

Analysing mentoring practices to understand how a preservice teacher reflects on practice to advance teaching

Tracey Sempowicz & Peter Hudson
Queensland University of Technology

Abstract

Mentors (cooperating classroom teachers) have a shared responsibility with universities for developing preservice teachers' pedagogical practices, particularly towards becoming reflective practitioners. Preservice teachers need to participate actively in their own learning, by reflecting and acting on the mentor's constructive feedback provided during planning and feedback dialogue sessions. This case study uses feedback practices outlined within a five-factor mentoring model to analyse dialogue between a mentor and her respective mentee during different stages in their school-based programs (first practicum). This investigation uses multiple data sources such as video and audio-recorded interviews, archival documents from participants such as lesson plans, reflections and reports to examine preservice teacher's reflections and implementations of practice as a result of her mentor's feedback (e.g., establish expectations, review lesson plans, observe teaching then provide oral and written feedback, and evaluate progress). Findings indicated that reflective thinking was more apparent when the mentor did not dominate conversations but instead asked astute pedagogical knowledge questions to facilitate the mentee's reflections on practice.

Keywords: mentoring, preservice teacher, mentor, feedback, reflective practice

Introduction

This study highlights the importance of a mentor's (cooperating classroom teacher's) feedback for developing a mentee's (preservice teacher's) reflection on action and the effect on their teaching practices. Standards for mentoring need to be based on empirical evidence on effective mentoring practices. Theoretical models have been proposed but few studies conduct investigations of practice within these models. For example, a five-factor mentoring model has gathered evidence on effective mentoring practices through the literature and quantitative studies but requires qualitative understandings (Hudson, 2007). This study investigates the mentoring of preservice teacher's reflective practices as a result of a mentor

teacher's feedback, using this mentoring model as a theoretical framework for collecting qualitative data. Specifically, this paper focuses on how a mentor's feedback may facilitate the continuous improvement of teaching and learning outcomes as a result of developing a mentee's reflective practice.

Literature review

Most education reviews highlight the need to improve Australia's education system and many have a focus on preservice teacher education occurring within school and tertiary settings (e.g., Bradley, Noonan, Nugent, & Scales, 2008; House of Representatives Standing Committee on Educational and Vocational Training [HRSCEVT], 2007; Masters, 2009). The Queensland premier's "Flying Start" paper further emphasises the need for educational reform with a focus on teachers and preservice teachers (Queensland Government, 2009). Indeed, there are only two ways to implement reform in an education system, namely through professional development of existing teachers and preservice teacher education (Hudson, 2010). Both teachers and preservice teachers, as key enactors of reform, are essential for change to filter throughout an education system.

There are reform measures advocated within government reports on teaching and teacher education. For instance, methods for advancing the teaching profession are provided through the Australian National Framework for Professional Standards for Teaching (MCEETYA, 2003), which among other standards emphasises the need for continuous critical reflection on teaching practices as a way towards ongoing professional growth. For preservice teachers, it is advocated that observing, practising, reflecting on and improving planning processes, decision making, and interactions with students and staff while undertaking field experiences can assist the transition from university theory to effective teaching.

While the literature on critical reflection is prolific, the evidence appears inconclusive as to how critical reflection is best fostered in preservice teachers (Hatton & Smith, 1995; Davis, 2006). Since Schön's (1983, 1987) articulation of reflective practices as a means for professional growth, there continue to be studies exploring how reflection on practice may translate to pedagogical improvements (e.g., Bean & Stevens, 2002). To illustrate, Brandt (2008) presents arguments from other researchers that stress the interrelatedness of reflection and learning, where experiences are evaluated "for teachers' self-directed development" (p. 42). Furthermore, reflective abilities tend to characterise attributes of effective teachers, and in particular the "development of values, knowledge and skills that support reflection on

practice” (Frick, Carl, & Beets, 2010, p. 422). Many educators have attempted to understand reflective practices by positioning arguments about how and when to reflect. Schön’s (1983, 1987) work postulates reflection-on-action (critical analysis of a past teaching experience) and reflection-in-action, where critical analysis occurs in the present while teaching. Reflection without advancing practice becomes a passive response, therefore, purposive reflection necessitates a productive outcome that demonstrates practices have been enhanced (van Manen, 1977), which can be particularly useful when there is an explicit emphasis on specific teaching practices (Davis, 2006).

