Mentoring conversations in preservice teacher supervision: knowledge for mentoring in categories of participation

Wendy Nielsen, Sharon Tindall-Ford & Lynn Sheridan

Published online: 04 Feb 2022.

Submit your article to this journal ⍜

Article views: 155

View related articles ⍜

View Crossmark data ⍜

Routledge
Taylor & Francis Group

Check for updates

ARTICLE

Mentoring conversations in preservice teacher supervision: knowledge for mentoring in categories of participation

Wendy Nielsen, Sharon Tindall-Ford and Lynn Sheridan

School of Education, University of Wollongong, Wollongong, Australia

ABSTRACT

The purpose of this study was to elaborate the knowledge of the supervising teacher as enacted through mentor-mentee conversations that occur during practicum. An interpretivist framework using Clarke et al.'s (2014) Categories of Participation was used to consider how supervising teacher knowledge manifests in mentoring conversations with the preservice teacher. Case study methods captured conversations *in situ* when dyad pairs (n = 5) discussed a particular lesson developed and taught by the preservice teacher. The results illustrate three Categories of Participation as most frequent, providing insight into supervising teachers' knowledge base. An important finding from this study is the value of mentoring conversations for 'making visible' classroom teacher practices and knowledge to the preservice teacher during the practicum, which has implications for the professional development of supervising teachers.

Practicum is a component of essentially every teacher education program around the world (Clarke, Triggs, & Nielsen, 2014). It is the period of time in a teacher education program where preservice teachers work with an experienced teacher who mentors them during in-school experiences, prior to the preservice teacher being formally qualified to teach. Many teacher education programs provide a graduated or scaffolded introduction to work in actual classrooms through one or more practicum periods over the degree program. This organization is localized with different universities or teacher education providers. We use the term 'practicum' for these periods, although other terms such as 'student teaching' or 'professional experience' reflect conceptualizations of both roles and relationships during the practicum. For example, while preservice teachers are (usually) university 'students' while on practicum, the term 'student teaching' positions these teachers more as pupils rather than early career teachers or colleagues implied in the term 'professional experience'.

CONTACT Wendy Nielsen ✉ wnielsen@uow.edu.au ▨ School of Education, University of Wollongong, Wollongong, New South Wales, Australia

Australia has seen recent and specific policy calls for improving the quality of preservice teachers' teaching and learning experiences, during both university-based programming and school-based practicum. Policy initiatives include the *National Partnership Agreement on Improving Teacher Quality* (Commonwealth of Australia, 2008), *The Melbourne Declaration on Educational Goals for Young Australians* (MCEETYA, 2008), the Teacher Education Ministerial Advisory Group report (TEMAG, 2014) and new Australian Professional Standards for Teachers [APST] (Commonwealth of Australia, 2011). All teachers in Australia must go through an accreditation process as of 2018 that is overseen at the State level (see, for example, NSW Department of Education, 2018). These sectoral reforms have implications for how universities and schools work together to deliver a quality practicum. While a quality practicum has long been recognised as crucial in the preparation of preservice teachers (Cohen, Hoz, & Kaplan, 2013; Darling-Hammond, 2010; Schleicher, 2011; White, Bloomfield, & Le Cornu, 2010), central to improving preservice teachers' practicum experience is the quality of the supervising teachers' mentoring practices.

The quality of supervising teachers' (i.e. classroom-based teacher educators) mentoring practices during the practicum can be highly variable, largely dependent upon effectiveness of the supervisor (Hascher, Cocard, & Moser, 2004). Hudson (2004) suggests that generic mentoring, essential elements of method and manner of mentoring, can be limiting 'to the mentee's experiences of specific teaching practices' (p. 140). Supervising teachers' understanding of their own practices is thus grounding for future improvement (Faikhamta & Clarke, 2018; Nielsen et al., 2017). One way to enrich the mentee's experience is through the use of mentoring conversations. Supervising teachers typically engage preservice teachers in mentoring conversations before and/or after practice teaching lessons where plans are discussed or teaching moves debriefed (White et al., 2010). These conversations play an increasingly important role in preservice teacher development during practicum, which has led to growing interest in supervising teachers' mentoring knowledge and the personal qualities of effective teacher mentors (Ewing, Lowrie, & Higgs, 2010; Hall, Draper, Smith, & Bullough, 2008; White et al., 2010). Mentoring conversations as a focus for interactions between expert teacher and novice preservice teacher thus offer insight into how preservice teachers acquire knowledge and develop reflective practice.

However, the knowledge base that underpins mentoring remains elusive, tacit (Mena & Clarke, 2015), and even problematic (Southgate, Reynolds, & Howley, 2013), particularly for how teaching knowledge is applied during mentoring. There is considerable evidence of the influence of teacher expertise on preservice teacher development (Darling-Hammond, 2010) and the importance of teachers' knowledge about teaching in supporting successful teacher development (Darling-Hammond, 2000; Wilson, Floden, & Ferrini-Mundy, 2001). While knowledge for supervision entails a range of understandings that support

preservice teacher development, it is during mentoring conversations where teacher knowledge is made visible. It is thus important that conversations between supervising and preservice teachers remain discursive, non-suppressive, and power-free so as to foster reflective thinking (Kim & Silver, 2016; van Ginkel, Verloop, & Denessen, 2016). However, mentoring also involves identity work (Amaral-da-cunha, Batista, MacPhail, & Graça, 2018), thus raising concerns regarding dependency, intimacy, power, and control within mentoring relationships (Clarke & Sheridan, 2016). While we can describe effective mentoring practices and supervising teacher expertise, current understandings lack clarity on how supervising teachers' knowledge is enacted during mentoring conversations. As such, the purpose of the current research is to elaborate supervising teacher knowledge as enacted through mentoring conversations, which we view as a window into the supervising teacher's knowledge of mentoring.

Mentoring practices and knowledge for mentoring

In our context, mentoring refers to the one-to-one support for a novice or less-experienced practitioner (the preservice teacher) by a more experienced practitioner (the supervising teacher), which may assist the preservice teacher to develop teaching expertise and formal entry into the culture of teaching (Hobson, 2012). Importantly, novice teachers are more likely to remain in the profession if they received supportive mentoring during their practicum (Gordon, 2017; Ingersoll & Kralik, 2004; Johnson, Berg, & Donaldson, 2005; Lejonberg & Tiplic, 2016; Smith & Ingersoll, 2004).

In the mentor role, supervising teachers provide preservice teachers with emotional and psychological support that includes being welcomed and accepted in the school and classroom (Hascher et al., 2004; McIntyre & Hobson, 2016; Nguyen & Sheridan, 2016; Rippon & Martin, 2006; Sheridan & Young, 2016). Thus, supervising teachers play an important moderating role in enculturation and socialization that helps preservice teachers adapt to norms and expectations within the school context (Aderibigbe, Colucci-Gray, & Gray, 2016; Edwards, 1998; Feiman-Nemser & Parker, 1993). The expert mentor provides support by offering guidance on how to build relationships with colleagues and students (Bodoczky & Malderez, 1997; Davies, Brady, Rodger, & Wall, 1999), in effect, helping them become members of a community (Mackey & Shannon, 2014). The literature in the area describes two versions of modelling: modeller of practice or co-constructor of practice (Sudzina, Giebelhaus, & Coolican, 1997), which roughly map onto Graham's (2006) notions of 'maestro' and 'mentor'. The former reflects a traditional apprenticeship model, while the latter suggests a more collegial, professional development approach where a more-experienced teacher supports a novice, which accords with contemporary educational policy in Australia. Tillema and van der Westhuizen (2015) make

an important link between a conversation strategy (on the part of the super-vising teacher) and what preservice teachers learn while preparing for the profession.

But, having access to a mentor does not necessarily guarantee better tea-chers (Roehrig, Bohn, Turner, & Pressley, 2008). In fact, mentoring can perpe-tuate poor teaching practices rather than promoting and developing high-quality teaching (Feiman-Nemser, Carver, Schwille, & Yusko, 1999). Mentors need to have an 'explicit view of good teaching and understanding of teacher learning' (Feiman-Nemser, 2001, p. 18). There are also multiple conceptions of the mentor role: parent, trouble-shooter, scaffolder, counsellor, supporter, assessor (Hawkey, 2006); instructional modeller (Koerner, O'Connell, & Baumgartner, 2002); and guide/coach (Boreen, Johnson, Niday, & Potts, 2009). Graham (2006) describes two styles of mentoring: 'maestros' and 'mentors'. The two views reflect different approaches: the former describes an expert/novice relationship (and is more common), while the latter suggests the important professional development role for the supervising teacher. However, we have limited knowledge of what teacher knowledge underpins these various mentor roles or enables the mentor to either perform them in all of their complexity or even to want to do this work (Mackey & Shannon, 2014). While teacher mentor-ing may be largely intuitive (Atkinson & Claxton, 2000), the current study aims to extend and deepen our understanding of the knowledge that supervising teachers draw upon in mentoring, as articulated through mentoring conversa-tions with preservice teachers during practicum.

