphens, we read it together, I made her read and listen again. Nothing exceptional, but always when she succeeded I tried to encourage her.

Mentor: How did you feel about the student and thought about the situation afterwards?

ECT: Quite good, although I thought that it was sensitive and maybe too much focus on the mistake only. I was afraid that it was too discouraging. But she was ok and happy about being able to read herself.

Mentor: How much have you discussed and analysed these issues related to inividual support in your studies?

ECT: Mmm, a bit yes. We have discussed about constructing motivation and individual progress, and why motivation is needed. But less about meeting individual students with their needs.

Mentor: And you said very well that the theoretical approaches – for example related to constructing motivation – become realised in the practices in the classroom.

ECT: I really did not think about the motivation theories, but more about my behavior as a teacher in the situation. Do I encourage the student about her personal characteristics or how she managed to solve the challenge in the situation. So focus clearly more on the efforts rather than personal characteristics.

Discussion: Significance of the work to quality and professional learning in teacher education

Our study shows that challenging classroom events identified by early career teachers can serve as a vehicle for productive mentoring dialogues and allow a variety of learning opportunities both for early career teachers and mentors in teacher education. The mentoring dialogues contained both the evaluative, elaborative and the foundational elements of the classroom challenges. Surprisingly, concrete and practical strategies were not merely at the

core in the mentoring dialogues. Rather, the early career teachers had also a need to understand the challenges thoroughly and clarify both the students' behavior but especially their own behavior in the classroom interaction profoundly.

Our analysis and results of the teaching practicum as a dilemmatic space (Hong, 1994) or as frames of practice (Giddens, 1984) supports the need to extend mentoring discussions in teacher education. As student teachers' and their teacher education mentors' capacities to notice events are developed, both are more able to discuss incidents of classroom interaction and develop ways for shared negotiation. Whilst BurrIDGE, Hooley & Neal (2016) note, "as teaching practice is expanded, framing will be strengthened and new frames initiated. ...[and] it is this totality of human engagement with learning environments that comprise teacher quality in schools" (p. 158).

It is important that early career teachers learn to identify, analyse and understand the challenges in the classroom interaction already during their pre-service teacher education as well as learn how to cope with them in a variety of ways. This would allow them to perceive the challenges in classroom interaction as a genuine part of it and as issues to be solved, not as failures that could or should be avoided. Otherwise, early career teachers might experience the first years in the profession too burdening. The challenges may become overwhelming in relation to their growing professional capabilities, and they may be in the risk of leaving the profession (cf. Heikonen et al., 2017). These threats can be partly buffered with the effective and systematic mentoring during pre-service teacher education. When having this kind of capabilities and strategies for overcoming the challenges, they might even be for help for their future colleagues.

Our study also shows how demanding it is for the early career teachers to analyze and understand one's own behavior in the classroom interaction and reasons behind it even with the help of experienced mentors. Thus, attention should be paid on the ways classroom interaction and learning are organised in order to promote them in pre-service teacher education and in-service teacher development. Teachers' capacity to build and promote safe and functional professional relationships in their professional communities facilitates their professional learning. Hence, mentoring programs should also include elements of social support and take into account the varied capacities of professional communities to deal with

challenges enhancing teachers' mentoring dialogues. While teacher education programs seem to succeed, at least to some extent, in providing student teachers platforms for mentoring classroom practices, there are aspects that need to be considered in teacher education pedagogy. We highlight the early-career teachers' need to employ their pupils and colleague teachers as resources for testing and renewing classroom practices. Although academic courses may not always be helpful, versatile mentoring opportunities for analysing classroom interaction have shown their capacity to promote teacher's professional learning.

Mentors play a key role while trying to support early career teachers' strivings to understand and learn from their practice. Focusing on the challenges in the classroom interaction requires trust and confidentiality in the mentoring relationship that needs to be built systematically. We emphasize the need to carefully consider and monitor the quality of the mentoring dialogues in line with the learning needs of early career teachers.

