

Mentors and the practicum experience: opportunities for professional learning.

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Abstract

The purpose of this research is to better understand the professional learning opportunities available to mentors through their work with preservice teachers (PSTs) and to explore how such opportunities might be enhanced through the collegial sharing of experiences and through critical reflection. The project investigates the key question: In what ways can practicum mentoring be a vehicle for the mentor's own professional learning?

The project took the form of a small scale case study at a P-12 school in Melbourne exploring the experiences of four mentors of PSTs who formed a professional learning community (PLC) during the second semester block practicum in 2012. The study aimed to explore participants' perceptions of their mentoring role, how their professional learning occurred and the types of professional learning they experienced.

The findings of the study suggest that the practicum can indeed be an important vehicle for the mentor's own professional learning. For the participants in the study, professional learning took place not only through observation of, and discussions with, their PST; but more crucially, as a result of their reflections when actively engaged in a PLC. Professional learning through critical reflection requires an explicit focus of attention on the part of the mentor to ensure that there is time and energy devoted to reflection and the building of professional knowledge. Participation in a PLC provided that opportunity. It enabled the exchange of information and experiences in a supportive, focused environment of like-minded colleagues.

Statement of authorship

This thesis contains no matter that has been accepted for the award of any other degree or diploma in any educational institution and, to the best of my knowledge and belief, it contains no material previously published or written by another person except where due reference is made in the text of the thesis.

Signed:

Date:

Ethics approval

The research for this thesis received the approval of Monash University Standing Committee for Ethical Research on Humans.

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1. Introduction

1.1 Background

In order to gain an Australian teaching qualification and be eligible for professional registration, all students of teaching are required to attend educational settings to observe and teach under the guidance of an experienced teacher or mentor for a minimum number of days. This professional experience or *practicum* (as it will be referred to in this study) typically takes place in a series of structured placements over the course of the degree or post graduate diploma.

The practicum involves a range of stakeholders from regulatory authorities, universities and schools to individuals including teacher educators, school-based practicum coordinators, mentors and pre-service teachers (PSTs). All have key roles to play both individually and collectively to ensure the practicum is successful and rewarding for all. This study shines a light on the role of the mentor during the practicum, which is pivotal, multifaceted, demanding and rewarding. However, the potential for PST mentoring to be a rewarding experience for mentors themselves is tempered by the demands placed by other stakeholders. Consequently, rich rewards such as professional learning and growth can be left untapped.

In my role as a university practicum tutor in 2011 and 2012, I visited a number of PSTs and their mentors during their practicum. I listened with great interest as the mentors described their observations of the learning that was taking place for the PSTs. Their descriptions were rich and articulate and it was clear that the experience involved reflection on a number of levels. It led me to wonder what effect their mentoring work with PSTs had on each mentor's own teaching and learning. When I asked them about this, many were taken aback, as they had not previously considered the practicum from the perspective of their own professional learning. Once the question was asked, however, many could quickly identify instances of how mentoring a PST had influenced their own teaching practice. They talked of learning new techniques and approaches and valuing the teaching resources that the PSTs had produced

or researched for their classes. I thought about one student's remark: "I like it when my teacher has a PST, they lift their game" and reflected on my own experiences as a secondary school teacher and mentor of PSTs. To what extent had I viewed the experience as an opportunity to engage with and question my own practices?

1.2 Research question

While a great deal of past research has focused on the benefits and challenges facing PSTs during the practicum, less attention has been paid to mentors' experiences, and especially to the *learning* experiences of mentors in their work with PSTs. Although the mentor's focus is primarily on the support of the PST, the practicum also provides learning opportunities for the mentor; for example, to reflect critically on their own teaching practice, to check assumptions and make changes. The purpose of this research was to better understand those professional learning opportunities available to mentors through their work with PSTs and to explore how such opportunities could be enhanced through the collegial sharing of experiences and through critical reflection.

The project investigated the key question: How can practicum mentoring be a vehicle for the mentor's own professional learning?

To explore this question, I asked:

- What are the challenges and motivators for mentors and how do they understand their role?
- How do professional learning opportunities come about for mentors?
- What types of professional learning do mentors experience as a result of their interactions with PSTs?

These questions were investigated through a small scale qualitative case study in which participants from a single school setting formed a professional learning community (PLC) during the practicum. As a PLC, they reflected upon the professional learning that took place for them as they mentored their PSTs.

The case study examined their collective perceptions and experiences through the analysis of data collected via surveys, focus group interviews and individual professional learning logs.

1.3 Organisation of this report

Following on from this introductory chapter which outlined the background to the study and the research question, Chapter 2 reviews research literature in relation to the practicum, mentoring of PSTs and the role of reflective practice in professional learning. Chapter 3 outlines the methodology and theoretical frameworks which underpin this research project. It describes the setting and participants involved in the case study and the research methods employed. Chapter 4 presents the key findings and also a discussion and analysis of the data with regard to the key questions surrounding the role of the PST mentor; *how* professional learning took place and *what* types of learning were experienced during the practicum. Chapter 5 details the implications and conclusions that can be drawn from the research project.

2. Review of relevant research literature

In order to situate this research within its field, a review of relevant policy and research literature was conducted. This chapter refers first to the extensive research literature regarding the nature of the practicum and the importance of the practicum to PSTs in the creation of professional knowledge. I then move on to literature regarding mentoring itself, including the complex and central role of the mentor during the practicum and the inherent challenges it presents. Finally, this chapter looks specifically at studies of professional knowledge and the value of reflective practice as an aid to the enhancement of professional learning.

2.1 The importance of the practicum

Different practicum models operate both overseas and within Australia, with varying partnership arrangements between schools and universities. Whatever the model, the central importance of the practicum is confirmed in multiple research studies (Bullough & Draper, 2004; Renshaw, 2012; Rorrison, 2006; White, Bloomfield, & Le Cornu, 2010). It is understood to offer PSTs an opportunity to develop professional practice knowledge in which “there is an emphasis on performance and doing. Practice knowledge is situated, context related and embodied” (Mattsson, Eilertsen & Rorrison, 2011, p. 4).

In response to the changing political educational agenda in Australia that presently focuses on productivity, participation and quality, White, et al. (2010) assert that while the practicum has undergone considerable change in the past few decades, “further changes are both predicted and necessary for teacher education... faced by the swell of education reform” (p.182). The whole life-cycle of a teacher (how they are attracted, prepared, placed, developed and retained) is an increasingly important issue and “the boundaries and borders between pre-service and in-service professional learning for teachers are blurring and changing” (p.184). This therefore opens up new possibilities and

perspectives for the practicum and the stakeholders that are involved. Yet, it is a complex set of relationships with various tensions and issues that need to be considered. Figure 1 represents the various stakeholders involved within the practicum.

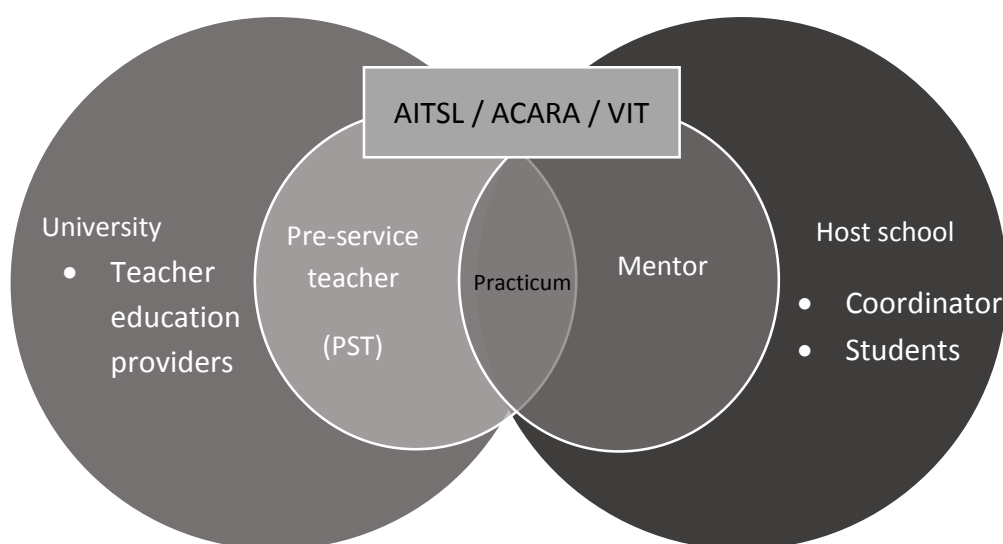


Figure 1: Stakeholders involved in the Victorian practicum

The first set of stakeholders is the regulatory authorities that oversee teaching and teacher education in Australia. They are: the Australian Curriculum, Assessment and Reporting Authority (ACARA), which is developing a national approach to curriculum and assessment; and the Australian Institute for Teaching and School Leadership (AITSL) which focuses on the development of professional standards for teachers and teacher education; and state bodies such as The Victorian Institute of Teaching (VIT) which manage the registration of teachers. Universities, schools, PSTs and mentors all need to be mindful of ensuring they are working within the guidelines prescribed by these authorities.

The next set of stakeholders is the university providers of teacher education who have to manage increasing PST numbers due to the uncapping of university places and the resulting difficulty in finding sufficient placement opportunities in schools (Grundy, 2007). The cost of administration, including maintaining relationships with schools, making visits and supporting PSTs

while on practicum is substantial and it is also crucial; the practicum experience is acknowledged by all stakeholders as a valued means of linking practice and theory (Le Cornu & Ewing, 2008).

The host school provides the placement opportunity, allocates suitable mentors, supports the PST and liaises with the university. Induction must be provided to the PST and, perhaps, the mentor. Host schools work with multiple universities, all of which have differing expectations, timing and requirements that must be considered. As Rorrison (2007) acknowledges, "The practicum sits within a very full and demanding teacher education course structure and on the periphery of a complex and only partially understood education system" (p.9). It is therefore one of a litany of organisational, political and economic concerns faced by schools and while it is very important in terms of producing and shaping future teachers, often the more immediate concerns of the mentor teacher's own students and of the school community take precedence over the concerns of the PST.

For PSTs the practicum is not only a necessary hurdle to gain their qualification, but an opportunity to experience teaching in a supported context and to make connections that can influence the prospects of future employment. It is a sizable time commitment when other factors such as university tasks, part time jobs and personal commitments must also be managed.

While the PST's motivations and needs are quite clear, the mentor may be motivated by a number of quite disparate factors. Some are more altruistic in nature such as an opportunity to share their knowledge and assist with preparing the next generation of teachers. Others are of a more practical nature, such as gaining an extra pair of hands in their classroom (Clarke & Collins, 2009). For a mentor, sharing the classroom and their practice with a stranger can also be quite challenging (Ganser, 2002).

According to Grudnoff (2011), there are connections between positive practicum experiences and a successful transition into teaching. As such, it is problematic that relationship and communication structures between schools and universities are often "left to chance" (Mattsson et al., 2011, p.10).

Grudnoff called for a more holistic and collaborative structural approach based on shared understandings of roles, responsibilities and expectations among universities, schools and PSTs. Rorrison (2007, 2010) recommended a set of guiding principles for practicum learning in order to develop a common understanding of the theory and pedagogy underpinning the practicum. Le Cornu and Ewing (2008) advocated the formation of learning communities in which all stakeholders viewed the practicum as a reciprocal learning experience.

In Australia, we are seeing the beginnings of a more coordinated approach to the practicum with bodies such as AITSL drafting the National System of Accreditation of PST Education Programs (Ingvarson, Elliott, Kleinhenz, & McKenzie, 2006) and commissioning a background report into the supervision of professional experience students (Renshaw, 2012). AITSL has used this literature review and environmental scan to inform the design and implementation of an online professional learning resource for supervising teachers (AITSL, 2013). These endeavours feed into AITSL's aim to ensure national consistency in the capabilities and competencies of teacher graduates. While this aim is laudable, it will require appropriate and supportive implementation strategies to ensure success.

2.2 The role of the mentor in the practicum experience

While in-school mentoring of PSTs has been a recognised method of support for some time, its status has recently been elevated through its inclusion in the national standards for Highly Accomplished and Lead teacher levels (AITSL, 2011). Mentoring has also been used in schools as a means of providing one-on-one support to improve teacher effectiveness and as a means of professional learning (Fullan & Hargreaves, 2000). While there is policy documentation relating to regulated and supported programs for the mentoring of *beginning* teachers (see for example the Victorian Institute for Teaching (VIT) 2013, mentor programs) there is a paucity of structured support for the mentoring of *preservice* teachers in both current policy and the research

literature (Ambrosetti & Dekkers, 2010; Clarke, Triggs, & Neilsen, 2012; Renshaw, 2012). There are, however, repeated calls within the scholarly literature for coordinated professional development as a means of supporting mentors and providing clarity regarding the role (Clarke, 2001; Lee & Wilkes, 1995; Renshaw, 2012; Ure, 2009).

In Australia, the National System of Accreditation of Preservice Teacher Education Programs (AITSL, 2011) aims to contribute to the delivery of quality programs and national consistency regarding the capabilities and competencies expected of teacher graduates. One of a number of recommendations focuses on the mentor:

Providers and their school partners ensure that teachers supervising professional experience (in particular the supervised teaching practice) are suitably qualified and registered. They should have expertise and be supported in coaching and mentoring, and in making judgements about whether students have achieved the Graduate Teacher Standards. (AITSL, 2011, p.15)

In response to these requirements, AITSL is currently putting in place a coordinated national approach to the practicum as part of it's initiative regarding initial teacher education. This includes a common assessment framework and online professional development program for mentors of PSTs (AITSL, 2013).

The mentor is central to the success of the practicum and there is a strong body of literature which articulates the importance of the role. Studies such as those undertaken by Arnold (2002), Grudnoff (2011) and Maynard (2000), confirm this centrality.

Research by Grudnoff (2011) established that mentor's perceptions of their role affect PSTs' experiences. Some mentors view the practicum quite narrowly as a time and place to put into practice the knowledge, skills and techniques studied at university; that is, to develop teaching skills. Others take

an inquiry approach, seeing it more as an opportunity for PSTs to experiment with, and reflect on, different teaching approaches (Grudnoff, 2011).

The mentor's relationships with PSTs are also central to the success of the practicum experience (Arnold, 2002), including the affective dimension of the relationship (Maynard, 2000). Indeed, both Arnold and Maynard positioned positive relationships as more important to a successful practicum than a mentor's level of experience or professional knowledge. This research lends weight to Ganser's (1995) argument that there should be careful selection and pairing of mentors and PSTs; quite a difficult outcome to achieve when PST placement opportunities are already limited.

2.3 Complexity of the mentor's role

Acknowledgement of the complexity of the mentor's role is reflected in a range of Australian policy developments at both state and national levels. For example, The National Teaching Standards Framework (2011) links the attainment of Highly Accomplished and Lead Teacher levels to the supervision and mentoring of PSTs as one of several requirements (Standards 6.1, 6.2) thereby acknowledging that it is a complex task requiring expertise.

Mentoring is indeed a complex construct. That complexity is perhaps most clearly demonstrated through the variety of terms used to describe teachers who share their classrooms with, and are responsible for PSTs during their practicum. Titles such as cooperating teacher, student advisor, supervisor and mentor (Ambrosetti & Dekkers, 2010) reflect the multiple roles undertaken within this supervisory role: mentor, observer, and evaluator, organiser of practice, peer, counsellor and friend to the PST (Renshaw, 2012; Sinclair, Dowson, & Thistleton-Martin, 2006). Each of these roles must be undertaken to varying degrees by the mentor throughout the practicum while keeping in mind the learning needs and stage of development of the PST.

Hall, Draper, Smith & Bullough (2008) found that mentors' perceptions of their role may be tacitly influenced by their own experience of having been

mentored, a problematic finding since approaches to mentoring have progressed over time. As Hargreaves and Fullan (2000) explain: “The old model of mentoring, where experts who are certain about their craft can pass on its principles to eager novices, no longer applies” (p. 3). Research indicates that a more structured and supported approach to mentoring may help mentors to clarify their tacit beliefs and better understand the role (Crasborn, Hennissen, Brouwer, Korthagen & Bergen, 2008; Renshaw, 2012). Whether that support can be provided effectively through the online professional learning forum for supervising teachers that was recently established by AITSL (2013) remains to be seen.

It is worth noting that AITSL’s online professional learning modules (2013) employ the use of the term “supervising teacher.” Does this choice of terminology signal AITSL’s view of the role as purely supervisory in nature? How does this sit with current university notions of the role? And what about mentors and schools? To what extent do they appreciate the nuances implied by different terminology and the evolving nature of the role?