The supervision role typically involves lesson observations taught by the preservice teacher and then subsequent discussion about the teaching (Hoffman et al., 2015; Kim & Silver, 2016; Mena, Hennissen, & Loughran, 2017; Tillema & van der Westhuizen, 2015). These can be troubling conversations if the preservice teacher struggles with basic teaching skills such as lesson planning, classroom organization, student management, or content knowledge (Hastings, 2004). In conversation, the supervising teacher both identifies and shapes how the PST learns about teaching (Helgevold, Næsheim-Bjørkvik, & Østrem, 2015; Loughran, 2006), while taking into account different learning styles and stages of development, which is crucial to teaching success (Lindgren, 2005; Nevins Stanulis, Brondyk, Little, & Wibbens, 2014; Valenčič & Vogrinc, 2007).

Preservice teachers also consider the supervising teacher to be critical to their success (Erickson, Bruner, MacDonald, & Côté, 2008; Sudzina et al., 1997; Weiss & Weiss, 2001) and among the most important influences on their developing practice and self-belief (Tillema, 2000; Tschannen-Moran & Hoy, 2007). Importantly, supervising teachers help to demystify processes and procedures (Mackey & Shannon, 2014). While effective mentoring has a profound effect on preservice teacher professional learning and the quality of future teachers (Cohen et al., 2013; Hobson, 2012; Ingersoll & Strong, 2011; Koc, 2011; Marable & Raimondi, 2007; Williams, 2009; Zeichner, 2010), support from a mentor

teacher is clearly associated with teacher efficacy (LoCasale-Crouch, Davis, Wiens, & Pianta, 2012); teaching commitment (Rots, Aelterman, Vlerick, & Vermeulen, 2007); well-being (Kessels, Beijaard, Veen, & Verloop, 2008); and improved instructional practice (Nevins Stanulis & Floden, 2009; Rozelle & Wilson, 2012). Thus, the supervision role is complex and mentoring practices vary widely.

Mentoring practices can often appear ad hoc (Ingersoll & Strong, 2011). This may be because the role often appears to lack clear description, standards of practice, or formal preparation (Banville, 2002). Current reform efforts in Australia aim to improve supervision through an increased focus on teacher knowledge and professional learning (Commonwealth of Australia, 2011; Teacher Education Ministerial Advisory Group, 2014). Further, both national and state teacher accreditation authorities provide explicit directives to schools and universities to ensure mentoring training prior to supervising preservice teachers. As a result, mentoring is becoming increasingly important in teacher education programs and involves professional learning for both mentor and mentee (Hoffman et al., 2015; Pomphrey & Burley, 2012; Sundli, 2007). With the growing importance of supervising teachers' role as mentors, we ask the following research question: *How is supervising teacher knowledge manifest in mentoring conversations with preservice teachers during practicum?*

Theoretical perspectives

We ground the study in Clarke et al.'s (2014) Categories of Participation, which are ways that supervising teachers participate in teacher education. Clarke et al. conducted an extensive review of 465 journal articles and developed 11 theoretical ways that supervising teachers support preservice teachers on practicum and conduct their work as teacher educators. The review admits that the categories overlap, but in brief, the categories are summarized here. We refer the reader to Clarke et al. for the empirical support and category development.

Providers of Feedback: a pervasive activity and expectation for supervising teachers that often emphasizes the *what* and *how* rather than the *why* of practice (Grimmett & Ratzlaff, 1986);

Gatekeepers of the Profession: supervising teachers are typically responsible for evaluating the preservice teacher (Cornbleth & Ellsworth, 1994), but may lack sufficient knowledge for this role;

Modellers of Practice: in modelling practice, even as there are many styles, supervising teachers provide important images of teaching for preservice teachers (Seperson & Joyce, 1973);

Supporters of Reflection: supervising teachers help preservice teachers develop reflective practice (Stegman, 2007) by guiding discussions and developing understandings of practice;

Purveyors of Context: preservice teachers need help to interpret the many levels of the school system and Koerner et al. (2002) argue that an open context supports preservice teacher learning;

Conveners of Relation: supervising teachers mediate school-level and system-level relationships for the preservice teacher, which is an important part of their mentoring (Bullough & Draper, 2004);

Agents of Socialization: supervising teachers are a key influence on the pre-service teacher's developing practice, as well as customs and ideologies of the profession (Zeichner & Gore, 1990);

Advocates of the Practical: in helping preservice teachers adapt to the local reality of the classroom, the supervising teacher provides first-hand experiences of a working classroom;

Gleaners of Knowledge: through working with the preservice teacher and by extension, university faculty, supervising teachers can be knowledge consumers and better engaged with their own practices;

Abiders of Change: system change and reform are ongoing, and this is a hidden dimension of teachers' work that may mask the emotional work involved for supervising teachers;

Teachers of Children: while supervising preservice teachers, supervising teachers remain primarily responsible for the children in their classroom, thus supervision can be seen as an 'add-on.'

Context and method

This study used an interpretivist framework (Schwandt, 2003) grounded in social constructivist perspectives on teacher education (Gergen, 1997; Lincoln & Guba, 2000). From this framework, we assume that the knowledge teachers have about supervision has been socially constructed and built through personal experience (Hagger, McIntyre, & Wilkin, 2013). Thus, supervising teachers come to their current practices through a combination of career experiences and influences from the local school and community contexts, as well as the regulatory climate. Part of their regulatory role involves formally assessing preservice teachers on particular knowledge, skills, and practices as articulated in the seven domains of the Australian Professional Standards for Teachers (Commonwealth of Australia, 2011). Supervising teachers are expected to use a Lesson Feedback form for one formal observation per day during the professional experience.

The study used a multiple case study method (Yin, 2014) for understanding complex real-life conversations *in situ*, involving mentors and mentees both pre and post lessons. This method is useful in studying a phenomenon in its natural context (i.e. a classroom) and provides a rounded picture of events with multiple data sources (Stake, 1995: Yin, 2014). The research was reviewed by the University Ethics Review Board. All conversations were transcribed verbatim and pseudonyms are used throughout.

Participants and data collection

Participants in the current research were volunteers from our university networks of supervising teachers and preservice teachers in our programs, as summarized in Table 1. Participating supervising teachers had 4–15 years of teaching experience, varied supervision experience, and worked in differing teaching contexts (e.g. primary, secondary, public, and independent schools). Preservice teachers similarly worked in a range of teaching contexts representing two degree programs. The five preservice teachers were about half-way into the final practicum in the degree program (a six-week internship for Bachelor of Primary Education students or a 5-week practicum for Masters of Teaching students). The five dyad pairs provided a collective study of single cases that were investigated jointly for the purpose of enquiring into mentoring knowledge (Stake, 1995; Yin, 2014). Conversations were captured pre-lesson and post-lesson via a small digital audiorecorder supplied to the supervising teacher, who operated it during the conversations.

The conversations before or after a scheduled lesson were typically organic in nature and often resulted in short, targeted conversational dialogue. To guide these organic conversations, the supervising teachers were asked to focus on specific curriculum/pedagogical aims for that mentoring episode. Examples of these aims include the use of positive reinforcement and modelling as a teacher; the use of prior knowledge to engage students; developing questioning techniques; gauging understanding of a topic; running group work activities; and behaviour management.

To support our interpretations of the recorded conversations, enrich our understandings of the mentoring knowledge used during the dyad conversations and serve as a form of triangulation, three different sources of data were collected: (1) audiorecords of pre- and post-lesson mentoring conversations; (2) lesson plans, student work samples and teaching resources; and, (3) classroom observation records and lesson evaluations. The three data sources (mentoring conversations, lesson plans, resources, and observations) all focused on the same phenomenon and were connected using a within-method triangulation method (Tobin, Tobin, & Begley, 2010). This form of triangulation was used to decrease the possible biasing effect on the researchers' interpretations of the data and was seen as important for clarifying decisions made on previous deduction (e.g. specific assumptions made based solely on the conversations).

In analysing data from each dyad, a form of 'phenomenological reflection' (van Manen, 2016) was used whereby the researchers reflected on the array of data sources to grasp the essential meaning (i.e. 'What is this an example of?') in reference to the different Categories of Participation illustrated in the conversations (see Table 2).