Some educators attempt to present theoretical frameworks to understand how preservice teachers may reflect. For example, Frick et al. (2010) collate ideas from other researchers to posit three levels of reflective practices, namely: Level 1 – developing professional identity through curriculum knowledge, understanding of learning, and professional attitudes; Level 2 – developing a sense of mission, where the one reflecting is located in relation to others (see Korthagen, 2004); and Level 3 – developing meta-cognition in which they “become self-regulated learners capable of knowing how and when to use their knowledge constructed in the previous two levels” (p. 423; see also Loyens, Rikers, & Schmidt, 2007). Frick et al.’s study concludes that there was no evidence to suggest these three levels of reflection occur in sequence; indeed it was shown that these three levels do not occur in isolation. In a somewhat similar vein, Lee (2005) draws from other educators’ studies to present 10 different studies that outline levels/content of reflecting thinking, including Lee’s own three levels of reflection (i.e., practical/technical, contextual/deliberative, and critical/dialectical) that was reframed into recall, rationalisation, and reflectivity. Lee also lists many varied processes for reflective thinking and delineates the variations between studies. Consequently, the search for models and frameworks to investigate and represent reflective practices is ongoing. More needs to be understood about how preservice teachers develop their reflective abilities and, more importantly, how these transfer into action within the classroom environment. It seems well agreed upon that critical self reflection is essential; van Halen-Faber (1997), for instance, highlights the critical nature of internally-driven reflection for continued independency and self motivation for advancing teaching practices, and these underlying principles are taken up by government bodies investing in a healthy education system.

Universities have a responsibility to provide explicit instruction in critical reflection to preservice teachers prior to commencing a field studies period (Korthagen, 1985). Gay and Kirkland (2003) argue that expectations for critical reflection need to be in place “where self-

reflection and cultural critical consciousness are part of the routine, normative demands” (p. 184). Hence, preservice teachers require guidance by experienced teachers who can facilitate the reflective processes. The classroom provides routine, real-world opportunities for preservice teachers to learn about themselves as potential teachers; however such opportunities require guidance from a competent teacher (mentor) who has knowledge of effective classroom practices and the individual nature of the students within the class. There is evidence showing that a mentor’s feedback can contribute to reflective practices, and that “an effective teacher is a reflective teacher” (Brandt, 2008, p. 42).

In the field, a mentor teacher’s role may include supporting and challenging the preservice teacher by promoting a problem-solving approach when reflecting about their teaching and learning. An effective mentor encourages and facilitates a consistent approach to reflection and can offer alternative viewpoints and perspectives, but still allows the mentee to act on reflections and trial alternatives (Korthagen, 1985; Schön, 1983, 1987). A preservice teacher needs to be an active participant in learning how to teach (Larivee, 2000, 2009), which includes being motivated to self-reflect. Effective critical self-reflection (as opposed to general or vague recollections) needs to be developed over a period of time within the school setting to understand skills and strategies aligned with effective reflective practices (Lee, 2005; Loughran, 2002).

It appears preservice teachers may respond to reflection when provided with tools for articulating reflective practices. Davis (2006) shows how written reflections (e.g., using a journal) can assist preservice teachers to reflect-on-action and allows for knowledge integration and can promote pedagogical thinking. She recommends that preservice teachers move beyond description towards deep critical analysis of teaching and learning, and re-conceptualise practices through knowledge integration. Ultimately, reflection must translate into visible outcomes that demonstrate a fine-tuning of teaching practices (Ward & McCotter, 2004).

Study Framework

The literature has grown significantly in the area of mentoring, and empirical evidence has been gathered to present effective mentoring practices for guiding a preservice teacher’s development. This study uses a four-step process in its investigation, namely: (1) mentor’s feedback, (2) reflective tool(s) used by the mentees, (3) reflection-on-action, and (4) teaching outcome. As discussed in the research design, a range of data collection methods will gather information around this four-step process. As frameworks for investigating reflective

practices are in exploratory stages, this study will explore reflective practices in relation to the mentor's feedback, which is based on the following framework: (1) articulating expectations and providing advice to the mentee before planning and teaching, (2) reviewing lesson plans, (3) observing the mentee teach in order to be informed on the mentee's practices, (4) providing oral feedback, (5) providing written feedback, and (6) facilitating the mentee's evaluation of teaching and learning (Hudson, 2007, 2010).