Moss (2010) argued that the shift in language from *supervision* to *mentoring* should have implications for how the role is perceived and enacted by mentors. My choice to use the term *mentor* in this study aims to acknowledge the role as multifaceted and to position the role as one that goes beyond supervision. At the same time, Hall et al. (2008) noted confusion about the terms mentor and mentoring:

...what we initially took to be a normative concept of *mentoring* is, in fact, rarely held by teachers who often think of mentoring as synonymous with the designation *cooperating teacher* and means nothing more than providing a place for the pre-service teacher to practice teaching and offering little support. (p.343)

In order to clarify the complex role of the mentor, a number of studies describe the characteristics of an effective mentor. For example, according to Hudson, (2010) an effective mentor:

- is a supportive, attentive listener and instils confidence (personal attributes);
- articulates aims, policies and curricula (system requirements);
- articulates how to plan for teaching (pedagogical knowledge);
- displays enthusiasm, develops a relationship with the PST, and encourages a rapport with students (modelling); and
- articulates expectations, reviews and provides advice, and written and oral feedback (feedback). (p. 32)

2.4 The challenges of mentoring

Overall, the mentoring role is seen by researchers as central to the success of the practicum (Arnold, 2002; Grudnoff, 2011; Maynard, 2000). It is complex due to the diverse nature of the role and a lack of support and common understanding by PSTs, mentors, schools and universities. A range of challenges and motivators influence mentors in different ways.

Studies by researchers such as Clarke (2001, 2006), Sinclair et al. (2006) and Hudson (2010) focused on the motivations and challenges that experienced teachers face when they take up mentoring roles. Clarke and Collins, (2009) identified challenges that included the challenge of guiding and mentoring, inadequate forms and guidelines, unclear policies and procedures, PSTs' lack of pre-practicum preparation and uncertain feedback and communication practices. Other researchers identified "guzzlers" (Sinclair, et al., 2006) such as time, the demands of regular teaching duties and lack of remuneration.

Some teachers feel that the difficulties outweigh any potential benefits. Issues raised in the research literature included challenges connected with the mentor's sense of self, and the challenges of mentoring a PST who is struggling. Research by Lee and Wilkes (1995) found that for some teachers their primary concern is for their students, and mentoring a PST can disrupt that focus. Ganser (2002) also noted that working with a PST or novice may not suit all teachers; it "may be threatening to some teachers who prefer to

work in isolation without inviting the scrutiny that student teachers and protégés necessarily bring into the relationship with experienced teachers” (p. 385). One’s identity as a teacher can be altered or called into question when mentoring. For some experienced teachers who view themselves and/or who are viewed by others as expert, it may be confronting to see themselves in a new light as a result of the practicum experience (Maynard, 2000). Sim explains that difficulties can also arise because:

They [PST mentors] have no control over the timing of the supervision or the personalities or characteristics of those they will supervise. They have had no input into the previous practicums of these students. (Sim, 2011, p.147)

It can be difficult for mentoring relationships to live up to ideals (Cain, 2009) and there is the potential for it to become a mentor–tormentor scenario: “If the school assumes the mentor always knows best, even about teaching strategies, innovative new teachers might quickly experience the mentor relationship as an oppressive one” (Hargreaves & Fullan, 2000, p.3).

2.5 Motivators of mentoring

Motivations identified by Clarke and Collins (2009) included contributing to professional renewal, improving one’s own teaching practices, time-out for pupil monitoring, developing a professional community and the opportunity to utilise mentoring practices in classroom contexts.

Hudson (2010) saw one of the benefits as assisting in educational reform, since the mentoring relationship opens up the possibility for rich dialogue where the PST’s knowledge about new theories and curriculum initiatives is combined with the mentor’s understanding of practice. Paris (2006, 2010) also sought to engage mentors and PSTs in a more reciprocal arrangement regarding the sharing of curriculum content knowledge.

Even if mentoring is not a wholly positive experience, it may still provide an opportunity for mentors to reconsider the methods and approaches they have

adopted and to engage in powerful professional learning. Hall et al. (2008) suggested that mentors who worked with struggling PSTs “produced through this struggle a richer, more complex and professionally compelling set of understandings than their colleagues” (p. 343).

As the AITSL standards (including those around mentoring) are adopted by schools and state teacher registration boards such as VIT, mentoring of PSTs could be viewed as an expected part of an experienced teacher’s role. While this may provide some incentive with regard to career advancement, other benefits or incentives for mentoring are less clear.

Mentoring can be seen as a much more active relationship without succumbing to a supervisory model. Highlighting the benefits of mentoring by repositioning the role as one in which mentors have opportunities to learn, for example, offers a more dynamic and reciprocal arrangement. It also has the potential to address the power issues that can arise between mentors and PSTs (Renshaw, 2012; Rorrison, 2006). However, if co-learning (Renshaw, 2012) is not a clear goal for the mentor and PST, it may not occur. While studies have found that the practicum can have mutual benefit for mentors and PSTs, this balance is not easy to achieve (Ambrosetti & Dekkers, 2010; Hall et al., 2008; Paris, 2006).

2.6 Building professional practice knowledge through reflection

There is substantial evidence that the construction of professional knowledge is dependent on the ability to engage in critical reflective practice (Dewey, 1933; Loughran, 1996, 2010; Rodgers, 2002; Schön, 1983; Shulman, 1986; Williams & Power, 2010; Zeichner & Liston, 1996). The practicum offers both mentors and PSTs opportunities to build professional practice knowledge in this way.

One of the earliest proponents of the importance of reflective practice for teachers was John Dewey (1933). According to Dewey, teachers who are

unreflective about their teaching, often uncritically accept common, everyday situations, losing sight of the bigger picture or the possibility of doing things differently. In looking more closely at when, where and how reflection happens, Schön (1983) maintained that teaching (like mentoring) is a very complex task and often, decisions and reflections take place *during* a lesson or event. According to Schön, reflective practitioners reflect both “in” and “on” action by reframing unanticipated problems during teaching and systematically thinking before and after each action.

In a practicum setting, both the PST and expert teacher reflect-in-action during a lesson, albeit on different levels. According to Rodgers (2002), when experienced teachers’ reflect-in-action, “their awareness spreads like a net over a number of ‘facets’ of classroom life” (p. 852). PSTs, on the other hand, generally have less capacity to reflect-in-action so good mentoring requires the mentor to articulate to the PST their tacit knowledge and subject it to critique. This enables the framing and reframing of knowledge in-action (Schön, 1983) in order to improve the understanding of both the mentor teacher and the PST. It is reflection *for* action, the creation of professional or *pedagogical content knowledge* (Shulman, 1986).

Shulman referred to the beliefs and assumptions about teaching as propositional knowledge, the propositions that guide the work of a teacher. It is the “norms, values, ideological or philosophical commitments of justice, fairness, equity and the like that we wish teachers and those learning to teach to employ. They are neither theoretical nor practical, but normative” (Shulman, 1986, p11). However, the mentor’s role is not simply to convey their understanding of this highly complex and involved knowledge of practice, but to facilitate the PST to develop their own understanding and practice.

Facilitating the development of the PST’s ability to critically reflect is generally understood to be part of the role of the practicum mentor (Crasborn, et al., 2007; Bates, et al., 2009; Clarke, 2006). Abundant research has focused on how PST professional knowledge is built through the practicum experience, and specifically, on the role the mentor plays within this (Hall, et al., 2008; Hascher, Cocard, & Moser, 2004; Grudnoff, 2011; Rorrison, 2006, 2008,

2010). Hascher et al. noted that the professional experience must move PSTs beyond “imitat[ing] their mentors to acquire the methodological tools for teaching” (p. 635); PSTs also need to engage in reflection and metacognition in order to develop the professional attitudes which foster life-long learning.

If the practicum is framed as a co-learning experience (Renshaw, 2012), it follows that mentor professional practice knowledge might be enhanced in the same ways as the PST’s is likely to be enhanced. But while research confirms the benefits to PSTs of collaborative or co-learning approaches to the practicum, very few studies have explicitly examined the practicum as a vehicle for the mentor’s own professional learning. In this sense, the current research project speaks to a gap in the research literature, with its focus on the *mentor’s* ability to critically reflect in order to further their *own* professional knowledge.

When mentors work with PSTs they need to be able to explain why they do certain things and why those things are important (Gilles & Wilson, 2004). Reconsidering actions that are largely automatic and learning how to explain these actions can provide valuable professional learning opportunities through critical reflection. By reminding themselves how and why they do things and making their tacit knowledge explicit, mentors create new professional practice knowledge for both PSTs and themselves. This research project focuses on how such mentor professional learning can be enhanced during the practicum.

2.7 Supporting mentor reflection through professional learning communities.

Rodgers (2002) noted that Dewey saw systematic reflection as desirably occurring in a community setting, in interaction with others, because “having to express oneself to others so that others truly understand one’s ideas, reveals both the strengths and holes in one’s thinking” (p. 856). A professional learning community (PLC) can create such spaces for collaborative discussions of mentoring practices, thereby enabling more powerful and overt opportunities for mentors to critically reflect. Le Cornu (2010) argued that a

learning communities model for the practicum creates a collaborative space “with a commitment to reciprocity...with opportunities provided for enhanced professional dialogue and professional learning between all participants” (p.202). It involved all the stakeholders in a collaborative partnership, with a focus on learning, altered relationship practices and new enabling structures.

Working in PLCs can be both helpful in challenging ideas and practices, and simultaneously confronting and uncomfortable at times. After all, reflective practice can be problematic if forced (Hobbs, 2007) and is not an easy skill to master (Brookfield, 1998; Davis, 2003). As Brookfield paradoxically pointed out, “we are all stymied by the fact that we are using our own interpretive filters to become aware of our own interpretative filters” (1998, p.197). To overcome this problem, Brookfield recommended the use of four critical lenses through which to reflect: our autobiographical lens, our learners’ eyes, our colleagues’ experiences and theoretical literature. PLCs offer powerful opportunities to reflect through both collegial and theoretical lenses.

The concepts of professional learning, reflective practice and professional learning communities are further discussed in Chapter 3, as they provide important conceptual frames for the research design of this project.

Research confirms that critical reflection and learning communities are important factors in creating new professional knowledge for both PSTs and in-service teachers. Less research has been conducted into whether mentoring offers such opportunities for reflection and professional learning. This study therefore aims to investigate the practicum through the lens of the mentor and their professional learning rather than that of the PST.

3. Methodology and methods

In this chapter, I introduce the study and the theoretical framework, methodology and key concepts that frame it: reflective practice, professional learning and professional learning communities (PLC). The setting, participants and position of the researcher are then described. Finally, the chapter offers a discussion of the ethical concerns raised by the project, the research instruments used to collect data, and the methods employed to analyse the data.

3.1 Overview of the study

The study investigated how practicum mentoring can be a vehicle for the mentor's own professional learning. A small scale case study at a P-12 school in Melbourne was conducted exploring the experiences of four mentors of PSTs during the second semester block practicum in 2012. The study aimed to explore the mentor teachers' perceptions of their role, how their professional learning occurred and the types of professional learning they experienced. An existing online survey was used at the start of the study to profile the participants' perceptions of mentoring. Individual and collaborative opportunities for critical reflection were then provided in the form of reflective learning log entries and focus group discussions. The focus groups acted as a PLC where collaborative critical reflection centred on what and how professional learning had taken place for participants and the factors that enhanced and impeded their learning during the practicum.

3.2 Research paradigm

A constructivist philosophical paradigm assumes that "humans construct their understanding of reality and scaffold their learning as they go along" and, in particular, as they engage in social interaction (O'Toole, 2006, p. 32). This qualitative case study took a constructivist approach to knowledge production in that it assumed and anticipated that knowledge about mentor professional learning would be constructed jointly by the researcher and the participants while they undertook their roles as mentors.

I took a primarily qualitative approach to research because I was interested in collecting and interpreting data related to participants' beliefs, claims and actions (Robson, 2002). I also collected some quantitative data in order to measure and compare participants' perceptions of their roles as mentors. Using quantitative data to support the qualitative findings provided more reliable and credible research in that I was able to triangulate the data (O'Toole, 2006).

3.3 Case study methodology

A case study is defined by Stake (1995) as "the study of the particularity and the complexity of a single case, coming to understand its activity within important circumstances" (cited in O'Toole, 2006, p. 44). Although the study's PLC was made up of four individual participants, it is their *collective* perceptions and experiences that make up the single case under investigation. It is grounded in the PLC's collective understanding and experiences (Murray & Male, 2005; O'Toole & Beckett, 2010) of mentoring PSTs.

The methodology of a single setting, small case study was appropriate because it provided a manageable, yet potentially rich source of data. It also had the advantage of minimising contextual variables. At the same time, I recognise its simultaneous limitation in being too small to provide generalizable data in an empirical or statistical sense (Robson, 2002). It does, however, provide a pilot study for the possibility of further research and may prove useful to others in terms of transferable conclusions.

For the study, I asked the PLC to maintain a focus on their own professional learning experiences while mentoring a PST. This is not a normal or expected dimension of the mentoring role. By refocusing participants' attention in this way, the study arguably resembled the first stages of an action research cycle (Robson, 2002). In this regard, it may be said that I took something of an interventionist, rather than ethnographic, approach to the research (O'Toole, 2006).

3.4 Conceptual and theoretical frames: reflective practice, professional learning and professional learning communities

These three concepts provided the lenses through which I approached the study:

- reflective practice as *the process* through which mentors would identify and articulate learning;
- professional learning as a way of understanding *the kinds* of learning, knowledge, understanding and skills that mentors might develop in their mentoring work; and
- professional learning community as *the context* to enable and encourage that learning.

3.4.1 Reflective practice

The work of Brookfield (1995, 1998), Dewey (1933), Jay and Johnson (2002), Loughran (1996, 2010), Schön (1983), along with Zeichner and Liston (1996) provided key concepts for understanding how professional knowledge is developed through reflection. In choosing to participate in the project, participants were demonstrating all of Dewey's attitudes towards reflection: *open-mindedness, wholeheartedness, responsibility and directness* (Dewey, 1933; Loughran, 1996; Rodgers, 2002). In particular, wholeheartedness and open-mindedness were evident at certain points during the study. These attitudes are important in securing the adoption and use of reflection.

Loughran (1996) proposed that “the value of reflection in teaching and learning is that it encourages one to view problems from different perspectives” (p.13). This was a central aim of my project which asked mentors to view the practicum from a different perspective, that of their *own* learning rather than the learning of the PST.

Given the small scale and time frame of my study there was potentially a difficulty in establishing the practice of more advanced models of reflection such as core reflection (Korthagen & Vasalos 2005, Williams & Power, 2010). Instead, the work of Brookfield (1995, 1998) and Jay and Johnson (2002)

provided ways of understanding - and themes for categorising and interpreting - the levels of reflection evident in the data.

Drawing on Brookfield's (1995) four lenses approach, I examined the extent to which the mentoring of PSTs provided opportunities for participants to reflect through the lens of their own autobiographies as learners of practice and through the lens of their students' eyes. I also looked at whether the conversations between PSTs and their mentors could be understood as a version of the critical mirror of Brookfield's collegial lens. Finally, I investigated whether the PLC provided a forum for participants to make links between practice and theory, thereby reflecting on their practice through Brookfield's theoretical lens.

I also sought to find instances of Jay and Johnson's typology of reflection: descriptive, comparative and critical reflective practice (2002) as a means of categorising the focus group discussions and professional learning logs.

3.4 2 Professional learning

In Australia, professional learning is seen as an important aspect of ongoing professional engagement and a means of modelling effective learning at each of the career stages from graduate to lead teacher (AITSL, 2011). Of particular relevance to this project is AITSL's positioning of mentoring and supporting PSTs as a valid form of professional learning for highly accomplished and lead teachers (AITSL 2011, Standards 6.1 and 6.2.)

Research literature has made a clear differentiation between professional development and professional learning (Fullan, 2007). Knapp (2003, cited in Mayer & Lloyd, 2011) stated that professional development includes "the full range of activities, formal and informal, that engage teachers or administrators in new learning about their professional practice" (p.112), while professional learning refers to "changes in the thinking, knowledge, skills, and approaches to instruction that form practicing teachers' or administrators' repertoire" (p. 112-113).

The change in language in schools from professional development to professional learning highlights the need for an enactment or change in practice as a consequence of the professional development. It points to a less passive, more dynamic experience of professional learning that is more likely to result in a change of behaviour by the teacher. The VIT (2013) training for mentors of graduate teachers is an example of professional development. They provide information from experts which mentors may apply if able or willing.