Table 1. Participant dyad pairs.

School	Location	Class	SupT	SupT Exp	PST	Degree	Duration of Conversations, in minutes
Somerset Primary	Suburban, public	Yr 4, English	Mr Murphy	15 yrs K-6 teaching; many PST	Mr Krevin	BEdPrimary, 4th yr	Pre, 16:34 / Post, 34:49
Somerset Primary	Suburban, public	Yr 4, English	Mr Raven	4 yrs teaching; first PST	Ms Karley	BEdPrimary, 4th yr	Pre, 05:55 / Post, 30:18
Carling Secondary	Suburban, private	Yr 10, History	Mrs Peters	4 yrs teaching; Art; 3rd PST	Miss Haggar	MTeach, final yr, Art	Pre, 08:20 / Post, 11:52
Freedom Secondary	Rural, public	Yr 8, History	Mr David	Not available	Mr Jeffrey	MTeach, final yr, Science	Pre, 01:55 / Post, 02:56
Right Secondary	Regional, private	Yr 7, English	Mr Donald	4 yrs teaching; English; 3rd PST	Mr Jacobs	MTeach, final yr, English	Pre, 02:48 / Post, 03:27

Table 2. Summary of Categories of Participation (adapted from Clarke et al., 2014).

Category	Description of Category for use in Coding	Example in Data Set	Present in all dyads?
1. Providers of Feedback (PF)	Commentary from the SupT* on PST plans or actions	'Okay. I love that you have pretty much catered to a whole range of learners.'	yes
2. Gatekeepers of the Profession (GF)	SupT often typically responsible for evaluating the PST, and thus plays a role in PST entry to the profession	Not present	no
3. Modellers of Practice (MP)	SupT demonstrates or illustrates how something should be done, or guides thinking in particular ways	'I'll get two students to actually say in their own words how they'd do it. And, maybe that way, the other kids can see.'	yes
4. Supporters of Reflection (SR)	SupT encourages PST to think more deeply about a planned activity or teaching event	'And, what's it going to be? Just an open-ended feedback for you or did you want them to share their work or compare [with] previous ones?'	yes
5. Purveyors of Context (PC)	SupT introduces the PST to the subtleties of the context and helps the PST manage these	'So this is the fourth lesson of focusing on students' content, which led to an environmental theme class this term.'	no
6. Convenors of Relation (CR)	SupT helps the PST to navigate the many relationships between the PST and others in the context	'We had spoken about possibly sending home positive reinforcement letters to the parents . . . to say that they've been working extremely well.'	no
7. Agents of Socialization (AS)	SupT socialize PST into the profession, have strong influence on PST teaching style	Not present	no
8. Advocates of the Practical (AP)	SupT help PST to understand the practicalities in the school setting	'there's a lot of words there and I think today if you want to go from the kids attempting to use those key words themselves in their own paragraph, what about you set them a minimum number to use?'	no
9. Gleaners of Knowledge (GK)	Working with PST means the SupT gains access to new professional materials and new ideas, possibly new insights about own students	Not present	no
10. Abiders of Change (AC)	SupT often patiently accept displacement interruptions, curriculum changes, as part of work	Not present	no
11. Teachers of Children (TC)	SupT maintains a focus on the children and their learning	'so the kids go home, "Oh, I did some writing", you know, you'd want the kids to go home and say "Okay, today I could summarise and write key words of my own, yeah, so I understand the information I'm writing"'	no

*SupT = supervising teacher; PST = preservice teacher

Analysis framework: categories of participation

To consider how supervising teacher knowledge is manifest in conversations with preservice teachers, we draw from Clarke et al.'s (2014) proposed 11 'Categories of Participation.' We use the categories to provide a window into supervising teachers' knowledge and practices as evident in mentoring conversations. The categories were used as *a priori* codes in working with the data,

as shown in Table 2. Members of the research team reviewed the transcripts individually and then collectively to compare and discuss interpretations to reach consensus for the code definitions and examples.

Incidence of the categories was highly variable and not all categories were present in the data set. Word counts for the transcripts were also highly variable and, of course, varied with the duration of the conversations. Thus, the absolute numbers of the occurrence of each category held little meaning, except possibly as a portion of the whole data set. Table 2 presents examples in the data set as representative examples of the types of comment or quote indicative of the category.

We note that only three categories occurred across conversations in each dyad pair: Modellers of Practice, Supporters of Reflection and Providers of Feedback. Because of the high relative frequency of these three categories, this led to a second level of analysis focused on these three categories. Narrative summaries were prepared for each of these high-frequency categories and additional reviews of other documents supported this second level of analysis. For example, lesson plans or student work samples provided background for comments from the supervising teacher or preservice teacher. Through the results section, we present examples from the data set to illustrate the categories as elaborating supervising teacher knowledge and how the supervising teacher enacts this knowledge through conversations to support preservice teacher development and learning during practicum.

Trustworthiness and credibility

To support trustworthiness and credibility of the research findings, we sought to ensure that dyad pairs were operating in an environment of trust and had established working rapport. This involved initiating the research after the dyad pair had been working together for 2 or 3 weeks (of the five-week practicum). Thus, their patterns of interaction were likely stabilized. Further, the pairs rehearsed use of the audiorecording device prior to commencing data gathering for the study. Researchers spent time in the dyad classrooms prior to data gathering to gain familiarity with the setting and observe the dyad pairs' interactions and communication. These steps helped to build trust within the dyad but also with the research team members. Second, the researchers maintained an audit trail, i.e. observations, lesson plans, resources, observational summaries, and running notes on thoughts and feelings to bracket their own perceptions and subjectivities. Member checking was also carried out during the analysis stage as our interpretations were developing.

Results and discussion

Through a focus on the three, high frequency 'categories of participation': *Modellers of Practice, Providers of Feedback* and *Supporters of Reflection* (Clarke et al., 2014), we seek insights into how knowledge for supervision is manifest in mentoring conversations. While the definitions for the categories may be self-evident, there are subtleties, both as described by Clarke et al. (2014) and as nuanced in the data set for the current study. Generally, 'Modellers of Practice' suggests an expectation that the preservice teacher (PST) will follow the lead of the supervising teacher. 'Provider of Feedback' is a key role for the supervising teacher where feedback scaffolds thinking through questioning and conversations. Finally, as 'Supporters of Reflection,' supervising teachers help to advance the preservice teacher's practice by possibly modelling reflection on practice (Franke & Dahlgren, 1996), and ideally, moving beyond the technical to be more reflective as a professional who continues to develop these professional practices (Tonna, Bjerkholt, & Holland, 2017; van Ginkel et al., 2016). In the section that follows, each of the three categories is elaborated, examples from the data provided and key findings discussed.

Modellers of practice

In this study, Modellers of Practice (MP) as a category of participation typically reflects a traditional apprenticeship notion of the supervising teacher's position relative to the student teacher. That is, the behaviours that are 'expected' of the preservice teacher by the supervising teacher. We present dialogues from two dyad pairs where the supervising teachers made explicit suggestions about how to do something, while the third example suggests a subtler, guiding modeller approach.

During the pre-lesson conference while reviewing Ms Karley's (PST) lesson plan, the supervising teacher, Mr Raven, offers a suggestion for the day's lesson:

Mr Raven: Okay and then yeah, you could use this as sort of setting it up for the future goal so you would hope that in their future writing and that sort of stuff throughout the term you'd be looking . . . coming back to this and looking to see are they using this.

Mr Raven's comments suggest how he would approach this lesson, including what he would expect from the children. Mr Raven returned to this in his written feedback post-lesson on the Lesson Feedback form: 'You could also have challenged/encouraged the kids to consider these in future writing.'

A second example where the supervising teacher modelled practice in terms of setting up expectations for handling the lesson comes from the pre-lesson conversation between the supervising teacher, Mr Donald, and Mr Jacobs (PST), who explains his lesson rationale to Mr Donald

Mr Jacobs: Yeah I'm really going to try and focus on the, kind of, explicit instruction of the game. I've also, kind of, set up the game so that um, it takes, each group takes a turn answering a question. So it's not like a buzzer, buzzer situation where you've got yelling out. It's, kind of, individual turns. And then teams that yell out during a turn that isn't theirs are going to lose points for their team.

Mr Donald: Perfect, perfect, perfect. So even spend, you know, ten, 15 minutes... Oh no, no, no.

Maybe, sorry five. Five, ten minutes actually going over. Make sure we've got that sorted so they know the rules. Other than that, looking forward to it.