The mentee's reflective tools used in this study include the mentee's written and verbal communication of practices (e.g., Davis, 2006; Schön, 1987). Reflection-on-action evidence will involve the information provided by the mentee through the mentee's reflective tools. This evidence will be collated as themes emerge. Finally, the teaching outcome will be identified through the mentor's and first-named researcher's (Sempowicz) diary and observations of the mentee's teaching in relation to the mentee's reflections. Hence, the research question was: How can a mentor provide feedback to assist the preservice teacher to reflect and advance teaching practices?

Context

This study is located at a satellite campus of a large Australian university. The campus is situated in a low socio-economic area and as a result, the campus strategic plan promotes community engagement such as practicum and internship for those commencing their journey as early-career teachers. The campus was successful in a grant application titled, Teacher Education Done Differently (TEDD), with an aim to enhance mentoring practices for preservice teachers. In consultation with school site co-ordinators, principals and teachers, a Mentoring for Effective Teaching (MET) program was created to advance mentoring practices for mentors (supervising teachers).

Thirty-nine preservice teachers, enrolled in a first field experience program, were placed in their schools in week 4 of semester one, and completed six one-day weekly visits to learn about the students in their classrooms, and the school culture and infrastructure. During this period, the preservice teachers were also undertaking coursework at the university; a key focus was to develop their abilities in applying behaviour management techniques for primary students. The weekly school experiences were designed to allow them to observe the behaviour management practices of their supervising classroom teachers. These weekly visits were part of the TEDD project for creating school-based experiences for preservice teachers

to assist them in making links between theory and practice. These preservice teachers then completed a four-week block practicum.

Preservice teachers are involved in many purposeful interactions and activities with schools in the area surrounding the campus. Hence, these schools play a fundamental role in the TEDD project. The school selected for this qualitative study is one of these local schools. The two main participants, a mentor and a preservice teacher undertaking a first practicum experience, while not paired specifically for this study, were considered a good representative case (Yin, 2009).

The mentee (pseudonym Amy) in this case study was in her second year of university study and was mentored by Gina, an experienced teacher at a primary school. Amy, 19 years old, commenced her Bachelor of Education Primary degree immediately after completing secondary school. This study focused on her first field experience held within a Year 2 class. Prior to this practicum she completed 12 out of a possible 32 university units of study, including one field studies preparation unit, and one unit each in science, dance and drama, and HPE. An elite athlete who competed at national level, Amy routinely trained in her sports field for three hours per day, outside of school hours, while on her practicum (generally committing four hours per day at other times) and worked part-time as a swimming instructor for ten hours per week. During her practicum she competed in a weekend-long competition interstate. Amy's mentor, Gina, had 20 years teaching experience, mentored 8 preservice teachers throughout her career and taught in 7 different primary schools (three full-time; four on a contract basis). She had taught years 2, 3 and 4 as well as multi-level classes in years 3/4 and 4/5.

Data collection methods and analysis

An initial meeting was conducted in the week prior to the field experience with the mentor and mentee to negotiate and discuss the process for data collection and gain consent for this study. This case study (Hittleman & Simon, 2006; Yin, 2009) used a number of data collection methods and instruments over the four-week field experience. These were: video-recorded sessions of mentor-mentee dialogue, audio-recorded informal dialogue sessions, audio-recorded teaching episodes, formal mentee-written lesson plans and reflections; formal mentor-written "Feedback on Teaching" evaluations; formal researcher written lesson observations (by Sempowicz); a formal individual interview with the mentee and then the mentor; and the mentee's Interim and Final Field Studies reports (see Table 1).