Mentoring is a situated, practice-based opportunity for mentors to engage in professional learning. They might draw on skills and ideas from professional development sessions, and use the experience of mentoring a PST to enact and embed the learning into their practice. This study shines a light on the potential for professional learning and explores what types of learning occur and how they can be facilitated.

It is this type of professional learning experience that research suggests is the more powerful (Cole, 2012, Fullan, 2007; Gilles & Wilson, 2007; Maynard, 2000). Gilles and Wilson (2007) referred to Cochran and Lytle's three contrasting principles for professional learning: "knowledge for practice, knowledge in practice and knowledge of practice". In knowledge of practice, "teachers work to create knowledge from their own experiences. This process often occurs through collaboration, inquiry and mentorship" (Gilles & Wilson, 2007, p.88). This project sought to identify the kinds of professional learning that took place for mentors through collaboration and inquiry when involved in a PLC.

3.4.3 Professional learning communities

To support and encourage the process of knowledge production, a professional learning community (PLC) was created. Like mentoring itself, a PLC draws directly on the knowledge (possibly as a result of a professional development session) and the experiences of the participants and provides an

opportunity for situated and contextualised learning in which they are more likely to be active and engaged in their participation.

A conceptual framework for establishing a collaborative community or PLC was outlined by DuFour and Eaker (1998). PLCs were originally proposed as a strategy for school improvement and aimed at developing the capacity of school personnel. The PLC structure became a model for a whole school approach to professional learning, an acknowledgement that valuable learning can happen within schools.

Research literature suggested that a PLC would facilitate the critical reflection required to enable professional learning amongst mentor-participants since reflection that takes place in a collaborative and communal setting is likely to be deeper than that which is done alone (DuFour & Eaker, 1998; Hargeaves & Fullan, 2000; Korthagen & Vasalos, 2005; Le Cornu, 2010; Loughran, 1996, 2010; Maynard, 2000). Learning is viewed as an ongoing action, fuelled by perpetual curiosity (DuFour & Eaker, 1998).

Eaker, DuFour and DuFour (2002) stressed the importance of a clearly articulated mission, vision, values and goals in order to build a PLC. Hord (2009) drew a parallel between effective PLCs and constructivist learning, suggesting that with appropriate settings and working relationships, PLCs facilitate constructivist learning. Further to DuFour and Eaker's dimensions of shared beliefs, values and vision, Hord (2009) added the following as fundamental to successful PLCs:

- the importance of shared and supportive leadership where power, authority and decision making are distributed across the community;
- supportive structural conditions such as time, place and resources;
- collective learning, intentionally determined, to address the increased effectiveness of professionals;
- peers sharing their practice to gain feedback, and therefore individual and organisational improvement; and
- reviewing, studying and interpreting of data.

The diagram in Figure 2 combines Eaker, DuFour & DuFour (2002) and Hord's (2009) models for an effective PLC. It demonstrates the interplay between the guiding dimensions of mission, goals, values and vision and what that should look like.



Figure 2: Model for an effective professional learning community

This model provided a framework for setting up the focus groups which acted as a professional learning community in the current study. The participants came together voluntarily at mutually agreed times and places with a clear mission and vision. Time was spent clarifying values and goals, with the intention of focusing on what and how professional learning took place while

mentoring PSTs. In my role as researcher and participant-observer, I led and facilitated discussions; yet leadership was shared as the participants began to ask their own questions and lead discussions, thereby creating a collaborative culture. Peers shared information and insights and provided feedback to each other.

The PLC formed to consider a shared goal, developed along SMART principles (specific, measurable, attainable, relevant, time bound) as Hord suggests.

Specific: The goals of the PLC were essentially the goals of the research project; that is, to explore:

- What are the challenges and motivators for mentors?
- What types of professional learning do mentors experience as a result of their interactions with PSTs?
- How are these professional learning opportunities enhanced or impeded?

Measurable: Understanding was generated and able to be measured through the collection of various forms of data including surveys, written reflections and focus group discussions.

Attainable: Expectations on the group were articulated before the start of the PLC and were established with consideration of the mentors' time constraints. Participants agreed these were attainable expectations/goals for participation.

Relevant: Participants were free to choose to take part if they felt it was relevant to their professional learning needs and interests. Indeed, participants volunteered to take part in the study precisely because they felt that its focus was relevant to them.

Time bound: The PLC was in place for the duration of the practicum, which was approximately four weeks.

3.5 Setting.

The setting for my research project was a large, inner eastern, Melbourne independent girls' school with students from kindergarten to Year 12 which I will refer to as "Eastern College". The junior and secondary schools operate as quite separate bodies, with minimal contact or interaction taking place despite all being on a single campus. The school had a pre-existing culture of professional learning in the sense that Loughran (1996) describes as being valuable: voluntary, small groups which came together, united by a common interest to improve their practice. With a strong tradition of supporting the formulation of voluntary PLCs, the selected school offered an ideal setting for this case study.

While Eastern College offers a formal induction session for PSTs who complete their practicum at the school, no formal mentor training or induction is provided for their mentors. Instead, Eastern College relies on the comprehensive written documentation provided by each university to guide the mentoring process.

3.6 Participants.

While there are a number of stakeholders involved in the practicum, the focus for this study was the mentor's own professional learning, therefore I chose to seek data solely from this group.

Monash University Human Research Ethics Committee (MUHREC) provided approval for this project as low-risk. As part of the recruitment process, an explanatory statement and consent form were provided (see Appendix 7.1 and 7.2) to ensure that potential participants were fully informed regarding the project. The school's practicum coordinator mediated the recruitment process via the staff daily newsletter and email, calling for volunteers from amongst the group of teachers who undertook to mentor a PST during the Semester 2, 2012 practicum. Three participants initially expressed interest in taking part in the project. All were female, and had experience both as teachers and as mentors of PSTs. The backgrounds of the mentors were quite varied and each had different reasons for taking part in the project. Throughout this report, the

participants are identified by pseudonyms and some information has been de-identified in order to maintain confidentiality.

Table 1: Participants involved in case study at Eastern College

Mentor	Sub school	Years teaching	Previous mentoring experience	PST / Mentee
Beth	Junior	14	yes	2 nd year B. Ed PST
Monica	Senior	17	yes	3 rd year B.A
April	Senior	22	yes	VIT mentee
Yvonne	Junior	10	yes	2 nd year B. Ed PST

“Beth” is a teacher in Eastern College’s Junior School. She began her career overseas teaching English, History and Drama. Beth then left the teaching profession and pursued a career in Human Resources. On her arrival in Australia, Beth taught in adult education, working in the TAFE sector. Beth moved back to teaching full time seven years ago and had been working at Eastern College for eighteen months at the time of the study.

Beth seemed particularly interested in participating in the research project, perhaps because she planned to undertake further study herself and was keen to discuss my experiences of part-time study while working. Beth had previously mentored two PSTs. Her current PST was in the second year of a Bachelor degree. She had previously completed an observation-based three week round with Beth in Term 2 and returned for another three week practicum in Term 3 in which the focus was on teaching.

“Monica” is a teacher in the secondary school at Eastern College who has a very demanding leadership role on top of her teaching load. Monica had been working at Eastern College for six years at the time of the study. Prior to that, she taught overseas for ten years. Since teaching in Australia, Monica had mentored five PSTs.

Monica was hosting a tertiary PST from Berne University during the time of the study. The student was on a one term placement at the school before undertaking a postgraduate teaching degree on her return to Switzerland. She was there primarily to observe and assist students one on one in the classroom. Whilst she was not required to teach any of Monica's classes, the opportunity to do so was taken up by the PST.

"April" is also a teacher from the secondary school. April had been teaching for 22 years, mainly in the private school education system, and also overseas for four years. She had mentored approximately six PSTs, and tried to mentor a PST every two years. Since 2010, April had also been a VIT mentor for beginning teachers.

April was keen to participate in the study because she had been involved in a similar research project some years back and had enjoyed the process. She took her role as a teacher very seriously and constantly sought out opportunities to improve her practice and extend her own learning.

The first focus group took place in the week before April's PST was due to start. Unfortunately, the PST withdrew from the course at the last moment, so April was unable to mentor a PST during the period of the study. However, she had enjoyed being part of the first focus group and was keen to continue as a participant in the study. I suggested that she could continue to participate by reflecting on her experiences of mentoring in the past. April also continued her participation in the study by reflecting on her current work as a mentor of a beginning teacher at Eastern College who was seeking full VIT registration.

After April's PST withdrew, I advertised for an additional participant in the school staff daily. "Yvonne", another teacher in the Junior School offered to take part, despite having missed the first focus group. This was Yvonne's ninth year teaching. Yvonne was a great addition to our group, offering yet another perspective as she had been part of the New Zealand model of teacher education as both a PST and a mentor. Over her career, Yvonne had mentored

seven PSTs. Yvonne's PST was also in second year and had just completed her first practicum involving teaching in the classroom.

3.7 Establishing trustworthiness: the role and positioning of the researcher

When conducting qualitative research, considerations regarding the validity and reliability of the data and its interpretation are important in order to establish trustworthiness. The position of the researcher and potential for bias therefore requires mitigation (Doecke, 2003; Robson, 2002).

In the case of designing the current study, I was aware from the outset that my understanding of mentoring would be influenced by my own years of experience as a teacher and mentor of PSTs, and by my more recent work as a university tutor of PSTs during the practicum. Keen to explore the question of mentor professional learning beyond the lens of my own experience, I took the decision to position myself in this study as a participant observer rather than a participant. Doing so focused my viewing of this experience through the lens of the researcher and observer rather than that of the mentor teacher (Flick, 2002; O'Toole & Beckett, 2010).

Denzin defined participant observation as "a field strategy that simultaneously combines document analysis, interviewing of respondents and informants, direct participation and observation and introspection" (Denzin, 1989, cited in Flick, 2002, p. 139). As a participant observer I was able to look, listen, ask questions and interact with the participants. It provided a flexible and opportunistic approach as we collaborated and negotiated together to form a common understanding of the goals and means of recording participants' reflections. I also kept a reflective journal throughout the collection and analysis of data.

Adopting the role of participant observer was partly enabled by my pre-existing relationship with the participants since I am also their colleague at Eastern College. Being a teacher/colleague at the school provided me with a deep understanding of the context for the research. It also expedited practical

matters such as knowing whether this would be a suitable location, approaching the school's leadership team when proposing and planning the research, and having access to booking rooms for the PLC to meet. Importantly, I was on Long Service Leave during the entire data collection period. This meant I was at a remove from the day to day goings on of the school and was able to move more fluidly into the reflective and reflexive stance of researcher and participant observer.

Overall, positioning myself as a participant observer was beneficial to the research since it provided the necessary distance from my biases and assumptions about mentoring while simultaneously enabling me to draw productively on my own experiences when analysing data. And while I acknowledge that my stance as a researcher was neither neutral nor detached, I aimed to be thorough in my description and interpretation of data. I considered alternative theoretical explanations for my findings and was reflective and reflexive throughout the study in order to mitigate the potential limitations of the research design (Robson, 2002).

3.8 Research methods.

Following case study methodology (Robson, 2002), data for the study were collected from a range of sources and independent perspectives. The data were largely qualitative, but some quantitative data were also gathered. The collation of multiple data sources enabled triangulation and corroboration of data and inferences. Specifically data were collected via:

- online survey;
- focus groups; and
- professional learning logs.

I sought to collect and analyse data in a manner that was reliable, plausible and credible in order to achieve a resonating and transferable argument (O'Toole & Beckett, 2010).

In the following discussion, the choice and design of each research instrument is explained in turn.

3.8.1 Survey tool: Mentoring Profiling Inventory

<http://www.mentoringprofile.com/>

In order to understand the participants' motivations and challenges and how they perceived their role as mentors, all participants took part in an online survey. Clarke and Collins (2009) produced this survey tool to assist mentors (or 'student advisors' as they are referred to by Clarke and Collins) in conceptualising their work with PSTs. The survey aims to make explicit the largely intuitive motivators and challenges that the practicum experience provides. This tool has since been included as part of AITSL's (2013) online professional learning program for mentors.

My aim was to collect data regarding each participant's perception of their role as a mentor to form a profile and compare it to the averages provided by Clarke and Collins. Using an existing survey tool allowed me to profile the case study cohort and also to benchmark their responses against the wider group sample (i.e. averages of 520 British Columbia school advisors.) The quantitative data collected could then be compared more rigorously due to the increased size of the data set.

Another reason for conducting the survey was to provide a starting point for our discussions in the first focus group regarding the role of the mentor. The research literature had highlighted the importance of mentors having a clear and common understanding of their role and the survey offered a structured way for participants to begin to achieve that.

All participants completed the online survey before meeting as a group. The results from the website were forwarded to me by email for collation and comparison of the findings. These are tabulated and analysed in Section 4.1: The role of the mentor.

3.8.2 Focus groups

Patton (2002) reminds us that qualitative interviewing assumes that "the perspective of others is meaningful, knowable, and able to be made explicit" (p.341). I aimed to gather the stories of my participants regarding their professional learning as mentors of PSTs as I valued the stories that they each

had to tell. While I acknowledge that individual interviews would have enabled each participant the fullest opportunity to share their individual stories, it can also be argued that focus groups enable a broader and deeper exchange to take place. Because it is not only the telling of stories that assists in producing professional knowledge; listening and interaction with colleagues can sometimes provide richer, more lasting change. As Brookfield (1998) reminds us, “checking our readings of problems, assumptions, and justifications against the reading offered by our colleagues is crucial if we are to claw a path to critical clarity” (p.200).

Crucially, the choice of focus groups over individual interviews enabled the creation of a PLC, which research shows is the most powerful way for teachers to engage in professional learning (Arnold, 2002; Hargreaves & Fullan, 2000; Neilsen et al., 2010). Despite only meeting twice, the group quickly established a dynamic of deep exchange, delving into the issues surrounding teaching and mentoring and, in particular, the various forms of professional learning that had taken place.

I took a semi-structured interview approach to the focus group (Robson, 2002), formulating a series of questions prior to the meeting to focus the discussion, but still allowing for input from the participants. (See Appendix 7.3.2). The group was small enough that each participant was able to answer in detail and was listened to respectfully. The participants felt empowered to make comments and were encouraging of each other.

Focus group 1 (FG 1)

Email was used to find a mutually acceptable time and place for the first focus group, which took place during lunchtime in the senior school. The purposes of the first focus group were to establish the mentors’ pre-existing sense of the professional learning opportunities afforded by the practicum, to develop strategies to enhance those opportunities and to consider how they would record their thinking about their professional learning during the practicum. It also created an opportunity to share their experiences of mentoring.

Focus group 2 (FG 2)

At the end of the practicum, mentors reflected collaboratively on the experience of focusing on, and documenting, their experiences as learners while mentoring PSTs. Again, the focus group acted not only as a method of data collection, but as a professional learning community. This session was held in a Junior School classroom, which provided an unexpected opportunity for the participants from the Senior School to see a different teaching context. This became an interesting catalyst for comparing pedagogical approaches. As with the first focus group, I prepared a series of questions (see Appendix 7.3.3) in advance to guide and focus discussions.

3.8.3 Professional Learning Log

To facilitate reflection about their own professional learning journeys throughout the practicum, participants were asked to complete a minimum of three entries in a professional learning log (PL Log). The template is available at Appendix 7.3.4. The purpose was to capture each participant's individual reflections. While a daily reflective journal would have no doubt provided a very valuable data source, I was conscious of the need not to add to the time burden of the participants, who were already engaged in providing feedback to PSTs on top of their normal teaching load. Therefore, I limited the expectation to weekly entries. I also provided a simple structure for the PL Log, with a tick box section and an area for general comments on the template for quick identification of types and to guide the sort of reflection being sought.

The PL Log aimed to record the types of professional learning that took place for participants and how these came about. These “types” had been categorised according to key ideas and common themes that emerged from the literature. (Arnold, 2002; Clarke, 2001; Paris, 2006, 2010; Scheetz, Waters, Smeaton & Lare, 2005; Shulman, 1986; Tatel, 1994).

The PL Log template offered the following categories of professional learning:

- access to new curricular content material;
- new pedagogical methods and concepts;
- new strategies or tactics for motivation, presentation, feedback and assessment;

- improvement in immediate teaching practices due to the presence of PST;
- new understandings regarding students; and
- challenges to assumptions and beliefs about teaching.

Having to consider and identify the different types of professional learning was intended to assist in focussing the mentors' attention onto their own learning in order to reflect and make sense of any changes to their perceptions and practices as the practicum unfolded (Schön, 1983; Loughran, 1996). Opportunities for open-ended reflection provided the possibility of a point of triangulation with the data gathered through the survey and focus groups in order to achieve corroboration, contestation, confirmation and/or resonances within the various findings (O'Toole & Beckett, 2010).