In reviewing the lesson plan with his supervising teacher, Mr Jacobs explains how he plans to run the game. Mr Donald responds with suggestions for timing and the need for rules clarity. These suggestions reflect how Mr Donald would handle the situation, essentially modelling his own approach. This is, of course, valuable knowledge for the PST given that the supervising teacher knows the students better and has greater understanding of how to enact teaching plans. Among the data set in the current study, this is the sort of 'modelling of practice' most commonly seen where the supervising teacher provides a prescriptive teaching directive for the preservice teacher, consistent with Graham's (2006) 'maestro' approach.

There are, however, subtleties to how the maestro models practice, as noted in the examples above. The maestro provides guidance on what needs to be practically done. These are often important technical considerations for the preservice teacher; however, these conversations do not provide evidence that preservice teacher reflection was being promoted through such mentoring, as suggested by Franke and Dahlgren (1996). In a way, the mechanical suggestions are modelled on how the supervising teacher would approach the same activity, which we interpret as reflecting the supervising teacher's knowledge for mentoring.

Mr Murphy provides an example of a supervising teacher who adopts a 'mentor' approach (Graham, 2006), which is quite subtle in how he works with the preservice teacher, Mr Krevin. Mr Murphy asks key questions to get Mr Krevin (PST) to think specifically about the skill he is aiming to develop among students through the lesson sequence. Mr Murphy helps to co-construct the next lesson with Mr Krevin through his questioning: 'How do you think you could actually get them to go from where you've modeled the paragraph for them where they are going to be clear about "it's my job to do that for myself"?' While scaffolding Mr Krevin's thinking about the steps involved in teaching the skill of independent paragraph writing, Mr Murphy does not direct Mr Krevin to 'do it this way' but rather, engages Mr Krevin to think about where the students ought to be at the end of the lesson sequence, thus focusing on student learning in his approach to mentoring the preservice teacher. This highlights Mr Krevin's own understanding of the process of learning the skill, the actual children he is working with, the lesson position in the unit and possible steps to move the students along a scaffolded sequence.

Later in the pre-lesson discussion, Mr Murphy suggests a particular idea that Mr Krevin can use to provide specific guidance regarding key words for students to use in developing a full paragraph:

Mr Murphy: I was thinking maybe what you could do is once you've done a reading and the kids have brainstormed the key words, maybe get two or three kids just to orally say 'I would use this word' and so kids are obviously going to listen for that as a model and 'Okay that's what I need to do.'

While Mr Murphy supports Mr Krevin's lesson sequence and offers ideas for scaffolding the

students in the classroom to develop the particular skill, he also suggests an extra scaffolding step to better support student learning. This is significant for the preservice teacher, as he is benefitting from Mr Murphy's classroom experience in teaching the concept but also seeing Mr Murphy's approach to scaffolding the target skill for students. In addition to providing a specific example, Mr Murphy goes on to explain his thinking behind it and what he expects this to do for the students in the room:

Mr Murphy: I'll get two students to actually say in their own words how they'd do it. And maybe that way, the other kids can see 'Okay it's the exact same word but this person mentioned this in terms of how they interpreted the meaning of that word.'

So, in 'modelling practice' Mr Murphy provides scaffolds for Mr Krevin to focus on student learning while developing his thinking about how to develop the teaching strategy, calling attention to the PST's reasoning and justifications, but also asking Mr Krevin to deliberately attend to the students in the classroom. As a skilled supervising teacher, he supports Mr Krevin to think deeply through his lesson prompts and questions. Mr Murphy's questions and comments are directed at modelling important ways of thinking specifically about student learning. Additionally, the supervising teacher offers insights to his thought processes on why he adopts a particular teaching strategy, which is consistent with Graham's (2006) 'mentor' approach that supports preservice teacher co-construction and developing reflective practice.

Of the five supervising teachers in the data set, four exhibited a traditional or 'maestro' approach to mentoring (Graham, 2006). These supervisors often directed the preservice teacher. Only one of the supervising teachers in the data adopted a more holistic developmental 'mentor' approach similar to Sudzina et al.'s (1997) 'co-constructor of practice.' Mentor teachers scaffold preservice teachers' learning (Graham, 2006), but do so in a 'gradual move to a more reflective and independent form signalling a shift from mimicked to independent and reflective practice' (Clarke et al., 2014, p.16). Team teaching or co-teaching may be a fruitful mechanism to promote such a shift (Baeten, Simons, Schelfhout, & Pinxten, 2018), although co-teaching is not without its challenges (Guise, Habib, Thiessen, & Robbins, 2017). Challenges include having a shared understanding of co-teaching and time to co-plan. Responding to

these and other challenges relies on a high level of skill on the part of the supervising teacher to make his/her professional skills and knowledge accessible to the preservice teacher (Hagger et al., 2013). Less developed practice among supervising teachers may mean that they follow a traditional apprenticeship or maestro notion of working with the preservice teacher, which includes more direction on 'expected' behaviours by the preservice teacher (Borko & Mayfield, 1995; McIntyre & Hobson, 2016).

Providers of feedback

Feedback is a key activity for supervising teachers in their work with preservice teachers that can take several forms including informal conversations, formal observations or written lesson feedback. Most of the conversations in the current study either pre- or post-lesson began with the supervising teacher giving a positive comment and then asking the PST to comment. The following exchange between Mr Raven occurred after Ms Karley's lesson at Somerset PS and is typical across the data set: 'Yeah, good lesson. I really enjoyed that. That was really good.' The general tenor of this sort of conversation-starter from the supervising teacher is inviting and positive and reinforces what the PST did in the lesson. Similarly, questions following the lesson typically asked about the PST' impressions of the lesson.

In pre-lesson conversations, the supervising teacher and PST typically sat down with hard copies of the lesson plans in front of them and the supervising teacher queried some aspect of the lesson. The PST's response became the basis for further feedback. In the example below, Mr David, the supervising teacher, asked about a worksheet that Mr Jeffrey had prepared for the history lesson:

Mr David: Ok, so when you talk about your resource, your worksheet. What sorts of things are they going to do to engage with this topic? Because it's a bit removed from their experience. So what sorts of things do you envisage?

Mr Jeffrey: Okay, so we're going to start with a simple pre-test. So they're going to tell me everything they know about, um, about cold war, about capitalism and communism. And then they're going to do their own research. They're going to research their own definitions. To further cement that knowledge. And then we're going to look at some maps. We're going to look at different places communism spread to. And that'll allow me to then work that into the next lesson.

The worksheet became a focus for feedback on Mr Jeffrey's lesson planning and Mr David seems to be asking about Mr Jeffrey's rationale, but possibly also to point out what he viewed as limitations for this method. In providing feedback on Mr Jeffrey's explanation, Mr David goes on to make suggestions about what else to include in the lesson, in this case, questioning, which was a developmental skill that Mr Jeffrey was working on:

Mr David: Great okay. And now don't forget too that we're going to build in those questioning techniques so that we have, sort of, tiered level of questioning. Something that starts quite basic, um, uses examples that the kids can relate to and then build deeper questioning to extend on student knowledge and experience. So, don't forget to put that into your worksheet.

Mr David offers oral feedback on the worksheet but is also attending to Mr Jeffrey's skill development as a preservice teacher with a hint of attention to student learning. This is a salient part of supervising teacher feedback. Like the experienced mentors in other research (see, for example, Ambrosetti, 2014; Spear, Lock, & McCulloch, 1997; Williams et al., 1998), participating supervising teachers often delivered feedback in a conversational and informal manner during the practicum. It is interesting to note that none of the high-school teachers in the current study provided formal written feedback to the preservice teachers. The teachers may be unclear on interpreting the Professional Standards using the official form or, possibly, have an intuitive sense of the challenges with validity and reliability in observation protocols (Halpin & Kieffer, 2015) or, more simply, are time-poor.

In the following pre-lesson conversation, Mrs Peters (supervising teacher) makes explicit comment about earlier feedback she had given to Ms Haggar (PST):

Mrs Peters: We came up with three things that we need to focus on for this lesson. So, one of those being positive reinforcement. Or possibly providing merits of some sort. Um, the second one being modelling answers for students in a written format as well as verbally. So not only – particularly with these students – not only verbally answering the question to them but also writing it on the board. So they have both modes there.

Mrs Peters is focusing Ms Haggar's attention on what she expects to see, reminding the PST about aspects of the planning and implementation around a current developmental focus (e.g. offering positive reinforcement).

Mrs Peters' method of feedback reflects her knowledge of classroom teaching, likely having taught a similar lesson in the past, but also involves the gradual scaffolding of the PST's thinking. Mrs Peters' feedback is oriented to practical application of the merit system, but it is also part of the supervising teacher's scaffolding to help the preservice teacher see the 'bigger picture' that connects beyond this individual lesson.