Table 1: *Data collection methods and instruments*

Method/Instrument	Case Study 1	
	Number	Session length (mins)
Researcher diary and lesson observations	4	20-57
Mentee-written lesson plans	6	
Mentee-written reflections	15	
Mentor-written “Feedback on Teaching” evaluations	3	
Interim Field Studies Report	1	
Final Field Studies report	1	
Final interview – Mentee	1	20
Final interview – Mentor	1	18
Video-recorded dialogues (formal)	5	7-16
Audio-recorded dialogues (informal)	8	4-12
Audio-recorded teaching episodes	7	1-57

A mentor teacher must be prepared to engage their mentee in “dialogue focused on practice” (Hall, Draper, Smith, & Bullough, 2008, p.342). Formal mentor-mentee dialogues (7-16 minutes in duration) were video-recorded and annotated observations were made using the five-factor mentoring model as a framework for collecting and analysing the data. Informal mentor-mentee dialogues were audio-recorded by the mentor in the classroom during morning tea and lunch breaks or while “walking and talking” on playground duty, using an audio digital recorder. These dialogues generally occurred immediately prior to or following a lesson taught by the mentee for the purposes of forward planning or reflecting on lessons. A sample of the mentee’s teaching episodes was also audio-recorded. These included two short conversations between the mentee and her class (27- 31 seconds), four class activities (20-30 minutes) and one complete lesson (57 minutes).

A school requirement was for the mentee to design formal lesson plans prior to teaching a group or class of students. Amy was guided by university coursework on how to write lesson plans. All lesson plans ($n=6$) developed by the mentee, with the exception of one, were collected. She was also required to complete written reflections after teaching lessons or leading activities, and these were completed in a timely fashion. Amy reflected on

the effectiveness of her planning, preparation and implementation of lessons, on classroom management and on student learning.

The mentee was formally observed by the mentor and given written feedback using the “Feedback on Teaching” documentation provided by the university. The form gave the mentor the option of using ticks (checks) against identified competencies (planning and preparation, teaching, reflective practice) and/or detailed written feedback (planning and preparation, lesson implementation, communication, classroom management, and general feedback). In addition, the researcher observed four lessons taught and provided feedback using the same “Feedback on Teaching” form.

The final focused interview conducted with the mentee (19:30 mins) then the mentor (18.27 mins) was guided by 13 semi-structured “nonthreatening” questions, providing critical evidence in this study. For example: “What mentoring feedback assisted your development as a teacher during this field studies period?” The mentor required little or no additional explanation of the questions, however the mentee’s limited knowledge and experience surrounding pedagogical discourse necessitated some rephrasing and elaboration of questions to assist Amy to articulate her responses. The interview was audio-recorded to provide an accurate account of the responses (Yin, 2009).

Interim and final field studies reports focused on four of the ten professional standards (Queensland College of Teachers, 2006), which were deemed appropriate by the university for preservice teachers. These were: Standard One – Design and implement engaging and flexible learning experiences for individuals and groups; Standard Two - Design and implement learning experiences that develop language, literacy and numeracy; Standard Seven - Create and maintain safe and supportive learning environments; and, Standard Ten - Commit to reflective practice and ongoing professional renewal.

Data sources used in this study were complementary (Yin, 2009). For example, individual interviews encouraged non-threatening conversations to occur, while video-recorded dialogues capture subtle nuances in body language. All data sources were cross-checked and triangulated to gain a rich description of the mentor and mentee interactions during the field experience (e.g., see Hittleman & Simon, 2006; Stake, 2006; Yin, 2009). Observations, archival documents, transcriptions of audio/video data and interviews were analysed against the feedback practices contained within the five-factor mentoring model (Hudson, 2007, 2010). The focus, however, was to investigate how mentor’s feedback can facilitate the mentee’s reflection-on-practice and how this can be translated into teaching practices.

Findings and discussion

Findings indicated the mentor used particular mentoring practices to facilitate the mentee's reflective practices towards teaching in the classroom. In general, data showed that the mentor's ability to model self-reflection and establish processes for providing feedback were crucial to the mentoring partnership. In providing feedback to the mentee, the mentor's personal attributes, articulation of pedagogical knowledge as well as knowledge of the education system requirements (to present lesson plans and reflections) impacted on the mentee's development as a reflective practitioner.