References

- Allen, J.M. (2009). Valuing practice over theory: How beginning teachers re-orient their practice in the transition from the university to the workplace. *Teaching and Teacher Education, 25*(5), 647-654.
- Beck, C., Kosnik, C. (Eds.) (2014). *Growing as a teacher: Goals and pathways of ongoing teacher learning*. Rotterdam: Sense Publishers.
- Bennet, S., Brown, J., Jr., Kirby-Smith, A., & Severson, B. (2013). Influences of the heart: Novice and experienced teachers remaining in the field. *Teacher Development, 17*(4), 562-576.
- Biesta, G., Priestley, M., & Robinson, S. (2017). Talking about education: Exploring the significance of teachers' talk for teacher agency. *Journal of Curriculum Studies, 49*(1), 38-54. doi.org/10.1080/00220272.2016.1205143.
- Bressman, S., Winter, J. S., Efron, S. E. (2018). Next generation mentoring: Supporting teachers beyond induction. *Teaching and Teacher Education, 73*, pp. 162-170. DOI/10.1016/j.tate.2018.04.003
- Broadley, T., Martin, R., Curtis, E. (2019). Rethinking professional experience through a learning community model: Toward a culture change. *Frontiers in Education, 4* (26 March 2019). DOI.org/10.3389/educ.2019.00022
- Bullough, R. V., Jr., & Draper, R. J. (2004). Making sense of a failed triad. *Journal of Teacher Education, 55*(5), 407-420.
- Burbules, N. C. (1993). *Dialogue in teaching. Theory and practice*. New York: Teachers College, Columbia University Press.
- Burridge, P., Hooley, N. & Neal, G. (2016). Creating frames of practice for teacher education. *Asia-Pacific Journal of Teacher Education, 44*(2), 156-171. doi.org/10.1080/1359866X.2015.1041877
- Carstensen, B., Klusmann, U. (2020). Assertiveness and adaptation: Prospective teachers' social competence development and its significance for occupational well-being. *British Journal of Educational Psychology*, DOI: 10.1111/bjep.12377
- Cochran-Smith, M., & Lytle, S. L. (2009). *Inquiry as stance: Practitioner research for the next generation*. New York: Teachers College Press.
- DeAngelis, K. J., Wall, A. F. & Che, J. (2013). The impact of preservice preparation and early career support on novice teachers' career intentions and decisions. *Journal of Teacher Education, 64*(4) 338-355. DOI: 10.1177/0022487113488945

Doyle, W. (2006). Ecological approaches to classroom management. In C. M. Evertson, & C. S. Weinstein, (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues* (pp. 97-125). Mahwah, NJ: Lawrence Erlbaum Associates.

Eros, J. (2011). The career cycle and the second stage of teaching: Implications for policy and professional development. *Arts Education Policy Review*, 112(2), 65-70.

Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103(6), 1013-1055. DOI: 10.1016/B978-0-08-044894-7.00656-4

Fuller, F. F. (1969). Concerns of teachers: A developmental conceptualization. *American Educational Research Journal*, 6, 207–226.

Giddens, A. (1984). *The constitution of society*. Cambridge: Polity Press.

Gordon, A. L. (2020). Educate – mentor – nurture: improving the transition from initial teacher education to qualified teacher status and beyond. *Journal of Education for Teaching*. DOI.org/10.1080/02607476.2020.1807296

Gotwals, A.W. and Birmingham, D., 2016. Eliciting, identifying, interpreting, and responding to students' ideas: Teacher candidates' growth in formative assessment practices. *Research in science education*, 46(3), 365–388. DOI:10.1007/s11165-015-9461-2

Heikonen, L., Pietarinen, J., Pyhältö, K., Toom, A. & Soini, T. (2017). Early career teachers' sense of professional agency in the classroom: Associations with turnover intentions and perceived inadequacy in teacher-student interaction. *Asia-Pacific Journal of Teacher Education*, 45(3), 250-266. DOI: 10.1080/1359866X.2016.1169505

Heikonen, L., Toom, A., Pyhältö, K., Pietarinen, J. & Soini, T. (2017). Student teachers' strategies in classroom interaction in the context of the teaching practicum. *Journal of Education for Teaching*, 43(5). DOI: 10.1080/02607476.2017.1355080

Heikonen, L. (2020). *Early-career teachers' professional agency in the classroom*. University of Helsinki: Helsinki Studies in Education 95.

Honig, B. (1994). Difference, dilemmas, and the politics of home. *Social Research*, 61(3), 563-597.

Husu, J., Toom, A. & Patrikainen, S. (2008). Guided reflection as a means to demonstrate and develop student teachers' reflective competencies. *Reflective Practice*, 9(1), 37–51.