In his general approach to feedback, Mr Murphy tended to employ open-ended questions. During their pre-lesson conversation, Mr Murphy asked: 'Could you think of how you could maybe model this to them so they could then be independent today or . . . ?' While a supervising teacher could use this opportunity to suggest how to make accommodations, instead, Mr Murphy encouraged the PST by guiding and scaffolding his thinking. Through the lesson sequence, Mr Krevin was working to foster the children's independent writing, which he developed through a graduated series of activities that

included vocabulary work, building sentences, modelling paragraph structure, small group and whole class discussion, and small writing pieces, as shown in his lesson plans. Mr Murphy's feedback assisted Mr Krevin to think specifically about particular lesson goals in the context of the wider sequence. This sort of conceptual work in planning was a key area where much of Mr Murphy's feedback was focused and reflects his knowledge and experience in providing supportive feedback. It also shows his clear understanding of this PST's strengths and weaknesses, but also demonstrates how he scaffolds the PST's attention to student learning across the range of abilities in the classroom.

Pre-lesson conversations also involved validating Mr Krevin's prior knowledge, and to some degree, tested his understanding of the broader learning goals for students. This is illustrated by Mr Murphy's concluding comments from the 20-minute pre-lesson talk:

Mr Murphy: I think that what we'll see today, it'll be interesting to see, is a more open-ended approach for the kids and you know, again, we're wanting . . . I think you've modelled plenty for them . . . how to use words and put them into their own sentences so it makes sense.

In giving feedback on lesson planning, Mr Murphy offers his own expectations for lesson outcomes but this also reinforces Mr Krevin's thinking and planning, which we read as a sophisticated form of feedback that balances particulars of planning and implementation with foreshadowing what Mr Murphy will watch for in formal observations.

Mr Murphy observed the lesson from a desk at the back of the room and used the Lesson Feedback form to record written feedback on the lesson. He and Mr Krevin reviewed the detail on this 2-page document during the 35-minute post-lesson conversation. The written feedback included specific feedback on issues raised in the pre-lesson talk, in addition to comments under the respective headings on the form. He also included 'Recommendations for Future Lessons' such as 'Remind students of both content and skills being developed' which again highlights paying attention to student learning in future.

The captured conversations provide examples that illustrate supervising teachers' practical knowledge of feedback for helping preservice teachers focus attention in particular ways. There is an important link between how supervising teachers offer feedback and model practice through their talk with their preservice teachers. And, because feedback remains a pervasive activity in teacher preparation (Clarke et al., 2014; Faikhamta & Clarke, 2018) feedback on planning or performance should help preservice teachers develop (Johnson et al., 2005; Kwan & Lopez-Real, 2005).

Supporters of reflection

This category frequently overlaps with both Modellers of Practice (MP) and Providers of Feedback (PF), in particular, where supervising teacher guidance draws attention to aspects of practice. Reflection is an important link between how supervising teachers talk about practice and further, how they model it. Reflective practice should be a fundamental activity for all teachers so that they are engaged in and deeply understand their teaching and develop as reflective practitioners (Kim & Silver, 2016; Loughran, 2002; Mena et al., 2017). Stegman (2007) offered a number of practical strategies for supervising teachers to enhance PST reflection. These include offering suggestions and observations from personal experience, providing supportive commentary, providing advice and insight, recommending instructional and participatory strategies and validating thoughtful lesson preparation. We have seen many of these indicated in the other two categories of Modeller of Practice and Provider of Feedback. In the current section, we present examples from our data set where the supervising teacher is guiding PST reflection. The examples illustrate the many aspects of teaching practice that require reflection, but more importantly, how reflection is modelled and practiced by the supervising teacher.

As seen earlier, questions in pre- or post-lesson conversations serve to focus PST thinking in particular ways, for example, to point to something the PST needs to consider, as seen in the pre-lesson conversation between Mr Donald (SupT) and Mr Jacobs (PST):

Mr Donald: What are probably the big behaviour management strategies we're going to have in place, ah put in place for this lesson, do you think?

Mr Jacobs: Um probably really sticking to the structure that we've been trying to take on board in the last week or so. Which is the, ah, three strikes kind of structure. And visibly on the board, making it known that, ah, students are being reprimanded and things like that.

Mr Donald: Yeah, exactly. I mean, with something like this, um, there's going to be cause for excitement. There's going to be cause for jumping around the room. Um. You know, because everybody's going to be trying to answer, answer questions. So I think, um, one of the biggest things that you'll have to watch is a bit of consistency. You know, if one kid's doing something outrageous and someone else is not doing anything. You're like, just monitor that one I think. I mean, you've got plenty of personalities in that class.

In the activity, the Year 7 children would be moving around the room and Mr Donald wanted Mr Jacobs to explicitly attend to managing the activity. While ensuring that Mr Jacobs had thought through the lesson, Mr Donald also encourages Mr Jacobs to consider the likely implications of the planned lesson activities. This exchange shows how the supervising teacher supports PST

reflection. Pre-lesson questions tended to take this sort of focus (e.g. likely consequences of the plan), while post-lesson questions tended to foster deeper reflection, while also serving to focus PST attention:

Mr Donald: What did you think were, um, the best bits of your lesson? Where do you think, um, you showed great development?

Mr Jacobs: Well I was quite pleased with how the pre-test went. I had not really done that sort of thing before and that really gave me an idea about where the girls were at. I was able to see, they kind of had a bit of knowledge about communism, capitalism, no knowledge of Cold War whatsoever. So next lesson I'm going to really look at that. I'm going to go through some definitions and we're going to really cement that knowledge.

While the PST here did not really answer the supervising teacher's question about development, Mr Donald's question prompted the PST to realize what the students understood (or didn't) from the lesson. This led to thinking about planning for the future and how to support student learning more deliberately.

While supervising teachers in the study asked questions targeted to support thoughtful reflection by the PST, this was more often found in the post-lesson interviews. Questions like this were typical: 'What were the things you were pleased with and what things you thought could have been approached differently or done in a different way?' (Mr Murphy to Mr Krevin, post-lesson conversation). In reviewing student work samples as part of their post-lesson conversation, Mr Murphy asked Mr Krevin another question that gets to the heart of reflective practice: 'If you look at the work that's in front of you, how do you think they reflect the lesson objectives and aims?' Others in our data set asked similar questions, but in a less sophisticated way. For example, Mr Raven had a casual sort of questioning style with his PST, Ms Karley:

Mr Raven: Maybe if we start with in terms of your outcomes and that sort of thing – do you think you sort of met those outcomes and if you want to, feel free to grab some examples that you thought, you know, showed that they met the outcomes and that sort of stuff.

Ms Karley: Yeah, well, pretty clear of the first one of understanding the language.

Mr Raven: So you were looking at . . . 'communicates effectively to a variety of audiences and purposes using increasingly challenging topics'. Okay so yeah, I guess that communicating is being able to sort of actually come up with it in a coherent way; in a way that's sort of authentic I guess.

Mr Raven asks Ms Karley to reflect on if and how the lesson outcomes were achieved. Mr Raven essentially answered his own question in stating the outcome from the syllabus. Interestingly, Mr Raven was himself an early career teacher and was in the supervision role for the first time. His initial questions were stated in quite a casual manner, and by answering himself, he may be reinforcing his own knowledge of the syllabus through the lesson sequence that Ms Karley developed. We read this 'reflection' as technicality that works at

a basic level of understanding the syllabus content. This is not to say that this concrete, technical approach to reflecting on practice is not valuable; it may well represent a step along a pathway for the supervising teacher to develop his own reflective practice, while supporting the PST along her own pathway.

Focusing PST attention so as to improve was a common way for supervising teachers to support reflection. This could involve a particular episode from a lesson or a more general future focus about upcoming lessons in the sequence. For example, Mrs Peters asked her PST, Ms Haggar, to look ahead:

Mrs Peters: Okay, so, I've only got one recommendation. So that is, probably just, um, providing consequences if work isn't being done. But what's something that you think we can work on? Particularly because we're doing the same form of lesson tomorrow. What is something that maybe you feel like you can improve on?

Ms Haggar: Probably just like, because there's still a couple of students you can see that they're doing it. But they're not engaged with doing it, or they're doing it and they don't understand. It's just because someone else is, like, helping them along with it. So I think that's something I'd want to focus on. Like going around to the lower capable students and maybe getting them to read out.

Here, the supervising teacher had identified a focus and in asking questions, invites the PST to attend to that issue. In other words, supervising teacher questioning may be particular or general depending perhaps on whether the conversation is pre- or post-lesson or how the preservice teacher's attention needs to be directed toward student learning as a focus and thus, invites reflection in different ways and may involve different strategies (Svojanovsky, 2017).