Articulate expectations

In the first video-recorded session (day 2 of the practicum) the mentor outlined her expectations for timely preparation and review of lesson plans, and for reflecting on teaching. A process was negotiated and the amount of class contact time was agreed upon. Gina stated: "We'll have a look today at our field experience progression and how we can plan our lessons for the time you are here." She suggested a process and sequence for scaffolding the mentee's teaching experience to give her a "variety of experiences with individuals, small groups and the whole class" and recommended repeating short activities in subsequent lessons to different groups of students to enable ongoing reflection and continuous improvement. She asked the mentee if she would like to "build up" to teaching a whole day by day 3 of the final week of the practicum and suggested that the final two days be allocated primarily to reflecting on and writing up a comprehensive account of the whole four-week experience. Gina suggested that Amy make "a list of things that you really liked (and) things that you would do differently". Gina also advised that this would be an opportune time to reflect on the effectiveness of her pedagogy, as well as the process used for planning and implementing lessons and evaluating students' progress.

The expectations included that the mentor and mentee would meet prior to a lesson being taught to review the mentee's lesson plan, to provide initial oral feedback and to discuss further strategies for teaching. The mentee would teach the lesson with appropriate modifications and the mentor would observe the lesson being taught. The mentor would provide brief, immediate oral feedback on all activities or lessons taught and follow up with written feedback on selected lessons.

The mentee's timely completion and presentation of lesson plans and written reflections provided evidence that the mentor's early and clear articulation of expectations regarding

these system requirements informed Amy's practices. Also, Amy's level of commitment and self motivation as well as her willingness to comply with Gina's expectations assisted her development.

Review lesson plans

The mentee met her mentor's expectations by presenting her lesson plans for review prior to teaching. Video-recorded dialogue showed the mentor inviting the mentee to share her ideas for future lessons while she listened intently. Researcher observations, audio and video-recorded dialogue, lesson plans and the mentee's written reflections revealed that the mentor guided the mentee in the development of pedagogical knowledge, curriculum content and classroom management strategies while reviewing lesson plans. For example, prior to a measurement lesson Gina discussed the aims of the lesson and used language from current syllabus documents referring to the "essential learnings". Gina asked Amy what questions she planned to ask the students and shared her understanding of higher order questioning techniques. The mentor gave the mentee clear guidance on the maths concepts to teach including order, sequence and links to students' prior knowledge to enhance student engagement (e.g., see Horng, Hong, ChanLin, Chang, & Chu, 2005). The mentor instructed the mentee to use repetition and guided practice of new or "big words" and to relate new language concepts to prior knowledge in science and mathematics lessons. Prior to another lesson on "Hard Working Pigs" (Program Achieve), the mentor suggested utilising "learning buddies" to further develop a sense of responsibility in students for their own work and to generate ideas.

Classroom management strategies were suggested including clear articulation of the lesson aims, giving clear and specific instructions for activities, using positive reinforcement strategies such as praise, stickers, and encouragement, and using the "sound gauge" for identifying acceptable noise levels. Amy wrote in her reflection: "using the sound gauge which was discussed at the start of the year, settled the children". Hence, when she asked the students to use "level 3 noise" (i.e., "working and whispering voices"), they knew what was expected and responded appropriately. In the interview, the mentee explained that she appreciated the suggestions made by her mentor prior to teaching, as she was able to make the appropriate modifications to the lesson and improve the teaching and learning outcomes. Amy stated in the interview: "it made me feel more comfortable running the lesson and having an idea that I was on the right track".

Observe teaching practice

During this first practicum period the mentee was supervised and supported by the mentor's presence in the room while she was teaching, particularly when delivering a whole lesson. The researcher's observation journal noted that the mentor stayed "in the background, unobtrusively observing the mentee". In the interview, Amy described her mentor as supportive in the classroom, stating "she's helpful in the way that she'll calm the kids down if they're not going to listen to me". Although this may be considered as interfering with Amy's position as a teacher (e.g., Long, 1997), she appreciated this action as a supportive approach. During small group, shorter activities, the mentee worked with her group in a space adjoining the classroom (preparation room or outside under-cover area) thereby ensuring proximity and support from the mentor if needed, while allowing her autonomy in managing the activities.

Following each activity or lesson observed, the mentor gave brief immediate oral feedback and established a time for a debriefing dialogue to take place. This approach facilitated "think time" for more in-depth reflection, opportunity for two-way dialogue and for amendments to be made for subsequent lessons, thereby ensuring continuous improvement and greater success.