When analysing the data according to Robson's (2002) template approach, it became clear that the initial six categories required further modification in order to reflect the themes emerging from the data. In some cases, categories were conflated; in others, new categories of learning were identified. Additional professional learning categories included: how to provide *feedback* and adjusting to the needs of *adult learners*.

Some participants emailed their PL Log entries as they completed them. Others, who had completed the PL Log by hand, returned them to me during the second focus group. Six entries were received from three participants, rather than the anticipated twelve weekly entries for four participants. This lower than expected return rate was very likely due to the pressures of time felt by the participants as they neared the end of term.

3.8 Methods for data analysis

The data were coded using a template approach to data analysis (Robson, 2002). My *a priori* themes were based on the three central research questions and the same professional learning categories used in the PL Log. The data were coded accordingly, and an initial template created. As per Robson (2002), the template was further refined through an iterative process of

reviewing and recoding data as necessary in response to other themes as they emerged. Themes based on six types of professional learning that had been identified through earlier research were condensed at this point. Two further types of professional learning (feedback and adult education practices) were added. Further themes regarding *how* professional learning took place were identified and categorised by drawing on Dewey's attitudes to reflection, Brookfield's four lenses for critical reflection and Jay and Johnson's typology of reflection.

3.9 Summary of methodology

The research design of a small scale qualitative case study at a single setting involving four participants provided an appropriate structure to investigate the key question of how practicum mentoring can be a vehicle for the mentor's own professional learning. The survey, focus groups and PL Logs enabled participants to address questions regarding the challenges and motivations of the mentor's role, the types of professional learning in which they engaged and how professional learning was achieved. Triangulation and corroboration of the research evidence was achieved through comparing and collating multiple data sources.

Chapter 4 provides a detailed description and analysis of the findings from the study.

4. Findings and data analysis

This chapter presents and analyses the data in relation to the three key themes generated by the research questions that drove the study:

- What are the challenges and motivators for mentors and how do they understand their role?
- How did professional learning come about?
- What types of professional learning took place?

Within each of the broad themes generated by the research questions, the data have been organised according to a number of key sub themes. Separating *how* and *what* professional learning took place (research questions two and three) proved to be quite complex as there are links and overlaps between the research questions.

As Shulman (1986) pointed out, the separation of content, curricular and pedagogical approaches is quite artificial and teachers actually consider the what, how and why simultaneously when considering subject matter knowledge. He coined the term pedagogical content knowledge (PCK) to highlight that intersection between content, curriculum and pedagogy. However, for the purposes of the PL Log template, it was important to articulate the breadth of types of professional learning to assist the participants in teasing out and making explicit possible examples.

Not only was it a hard distinction for me to make as the researcher, the participants also had initial difficulty in articulating the difference between what and how professional learning had taken place. Nevertheless, that tension was ultimately quite purposeful in that it assisted in gaining and maintaining the participants' focused attention on the question of their professional learning. And, despite the associated challenges and inevitable overlap, the separation of 'how' and 'what' has been productively maintained throughout the findings and discussion sections that follow.

4.1 Findings: the role of the mentor.

Prior to the first focus group, participants completed Clarke and Collins' (2009) online Mentoring Profile Inventory (MPI) survey tool. Along with a quantifiable data set, it also provided a common discussion point for participants to reflect on their roles as mentors during the focus group. This section draws primarily on the MPI survey results to analyse participants' perceptions of their mentoring role, including the key motivators and challenges for the group. Data collected via the survey instrument are analysed alongside focus group and PL Log data in order to create a fuller picture of participants' role perceptions.

The MPI categories were established through earlier research conducted by Clarke and Collins as the most common reasons provided by mentors for their decision to mentor PSTs, including both altruistic and practical or self-directed motivators. Participants' survey results are tabulated below. I have also included data from my own survey results; as a participant-observer, completing the survey provided an understanding of how it operated and another set of data for comparison. Table 2 below outlines the motivators:

Table 2: MPI survey results for motivators (all scores out of 50).

My work with student teachers is important:	Average*	Researcher	April	Beth	Monica	Yvonne	Case study average
<i>Renewing the Profession</i>	37	40	38	46	16	46	37
<i>Improving my own Teaching Practices</i>	37	38	50	40	46	50	44
<i>Student Teachers Promote Pupil Engagement</i>	31	30	26	20	20	30	26
<i>Time-Out to Monitor Pupil Learning</i>	28	30	26	0	0	48	21
<i>Contributing to Teacher Education</i>	38	40	42	42	32	50	41
<i>Reminders about Career Development</i>	21	30	18	10	0	30	17
<i>Developing a Professional Community</i>	35	32	46	40	32	50	40
<i>Mentoring Practices in Classroom Contexts</i>	38	40	42	46	30	46	41

* Averages of 520 British Columbia School Advisors.

All four participants in the current study saw *improving my teaching practices* as a major motivator, scoring 44 on average, with two full scores of 50. This was well above the average of 37 for British Columbia (BC) student advisors, who ranked *contributing to teacher education* (38) and practising *mentoring in classroom contexts* (38) more highly than *improving teacher practices*. My participants were also highly motivated to make a *contribution to teacher education* (41) and put into *practice mentoring skills* (41) which Clarke defines as the linking of theory and practice and assisting PSTs with daily issues.

Time out to *monitor pupil learning* and *promote student engagement* were motivators to a lesser extent with respective averages of 26 and 21 for the participants. As with the BC survey results, *a reminder about career development* was the least motivating factor for participants in the current study. It scored an average of 17 for the participants, compared with 21 for the wider BC cohort.

The major motivator (average of 44) from the survey data of *improving my teaching practices* was also verified during focus group discussions. Monica stated that “I actually take a lot more care when I have a student teacher and I think about what I am planning and we talk through it very thoroughly” (Monica, FG 1). Mentoring a PST provided Monica with the opportunity to reflect upon and discuss what was to happen, what might happen, and in doing so, to gain a fresh perspective on teaching. Monica claimed in her PL log that “the two lessons left a lasting impression on me as I gained satisfaction from helping an upcoming teacher. She listened to my suggestions and responded well to feedback” (Monica, PL Log 1). While Monica had not rated *renewing the profession* as highly as the participants (16 compared with 37 to 46), her comments suggest that mentoring affirmed her ability to help with the next generation of teachers and to achieve a positive outcome. Therefore her motivations were both self-directed and altruistic.

At an average score of 26, all the participants placed *student teacher promotes pupil engagement* as less important when compared to the BC average result of 31. Yet the data from the focus groups and PL logs for Beth and Monica in

particular, indicated that their students valued the connections that the PSTs made with them. The engagement also provided important insights into their students and learning experiences for Beth and Monica. This point is further articulated in Section 4.5.3: Professional learning about students.

Linked to this is the opportunity that having a PST provides for monitoring student learning. The responses in the survey were widely varied amongst the participants, from 0 to 48. I asked Beth to explain her 0 ranking of this category during the first focus group. I had suggested to her that it might be because as a primary school teacher, she was teaching a single grade and that she already had a strong understanding of her students. Beth replied:

I answered that question from the perspective that if I am observing what the student teacher is doing, yes I am observing the context in which she is operating, but I am also making notes for her, she is my primary focus.

Researcher: Not the students?

Beth: Yes, they get plenty of other opportunities to be my focus of attention... maybe I am a terrible teacher?

Monica: No we all have different stories. (FG 1)

The survey data also demonstrated that the opportunity to *develop a professional community* was valued by the participants, with three placing it as a strong motivator with scores of 50, 46 and 40, all well above the BC average of 35.

Overall, the participants were highly motivated. “I see it as a professional responsibility, but that’s second to the fact that I genuinely like to see what people do and genuinely like to learn myself” (April, FG 1).

Table 3: MPI survey results for challenges (all scores out of 50)

My work with student teachers is challenging at times because of...	Average*	Researcher	April	Beth	Monica	Yvonne	Case study average
<i>Challenges in Guidance and Mentoring</i>	18	26	4	4	6	6	9

<i>Inadequate Forms and Guidelines</i>	18	30	6	10	0	30	15
<i>Unclear Policies and Procedures</i>	17	34	0	6	10	24	14
<i>Concerns about School Advising as a Sub-Specialty</i>	19	24	18	0	14	18	15
<i>Concerns about STs' Pre-Practicum Preparation</i>	20	34	26	6	12	34	22
<i>Uncertain Feedback and Communication Practices</i>	16	32	10	12	8	10	14

* Averages of 520 British Columbia School Advisors.

The survey results in Table 3 regarding the challenges of mentoring a PST demonstrated that the concerns listed (with averages between 22 and 9) were of less significance to participants than the motivators (17 to 44). Their challenge scores were also lower than the average scores for the BC student advisors' results, which ranged between 16 and 20. The participants in this study were not concerned about their ability to provide *guidance and mentoring*, with an average score of 9; this may have been influenced by the fact that they were all experienced mentors of PSTs.

The challenge that my participants rated the most significant was *concerns about PST's pre-practicum preparation* with an average score of 22. Notably, this was also rated as the greatest challenge for BC survey respondents (20).

In particular, Yvonne's scores of 30 for *inadequate forms and guidelines* and 24 for *unclear policies and procedures* indicated that she found this broad area a challenge. This was further verified in the focus group discussions. Yvonne had worked under the New Zealand PST mentoring model, which she explained was very thorough and unambiguous. Yvonne:

What's really different between here and the experience in New Zealand is that we were actually briefed on how to take on student teachers and what to expect and you had to go and attend a course and you learnt how to give feedback and you knew who to go to if you had difficulties, if you had any challenges (Yvonne, FG 2).

My own scores for these categories (30 and 34) were also much higher than the average, possibly as a result of having focused so heavily on these issues as part of my reading for the current study.

At Eastern College, official communication about practicum requirements was mainly between the school coordinator and the universities, with far less interaction between the mentors and university educators due to the reduction in school visits by university staff in recent years. As mentors, the participants relied mostly upon the written guidelines and procedures provided by the universities. With an average score of 14 for *unclear policies and procedures* the survey data suggested that this may not have been a significant challenge. This issue was raised in the focus group, with participants indicating their feelings of isolation:

April: There are criteria and that helps guide your thinking. But it's very much, it's in your court.

Yvonne: It's very subjective.

April: It's very subjective. It's [as if] you take the student teacher for four weeks and spit them out at the other end. I think if you asked for the support it would be there...

Beth: Yes

April: But it's not a given (FG 2).

The challenge of *uncertain feedback and communication practices* scored an average of 14 among participants and 16 for BC respondents. This relatively low score suggests that it was not seen as a major concern at the time the survey was conducted. Yet the conversations that take place between the PST and mentor can be difficult to negotiate with sensitivity and data from the focus group discussions highlighted that delivering feedback was, in fact, a significant challenge, despite the low scores recorded on the MPI.

As well as the key challenges of PST level of preparedness, unclear policies and procedures and uncertain feedback practices highlighted by the participants' MPI survey results, data from the focus groups highlighted another important challenge that Clarke and Collin's survey does not include.

The issue of time was a key challenge faced by participants in being able to ensure a successful practicum for the PST, the mentor and their students.

Both Monica and Beth referred to time as a significant challenge. For Monica, “timing is a big thing with me, especially with student teachers. I do love them ... but ... I have to be very careful that they are not secondary” (Monica, FG 1). Her own paucity of time meant that she worried about being able to give the PST enough time. She explained the importance of:

...not making them feel like they are an inconvenience. Or that they can see that I am running around. They say “I can come back later”, “No you are here now, we are in the moment, you’ve done your reflection and I’ve managed to get my notes in order for you, let’s sit down and do it now” (Monica, FG 1).

Beth had been looking forward to learning about digital presentation tools such as Prezi from her PST but, she explained, “we never got round to it, which was such a shame” (Beth, FG 2). While Monica’s concern was about making time for the PST, for Beth it was her own professional learning opportunity that was lost through time constraints.

There was also evidence of Yvonne suffering the pressure of time constraints and commitments. This manifested in her late arrival at the focus group meeting and inability to complete any PL Log entries.

4.2. Discussion: the role of the mentor

The MPI data established that these participants were highly motivated in their mentoring work by both self-directed and altruistic motives. In particular, they were motivated by the promise of improving their own teaching practice. They also valued the opportunity to contribute to teacher education, practice their mentoring skills and to develop a professional learning community. It is clear that the participants were aware of the importance and multiple aspects to the role of mentoring a PST involved. (Arnold, 2002; Grudnuff, 2010; Maynard, 2000). The challenges outlined in Clarke and Collin's survey were not of great concern to this particular cohort, but the focus group and PL Logs revealed that the more immediate issue of time was a challenge.

These findings were interesting when compared with my own survey results, which highlighted my concerns about the challenges, as opposed to my enthusiasm for the motivators. Was it because I had the challenges more firmly in my mind as I had been reading the literature extensively at that time? The research participants took the survey before starting with their PSTs, or early on during the practicum, and they may have been feeling more positive about the process as a consequence.

The motivational appeal of renewing their own teaching practice through mentoring was not surprising given that the participants had agreed to be part of this particular study. Possibly they also felt that this was the expected or "right" response. Mentoring a PST provided a unique opportunity to look more closely at what is taught and how teaching and learning occur; an opportunity which Monica, for example, found particularly important.

Beth's comment "maybe I am a terrible teacher" highlighted the challenging balancing act that must be achieved when having a PST in the classroom for an extended amount of time. As the literature also highlighted, mentoring has an impact on one's identity as a teacher (Ganser, 2002; Lee & Wilkes, 1995). The mentor can feel a strong commitment and allegiance to the students in the classroom as well as meeting the needs of PST. Nevertheless, during the

practicum Beth was indeed able to make use of the opportunity afforded by the PST's presence to complete additional student monitoring. She commented that "my anecdotal notes are brilliant for this term" (Beth, FG 2).

The participants' high level of interest in developing a PLC supports the research findings of DuFour and Eaker (1998), Le Cornu (2010) and Loughran (1996). The PMI results regarding the formulation of the PLC as a motivator and time as a key challenge were also confirmed during the focus groups and in the participants' emails. Beth emailed to say:

Thank you for the opportunity to meet and chat with some fabulous people. Just loved the opportunity to get to know a few senior school staff and spend time getting to know them – I so wish we did that much more often" (Beth, personal communication, October 19, 2012).

However, such interactions need to go beyond creating a positive feeling. In order for a PLC to succeed it must support critical reflection to build and refine professional knowledge and in turn improve student learning.

The group enacted the PLC model defined in Figure 2. It collaborated to set SMART goals, i.e. goals that were specific, measurable, attainable, relevant and time-bound (Hord, 2009). The survey assisted participants in defining the role, challenges and motivators of mentoring. The use of the PL Log template provided a means of identifying and recording the types of professional learning taking place. The PLC (focus group) meetings assisted with critical reflection by providing different lenses through which to view the experience of mentoring. Time spent attending the meetings counted towards VIT professional learning hours and the PL Log entries along with reflections about the meetings provided the written evidence required.

Together with her focus group comments, Yvonne's survey responses regarding the challenges of confusing forms and guidelines, policies and procedures, lend weight to Rorrison's (2006, 2010) and Renshaw's (2012) assertions that there is a need for restructuring the communication and relationships between schools and universities. As previous research studies (Grudnuff, 2011; Mattsson et al., 2011) demonstrated, it is important to ensure

that mentors have a clear and consistent approach to mentoring and, in particular, to assessment. To that end, AITSL have since published an online professional development training module and forum for PST mentors and are preparing common PST assessment criteria guidelines.

The challenges identified in Clarke and Collin's MPI survey focused more on the communication and relationship between university and school, rather than the pragmatic and more immediate issues – such as time – which were raised by the participants in this study. This perhaps reflects Clarke and Collin's focus on gathering evidence to support a restructuring of the role of student advisor (or mentor) and improved links between schools and universities. In this sense, perhaps Clarke and Collin's survey design does not fully capture the lived experience of mentoring in schools.

Although time is not listed in the MPI profile challenges, it has been acknowledged as an issue by other researchers (Sinclair et al., 2006). In constructing a profile of mentors, Sinclair et al. noted that workload was one of the most significant “guzzlers” or negative motivators that may dissuade mentors from taking PSTs (p. 264). Certainly this was true for the participants in the current study for whom a great deal of additional time was taken up mentoring their PSTs on top of regular school commitments. It is therefore not surprising that mentors have little time to consider their own professional learning when mentoring. As Beth explained, she was able to find time for the PST's ongoing learning, but her own professional learning opportunities were often lost. While time is entirely absent from Clarke and Collin's (2009) MPI survey, in the context of this study, it was a significant challenge and a major impediment to mentor professional learning. The findings beg the question: how do mentors ensure that their own learning needs are prioritised?