- Janssen, F., Grossman, P., & Westbroek, H. (2015). Facilitating decomposition and recomposition in practice-based teacher education: The power of modularity. *Teaching and Teacher Education*, 51, 137–146. doi:[10.1016/j.tate.2015.06.009](https://doi.org/10.1016/j.tate.2015.06.009)
- Kagan, D. M. (1992). Professional growth among pre-service and beginning teachers. *Review of Educational Research*, 62(2), 129-169. doi: 10.3102/00346543062002129
- Kelly, N., M. Cespedes, M. Clarà, and P. Danaher. 2019. Early career teachers' intentions to leave the profession: The complex relationships among preservice education, early career support, and job satisfaction. *Australian Journal of Teacher Education*, 43(3), 93–113. doi:[10.14221/ajte.2018v44n3.6](https://doi.org/10.14221/ajte.2018v44n3.6).
- Lampert, M., Franke, M. L., Kazemi, E., Ghouseini, H., Turrou, A. C., Beasley, H., Cunard, A. & Crowe, K. (2013). Keeping it complex: Using rehearsals to support novice teacher learning of ambitious teaching. *Journal of Teacher Education*, 64(3), 226–243. DOI: [10.1177/0022487112473837](https://doi.org/10.1177/0022487112473837)
- Lejonberga, E., Elstada, E., Sandvik, L. V., Solhaug, T. & Christophersen, K. A. (2018). Developmental relationships in schools: Pre-service teachers' perceptions of mentors' effort, self-development orientation, and use of theory. *Mentoring & Tutoring: Partnership in Learning*, 26(5), 524-541.
- Mena, J., García, M., Clarke, A. & Barkatsas, A. (2016). An analysis of three different approaches to student teacher mentoring and their impact on knowledge generation in practicum settings. *European Journal of Teacher Education*, 39(1), 53-76. DOI: [10.1080/02619768.2015.1011269](https://doi.org/10.1080/02619768.2015.1011269)
- Milton, E., Daly, C., Langdon, F., Palmer, M., Jones, K. & Davies, A. J. (2020): Can schools really provide the learning environment that new teachers need? Complexities and implications for professional learning in Wales. *Professional Development in Education*. DOI: [10.1080/19415257.2020.1767177](https://doi.org/10.1080/19415257.2020.1767177)
- Orland-Barak, L. (2003). Emergency room stories: Mentors at the intersection between the moral and the pedagogical. *Journal of In-Service Education*, 29(3), 489-512. DOI: [10.1080/13674580300200219](https://doi.org/10.1080/13674580300200219)
- Orland-Barak, L. & Wang, J. (2020). Teacher mentoring in service of preservice teachers' learning to teach: Conceptual bases, characteristics, and challenges for teacher education reform. *Journal of Teacher Education*. DOI: [10.1177/0022487119894230](https://doi.org/10.1177/0022487119894230)
- Payne, K. & Zeichner, K. (2017). Multiple voices and participants in teacher education. In D. J. Clandinin & J. Husu (Eds.), *The SAGE Handbook of Research on Teacher Education* (pp. 1101-1116). London: Sage Publications.

Peercy, M. M., & Troyan, F. J. (2017). Making transparent the challenges of developing a practice-based pedagogy of teacher education. *Teaching and Teacher Education*, 61, 26-36.

Peercy, M. M., Kidwell, T., DeStefano Lawyer, M., Tigert, J., Fredricks, D., Feagin, K. & Stump, M. (2020). Experts at being novices: What new teachers can add to practice-based teacher education efforts. *Action in Teacher Education*, 42(3), 212-233. DOI: 10.1080/01626620.2019.1675201

Pianta, R. C., & Hamre, B. K. (2009). Conceptualization, measurement, and improvement of classroom processes: Standardized observation can leverage capacity. *Educational Researcher*, 38, 109–119.

Rajuan, M., Beijaard, D. & Verloop, N. (2008). Student teachers' perceptions of their mentors as internal triggers for learning. *Teaching Education*, 19(4), 279-292, DOI: 10.1080/10476210802339951

Rodriguez, J., McKinney, T., Powell, S., Walker, Z. & Garland, K. V. (2020) Was this feedback useful? Examining the observation and feedback process for pre-service teachers, *Teaching Education*, 31(2), 144-161. DOI: 10.1080/10476210.2018.1508281

Russell, T., & Martin, A. K. (2017). Reflective practice: Epistemological perspectives on learning from experience in teacher education. In R. Brandenburg, K. Glasswell, M. Jones & J. Ryan (Eds.), *Reflective theory and practice in teacher education* (pp. 27-47). Singapore: Springer.