Provide oral feedback

It is evident that the preferred method of giving and receiving feedback in this case was oral feedback (see Table 1). During both the audio and video-recorded dialogue sessions the mentor provided oral feedback when she reviewed the mentee's lesson plans prior to teaching. She used questioning to check her own understanding of the lesson plan, such as "What do you want the kids to learn this afternoon?". She discussed the questions the mentee planned to ask of the students and suggested teaching strategies, for example: "you could scribe for them (slower writers), just the beginning of the sentence on the board, to get them started". She reinforced and encouraged the mentee with praise (e.g., "that's good") and non-verbal cues (smile, laugh). She discussed links to future lessons and the opportunity to reflect between lessons and make adjustments, suggesting that the mentee "go home and reflect" on the first lesson by asking herself questions, such as:

What's working? What do I need to change? What am I up to? Am I catering for each of the individuals in the group (e.g., intellectually impaired, or fast finishers)? Am I giving

them enough instructions so that they can follow the instructions clearly? Do I have to worry about behaviour management in this lesson? How am I doing that?

Gina used the term “reflection” and its derivatives regularly during the video and audio dialogue sessions, which indicated that she was reinforcing the strategy with her mentee, for instance, “...some things for you to reflect on tonight”. This strategy of allowing the mentee “think time” with follow-up discussion the next day enabled her to reflect in greater depth. In one audio-recorded session the mentor asked: “what didn’t work as well as you’d hoped yesterday? What would you do differently next time?”. The mentee was able to respond at length about the effect her physical position and movement had on student behaviour, the reward system she used, her clarity of instructions, the need for extension activities for early finishers, and the need to restate rules for conducting experiments, as well as her strategies for completing an activity.

In addition to reflecting on teaching practice, Gina stressed the importance of providing oral feedback to students as well as opportunities for them to reflect on their own learning. She emphasised the need to provide regular oral feedback to students to check their understanding and to enable them to build on their knowledge of the subject. Gina also highlighted the value of feedback which informs future lesson planning. Amy described her methods of gathering feedback from students (e.g., KWL strategy) and Gina was able to provide suggestions to ensure that feedback given to students was individual, specific and timely in order to cater for individual learning needs.

Provide written feedback

While the advantages of oral feedback (immediacy, efficiency) made it the preferred and regular method of giving feedback, Gina also provided Amy with written feedback in the form of three formal lesson observations using the *Feedback on Teaching* form provided by the university. Following this feedback Amy was given “take up time” to self-evaluate and prepare for a reflective dialogue with the mentor the next day. The mentee wrote 15 written reflections following her teaching episodes which demonstrated her ability to integrate her own thoughts about her teaching and the learning environment with the immediate feedback provided by her mentor. The mentor’s comments written over the course of the four-week period acknowledged Amy’s efforts to develop her reflective practice. In week 1, she indicated using ticks (checks) “excellent” and “very good” reflective practice. In week 3, she

wrote: “Amy’s progress is very pleasing. She does very perceptive feedback”. In the final week she added: “reflections [are] very introspective”.

Facilitate evaluation

The day after a lesson was observed and brief oral feedback was given by the mentor, the mentor and mentee met to further reflect on the lesson. . It was evident in both the recorded dialogues and the mentee’s written reflections that the mentor established a structure for reflection and feedback through questioning. For example:

What do you think worked really well over the two days? Did you find that there were degrees of ability in the science lesson? Do you think you have successfully given those children a chance through your feedback; that they will now be able to answer the questions themselves? When you start next week, what’s the first thing you will do?”

Amy confirmed the value of her mentor’s feedback when she stated: “... from the feedback that you gave me I learnt a lot ...”, as well as from the students’ written reflections.

Following the dialogue sessions, Amy wrote up her reflections incorporating both her own thoughts and Gina’s feedback. This included asking open-ended questions that prompted Amy to think about relevant issues, actively listening to her responses, and providing suggestions and encouragement for future action. After examining the mentee’s written self-reflections it was evident that Amy adopted a similar format to her mentor’s style of questioning. For example: “What worked well? What didn’t work well? What would I change for future lessons?”