4.3 Findings: How did professional learning take place?

The data from the focus group sessions and PL Log entries were coded in order to establish themes regarding *how* professional learning took place for the participants during the practicum. Figure 3 provides a visual representation of the themes according to which these data will be discussed.



Figure 3: Diagram emphasising the ways in which professional learning takes place for mentors of PSTs (i.e. how).

As seen in Figure 3, findings show that mentor professional learning primarily occurred as a result of either being observed by, or by observing, their PST. Mentor professional learning was further enhanced through the discussions and reflections that took place between the PST and mentor during planning and feedback sessions. Even more valuable in terms of mentor professional learning was the reflective commentary each participant engaged in as part of the PLC.

4.3.1. Professional learning through being observed

Findings in relation to how professional learning took place reveal that some of the most powerful professional learning for the participants was achieved through having their PSTs observe them teaching a lesson. It focused the

participants' attention onto their own performance and the way they made decisions during classes. A shift in classroom dynamics also took place with a new purpose of modelling established, due to the presence of the PST in the classroom. Beth reflected that "you know that you are showcasing this, modelling this for somebody else. Is this what you should be really modelling; is this how you should be modelling?" (Beth, FG 1). The lesson became more of a performance with multiple layers and purposes.

Beth: ...constantly what was happening in your head wasn't the focus on the lesson necessarily or just what was happening in your classroom; the dialogue going on in your head is, that was not a stupid or consistent question to ask, I must remember not to do that. So you are focussing on that sort of dialogue -

April: the performance dialogue -

Beth: yes, the performance dialogue, rather than what you do inherently, coming from here [*hand to heart*]. So I suppose it's the difference between being cerebral and being emotional, or doing your gut [*pause*].

April: But whether one is better than the other; that would have been really interesting. (FG 2)

The same theme arose in the second focus group, when April articulated a similar internal dialogue when being observed:

I found that once I was under the spotlight, it really changed the way I thought about what I was saying, so I didn't bounce around as much as I normally do and I didn't do off-the-cuff sort of questioning which is what I normally do. They were much more considered questioning, as I was trying to model to him the sorts of questions that you would need to elicit that response or to foster that type of understanding from that type of kid. (April, FG 2)

For April, there were changes in what she perceived to be important and where her energies were focused.

So that was really quite interesting for me, that I was constantly in the back of my head thinking, he's watching this, and I want to give as a good a performance as I can, but a correct one as well, rather than just playing. And I am not saying that playing doesn't have a place, it does and when you have been teaching for ages and you know the material, you know the sorts of questions that are going to work. But I was very consciously making an effort to structure them very carefully. (April, FG 2)

While this focused approach to modelling offered valuable professional learning opportunities, being observed and modelling lessons was quite hard to sustain and very draining on the participants. April said of the lesson that:

...it was hard work. I do remember coming out thinking phew, that was hard work, because I was so much more intensely focused, so I don't think I could keep that up for every lesson, three times a day for a whole year. (April, FG 2)

Yvonne worried that modelling "perfect" lessons was setting up an artificial situation, "in a way she [the PST] has been seeing some artificial things, because I have been trying very hard" (Yvonne, FG 2).

4.3.2 Professional learning through observing

Changing position in the classroom from teacher to *observer* provided just as rich an opportunity for learning as that provided by being observed. As a means of facilitating this kind of learning, each lesson April asked her PST to focus on one area for improvement, such as board technique or open questioning. "Then when we are doing the debrief afterwards, I can say to the student teacher, well I've learned this from you today, so that makes them feel good" (April, FG 1). Then, together, April and her PST decided what strategies might be utilised to improve *both* of their techniques.

Further evidence of this approach to professional learning was evident in April's PL Log where she reflected on the value of observing what her VIT mentee was doing as a means of critiquing her own approach:

As I listened to him [questioning students], I thought about what type of question he was asking the students, making mental notes as to what type of question it was. Also, I thought about if I would have asked the question differently and how. (April, PL Log 1)

For Monica, observing her PST take the class allowed her to see the success of a different approach:

...when she took the Year 11 [EAL] class, who are quiet, she stood there and waited respectfully and I'd be sitting there going, ok, let's try and get this going. And yet it worked, they interacted with her (Monica, FG 2).

In discussing this with the PLC, Monica was able to reflect and consider why that approach might have been effective:

I think they saw her as someone who understood their position because she was from another country as well.

April: Or maybe you're an older person, so you have to be respected.

Monica: Probably.

April: You're very much in the hierarchy of the system, whereas she is closer in age.

Monica: Yes, and that's when it goes back to the Gen Y thing, yeah I did learn a lot this time. (FG 2)

In this exchange, other participants offered suggestions and helped to clarify *what* Monica had observed in the behaviour of the PST and *how* it could be of benefit to her own approach when working with these students.

4.3.3. Professional learning through collaborative critical reflection

While the data revealed that a great deal of professional learning took place for participants during their classroom experiences of either observing or being observed by their PSTs, deliberate engagement in reflective practices while

mentoring was critical to enabling professional learning as well. In particular, the practices of keeping a PL Log and participating in the PLC invited participants' deep critical reflection on their professional learning. PL Log entries were made by mentors during or after lesson observations. The PL Log enabled close individual reflection on the actions and discussions taking place with the PSTs. The template provided a simple guide to ensure that the reflections centred on the mentor's own professional learning. Through the thinking process of reflecting individually, a value judgement was being made on their actions and discussions with the PST.

However, perhaps the more powerful critical reflection was collaborative in nature. The PLC provided an opportunity for a social process to exchange information and ideas and to reflect with fellow mentors in a more dynamic manner.

Beth used the PLC as an opportunity to reflect on the value she placed on developing a relationship with her students:

It all goes back to the very basic concept of connecting, because when you are a teacher, you have to connect. You connect with every single child in your room all the time and also in different contexts as well.... I always say that everyone's got a story and you come to school with a story and you have be cognizant to the fact there is a story and connect accordingly with that story. (Beth, FG 1)

Participation in the PLC provided a dedicated time to critically reflect on teaching practice. The exchange below took place between Beth and April during the second focus group. April had just described her experience of being observed and modelling a lesson on questioning techniques. The group felt sufficiently empowered and at ease with each other that roles within the group could be exchanged. Here, Beth took on the role of facilitator and asked April to reflect on the impact of the experience on her teaching:

Beth: Did that impact on your teaching, negatively, from the perspective that did you feel hampered by that or restrained by having to do that?

April: That's a good question. It was hard work. I do remember coming out thinking phew, that was hard work, because I was so much more intensely focused, so I don't think I could keep that up for every lesson, three times a day for a whole year.

Beth: Because you weren't operating from your natural fall-back position.

April: No, this is go in there and have fun. Do the prep, but just go in there and see what happens, go with the flow. (FG 2)

April then considered the experience from her students' perspectives and acknowledged that it would have been valuable to check her understandings with them:

Unfortunately I didn't do any surveys with the kids afterwards, which might have been interesting, but I still think I got the concepts and that across that I wanted to, but perhaps in a more focused manner. I have to have a think about the answer to your question.

Beth: That's one of the things that I have felt ... that being under the spotlight like that, sometimes, that it would actually throw me off course-

April: because you were challenging yourself into something different. (FG 2)

Despite having only two meetings of an hour's duration each, participants used the PLC as an opportunity to test assumptions and share problems. They valued coming together to meet.

April: Can I also make the observation that I think what is missing here at this school also is that the teachers who have got PSTs, the opportunity to get together and chat?

Yvonne, Beth and Monica: Yes.

April: Because we've just had three or four of us together to sit and chat for half an hour or so, and that's already enough to make you feel "I want to contribute something; oh I'm going back to the group to talk about this". Do you know what I mean?

Monica: Yes.

Beth: You don't feel as if you are on your own. (FG 2)

The group also identified improved communication within and between the secondary and junior schools and a reduction in isolation as important.

April: Yes, I don't know who's got a student teacher at the moment, but I know there are at least five up there [in Senior School].

April: And it would be kind of nice to know, maybe on the board, "welcome to these student teachers," there must be ways of doing it, and getting the mentors together.

Beth: Not just keeping secondary [teachers] together and Junior School.

April: No. (FG 2)

The opportunity to come together was therefore valued on a number of levels by the participants.

4.4 Discussion: How professional learning took place

This section offers a systematic discussion and interpretation of the findings in order to establish how participants' professional learning was either enhanced or impeded

- through being observed by the PSTs
- through observing their PSTs
- through collaborative critical reflection.

4.4.1 Discussion: Professional learning through being observed.

The data demonstrate that the act of being observed by their PST assisted the mentors to make their tacit practice knowledge more explicit. At the same time, the data reveal that the situation can feel forced or artificial; as though in the act of modelling, teaching becomes more of a performance and it is hard work. Consequently, modelling classes in this way is difficult to sustain and may impact on how often or even whether teachers volunteer to mentor PSTs.

Beth felt strongly that when her classes were being observed by the PST, there was a change to her previously intuitive actions. Her comments are interesting when considering Sawyer's (2004) concept of linking constructivist teaching with theatrical improvisation. Sawyer maintains that when teachers are in the classroom, they join with students as co-actors in a similar way to actors engaged in improvisation:

Both are collaborative conversations in which no participant knows what will emerge, and in which no participant is allowed to control what emerges. In an improvisational classroom, the class collaboratively creates its own knowledge, sometimes in a way that no teacher could have managed or planned. (p.199)

However, when an outsider such as the PST enters and observes the classroom, it creates a self-conscious separation that may disrupt the co-acting, improvisational relationship that Sawyer sees as being an important part of effective teaching. The act of being observed while teaching quite ordinary lessons also changed Beth and April's internal dialogue. Both mentors were constantly reflecting *in action* (Schön, 1983) and being reflexive about their performance (Loughran, 1996). It provided a catalyst for thoughts about how they taught and why. April and Beth reframed their practice as a result of viewing their performance through the PST's eyes.

However, April and Beth's sharing of their common experience of feeling like performers when being observed enabled them to make sense of the experience. They reflected together on their feelings of discomfort and their actions as they adapted to make the most of the unseen opportunities for professional learning that arose for making meaning and links to learning.

When discussing their actions with their PSTs, a collegial dialogue took place, enacting a form of Brookfield's third reflective lens of our colleagues' experiences. Brookfield advocates participating in "critical conversations with peers" as they "serve as critical mirrors reflecting back to us images of our actions that often take us by surprise" (1998, p. 200).

4.4.2 Discussion: Professional learning through observing

As with professional learning through being observed, professional learning by observing the PST was enhanced for the participants as a result of enacting another version of Brookfield's third lens for critical reflection. Rather than seeking feedback from colleagues, they are learning from observing and giving feedback to a colleague, their PST.

The change in perspective from teacher to observer enabled the participants to gather new understandings about their students as they were free to view the classroom from different physical locations and gather fresh perspectives both on individual students and the class as a whole. Observing their PSTs conducting classes gave participants an opportunity to view the impact of different pedagogical approaches to curriculum. April viewed classroom practice from a new perspective and carefully considered a different approach. In her discussions with the PST after the lesson, April made it clear that she saw this as an opportunity for her to learn as well (Le Cornu, 2010, Renshaw, 2012).

By making this intention explicit and working on their learning goals together, a more reciprocal exchange of ideas was able to take place between the PST and mentor. The PST was given permission to act as a colleague or peer, enabling the opportunity for Brookfield's third reflective lens of critical conversations with peers to take place.

4.4.3 Discussion: Professional learning through collaborative critical reflection

The act of sharing stories and coming together with a common purpose and defined focus as a PLC enhanced participants' opportunities for professional learning and the creation of new knowledge about professional practice. While keeping the PL Log focused and enhanced the reflections of participants to consider where, what and how the professional learning was taking place for them, it was the collaborative reflection that proved most powerful. Also, the

mentor's discussions with their PSTs provided an opportunity for collaborative critical reflection.

Teachers love swapping stories; the teaching profession is such that talking and listening are the key tools of trade and research literature supports the notion of this interaction as being a valid means of creating professional knowledge (Doecke et al., 2000). The participants in this study were no exception to this. They relished the opportunity to share their stories about mentoring and explore how it had impacted upon or changed their own practice.

The data confirmed that engaging with the PLC enabled each member to spend time articulating what was important to them, clarifying their own values and beliefs and seeking confirmation from other group members. Further evidence of this aspect of professional learning is discussed in Section 4.5.4.

In terms of Jay and Johnson's (2002) typology of reflection, Beth and April's discussion about modelling lessons alternated between descriptive, comparative and critical reflective commentary. Together, they teased out or made sense of the experience and what further questions were raised by the process, utilising Brookfield's third lens of colleagues' experiences. They were able to finish each other's sentences due to that commonality of experience and switch between "I" and "you" as it moved from the personal to a generalizable occurrence.

The conversation has sparked a desire for further reflective dialogue. This is evident in April's response "I have to have a think about the answer to your question", indicating that Beth's question about the potential negative impact on her teaching of being observed was not fully resolved for her as yet, and that it was a question worth further consideration. As Schön pointed out, reflection is not a linear process with critical reflection as a last step (Jay & Johnson, 2002). It is an iterative process and we can see that there are further iterations still to be had.

Dewey's dispositions towards being critically reflective were enacted by all the participants. They demonstrated open-mindedness with wholehearted

enthusiasm as each member freely shared their stories and considered other points of view. They took active responsibility for their role as mentors by engaging in the study and displayed directness in their confident and trusting approach (Dewey, 1933; Loughran, 1996; Rodgers, 2002). They engaged with each other to seek new knowledge and understandings about their practice.

Therefore even though this particular PLC met for a relatively short time, there is evidence of a clear ability to develop a refined sense of their own practice and to crystallise their values and beliefs about teaching. The opportunity for professional learning that was afforded by mentoring a PST was greatly enhanced through engaging in the PLC. Future meetings between the PLC could be devoted to the discussion of Brookfield's fourth lens; what the research literature provided in terms of validity, explanations and strategies.

The kinds of shared missions, goals, values and vision that Eaker et al., (2002) and Hord (2009) considered vital to a successful PLC formed within this group. There was administrative support provided by the principal and student teacher coordinator to establish the PLC and seek members. A collaborative approach in which leadership was shared was quickly established.

There was also evidence in Beth's discussion of a clear articulation of the vision of wanting to contribute, to learn and participate actively in making and shaping their own professional learning. During both focus groups, the participants articulated ways in which their professional learning opportunities could be enhanced. Student learning was potentially enhanced through the new understandings of students gained by their teachers through the opportunity to observe the class and through discussions with their PSTs. Colleagues provided peer feedback and sharing of approaches and information.

Much time and energy was devoted to the articulation of what each participant believed constituted good teaching and learning and also what they valued as both teachers and learners, as the exchange between April, Beth and Monica highlighted. The call for improved communication within and between the secondary and junior schools and a reduction in isolation were part of their shared mission and values.

4.5 Findings: What types of professional learning took place?

Having established from the data the ways in which mentors underwent professional learning, this section reports on what types of professional learning took place.

Figure 4 below outlines the six types of mentor professional learning which emerged from the case study data. These themes were identified through coding data from both the focus groups and PL Log entries and will be discussed one at a time in Section 4.5.

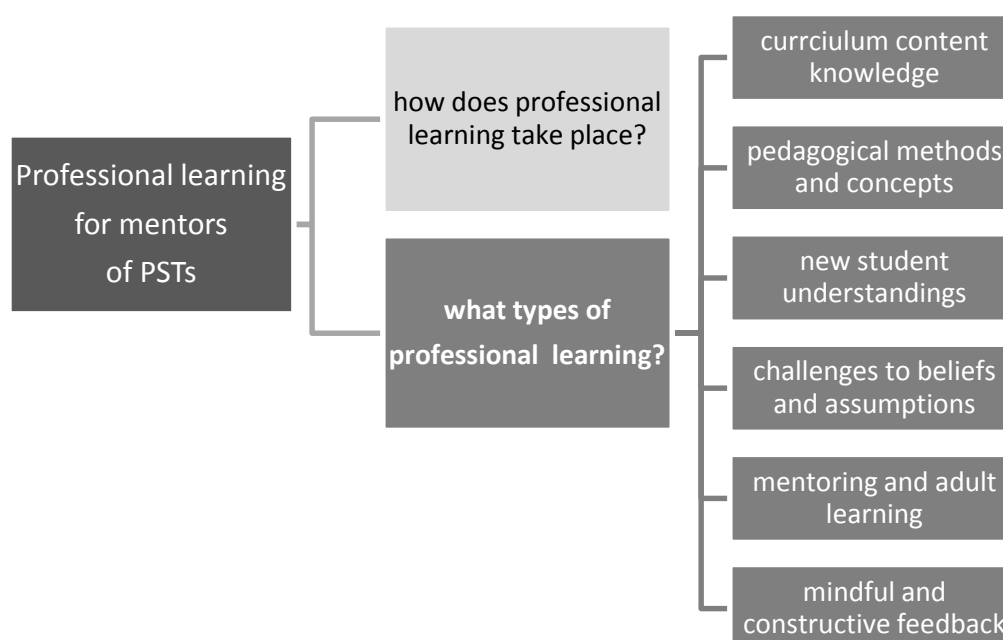


Figure 4: Diagram highlighting what types professional learning happened for mentors of PSTs.