A reflective focus through guiding discussions is a key supervision strategy according to Smagorinsky and Jordahl (1991). Joint discussions can then develop, examine, and articulate understandings about practice, which Crasborn, Hennissen, Brouwer, Korthagen, and Bergen (2011) argue is what supervising teachers do when they have a reflective disposition. Importantly, the mentor's ability to support critical reflection is also developmental (Tonna et al., 2017). Kim and Silver (2016) argued that both the structure of questions and the question type influence how reflection emerges in conversation. Thus, developing these skills further would be valuable for supervising teachers. In the current study, several of the participating supervising teachers were early career teachers themselves and thus through supervising may benefit from opportunity to develop their own reflective dispositions.

Conclusions and implications

This study identified aspects of supervising teachers' knowledge as enacted through recorded conversations about a lesson taught by their preservice teachers. We used Clarke et al.'s (2014) 'categories of participation' as analytic

codes for this identification. The purpose of the research was to analyse mentoring conversations in order to make visible supervising teachers' knowledge for mentoring, based on categories evident in these conversations. This complements other research in the area that has used conversation analysis techniques (Kim & Silver, 2016; Tillema & van der Westhuizen, 2015) or propositional discourse analysis (Mena et al., 2017) to unpack supervising teacher knowledge. The current research focused on three of eleven of Clarke et al.'s proposed categories because they were ubiquitous across the data set: each supervising teacher was a Modeller of Practice, Provider of Feedback and Supporter of Reflection. While the data set shows limited incidence of the other eight categories, the three that were identified illustrate a level of technicality in how supervising teachers approach supervision, even as practices seems to fall on a continuum for all three categories, with substantial overlaps in the categories presented as forms of 'knowledge' for supervision. This conclusion needs validation with more dyad pairs and for the other categories of participation.

In the current study, four of five mentor teachers adopted a maestro approach to mentoring and thus, are positioned at the 'mimicry' end of the continuum as suggested by Clarke et al. (2014). Participating teachers typically made explicit suggestions for their preservice teacher's teaching practice, which often eclipsed the need for an extended dialogue with the preservice teacher. In other words, explicit or specific modelling or guidance seemed to forestall the mentoring conversation rather than foster the sorts of collaborative and co-constructed practice that teacher education reforms advocate.

The one participating supervising teacher who operated primarily at the reflective practice end of Clarke et al.'s (2014) continuum supported the preservice teacher to consider what could be accomplished within the lesson and remained focused on student learning. This involved subtle scaffolding and questioning on the part of the supervising teacher, seemingly suggesting that the supervising teacher was able to assess the needs of the preservice teacher while adopting a co-constructor approach to support future lesson and skill development. As Tonna et al. (2017) noted, critical reflection by supervising teachers is developmental. The current study suggests that supervising teacher skill and knowledge to support reflective practice among preservice teachers is also developmental.

Much supervising teacher feedback was 'technical', 'concrete' or on specific aspects of enacting teaching, for example, commenting on the time allocated to student activity or individual elements of the teaching, similar to what Helgevold et al. (2015) criticized as a 'business-as-usual' approach to mentoring. However, this concrete feedback did help PST in the current study to see connections across the lesson sequence, but we saw limited evidence of feedback that supported preservice teachers' thinking so as to better understand and develop their practices, in particular, to focus on student learning. When the

supervising teacher can guide the PST to think about broader learning goals for the students across a series of lessons, we see a key distinction along the continuum from technical production to independent and reflective practitioner. The gap may reflect the limited supervisory experience of some study participants or limited capacity to engage reflectively.

We note a tension for supervising teachers who must specify feedback as commentary in response to preservice teachers meeting (or not) the Professional Standards (Commonwealth of Australia, 2011) on a sort of checklist; the checklist may serve to limit the conversation to technicality, which has implications for how supervising teachers mentor PST on practicum. This further suggests the need for a further line of research to interrogate how supervising teacher knowledge of the Standards is employed (or not) within mentoring conversations and how deep knowledge supports more expert mentoring.

In modelling practice, supervising teachers made suggestions about how to do something or what to think about. This sort of modelling may have been more prevalent (in the current study) than a more directed 'do as I do' approach because the preservice teacher participants were farther along in their development and spent only limited time observing this supervising teacher. Thus, supervising teacher knowledge is manifest as he or she points out aspects of practice during conversations. Providing feedback remains a core function of the supervising teacher role and through both oral and written feedback, the supervising teachers typically commented on aspects of planning or teaching and noted specific areas for the preservice teacher's attention. As supporters of reflection, supervising teachers commonly asked questions that were future-oriented, and queried how the preservice teacher will build from earlier work or otherwise learn from something that had happened in the lesson. Taken together, the three categories of participation echo key supervision activities during practicum and provide insight into expert supervising teacher knowledge and directions for professional development for developing supervising teachers, including articulating a 'mentoring conception' as part of professional development for supervising teachers (Nielsen et al., 2017; van Ginkel et al., 2016).

In Australia, as elsewhere in the world, teacher education is under increasing scrutiny to produce high-quality teachers and with the 'practice-based turn' in teacher education, school-based teacher educators have both a growing responsibility toward the professional learning of preservice teachers and a consequent need to develop their own practices (Hoffman et al., 2015). The Categories of Participation thus offer some guidance for how to support supervising teachers to develop their practices as supervisors. Knowledge for mentoring is manifest in conversations between the supervising teacher and the preservice teacher and thus mentoring conversations provide a window into the knowledge base of supervision. Further, the categories of participation offer insight into where to direct professional learning to support high-quality

practicum experiences and develop supervising teacher knowledge and practice. Research also needs to consider how to make expert supervising teacher knowledge available to support the wider development of such expertise among a community of those school-based teacher educators who supervise preservice teachers on practicum.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributors

Wendy Nielsen is an associate professor in science education with research interests in initial teacher education, particularly preservice teacher science knowledge and pedagogies to support knowledge development. She has additional interests in doctoral education, supervising teacher knowledge and technology-enhanced learning.

Sharon Tindall-Ford's research has focused on producing quality outputs that change practice in classrooms, schools and teachers' professional learning. Using both quantitative and qualitative methodology, her research has focused on Cognitive Load Theory (CLT) and the inter-related areas of teacher policy and teacher (including pre-service) learning and leading.

Lynn Sheridan is a senior academic in Teacher Education. Her research focuses on the role of non-academic attributes in regard to teaching success, retention and career satisfaction. Current empirical research in this area is focusing on extending theory on the phenomenon of resilience and adaptability of professions (teachers & nurses), within local contexts.

ORCID

Wendy Nielsen http://orcid.org/0000-0002-2066-6200

References

Aderibigbe, S., Colucci-Gray, L., & Gray, D. S. (2016). Conceptions and expectations of mentoring relationships in a teacher education reform context. *Mentoring & Tutoring: Partnership in Learning*, *24*(1), 8–29.

Amaral-da-cunha, M., Batista, P., MacPhail, A., & Graça, A. (2018). Reconstructing a supervisory identity: The case of an experienced physical education cooperating teacher. *European Physical Education Review*, *24*(2), 240–254.

Ambrosetti, A. (2014). Are you ready to be a mentor? Preparing teachers for mentoring pre-service teachers. *Australian Journal of Teacher Education*, *39*(6), 30–42.

Atkinson, T., & Claxton, G. (2000). *The intuitive practitioner: On the value of not always knowing what one is doing*. Taylor & Francis.

Baeten, M., Simons, M., Schelfhout, W., & Pinxten, R. (2018). Team teaching during field experiences in teacher education: Exploring the assistant teaching model. *European Journal of Teacher Education*, *41*(3), 377–397.

Banville, D. (2002, July). Literature review of best practices of cooperating teachers in the USA. *Paper presented at the China-U.S. Conference on Physical Education*, Beijing, China.

Bodoczky, C., & Malderez, A. (1997). The INSET impact on a mentoring course. In . D. Hays (Ed.), *In-service teacher development: International Perspectives* (pp. 50–59). Hemel Hempstead: Prentice.

Boreen, J., Johnson, M. L., Niday, D., & Potts, J. (2009). *Mentoring beginning teachers: Guiding, reflecting, coaching*. Stenhouse.

Borko, H., & Mayfield, V. (1995). The roles of the cooperating teacher and university supervisor in learning to teach. *Teaching and Teacher Education*, *11*(5), 501–518.

Bullough, R. V., & Draper, R. J. (2004). Mentoring and the emotions. *Journal of Education for Teaching*, *30*(3), 271–288.