Despite being the mentee’s first field experience, it was apparent by mid-point (day 11) that she understood the process of reflection-on-action established by the mentor. With only minimal prompting, such as “how’s it going?”, Amy was able to reflect and identify positive elements of her lesson as well as aspects that she needed to change for the next lesson (e.g., during an outdoor lesson, when the wind blew pages around, “I fixed that up by putting their sheets in plastic sleeves”). The mentor continued to offer minor suggestions as appropriate; to illustrate: “Are they also working on their clipboard? Do they need that? Is that something else that would help them with their paper?”. As the practicum progressed, it became apparent that the mentee was developing her ability to critically self-reflect with minimal input from her mentor.

During the interview, Gina identified one of Amy’s strengths as her “willingness to listen, to implement, then to reflect” and to make the desired changes in future lessons. She

added “she has a very, very good reflective ability”. Gina described how well Amy accepted her advice and responded to it in subsequent lessons (e.g., movement about the class, proximity, checking for understanding). She stated humorously, “I can hear myself”. These dialogues suggested a positive influence that the mentor had on the mentee’s reflective practices. This willingness to act on the mentor’s advice to critically self-reflect on her practice was confirmed in both the Interim and Final Reports. In the Interim Report (completed day 10) Gina stated that Amy’s reflections were completed, “...really well after each lesson”. In the Final Report she elaborated: “Amy was able to critically reflect on her professional practice. She always provided these observations daily. They were... in line with my observations”.

Conclusion

This qualitative study explored mentoring practices aligned with an empirical mentoring model. Specifically, it focused on the development of a mentee’s critical reflective practices as a result of the processes implemented by the mentor. It demonstrated that a mentor who models reflective practices to the mentee and facilitates opportunities for the mentee’s reflections is likely to influence the mentee’s reflective practices and, subsequently, pedagogical development. More research is required to show how this may include a flow on effect for student learning in the classroom as mentee’s model reflective practices to students, obtaining feedback on their learning (directly through verbal or written feedback) or indirectly (through observation and anecdotal note-taking) to inform future “needs-based” planning.

As time constraints often impact on mentoring practices, this study indicated that early scheduling of time and negotiation of processes for articulating expectations, reviewing lesson plans, observation of teaching and opportunities to provide oral and written feedback can give the mentee considerable opportunities for developing reflective practices. Scaffolding the mentee’s teaching experiences with individuals, small groups and whole class lessons, along with opportunities to repeat lesson activities, can present dialogic content for mentee reflection towards pedagogical improvements.

In this study, the personal attributes of both the mentee and the mentor (positive attitude, attentive listening, being comfortable talking and being reflective) tended to influence the effectiveness of feedback and the mentee’s willingness to critically reflect on practices. The five-factor model of mentoring provided a framework for gathering data about the mentor’s practices within a specific field of investigation (i.e., mentoring practices that

enhance the mentee's reflective practice). Gathering further data from rich qualitative case studies may provide deeper insights into how mentors' practices affect the mentee's reflective practices. Research is needed to investigate other pedagogical knowledge practices such as planning, preparation, teaching strategies, questioning skills, assessment and so forth and how these may influence the mentee's reflection on practice and how this translates into improved pedagogy. Gathering empirical evidence on how mentors specifically use their knowledge and skills can aid the development of more effective mentoring programs.

Acknowledgements: This work was conducted within the Teacher Education Done Differently (TEDD) project funded by the Australian Government Department of Education, Employment and Workplace Relations (DEEWR). Any opinions, findings, and conclusions or recommendations expressed in this paper are those of the authors and do not necessarily reflect the views of the DEEWR. We would like to acknowledge Sue Hudson (Project Leader) and Jenelle Edser (Project Officer).

References

- Australian Education Union. (2006). *AEU national beginning teacher survey results 2006* [Electronic Version]. Retrieved 2 August, 2010, from <http://www.aeufederal.org.au/Publications/Btsurvey06.html>
- Bates, A. J., Ramirez, L., & Drits, D. (2009). Connecting university supervision and critical reflection: Mentoring and modelling. *The Teacher Educator*, 44(2), 90-112.
- Bean, T. W., & Stevens, L. P. (2002). Scaffolding reflection for preservice and inservice teachers. *Reflective Practice*, 3(2), 205-218.
- Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). *Review of Australian higher education: Final report*. Canberra: Australian Government.
- Brandt, C. (2008). Integrating feedback and reflection in teacher preparation. *ELT Journal*, 62(1), 37-46.
- Brophy, J., & McCaslin, M. (1992). Teachers' reports of how they perceive and cope with problem students. *The Elementary School Journal*, 93(1), 3-66.
- Davis, E. A. (2006). Characterizing productive reflection among preservice elementary teachers: Seeing what matters. *Teaching and Teacher Education*, 22, 281-301.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston, MA: D.C. Heath.