4.5.1 Professional learning about curriculum content knowledge

Gaining new curriculum knowledge was an expectation of the participants, which they confirmed at the first focus group session. However, it did not quite eventuate in the ways that they were expecting.

Yvonne found her mentoring experience in Australian schools different to when she worked in New Zealand. There, mentoring PSTs was a regular, ongoing

and expected part of the teaching load. PSTs would often teach micro lessons to the students.

It was very, very interesting, it meant that you were exposed to the latest, or the cutting edge curriculum or the professional practice and so you saw a lot of student teachers taking micro teaching lessons and you were there and exposed to all the different activities that the student teachers were doing and you were able to see things and go oh that looks really good, you were able to steal a lot of new ideas. (Yvonne, FG 2)

April also made reference to “stealing” good ideas when observing PSTs:

[My PSTs] particularly [the] really good ones, they had great ideas. And I’ve thought that’s very nice, I’ll take that one and use it for next year. So that’s happened a few times, where I’ve really pinched what they have done and then altered it to suit what I wanted to do later on. (April, FG 1)

But new knowledge was not always on offer from PSTs. In her PL Log Beth expressed excitement at the opportunity to increase her knowledge of assessment techniques:

Assessment is quite an emotive issue in teaching and learning circles, so it is going to be wonderful to hear from [the PST] what the latest ideas on this subject are at university and observe her implementing them as well as being part of the support she needs to do so effectively. (Beth, PL Log 2)

But as Beth’s case reveals, these anticipated opportunities for knowledge sharing can easily be thwarted. When asked later about what she had learned, Beth explained:

It was very interesting. Her learning about assessment was purely classroom based. There was nothing new that she could add to my

understanding. No new tools, no new strategies. I was quite disappointed, because I thought, oh university, cutting edge, bring it on. The flip side of that was that I got to once again reflect on how I assess. I thought I better smarten up my act... my anecdotal notes [taken while the PST took the class] are brilliant for this term. (Beth, FG 2)

It is worth taking a moment to frame Beth's comment in the context of the case study school. Eastern College had recently conducted professional development sessions regarding formative assessment and personalised learning. Therefore Beth could already be familiar with and enacting the "cutting edge" strategies she was seeking. While the focus for the professional learning experience was not quite what she expected, it still provided a positive outcome from which Beth could gain some benefit.

The professional learning that took place for the participants in this study seemed to be less about acquiring new ideas, and more about reflecting on existing ones. Discussions in the focus groups and PL Logs centred more on the *how* and *why* aspects of curriculum content knowledge rather than the sharing of specific subject matter knowledge. In her PL Log Beth stated that "working with the integrated unit, it was a very worthwhile experience discussing what we were doing and then also 'justifying' why we're doing it" (Beth, PL Log 1).

Beth described to her PST why the team of Grade 3 teachers had selected this particular approach to the subject matter and style of delivery. "Verbalising my thinking and offering evidence for learning this content helps to crystallise that thinking and offer new directions" (Beth, PL Log 1). In this sense, professional dialogue with her PST provided Beth with a more powerful opportunity for change and improvement in content and curricular knowledge than individual reflection alone.

4.5.2 Professional learning about pedagogical methods and concepts

Participants' professional learning also involved pedagogical methods and concepts, which can be defined as the way in which the curriculum content was being conceptualised and delivered. In the PL Log template (see

Appendix 7.3.4) *pedagogical methods and concepts* was further divided into *strategies for motivation, presentation and assessment* and *immediate changes to my teaching practice*. These subdivisions were intended to assist mentors to clarify specific examples of changes to their pedagogy. However, the participants did not use those sub divisions and spoke about them together. Therefore I too discuss them together.

April's mentoring work provided the opportunity to reflect on her pedagogy around questioning: "this [feedback session] was valuable for me as we discussed the purpose of questioning and the difference between good/not so good types of questions. [It] helped me to define in my own mind" (April, PL Log 1).

For Beth, PST feedback offered the opportunity to reflect and to articulate her pedagogical decision making around time management and prioritisation:

Observing [my PST] and writing feedback notes for her, I have become mindful once again of the need to strive for more disciplined time management. She ran a lesson yesterday which was well planned, but not well timed and so much awesome stuff got left out – this happens sometimes when I'm running a lesson. (Beth, PL Log 3)

In both instances the data confirmed that the reflection taking place assisted the mentors to make more visible the thinking that was behind their actions. Beth explained further how the conversations with the PST help to sharpen her focus:

In discussing how we'll tackle the next week of integrated study, I needed to revisit what exactly it was that we needed to achieve and the most engaging manner in which we could do it. We had a great discussion about how to begin the week and how it would progress. We also discussed the ideas around scaffolding learning experiences and came up with some fabulous teaching and learning ideas. (Beth, PL Log 2)

There was a clear sense of joy evident in Beth's PL Log entries in having someone with whom to discuss ideas, share approaches and consider

alternative strategies. Beth went on to reveal that these discussions brought about a change in her methodological approach to teaching and assessing the unit:

I have just started a new system for taking anecdotal notes, which is working well. [The PST's] focus on assessment has caused me to be more mindful of what assessment I conduct and how I conduct it, as well as how I use it. She conducted a lesson the other day in Maths and whilst giving her feedback, I reflected on how she could best have conducted assessment for this unit in order to give her constructive feedback, which in turn caused me to consider more closely the forms of assessment I would use. (Beth, PL Log 3)

The scope of professional learning taking place for participants was quite broad, mirroring the diversity in the role of teaching. It encompassed consideration of overarching, fundamental beliefs as well as more simple everyday occurrences and concerns such as board technique, as April explained:

Often if we're focusing on board technique for the day or moving around the classrooms for the day, then I'll use that to think about that for myself, so ok I am looking at your board technique and I am critiquing this, so what about my own? How good am I in this area, how could I improve, so it's almost like a parallel, I am doing this with the student teacher, so why don't I reflect on it myself in the same lesson. (April, FG 1)

Sharing her classroom with a PST provided Monica with a reminder of what actions are important and what measures assist with students' learning.

Watching her take the lesson reinforced to me the aspects of my teaching that I do well. It was also a reminder of some small things that I don't do so often e.g. write a plan for each day's lesson, use the board more effectively, write homework on the board, daily quiz. (Monica, PL Log 2)

4.5.3 Professional learning about students

Mentoring their PSTs also enabled the participants to consider their students from a different perspective. For April, the link between observing her students and creating new understandings was clear and immediate as it gave her the time to see different sides of her students. She commented that:

...you learn all sorts of things, the ones who chat, the ones who waste time, the ones who are doing the phone under the desk, the ones who really are struggling and not pushed enough and that then translates directly into improved teaching in my classes. (April, FG 1)

Monica, too, gained a different perspective on student learning behaviour during the practicum period:

I gained a new understanding about my students as I watched them sit quietly and not respond. I also noticed that they put their head down or looked away, hoping the teacher wouldn't ask them a question. I was also surprised to see how many times they looked up new words in their dictionaries rather than trying to work out the word in the context of the sentence. (Monica, PL Log 1)

As an observer of the class, Monica noticed her English as an Additional Language (EAL) students' body language and their over-reliance on their dictionaries. In the debrief session Monica spoke with the PST about how this situation could be improved. Monica listed in her log the strategies that they discussed.

Beth discerned that the PST's different personal approach worked well with her students. "[The PST is] a very calm person, that's her personality. It worked very well in this room most of the time" (Beth, FG 2). In her PL Log, Beth articulated more thoroughly why she felt this was a valuable insight. There was a student in her class with difficult family issues that resulted in the student feeling disconnected and withdrawn at school. The presence of someone new might have been a further complication for this particular student, yet quite the opposite transpired:

Yesterday, she connected beautifully with [the PST], sitting very close to her and engaging in conversation. It was so good to see that connection happening and I've been reflecting on what may have made that happen. [My PST] is a calm and nurturing person and also has no knowledge of what's been happening in her life. I think this student needs calm influences in her life and gentleness – timely reminder for me as a teacher, especially coming to the end of a very busy term to be mindful of students' emotional needs. (Beth, PL Log 1)

Just as Beth saw the value of taking a different approach with her students, Monica gained a new perspective as a result of the age of the PST:

[The PST] is twenty years younger than me, so that gave me an insight into how to understand a teacher from her era and to see what the focus is e.g. interactions, teaching, knowledge of material, providing assistance, encouragement / praise. (Monica, PL Log 2)

Monica did not articulate in her PL Log whether she saw them as positive or negative differences, she just outlined in what areas those differences were likely to be visible. However, in discussions held during the focus group, Monica raised this again in more detail:

I have a Year 12 EAL class that are deadly quiet and have been for the whole year. And it's been quite interesting having someone as an outsider sit and watch me plod through this [class] that says zilch. *Laughter.* (Monica, FG 2)

Monica went on to share with the group her sense of frustration and what the PST had witnessed:

And I do remember her making a comment after the first class and she said, "Maybe they are just happy to sit there and listen to you. They respect what you say and they are happy to listen." And it's funny, I remember going home [and thinking about it]. And I guess for the whole year, I have tried everything possible..... But it took an outsider, a

student who is similar in age, to say you know, this is how they are, and I found that quite insightful.... Because she could see how hard, like every time she comes in and she'd say "oh, you try too hard." *Laughter.* (Monica, FG 2)

4.5.4 Professional learning about beliefs and assumptions about teaching

This category refers to the ways in which the participants were able to recognise, articulate and test the beliefs and assumptions that underpin their teaching. While the PL Log template heading for this theme was *challenges to my beliefs and assumptions*, the data bore out a slightly different set of findings. While some participants' beliefs and assumptions were challenged, the mentoring experience also seemed to offer participants opportunities to clarify and crystallise their values and beliefs.

In the second focus group Yvonne talked about wanting to make her PST feel able to take risks and chances in order to find her identity as a teacher. She was very explicit about what good teaching and mentoring should look like:

I was remembering my own first experience of being in a classroom. It was horrifying, you wake up in the morning, thinking I mustn't do anything wrong, I'm in someone else's room; you know, you've just got to learn someone else's classroom management skills. What they do. So for me, I just wanted her to relax and play. (Yvonne, FG 2)

Yvonne articulated what she felt were important attributes of an effective teacher:

So for her I set that goal, I wanted her to be aware, be a mindful teacher. For her to know what it is that she is good at, what is it that she needs to work on, and to be reflective? I tried to create this environment where she was more of an assistant than someone who was watching her all the time. (Yvonne, FG 2)

As the data were coded, a parallel theme to challenging the mentors' beliefs and assumptions emerged: challenging assumptions about expert teaching and, in particular, the notion of the experienced mentor as the perfect teacher.

During the first focus group April explained that when she routinely asks each of her PSTs to critique a lesson that they observed her teaching, "...they say: why would you do that, no, you'll be perfect? And I say: no I am not" (April, FG 1). As part of her approach to mentoring, April was keen to dispel that myth and set up a more collaborative, equal relationship.

Both focus groups discussed the notion of the perfect lesson. Participants were able to clarify a shared belief that no teacher, however experienced, teaches perfect lessons all the time:

Yvonne: For me, you always know that you have got to be very mindful of what you do and what you say, because you know that they are taking notes. *[laughter]* So, in a way what she sees and what I am teaching may not be what happens all the time. Because I don't deliver a perfect lesson every day, every session.

April: None of us do.

Beth: Nobody does. (FG 2)

The discussion enabled the acknowledgement by participants of how hard teaching and mentoring can be and a reassurance that this situation was acceptable and, in fact, was a valuable opportunity as a learning experience in itself. Yvonne explained:

I wanted her to know that not all lessons are perfect and that you reflect on, oh that was really bad, what did I do wrong? So, it was really rewarding to see how she became the person who said "well actually I still need to work on my classroom management, getting children's attention and making sure that I don't speak before I have their attention." (Yvonne, FG 2)

4.5.5 Professional learning about mentoring and adult learning

Professional learning about mentoring itself featured strongly in the data and participants described their learning about how to cater for adult learners. April described the difference between teaching children and adults in the first focus group in the following way:

We are very good as teachers at saying do this, this, and this, but we don't say that [as PST mentors], we say what do you think you could do? But we still want them to tell us what we want them to say, we want them to say, "I'll improve my board work" and we go "yes, improve your board work." (April, FG 1)

April also articulated some of the distinctions between the teaching and mentoring roles:

I am very conscious of not doing that this time round with my student teacher and it's going to be more of a professional dialogue, because I would never, ever impose myself on a maths colleague, I would never say "have you thought about, should you do it this way, I do it this way, so you should do it this way?" I would never do that. (April, FG 1)

She shared with the group her learning about how to create a more equal and professional dialogue which would allow the PST to take ownership of their own development or direction.

April had gained a deeper understanding of the difference between teaching and mentoring through her VIT mentor training:

It was useful from the point of view that it made me think about ... how I could reflect on my teaching and learning, to help the graduate teacher reflect on their teaching and strategies. (April, FG 1)

She went on to explain how this training provided a framework through which to view mentoring:

Whereas if you are just a teacher, *just* a teacher, if you have a student teacher you just come in and do it, you do your best, you do what you think is best, but it doesn't have that extra background, that professional background. That professional development that is specially focused on how you help someone who is training out. (April, FG 1)

As discussed earlier, Yvonne made sure that her PST felt that she could "play", that they worked in a collegial manner so that it was a more shared experience where success involved making mistakes, trialling possible approaches.

Beth was mindful of the ongoing needs of her PST due to her stage of development as a teacher. She reflected in her PL Log:

I also had to remember that in so much as I structure and scaffold the learning experience for my students, I need to do the same for [the PST] when she is attempting something for the first time, no matter how awesomely competent she is. (Beth, PL Log 3)

Beth understood that the same frameworks and support in teaching and mentoring are useful in both contexts if provided in a collegial and sensitive manner:

She is set to continue these literacy rotations today and before she begins, I will (as I always do) have a conversation about her preparation and how she's feeling, what help she needs, etc. However, this morning, I'll be even more mindful of supporting her with structuring the lesson. (Beth, PL Log 3)

One of the mentoring strategies that participants employed to support their PSTs was team teaching. But while team teaching was valued by the participants, it was not necessarily viewed as a means of enhancing their own professional learning:

I love that opportunity [to team teach with] the final year students in their final rounds. The whole concept that they have more confidence now,

they are stepping up to plate, and you are able to team teach with them...I love team teaching. (Beth, FG 1)

Monica and Yvonne used team teaching as support for the PST. Yvonne had found her own experience as a PST very daunting and felt that team teaching enabled a less formal and threatening environment for the PST. She explained that “I tried to create this environment where she was more of an assistant than [where I was] someone who was watching her all the time” (Yvonne, FG 2).

Monica explained her approach as follows:

...we have a little signal, and I teach them that right from the start, obviously you do it in a way that you are not taking over the class.

Beth: What’s your signal?

Monica: It’s a little bow; you can almost see, you know its coming, you’re waiting for it. Like, ok, I think you really need to bow; you need help. (Monica, FG 1)

4.5.6 Professional learning about mindful and constructive feedback

When asked what types of professional learning they had experienced during the practicum, all participants responded that learning how to provide effective feedback was an important dimension of their professional learning.

Beth: Mindfulness for me is one of the big things.

Researcher: Mindfulness in the way you are giving the feedback?

Beth: Yes.