Saariaho, E., Pyhältö, K. Toom, A., Pietarinen, J. & Soini, T. (2016). Student teachers' self- and co-regulation of learning during teacher education. *Learning: Research and Practice*, 2(1), 44-63. DOI: <http://dx.doi.org/10.1080/23735082.2015.1081395>.

Savill-Smith, C. (2019). *Teacher well-being index 2019*. London: Education Support.

Schmidt, J., Klusmann, U., Lüdtke, O., Möller, J., Kunter, M. (2017). What makes good and bad days for beginning teachers? A diary on daily uplifts and hassles. *Contemporary Educational Psychology*, 48, 85-97. doi: 10.1016/j.cedpsych.2016.09.004

Schwille, S. A. (2016). *Never give up: An experienced teacher overcomes obstacles to change*. Charlotte, NC: Information Age Publishing.

Solheim, K., Roland, P. & Ertesvåg, S. K. (2018) Teachers' perceptions of their collective and individual learning regarding classroom interaction, *Educational Research*, 60(4), 459-477. DOI: 10.1080/00131881.2018.1533790

Spilt, J.L., Koomen, H.M.Y., Thijs, J.T. (2011). Teacher wellbeing: The importance of teacher-student relationships. *Educational Psychology Review*, 23(4), 457-477. doi: 10.1007/s10648-

011-9170-y

Stanulis, R.N. and Bell, J., 2017. Beginning teachers improve with attentive and targeted mentoring. *Kappa Delta Pi Record*, 53(2), 59–65. doi:10.1080/00228958.2017.1299543

Stanulis, R. N., Wexler, L.J., Pylman, S., Guenther, A., Farver, S., Ward, A., Croel-Perrien, A. & White, K. (2018). Mentoring as more than “cheerleading”: Looking at educative mentoring practices through mentors’ eyes. *Journal of Teacher Education*, 70(5), 567–580. doi:10.1177/0022487118773996.

Sykes, G., Bird, T., & Kennedy, M. (2010). Teacher education: Its problems and some prospects. *Journal of Teacher Education*, 61(5), 464–476.

Toom, A., Pyhältö, K., & O’Connell Rust, F. (Eds.) (2015). Special Issue: Teacher’s professional agency in contradictory times. *Teachers and Teaching: Theory and Practice*, Volume 21, Issue 6.

Toom, A., Tiilikainen, M., Heikonen, L., Leijen, Ä., Mena, J. & Husu, J. (2019). Teacher candidate learning of action-oriented knowledge from triggering incidents in teaching practice. *Teachers and Teaching: Theory and Practice*. DOI: 10.1080/13540602.2019.1652162

van Ginkel, G., Oolbekkink, H., Meijer, P. C. & Verloop, N. (2016). Adapting mentoring to individual differences in novice teacher learning: The mentor’s viewpoint. *Teachers and Teaching*, 22(2), 198-218. DOI: 10.1080/13540602.2015.1055438

van Tartwijk, J.W.F.; Zwart, R.C.; Wubbels, T. (2017). Developing teachers’ competences with the focus on adaptive expertise in teaching. In Clandinin, D. J. & Husu, J. (Eds.), *The SAGE Handbook of Research on Teacher Education* (pp. 820 - 835). London: Sage Publications.

Vermunt, J. D. (2014). Teacher learning and professional development. In S. Krolak-Schwerdt, S. Glock, & M. Böhmer (Eds.), *Teachers’ professional development* (pp. 79–95). Rotterdam: SensePublishers.

Väisänen, S., Pietarinen, J., Pyhältö, K., Toom, A. & Soini, T. (2016). Social support as a contributor to student teachers’ experienced well-being. *Research Papers in Education*, 32(1), 41-55. DOI: <http://dx.doi.org/10.1080/02671522.2015.1129643>

Ward, L., Grudnof, L., Brooker, B. & Simpson, M. (2013). Teacher preparation to proficiency and beyond: Exploring the landscape. *Asia Pacific Journal of Education*, 33(1), 68–80. DOI: 10.1080/02188791.2012.751896

Wexler, L. J. (2020). ‘I would be a completely different teacher if I had been with a different mentor’: Ways in which educative mentoring matters as novices learn to teach, *Professional*