- Frick, L., Carl, A., & Beets, P. (2010). Reflection as learning about the self in context: mentoring as catalyst for reflective development in pre-service teachers. *South African Journal of Education, 30*, 421-437.
- Gay, G., & Kirkland, K. (2003). Developing cultural critical consciousness and self-reflection in preservice teacher education. *Theory into Practice, 42*(3), 181-187.
- Hall, K. M., Draper, R. J., Smith, L. K., & Bullough, Jr, 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.
- Hatton, N. & Smith, D. (1995). Reflection in teacher education: Towards definition and implementation. *Teaching and Teacher Education, 11* (1), 33-49.
- Hittleman, D. R., & Simon, A. J. (2006). *Interpreting educational research: An introduction for consumers of research*. Upper Saddle River, NJ: Prentice-Hall.
- House of Representatives Standing Committee on Educational and Vocational Training. (2007). *Top of the class: Report on the inquiry into teacher education*. Canberra: The Parliament of the Commonwealth of Australia.
- Hudson, P. (2007). Examining mentors’ practices for enhancing preservice teachers’ pedagogical development in mathematics and science. *Mentoring & Tutoring: Partnership in Learning, 15*(2), 201–217.
- Hudson, P. (2010). Mentors report on their own mentoring practices. *Australian Journal of Teacher Education, 35*(7), 30-42.
- Korthagen, F. (1985). Reflective teaching and preservice teacher education in the Netherlands. *Journal of Teacher Education, 36*(5), 11–15.
- Korthagen, F. (2004). In search of the essence of a good teacher, towards a more holistic approach in teacher education. *Teaching and Teacher Education, 20*, 77-97.
- Larrivee, B. (2000). Transforming teaching practice: Becoming a critically reflective teacher. *Reflective Practice, 1*(3), 293–307.
- Larrivee, B. (2009). *Authentic classroom management: Creating a learning community and building reflective practice* (3rd ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Lee, H. J. (2005). Understanding and assessing preservice teachers' reflective thinking. *Teaching and Teacher Education, 21*, 699-715.
- Lee, H.-J. (2005). Understanding and assessing preservice teachers’ reflective thinking. *Teaching and Teacher Education 21*, 699-715.
- Loughran, J. J. (2002). Effective reflective practice in search of meanings in learning about teaching. *Journal of Teacher Education, 53*(1), 33-43.

- Loyens, S., Rikers, R., & Schmidt, H. (2007). The impact of students' conceptions of constructivist assumptions on academic achievement and drop-out. *Studies in Higher Education, 32*, 581-602.
- Masters, G. N. (2009). *Improving literacy, numeracy and science learning: Preliminary advice. Assessment and reporting projects*. Retrieved 6 March, 2010, from http://research.acer.edu.au/ar_misc/4
- Ministerial Council on Education Employment Training and Youth Affairs (MCEETYA). (2003). *A national framework for professional standards for teaching: Teacher quality and educational leadership taskforce*. Canberra, Australia: Author.
- Queensland College of Teachers. (2006). *Professional standards for Queensland teachers*. Retrieved on 2 August, 2010, from <http://www.qct.edu.au/standards/index.html>
- Schön, D. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schön, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco, CA: Jossey-Bass.
- Stake, R. E. (2006). *Multiple case study analysis*. New York: The Guilford Press.
- van Halen-Faber, C. (1997) Encouraging critical reflection in preservice teacher education: a narrative of a personal learning journey. *New Directions for Adult and Continuing Education, 74*, 51-60.
- van Manen, M. (1977). Linking ways of knowing with ways of being practical. *Curriculum Inquiry, 6*(3), 205–228.
- Ward, J. R., & McCotter, S. S. (2004). Reflection as a visible outcome for preservice teachers. *Teaching and Teacher Education, 20*, 243-257.
- Yin, R. K. (2009). *Case study research: Design and methods*. (4th ed.). Thousand Oaks, California: SAGE Publications.