Monica: Yes, I would agree and I would add to that to, especially too the time to do it. (FG 1)

For Beth, providing feedback to her PST gave her the opportunity to practice constructive feedback techniques:

I have to arrange my face, because I wear so much of what I am thinking on my face. And I have to be really careful that I don't go "what are you doing?", that I keep that "what are you doing?" in my head. So that I can arrange the information in such a way that it is constructive feedback, that it is supportive. (Beth, FG 1)

Beth considered carefully the impact of how honest or blunt she can be in order to ensure that the feedback is not ignored or rejected:

Because as teachers naturally we are critical people, we are taught to think like that, to look for the problems. We are taught to kick into problem-solving mode immediately. That is part of who we are and you have to be mindful of that. Because not always is someone looking for a solution. Mindfulness for me is one of the big things. (Beth, FG 1)

April made use of the professional development sessions undertaken as part of becoming a VIT mentor of graduate teachers to change her approach to giving feedback to her PST in a more collegial, professional manner. April explained that when communicating feedback, "its saying this is what I've done, how would you do it? So it's changing that relationship from me as a professional and them as a student, into two professionals." (April, FG 1)

Monica shared with the other participants that her approach had been to delay providing feedback straight after the class. Instead, she asked the PST to go away and reflect first on the strengths and weaknesses of the lesson. She explained the process to the other participants in the focus group:

I would go [to the PST] "you are spot on"; I would reinforce on that and then extend from those points. I felt that was really beneficial. And probably because you feel, oh, where do I start here, but if they come in with something first and they have recognised it, it's kind of reassuring so, I guess I see my role more as to "hey look it's not that bad, let's look at what we can do better and what we can work on." (Monica, FG 1)

4.6 Discussion: What types of professional learning took place?

The types of professional learning that took place for the mentors in this study centred on conversations about how and why particular curriculum content knowledge and pedagogical approaches were important, rather than in picking up new skills. Such conversations provided participants the opportunity to make conscious and explicit their knowledge in these areas and to extend and refine their understandings as they reflected with their PSTs and with colleagues. In particular, they had the opportunity to clarify and crystallise their beliefs and values about teaching. Mentoring a PST also led to new understandings about their students, as they gained different insights through their discussions with their PSTs. The data also demonstrated that the participants articulated and shared methods and approaches to issues such as providing feedback to their PSTs. They were able to draw on knowledge from previous professional development sessions to enact their own professional learning and embed this knowledge into their practice repertoire. Each of the six themes is discussed below.

4.6.1 Discussion: Professional learning about curriculum content knowledge

In this study, there was very little evidence of Arnold (2002) or Scheetz's (2005) predicted mentor professional learning through content and curricular exchange. But as Shulman (1986) reminds us, subject matter content knowledge for teachers goes beyond the facts and concepts in a domain; it requires understanding of the structures of the subject matter so that *why* it is worth knowing this particular content is made clear and *how* it relates to other knowledge. He referred to curricular knowledge as an understanding of the range of programs, instructional materials available for instruction of the subject matter (Shulman, 1986, p.9). In this study, professional learning of this kind was certainly evident. The participants' reflective commentary often centred on the *how* and *why* aspects of the curriculum content knowledge being shared, rather than the *what*.

The use of terms such as *pinch* and *steal* by April and Yvonne gave the impression that the act of learning something from a PST was to be done surreptitiously, that this was not an expected outcome of mentoring a PST. It implies that the participants saw themselves as the expert and repository of knowledge in this area and should already be aware of the things they were learning. The PST is therefore positioned as the sole learner in the practicum, rather than it being an opportunity for explicit, mutual professional learning for both parties. While the mentors in this study claimed to be open to learning new things from their PSTs, their linguistic choices around the notion of 'stealing' imply that the practicum was not anticipated primarily as a collaborative or open learning exchange. Perhaps by adapting a learning communities model such as that advocated by Le Cornu (2010) or Renshaw's (2012) co-learning approach, the mentors would have been more receptive.

4.6.2 Discussion: Professional learning about pedagogical methods and concepts

With respect to pedagogical methods and concepts, data from the participants' PL Logs revealed examples of professional learning regarding the pedagogical knowledge of teaching such as principles of classroom management and organisation and also pedagogical content knowledge (PCK) which "...goes beyond knowledge of subject matter per se to the dimension of subject matter knowledge *for teaching*" (Shulman, 1986, p.9). Shulman explained PCK as:

...the most regularly taught topics in one's subject area, the most useful forms of representation of those ideas, the most powerful analogies, illustrations, examples, explanations, and demonstrations - in a word, the ways of representing and formulating the subject that makes it comprehensible to others. (Shulman, 1986, p.9)

Through mentoring a PST and having to explicitly articulate their pedagogical content knowledge with regards to their subject matter, the participants' own understanding of PCK was greatly enhanced.

The data confirm that mentoring a PST is an authentic way to make mentors' often tacit PCK knowledge more explicit (Loughran, 1996). As with curriculum content knowledge in the previous section, mentoring a PST offered a powerful

opportunity for participants to critically reflect on pedagogical thought and action.

As a result of mentoring a PST, the participants in the study reflected upon their own behaviours, habits and decision making to make more explicit their understanding of pedagogical content knowledge. This was made possible by adopting a disposition to critically reflect and by being open-minded to new learning.

Beth's PL Log comments reveal that she especially welcomed the collaborative process and valued her PST's input. Beth displayed each of Hudson's (2010) characteristics of a successful mentor. She was enthusiastic and supportive; an attentive listener who was able to articulate aims, curriculum goals and pedagogical knowledge, and provide feedback. Through being an effective mentor, she was able to modify and build on her own knowledge. Indeed all the participants talked positively about a reconsideration of their own pedagogy by being willing to think of themselves as learners as well as mentors.

4.6.3 Discussion: Professional learning about students

For the participants in this project, the experience of having a PST in their classroom positively enhanced the understanding of their students and the ways in which they learn. PCK forms a teacher's understanding of how students learn, or fail to learn, specific subject matter (Van Driel & Berry, 2012). As the participants observed their classes while their PSTs ran a lesson, new understandings of the habits and behaviours of their students formed. How individual students responded to different approaches to the subject matter and to a different personal teaching style were noted. PL Log entries and discussions with their PSTs both served to articulate and make explicit for the mentors themselves the methods for engagement and checking for understanding that can be used to enhance student learning.

Just as Brookfield's (1998) third lens of feedback from colleagues provides an important perspective for critical reflection, the questions and feedback from the PST provide equally rich perspectives. The data confirmed that this was a

very useful learning tool for the participants as they articulated the success of various actions to their PSTs and justified their decisions; they were making explicit the knowledge gained from their past experience.

When Monica shared with the PLC her frustration regarding her EAL class, it provided a powerful example of the way in which the act of having a PST coupled with the opportunity to share and reflect can affect change and engage the mentor in professional learning (Fullan, 2007). It was through this exchange that Monica could move beyond the feeling of helplessness, that she had already tried “everything.” Instead, she began to see another approach and a different perspective.

Brookfield (1998) reminds us of the importance of seeking student feedback as a means of enabling more critical reflection. Monica was surprised that what she thought had worked well was not as well received by the students themselves. She then was able to discuss this with the PST and they could adapt and modify their approach in response to the feedback received.

Overall, mentoring a PST provided the participants with new understandings about their students as a result of the opportunity to observe them more closely while the PST took the class and observing their PSTs’ sometimes different approaches to student interaction. Further insights were gained through discussions and critical reflection with their PSTs and within the PLC.

4.6.4 Discussion: Professional learning about beliefs and assumptions about teaching

Yvonne made explicit the power imbalance that can exist between PSTs and mentors (Brookfield, 1995). Through becoming aware of and scrutinising this assumption, Yvonne was able to engage in critical reflection. She drew on her autobiography as a learner of practice, which Brookfield recommended as the first of his critically reflective lenses. She compared it to the way in which she provided a safe and supportive environment for her own students, where they can relax, play and learn from mistakes. This translated into a rationale of

practice (Brookfield, 1995) towards mentoring the PST and a greater understanding of her own values and beliefs about teaching and learning.

Yvonne aimed to create a safe environment in which the PST could feel free to enact Schön's practices of reflection on action and in action. When discussing this in the PLC, she identified important power dynamics and articulated what was important to her as an educator. She made explicit what she thinks quality teaching and learning look like and how they take place, again acting as a critically reflective teacher as she tested her assumptions (Brookfield, 1995).

Just as teachers need to be clear about their role and conscious of its complexity, it is important for mentors to be able to articulate their values and beliefs about teaching and learning and to question inherent power dynamics and the hegemonic assumptions that underpin their work. Doing so creates a rationale for practice, more informed actions and an enlivened, democratic classroom (Brookfield, 1995).

April's technique of asking her PSTs to critique her own teaching, may be seen as a way of mitigating the power imbalances and hegemonic assumptions that underpin mentoring a PST. Like Yvonne, she was conscious of the power dynamic that exists with her PSTs because part of her role as mentor is to assess their performance. Questioning the basis of that power structure created an environment in which the authentic exchange of views between mentor and PST was more likely. It brought up for discussion questions such as whether there is a "right" or perfect way of acting or teaching, or are there multiple "right" ways?

It also gives rise to the conversation about the myth of the perfect lesson. This is an example of the paradigmatic assumptions that Brookfield (1995) refers to. April mentioning that the PSTs assume she will be perfect, provides the opening in the PLC for the participants to discuss and dispel the myth of the perfect lesson. The participants also used the PLC to challenge the assumption that eventually teaching will become automatic and that lessons

will no longer require careful planning and modification through reflection. This supports AITSL's advice to mentors of PSTs that "sharing your own learning goals is ... a way to model for the preservice teachers how continuous learning is integral to professional engagement" (AITSL, 2013).

4.6.5 Discussion: Professional learning about mentoring and adult learning

While the mentor role shares many of the attributes of a teacher, the literature highlighted that there are also important distinctions to consider. Gilles & Wilson (2004) confirmed that teaching adults required a different set of skills from those required for teaching children.

April recognised that while mentors have a role as teachers or trainers of PSTs, their role is also as a colleague, critical friend and facilitator. There needs to be a collaborative approach (Ambrosetti & Dekkers, 2010). April was prepared to be more open-minded to the different styles and approaches of her PST. The advantage of this approach in terms of April's own professional learning is that it developed her expertise as adult educator.

April raised the difficult question of how to find a balance between offering direct advice and instruction on the one hand, and enabling the PST to self-discover on the other. Through reflecting critically in the PLC, April realised that often the two approaches are more similar than they first appear since the mentor assumes they know the "right" answer in both cases; it's just a question of how the PST arrives at it. Here, then, is a powerful example of how critical reflection enabled a hegemonic assumption about mentoring to be brought to light and challenged.

These examples further highlight the complexity of the role of mentor and the level of astuteness required to switch between the constituent roles of teacher, colleague, critical friend and facilitator as PSTs develop their abilities and confidence as teachers. The data revealed the importance of remembering that PSTs are still "students of teaching" (Hascher et al., 2007, p. 635) and are at various stages in their development as teachers. As Beth reminded us, learning is not a linear process.

Working collaboratively and team teaching were approaches favoured within a number of studies, (Paris, 2006; Rorrison, 2007). In these studies, collaborative and team teaching were seen as a means to create a more balanced relationship between the PST and mentor and to shift away from the expert - apprentice model of the practicum, towards one of co-learning for both parties (Renshaw, 2012). But the mentors in a study undertaken by Hall et al. (2008) did not view team teaching as part of their role and responsibilities as mentors. Likewise, the participants in the current study saw it neither as a primary focus for mentoring nor as an opportunity for their own professional learning. Some, however, acknowledged that team teaching can be positive.

For Beth, team teaching was something that happened at the end of their training, when PSTs were ready to work independently in a classroom, rather than as a means of facilitating either the PST's or the mentor's learning. Monica demonstrated her view of team teaching as more about providing support and a safety net for the PST, rather than engaging in a genuine collaboration within which she sought to learn from the PST's actions. Like Monica, Yvonne also used team teaching as a support mechanism rather than a learning opportunity.

But this tendency to position team teaching as a supportive mechanism may well undermine the PST and their emerging identity. As Brookfield reminds us, teachers need to be mindful of power relationships and this is also relevant when mentoring in order to mitigate challenges to the PST's sense of authority (Ambrosetti & Dekkers, 2010; Hall et al., 2008). Furthermore, positioning team teaching primarily as a way of supporting or 'rescuing' the PST also impedes the prospect of professional learning opportunities emerging for the mentor.

4.6.6 Discussion: Professional learning about mindful and constructive feedback

A repertoire of practices for feedback was established by the PLC. Beth suggested mindfulness was important, while April drew on techniques from her VIT mentor training. Monica shared her approach of delaying feedback as a means of empowering the PST. The PLC discussions provided a range of insights into the best approaches and a sharing of the professional learning

that each participant had experienced through mentoring PSTs. Mentors were putting into action what they had learnt from earlier professional development sessions (Hargreaves & Fullan, 2000).

At Eastern College, a recent whole school professional development focus had centred on mindfulness, formative assessment and examining potential feedback strategies. Mentoring a PST gave the participants the opportunity to rehearse, refine and extend their repertoire of feedback practices. This enabled important links and connections between the professional development sessions and engaging in professional learning by embedding it in their own practice (Fullan, 2007; Mayer & Lloyd, 2011).

Beth acknowledged the importance of waiting beyond a first reaction, shifting to a more attentive and open-minded approach, an attribute for reflection considered very important by Dewey (1933). Beth was also able to express her values as an educator (Eaker, DuFour & DuFour, 2002), expressing concern about the limited approach to support taken by many teachers.

In order to mitigate the uneven power dynamic between herself and the PST (Rorrison, 2006), Monica met with the PST after they had completed their own initial reflection. After the PST outlined her reflections in the follow-up session, Monica provided another perspective and together they worked out alternatives. If the mentor goes first, the PST is likely to simply adopt what their view is. Monica sees the value in the PST arriving at their own conclusions first. She then fleshes out or extends on their responses.

Monica's technique provided the PST with a model of reflective practice that fitted Jay & Johnson's (2002) typology of descriptive, comparative and critical reflective practice. It helped to ascertain the level of self-awareness of the PST and build upon that, providing a more powerful starting point for reflection. There was then an opportunity for building new knowledge or new approaches together. This approach also made better use of the time that the PST and mentor had available for discussion.

Monica also made use of a simple thinking routine to structure her critical and reflective thinking. “In giving feedback I focused on providing appropriate examples and stressed the positives, the minuses and the interesting from each class” (Monica, PL Log 2). These routines are regularly used with students at Eastern College, so Monica was modelling a structure that could be adapted by the PST to use in other situations. The data demonstrated that Monica was able to make connections and links and reinforce her own professional learning and understandings.

5. Implications and Conclusions

5.1 Summary of main findings

This study demonstrates that the practicum can indeed be an important vehicle for the mentor's own professional learning. A wide range of professional learning was evident, including: an improved understanding of curriculum content knowledge, pedagogical methods and concepts and increased knowledge about students. Importantly, the PLC offered participants the chance to test their assumptions and beliefs about teaching. They gained a greater understanding of mentoring skills and the needs of adult learners. In particular, participants improved their ability to provide mindful and constructive feedback to PSTs.

Mentor professional learning took place not only as a result of observations and discussions with their PSTs, but more crucially, as a result of the deep levels of reflection achieved when the mentors actively engaged in a PLC. Professional learning through critical reflection required an explicit focus of attention on the part of the mentor to ensure that there was time and energy devoted to reflection and the building of professional knowledge. Participation in a PLC provided that opportunity. It enabled an exchange of information and experiences in a supportive, focused environment of like-minded colleagues. The model also assisted in the enhancement of a number of the motivating factors for mentors identified in Clarke and Collin's (2009) PMI survey; in particular improving my own practice and developing a professional community.

Mentoring a PST and engaging with a PLC provided valuable opportunities for the mentors in the current study to engage in Brookfield's lenses for critical reflection. They examined their own autobiography as a learner of practice when explaining to the PST and their colleagues why they took a particular approach and as a source of information regarding how to approach mentoring as they referred back to their own experience as pre-service teachers. Mentoring provided a perspective on practice and approaches to teaching through the eyes of student learners, as the mentors were able to observe their

students' responses while their PSTs taught lessons. While Brookfield (1995) advocated the value of seeking feedback from students as part of critical reflection, the opportunity to observe the class from a student's perspective provided another version of reflection through students' eyes. However, this needs to be tempered by the fact that the teacher's perspective is never going to be the same as the students'; it is perhaps more akin to the collegial lens in this regard.

The discussions between the PST and mentor and between mentors themselves provided a similar critical mirror to Brookfield's third lens, the discussion of experiences with colleagues. Coming together as part of a PLC to discuss PST mentoring and professional learning also enabled the mentors to relate practice with theory and theoretical literature, Brookfield's final lens. They were able to utilise the theories introduced through professional development and translate them into real professional learning.