Clarke, A., Triggs, V., & Nielsen, W. (2014). Cooperating teacher participation in teacher education: A review of the literature. *Review of Educational Research*, *84*(2), 163–202.

Clarke, M., & Sheridan, L. (2016). Heroes and villains: The insistence of the imaginary and the novice teacher's need to believe. *Asia-Pacific Journal of Teacher Education*, *45*(2), 194–206.

Cohen, E., Hoz, R., & Kaplan, H. (2013). The practicum in preservice teacher education: A review of empirical studies. *Teaching Education*, *24*(4), 345–380.

Commonwealth of Australia. (2008). *National Partnership Agreement on Improving Teacher Quality*. Council of Australian Governments.

Commonwealth of Australia. (2011). *Australian Professional Standards for Teachers*. Australian Institute for Teaching and School Leadership.

Cornbleth, C., & Ellsworth, J. (1994). Teachers in teacher education: Clinical faculty roles and relationships. *American Educational Research Journal*, *31*(1), 49–70.

Crasborn, F., Hennissen, P., Brouwer, N., Korthagen, F., & Bergen, T. (2011). Exploring a two-dimensional model of mentor teacher roles in mentoring dialogues. *Teaching and Teacher Education*, *27*(2), 320–331.

Darling-Hammond, L. (2000). Teacher quality and student achievement. *Education Policy Analysis Archives*, *8*, 1.

Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education*, *61*(1–2), 35–47.

Davies, M. A., Brady, M., Rodger, E., & Wall, P. (1999). Mentors and school-based partnership: Ingredients for professional growth. *Action in Teacher Education*, *21*(1), 85–96.

Edwards, A. (1998). Mentoring student teachers in primary schools: Assisting student teachers to become learners. *European Journal of Teacher Education*, *21*(1), 47–62.

Erickson, K., Bruner, M. W., MacDonald, D. J., & Côté, J. (2008). Gaining insight into actual and preferred sources of coaching knowledge. *International Journal of Sports Science & Coaching*, *3*(4), 527–538.

Ewing, R., Lowrie, T., & Higgs, J. (2010). *Teaching and communicating: Rethinking*. Oxford University.

Faikhamta, C., & Clarke, A. (2018). Thai cooperating teachers' motivations and challenges in supervising student teachers through their internship program. *Kasetsart Journal of Social Sciences*, http://www.elsevier.com/locate/kjss

Feiman-Nemser, S., Carver, C., Schwille, S., & Yusko, B. (1999). Beyond support. In M. Scherer (Ed.), *A better beginning: Supporting and mentoring new teachers* (pp. 3–12). ASCD.

Feiman-Nemser, S., & Parker, M. B. (1993). Mentoring in context. *International Journal of Educational Research*, *19*(8), 699–718.

Feiman-Nemser, S. (2001). Helping novices learn to teach: Lessons from an exemplary support teacher. *Journal of Teacher Education*, *52*(1), 17–30.

Franke, A., & Dahlgren, L. O. (1996). Conceptions of mentoring. *Teaching and Teacher Education*, *12*(6), 627–641.

Gergen, K. (1997). Constructing constructivism: Pedagogical potentials. *Issues in Education: Contributions from Educational Psychology*, *3*, 195–202.

Gordon, E. J. (2017). Exploring the dyad: The relationship establishment between a novice physical education teacher and his mentor. *Mentoring & Tutoring: Partnership in Learning*, *25*(1), 27–41.

Graham, B. (2006). Conditions for successful field experiences: Perceptions of cooperating teachers. *Teaching and Teacher Education*, *22*(8), 1118–1129.

Grimmett, P. P., & Ratzlaff, H. C. (1986). Expectations for the cooperating teacher role. *Journal of Teacher Education*, *37*(6), 41–50.

Guise, M., Habib, M., Thiessen, K., & Robbins, A. (2017). Continuum of co-teaching implementation: Moving from traditional student teaching to co-teaching. *Teaching and Teacher Education*, *66*, 370–382.

Hagger, H., McIntyre, D., & Wilkin, M. (2013). *Mentoring: Perspectives on school-based teacher education*. Routledge.

Hall, K. M., Draper, R. J., Smith, L. K., & Bullough, R. V. (2008). More than a place to teach: Exploring the perceptions of the roles and responsibilities of mentor teachers. *Mentoring &tutoring: Partnership in Learning*, *16*(3), 328–345.

Halpin, P. F., & Kieffer, M. J. (2015). Describing profiles of instructional practice: A new approach to analysing classroom observation data. *Educational Researcher*, *44*(5), 263–277.

Hascher, T., Cocard, Y., & Moser, P. (2004). Forget about theory—practice is all? Student teachers' learning in practicum.*Teachers and Teaching: Theory and Practice*, *10*(6), 623–637.

Hastings, W. (2004, December). "I felt so guilty": The emotional dimension of supporting problematic pre-service teachers. *Australian Association for Research in Education Annual Conference* (pp.1–11). Melbourne, VIC: AARE.

Hawkey, K. (2006). Emotional intelligence and mentoring in preservice teacher education: A literature review. *Mentoring and Tutoring: Partnership in Learning*, *14*(2), 137–147.

Helgevold, N., Næsheim-Bjørkvik, G., & Østrem, S. (2015). Key focus areas and use of tools in mentoring conversations during internship in initial teacher education. *Teaching and TeacherEducation*, *49*, 128–137.

Hobson, A. J. (2012). Fostering face-to-face mentoring and coaching. In S. J. Flecher & C. A. Mullen (Eds.), *The SAGE Handbook of Mentoring and Coaching in Education* (pp. 59–73). Sage.

Hoffman, J. V., Wetzel, M. M., Maloch, B., Greeter, E., Taylor, L., DeJulio, S., et al. (2015). What can we learn from studying the coaching interactions between cooperating teachers and preservice teachers? A literature review. *Teaching and Teacher Education*, *52*, 99–112.

Hudson, P. (2004). Specific mentoring: A theory and model for developing primary science teaching practices. *European Journal of Teacher Education*, *27*(2), 139–146.

Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers. *Review of Educational Research*, *81*(2), 201–233.

Ingersoll, R., & Kralik, J. (2004). The impact of mentoring on teacher retention: What the research says. In *Education Commission of the States* (pp. 1–24). University of Pennsylvania. https://www.gse.upenn.edu/pdf/rmi/ECS-RMI-2004.pdf

Johnson, S. M., Berg, J. H., & Donaldson, M. L. (2005). *Who stays in teaching and why? A review of the literature on teacher retention: The Project on the Next Generation of Teachers*. Harvard Graduate School of Education.

Kessels, C., Beijaard, D., Veen, K. V., & Verloop, N. (2008, April). The importance of induction programs for the well-being of beginning teachers. New York, NY: Paper presented at the annual meetings of the American Educational Research Association.

Kim, Y., & Silver, R. E. (2016). Provoking reflective thinking in post observation conversations. *Journal of Teacher Education*, *67*(3), 203–219.

Koc, E. M. (2011). Development of mentor teacher role inventory. *European Journal of Teacher Education*, *34*(2), 193–208.

Koerner, M., O'Connell, F., & Baumgartner, F. (2002). Exploring roles in student teaching placements. *Teacher Education Quarterly*, *29*(2), 35–58.

Kwan, T., & Lopez-Real, F. (2005). Mentors' perceptions of their roles in mentoring student teachers. *Asia-Pacific Journal of Teacher Education*, *33*(3), 275–287.

Lejonberg, E., & Tiplic, D. (2016). Clear mentoring: Contributing to mentees' professional self-confidence and intention to stay in their job. *Mentoring & Tutoring: Partnership in Learning*, *24*(4), 290–305.

Lincoln, Y. S., & Guba, E. G. (2000). Paradigmatic controversies, contradictions and emerging Influences. In N. K. Denzin & Y. S. Lincoln (Eds.), *The handbook of qualitative research* (pp. 163–188). Sage.

Lindgren, U. (2005). Experiences of beginning teachers in a school-based mentoring program in Sweden. *Educational Studies*, *31*(3), 251–263.

LoCasale-Crouch, J., Davis, E., Wiens, P., & Pianta, R. (2012). The role of the mentor in supporting new teachers: Associations with self-efficacy, reflection, and quality. *Mentoring & Tutoring: Partnership in Learning*, *20*(3), 303–323.

Loughran, J. J. (2002). Effective reflective practice in search of meaning in learning about teaching. *Journal of Teacher Education*, *53*(1), 33–43.

Loughran, J. J. (2006). *Developing a pedagogy of teacher education: Understanding teaching and learning about teaching*. Routledge.