Having a PST provided the mentors with an opportunity to stop, reflect and check that they were still on track as teachers. Indeed, some would even "smarten up [their] act" (Monica, FG 1) as they were forced to focus on what, how and why they were teaching. Ultimately reflective discussions went beyond the operational aspects of teaching, delving into deep reflection about teacher knowledge and the sharing of values and beliefs. Being part of a PLC assisted with this process, enabling their PST experiences and professional development theories to be embedded as authentic professional learning.

5.2 Implications of the findings

This study confirms that approaching mentoring as an experience where both parties are learners increases the likelihood of professional learning taking place for mentors. Furthermore, it encourages a mindset that is open to the exchange of ideas and reciprocal feedback between PSTs and mentors.

In line with previous research into mentor experiences (Clarke & Collins, 2009; Sinclair et al., 2006), this study found that while mentors value the opportunity to reflect upon their own practice, they rarely make their own professional

learning the primary focus; the needs of the PST and the mentor's students are considered first. The study found that while making time for reflection is a crucial challenge for mentors, having a regular meeting opportunity through a PLC certainly assists them to set aside the time and space to prioritise critical reflection and knowledge building.

As Dewey (1933) contended, the process of reflection begins when teachers encounter a problem or puzzle; they step back to consider and analyse the challenge in the context of their experiences. Mentors are used to considering the PST's professional learning as the centre of that problem and puzzle upon which to reflect, and the participants in the current study were certainly at ease discussing how each of their PSTs was progressing. However, the reflective focus for this PLC was the mentors' own professional learning and participants needed to be prompted back to this focus at times. The participants were being asked to view mentoring from a different perspective, the perspective of their own professional learning opportunities while engaged in mentoring. This required some consideration and a definite change in the focus of their thinking.

The rewards of this shift in reflective focus from the PST's professional learning to their own, brought rich rewards. Participants began to talk about, reflect on, and to articulate their values and identities as teachers. They picked apart some of the assumptions underlying their fundamental beliefs about teaching. In this sense, it was the deliberate focus on the mentor's own professional learning that enabled this PLC to delve into the territory of critical reflection. Both Brookfield (1998) and Rodgers (2002) warn that reflective activity is unlikely to make change or affect behaviour without this critical dimension to reflection. In this study, through inviting or insisting that the mentors focus on their own professional learning, they were able to clarify their views, explore multiple viewpoints and question assumptions.

The opportunities for deep, critical reflection afforded by the PLC were a powerful outcome of this project. At the same time, the more highly anticipated forms of professional learning were less obvious in this instance. While research conducted by Arnold, (2002) and Scheetz et al. (2005) suggested

that the two-way exchange of curricular and content knowledge between the mentor and PST was a highly likely source of professional learning for mentors, this did not eventuate in this study. Nor was there evidence of Hudson's (2010) discussions regarding educational reform. This is interesting to note given our particular historical moment, in which it might have been anticipated that a fruitful exchange regarding the implementation of the new Australian Curriculum would have taken place.

Can the failure of these kinds of anticipated two-way learning exchanges be attributed to the absence of a co-learning expectation? Such exchanges require an open-mindedness that cannot possibly be apparent if the construction of the mentor-PST relationship is ultimately one in which only one party is expected to learn. In this study, mentors accessed powerful professional learning through their mentoring work. But that professional learning came about through the mentors' own reflective activity and through their collaboration with colleagues. Nowhere was there clear evidence of the mentor learning explicitly from the PST.

In this sense, while the participants did get something valuable out of the PLC, their learning was limited by the way they positioned themselves. The participants were happy to see themselves as learners and to engage in professional learning, but they were less willing to position a PST explicitly as someone who had something to teach them about teaching.

Models of the practicum which are predicated on partnerships and learning communities where all stakeholders are learners (Le Cornu & Ewing, 2008, Renshaw, 2012, White et al., 2010), provide opportunities for stronger partnerships and shared understandings to develop and foster greater opportunities for reciprocity. Practicums that are structured around co-learning can also assist with the isolation, undervaluing and loneliness each stakeholder can experience (Le Cornu & Ewing, 2008). This benefit was also acknowledged by the participants in this study.

However, such an approach is always limited by the difficulty of time. As the participants in this study highlighted, this is a key issue facing mentors: to find

the time to prioritize their own professional learning, but also to carry out their mentoring and teaching responsibilities.

5.3 Limitations of the research and suggestions for future research

This case study only examined a single setting; one which was well resourced, with teacher-participants who actively sought to extend their understanding and examine their own professional learning when mentoring a PST. It also focused on a single practicum. Further research could be conducted over a longer time span, with additional participants and in different school settings in order to test the efficacy of establishing PLCs for mentors of PSTs working across different settings and faced with a broader range of contextual challenges.

The study is further limited by its focus on a single stakeholder group within a highly complex practicum experience. While involvement in a PLC is likely to be beneficial for PST mentors, it should not be seen as the only solution. Nor should it be viewed in isolation to the practicum or indeed to professional learning as a whole. Rorrison (2010) highlights the need for supportive and collaborative relationships between all stakeholders and maintains the importance of viewing the practicum “not as a testing ground but as a learning experience” (p. 516).

While the voices of the mentors were clearly heard throughout this study, the experiences from the point of view of the PSTs or indeed the students themselves were not sought due to my focus on mentor professional learning. However, research into their perspectives may assist with developing further understanding of the limitations and enhancement of professional learning for mentors.

It remains unclear from this study how successfully mentor professional learning affects change in PST learning or in mentoring practices. But the research literature confirms that the sort of professional learning featured in this study – situated, de-privatised, continuous, and within a supportive structure (Cole, 2012, Fullan, 2007) – is most likely to have an enduring impact.

Further research is required to determine the extent of ongoing changes to mentor practices and PST learning as a result of involvement in PLCs.

5.4 Future directions

In 2013 I continued to facilitate a PLC to support mentors of PSTs. The PLC supported Eastern College's theme of "taking notice" and approaching professional learning with a growth mindset. Participation contributed towards each teacher's professional learning plan and professional learning hours for VIT registration purposes. The literature suggests that such a group has more chance of success and survival if it is not imposed from "above". However, in this instance, having support from school leadership and a legitimate goal which fitted with governance requirements provided further incentive and a context within which to work.

Following the model of the current study, the PLC was set up following SMART principles with a clear aim, shared goals and mission; therefore it was able to build and share knowledge, which is more likely to lead to improved practice and change. As Timperley, Barrar and Fung (2007) warn, simply participating in a PLC is not associated with changes in teacher practice, it requires a clear structure: "Effective communities provided teachers with opportunities to process new understandings and challenge problematic beliefs, with a focus on analysing the impact of teaching on student learning" (p. xxxvii).

With regard to formal recognition of professional learning for mentors of PSTs, their engagement in a PLC provides tangible evidence for the purposes of logging VIT professional learning hours. The PLC assists mentors to identify and make explicit what new learning has taken place for them as a result of mentoring their PST. VIT requires written reflections to accompany the professional learning hours logged by teachers. This aims to encourage teachers to reflect upon their learning and enact change in their behaviour. The critical reflections that take place within the PLC could assist in the recording of professional learning and improving practice. Further research needs to be undertaken to ascertain the extent of this link.

Classroom teachers can be limited in their perspective on how to do things, either due to habit or not considering alternatives. When a PST joins a mentor in their classroom, it provides the opportunity for the mentor teacher to look at things differently. They are able to see differently because the dynamics in the classroom have changed. Mentoring naturally invites the de-privatisation of practice where “classroom teaching observation and feedback is commonplace [and] professional learning planning is focused, pragmatic and shared” (Cole, 2012, p.11). Supporting the practicum experience through the development of PLCs in schools provides another layer to the de-privatisation of practice and another layer of opportunity for the mentor’s own professional learning since in that context, “professional learning opportunities are structured into the day-to-day operations and routines of the school; and a culture of professional sharing, experimentation and critique has become the norm” (Cole, p.11).

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7. Appendix

7.1 Explanatory statement for teacher participants

31 July 2012

Title: Mentors and the practicum experience: opportunities for professional learning

This information sheet is for you to keep.

My name is Christine Lloyd and I am conducting a research project with Dr Rachel Forgasz, a lecturer in the Department of Education towards a Masters of Education at Monash University. This means that I will be writing a thesis which is the equivalent of a short book.

You are invited to take part in this study. Please read this Explanatory Statement in full before making a decision.

Why were you chosen for this research?

You will be mentoring a preservice teacher this semester.

The aim/purpose of the research

I am conducting this research to find out what benefits there are for mentors of preservice teachers in terms of their own teaching and learning and to see if this can be enhanced through the collegial sharing of experiences and critical reflection.

Possible benefits

This is an opportunity to re-examine your practice as a mentor and reflect upon how this changes your own teaching practice. It will provide collegial support in your role as a mentor of preservice teachers. Furthermore, being part of a group which is looking specifically at improving teaching and learning can become part of your MLC Professional Learning Plan under this year's theme of "taking notice". It would count towards approximately three Professional Development hours for the purposes of VIT.

What does the research involve?

The study involves a short online survey, the recording of two focus groups and keeping a professional learning log. The focus groups will be an informal meeting of those mentors taking part in the research, at which you can share your experiences as a mentor and discuss the types of professional learning that take place during the practicum. They will be held at lunchtime for 45 minutes at MLC on a day that suits those involved, possibly Wednesday.

How much time will the research take?

Online mentor profile survey: 15 minutes (timing to suit you in week beginning Mon 30 July 2012)

Focus groups x 2: 45 minutes (lunchtime, possibly weeks beginning Mon 6 Aug and 11 September 2012)

Professional learning log: minimum of 3 entries x 15 minutes (timing to suit you during practicum)

Inconvenience/discomfort

Whilst this study may cause you some inconvenience due to it being an added burden on your time, there are no foreseeable risks of harm. When the results are published, neither the school nor the participants will be directly named. You will be given the opportunity to review transcripts of the focus groups once they have been made in order to verify that they are an accurate record of our discussion.

Payment

Nil

You can withdraw from the research

Being in this study is voluntary and you are under no obligation to consent to participation. However, if you do consent to participate, you may withdraw from further participation at any stage.

Confidentiality

Your confidentiality will be maintained due to the use of pseudonyms in the transcript of data from the focus groups, the professional learning log, and any publications resulting from this research.

Storage of data

Data collected will be stored in accordance with Monash University regulations, kept on University premises, in a locked filing cabinet for 5 years. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report.

Use of data for other purposes

This data may also be used at a later stage in further research undertaken by the University or referred to in publications such as educational or academic journals. Again, privacy and confidentiality will be maintained through the continued use of pseudonyms and referral to MLC as an "independent girls' school".

Results

If you would like to be informed of the aggregate research finding, please contact Christine Lloyd [REDACTED] [REDACTED] [REDACTED]

The findings are accessible for 5 years.

<p>If you would like to contact the researchers about any aspect of this study, please contact the Chief Investigator:</p>	<p>If you have a complaint concerning the manner in which this research (project number 2012001038) is being conducted, please contact:</p>
<p>Dr Rachel Forgasz</p> <p>Lecturer</p> <p>Student Adviser</p> <p>Faculty of Education</p> <p>Monash University, Clayton</p> <p>██████████</p> <p>Room 351 (Building 6)</p>	<p>Executive Officer</p> <p>Monash University Human Research Ethics Committee (MUHREC)</p> <p>Building 3e Room 111</p> <p>Research Office</p> <p>Monash University VIC 3800</p> <p>████████████████████</p> <p>████████████████████████████████████</p> <p>████████████████████████████████</p>

Thank you.



Christine Lloyd

7.2 Consent form

Title: Mentors and the practicum experience: opportunities for professional learning.

NOTE: This consent form will remain with the Monash University researcher for their records.

I understand I have been asked to take part in the Monash University research project specified above. I have had the project explained to me, and I have read the Explanatory Statement, which I keep for my records.

I understand that:	YES	NO
- I will be asked to complete a survey asking me about the challenges and motivators in mentoring preservice teachers	<input type="checkbox"/>	<input type="checkbox"/>
- I will be asked to take part in 2 focus groups of up to four people	<input type="checkbox"/>	<input type="checkbox"/>
- unless I otherwise inform the researcher before the group interview, I agree to allow the group to be audio-taped	<input type="checkbox"/>	<input type="checkbox"/>
- I will be asked to keep a log regarding my professional learning during the practicum	<input type="checkbox"/>	<input type="checkbox"/>

and

I understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way.

and

I understand that any data that the researcher extracts from the focus groups / survey / log for use in reports or published findings will not, under any circumstances, contain names or identifying characteristics without my signed consent below.

and

I understand that I will be given a transcript of data concerning me for my approval before it is included in the write up of the research.

and

I understand that I may ask at any time/prior to publication/ prior to my giving final consent for my data to be withdrawn from the project

and

I understand that no information I have provided that could lead to the identification of any other individual will be disclosed in any reports on the project, or to any other party

and

I understand that data from the survey, focus groups and reflective journal will be kept in secure storage and accessible to the research team. I also understand that the data will be destroyed after a 5 year period unless I consent to it being used in future research.

and

I do give permission to be identified by a pseudonym in any reports or publications from the project.

Participant's name:

Signature: _____ Date: _____

7.3 Research instruments

7.3.1 Survey tool: Mentor Profiling Inventory

This is an existing tool devised by Tony Clarke and John Collins from University of British Columbia, available online

Instructions:

Go to <http://www.mentoringprofile.com/>

Complete the online survey which will help to identify your perceptions about the motivations and challenges of the role. (Note: they refer to your role as a PST mentor as Student Advisor.)

An individual mentoring profile will be emailed to you, collating your responses.

We will use these findings as a starting point at our first group interview. Please forward a copy of this email to me [REDACTED]

7.3.2. Focus Group at start of practicum

Guide for group discussion:

- Each participant introduces themselves:
 - o how many years teaching?
 - o how many PSTs they have mentored in the past?
- What did you find interesting about your mentoring profile provided by the MPI survey result?
- Share an example of how mentoring a PST has changed the way you teach

The research shows that PST mentoring can be a valuable opportunity for your own professional learning, particularly if approached from the position of a co-operative teaching and collaborative learning model. This research project aims to frame the experience as one in which *both the PST and* mentor gain a deeper understanding of teaching and learning. This involves taking more of an inquiry rather than directive approach when you are working with the PST.

- What types or categories of professional learning are likely to occur?
PROMPTS:
 - o new curricular content material
 - o new pedagogical methods and concepts
 - o new strategies or tactics for motivation, presentation, feedback and assessment
 - o improvement in immediate teaching practices due to presence of PST
 - o new understandings of their students
 - o challenges to assumptions and beliefs about teaching

- How might professional learning take place?
PROMPTS:
 - through observation of PST's classes
 - through classes observed by PST
 - through discussions with PST
 - through review of PST lesson plans

- What could be done to enhance the opportunities for professional learning? PROMPTS:
 - discussions with PST of alternative structures, methods of presentation, approaches
 - encouraging PST to put into practice approaches discussed at University
 - change in focus when discussing PST's lessons and lesson plans to a more of a reciprocal arrangement
 - changes in how you observe the class while the PST is taking it
 - gathering feedback through PST's observations of your classes
 - engaging in collaborative teaching with PST

- Can we agree on a way of recording instances of professional learning that take place? Review and discussion of Professional Learning Log template provided by researcher. (*each participant is asked for their response*)

- Is there anything else you would like to raise regarding the project?

7.3.3 Focus Group 2.

Guide for group discussion:

1. Please share an incident which you found really rewarding during the practicum.
2. What did each of you find was the most difficult part of the practicum?
3. In what ways did you change the way you mentored your PST this time?
4. What are your thoughts about keeping the PL Log?
5. Which types of professional learning did you value most and why?
6. I used to think..... now I think..... How have your attitudes or beliefs about teaching and learning changed?
7. How do you think your own teaching has changed or might change?
8. What other comments would you like to make regarding this project?

7.3.4 Template provided to participants for professional learning log:

Mentors and the practicum experience: opportunities for professional learning

Professional Learning Log

Mentor's name: _____ Date: _____

Aim: To record what types of professional learning are taking place and reflect upon how you might be able to use this knowledge later on.

Place a tick in the box/es to indicate the type of learning that occurred:

Curricular content knowledge		Pedagogical methods and concepts	
Strategies for motivation, presentation, assessment		Immediate changes / improvements to my teaching practice	
New understandings about my students		Challenges to my beliefs and assumptions about teaching	

Describe what happened and where. Why was it powerful?