Mackey, H., & Shannon, K. (2014). Comparing alternative voices in the academy: Navigating the complexity of mentoring relationships form divergent ethnic backgrounds. *Mentoring &tutoring: Partnership in Learning*, *22*(4), 338–353.

Marable, M. A., & Raimondi, S. L. (2007). Teachers' perceptions of what was most (and least) supportive during their first year of teaching. *Mentoring and Tutoring: Partnership in Learning*, *15*(1), 25–37.

McIntyre, J., & Hobson, A. J. (2016). Supporting beginner teacher identity development: External mentors and the third space. *Research Papers in Education*, *31*(2), 133–158.

Mena, J., & Clarke, A. (2015). Eliciting teachers' practical knowledge through mentoring conversations in practicum settings. In H. Tillema, G. J. van der Westhuizen, & K. Smith (Eds.), *Mentoring for learning: Climbing the mountain* (pp. 47–78). Sense Publishers.

Mena, J., Hennissen, P., & Loughran, J. (2017). Developing pre-service teachers' professional knowledge of teaching: The influence of mentoring. *Teaching and Teacher Education*, *66*, 47–59.

Ministerial Council on Education, Employment, Training and Youth Affairs [MYCEETA]. (2008). *Melbourne Declaration on Educational Goals for Young Australians* (pp. 59). MYCEETA.

Nevins Stanulis, R., Brondyk, S. K., Little, S., & Wibbens, E. (2014). Mentoring beginning teachers to enact discussion-based teaching. *Mentoring & Tutoring: Partnership in Learning*, *22*(2), 127–145.

Nevins Stanulis, R., & Floden, R. E. (2009). Intensive mentoring as a way to help beginning teachers develop balanced instruction. *Journal of Teacher Education*, *60*(2), 112–122.

New South Wales Department of Education. (2018). Teacher Accreditation. Accessed March 19, 2021, https://education.nsw.gov.au/teaching-and-learning/professional-learning/teacher-quality-and-accreditation/teacher-accreditation

Nguyen, H. T. M., & Sheridan, L. D. (2016). Identity formation of LBOTE preservice teachers during the practicum: A case study in Australia in an urban high school. *Teacher Education Quarterly*, *42*(2), 29–50.

Nielsen, W., Mena, J., Clarke, A., O'Shea, S., Hoban, G., & Collins, J. (2017). Australia's supervising teachers: Motivators and challenges to inform professional learning. *Asia-Pacific Journal of Teacher Education*, *45*(4), 346–368.

Pomphrey, C., & Burley, S. (2012). Using mentoring and coaching for professional learning in UK secondary schools. In S. J. Fletcher & C. A. Mullen (Eds.), *The SAGE Handbook of Mentoring and Coaching in Education* (pp. 295–307). Sage.

Rippon, J. H., & Martin, M. (2006). What makes a good induction supporter? *Teaching and Teacher Education*, *22*(1), 84–99.

Roehrig, A. D., Bohn, C. M., Turner, J. E., & Pressley, M. (2008). Mentoring beginning teachers for exemplary teaching practices. *Teaching and Teacher Education*, *24*(3), 684–702.

Rots, I., Aelterman, A., Vlerick, P., & Vermeulen, K. (2007). Teacher education, graduates' teaching commitment and entrance into the teaching profession. *Teaching and Teacher Education*, *23*(5), 543–556.

Rozelle, J. J., & Wilson, S. M. (2012). Opening the black box of field experiences. *Teaching and Teacher Education*, *28*(8), 1196–1205.

Schleicher, A. (2011, March). *Building a high-quality teaching profession: Lessons from around the world*. Report from the International Summit on the Teaching Profession. Organization for Economic Cooperation and Development.

Schwandt, T. A. (2003). Three epistemological stances for qualitative inquiry: Interpretivism, hermeneutics and social constructionism. In N. K. Denzin & Y. S. Lincoln (Eds.), *The landscape of qualitative research* (pp. 292–331). Sage.

Seperson, M. A., & Joyce, B. R. (1973). Teaching styles of student teachers as related to those of their cooperating teachers. *Educational Leadership Research Supplement*, *31*, 146–151.

Sheridan, L., & Young, M. (2016). Genuine conversation: The enabler in good mentoring of preservice teachers. *Teachers and Teaching: Theory and Practice*, *23*(6), 658–673.

Smagorinsky, P., & Jordahl, A. (1991). The student teacher/cooperating teacher collaborative study: A new source of knowledge. *English Education*, *23*, 54–59.

Smith, T. M., & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover?. *American Educational Research Journal*, *41*(3), 681–714.

Southgate, E., Reynolds, R., & Howley, P. (2013). Professional experience as a wicked problem in initial teacher education. *Teaching and Teacher Education*, *31*(1), 13–22.

Spear, M., Lock, N. D., & McCulloch, M. (1997). The written feedback mentors give to student teachers. *Teacher Development*, *1*(2), 269–280.

Stake, R. (1995). *The art of case study research*. Sage.

Stegman, S. F. (2007). An exploration of reflective dialogue between student teachers in music and their cooperating teachers. *Journal of Research in Music Education*, *55*(1), 65–82.

Sudzina, M., Giebelhaus, C., & Coolican, M. (1997). Mentor to tormentor: The role of the cooperating teacher in student teacher success or failure. *Action in Teacher Education*, *18*(4), 23–35.

Sundli, L. (2007). Mentoring—A new mantra for education? *Teaching and Teacher Education*, *23*(2), 201–214.

Svojanovsky, P. (2017). Supporting student teachers' reflection as a paradigm shift process. *Teaching and Teacher Education*, *66*, 338–348.

Teacher Education Ministerial Advisory Group [TEMAG]. (2014). *Action now: Classroom ready teachers*. TEMAG.

Tillema, H. H. (2000). Belief change towards self-directed learning in student teachers: Immersion in practice or reflection on action. *Teaching and Teacher Education*, *16*(5–6), 575–591.

Tillema, H., & van der Westhuizen, G. J. (2015). Mentoring conversations and student teacher learning. In H. Tillema, G. J. van der Westhuizen, and K. Smith (Eds.), *Mentoring for learning: Climbing the mountain* (pp. 23–41). Sense Publishers.

Tobin, G. A., Tobin, C., & Begley, C. M. (2010). Triangulation as a method of inquiry. In T. Huber (Ed.), *Storied inquiries in international landscapes: An anthology of educational research* (pp. 423–428). Information Age.

Tonna, M. A., Bjerkholt, E., & Holland, E. (2017). Teacher mentoring and the reflective practitioner approach. *International Journal of Mentoring and Coaching in Education*, *6*(3), 210–227.

Tschannen-Moran, M., & Hoy, A. W. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*, *23*(6), 944–956.

Valenčič, M., & Vogrinc, J. (2007). A mentor's aid in developing the competences of teacher trainees. *Educational Studies*, *33*(4), 373–384.

van Ginkel, G., Verloop, N., & Denessen, E. (2016). Why mentor? Linking mentor teachers' motivations to their mentoring conceptions. *Teachers and Teaching: Theory and Practice*, *22*(1), 101–116.

van Manen, M. (2016). *Researching lived experience: Human science for an action sensitive pedagogy* (2nd ed.). Routledge: Taylor and Francis Group.

Weiss, E. M., & Weiss, S. (2001). Doing reflective supervision with student teachers in a professional development school culture. *Reflective Practice*, *2*(2), 125–154.

White, S., Bloomfield, D., & Le Cornu, R. (2010). Professional experience in new times: Issues and responses to a changing education landscape. *Asia-Pacific Journal of Teacher Education*, *38*(3), 181–193.

Williams, E., Butt, G., Gray, C., Leach, S., Marr, A., & Soares, A. (1998). Mentors' use of dialogue within a secondary initial teacher education partnership. *Educational Review*, *50*(3), 225–239.

Williams, J. (2009). Beyond the practicum experience. *ELT Journal*, *63*(1), 68–77.

Wilson, S., Floden, R., & Ferrini-Mundy, J. (2001). *Teacher preparation research: Current knowledge, gaps, and recommendations*. Report for the US Department of Education and Office of Educational Research. Seattle, WA: University of Washington, Center for the Study of Teaching and Policy.

Yin, R. (2014). *Case study research: Design and methods* (5th ed.). Sage.

Zeichner, K. M., & Gore, J. M. (1990). Teacher socialization. In W. R. Houston, M. Haberman, & J. Sikula (Eds.), *Handbook of research on teacher education* (pp. 329–348). MacMillan.

Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college-and university-based teacher education. *Journal of Teacher Education*, *61*(1–2), 89–99.