

# CO–DEPLOYED, TEAM–BASED PRE–SERVICE TEACHER PROFESSIONAL EXPERIENCE: INTENDED AND UNINTENDED COLLEGIAL OUTCOMES

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## List of Abbreviations and Terms

B. Ed	Bachelor of Education
BEP	Bendigo Education Plan
BHPE	Bachelor of Health and Physical Education
B. OEd	Bachelor of Outdoor Education
DEECD	Department of Education and Early Childhood Development
Dip. Ed	Diploma of Education (also recognised as Dip Ed)
NAPLAN	National Assessment Program, Literacy and Numeracy
OECD	Organisation for Economic Co-operation and Development
Prac	Teaching practicum – now labelled ‘professional experience’
SCTE	School Centres for Teaching Excellence (as part of the Bendigo Education Plan)
VIT	Victorian Institute of Teaching

## List of Appendices

Appendices have been included as a separate electronic document with this thesis.

Appendix A      Stage 1 Survey Monkey questionnaires – 2011 and 2012

Appendix B      Stage 2 Email interview questions

## Abstract

Design of pre-service teacher professional experience (previously known as Practicum) is changing to mirror the needs of teaching practice, teaching spaces, and teacher preparation. Team-based or co-deployment of pre-service teachers on professional experience, a notion that allows for more than one pre-service teacher onsite in any placement, has the capacity to positively impact on the effective preparation of pre-service teachers. Co-deployment may assist team-based activity, increase co-mentoring, enable peer coaching, and facilitate inclusion to the 'learning community' theory of teaching, but ostensibly, it also provides the potential to improve collegiality and individual resilience in pre-service teachers.

By surveying a group of pre-service teachers involved in a co-deployed professional experience known as 'P2', this thesis identified whether a program of pre-service teacher co-deployment resulted in increased collegiality, and whether contemporary, team-based or co-deployed professional experience engendered a 'learning community' approach to teaching. Findings from this research discussed what pre-service teachers perceived as the longer-term benefits of co-deployed professional experience, and what structures these pre-service teachers identified as constraints or enablers of collegiality in the contemporary, co-deployed professional experience setting. The findings ultimately concluded that pre-service teachers both valued and enjoyed co-deployed professional experience, and that the co-deployment increased their learning opportunities, peer support frameworks, and teaching practice. Longer-term benefits of the program included ongoing peer networks, sharing of teaching advice, and provision of moral and professional guidance. From this research, eight key implications for contemporary professional experience model design have been determined.

## **Statement of Authorship**

Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis submitted for the award of any other degree or diploma.

No other person's work has been used without due acknowledgment in the main text of the thesis.

This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

## **Declaration of Ethics Committee Approval**

All research procedures reported in the thesis were approved by the La Trobe University, Bendigo, Human Research Ethics Committee: Approval Number R004/11 School Centres for Teaching Excellence.

Signed

Date: 23<sup>rd</sup> September 2014

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Finally, I dedicate this thesis to my mother Anne Jepson, a teacher of the finest calibre. May she read this in her current incarnation, and with any luck, agree with what I've asserted...

## Chapter 1. Introduction

### 1.1 Introductory summary

The education system at large has long been subject to public scrutiny, and as a result education provision is under constant pressure to remain current with the needs of society, industry and the nation's economy. Now, in the opening decades of the 21<sup>st</sup> Century, educational philosophy is moving away from the rigidly managed classrooms and rote-learning that characterised the industrial era, and is developing more flexible learning approaches that embrace individualised, differentiated curricula and student-centred learning – methods of information transmission that more closely prepare for the digital, globalised society.

This transformation has necessarily led to significant redesign of both learning spaces and the schools within which they reside. The decentralisation of the classroom to allow for mobility, communication, and interaction with other learning groups has developed the learning space into one based more on community (Bunting, 2004), both in function and form.

Curriculum that is both differentiated and student-centred, and learning spaces that are both flexible and potentially virtual, inevitably impact on teachers – and it has long been recognised that teachers play a significant role in enacting any educational philosophy reform (Main, 2012). Teachers who have only ever worked in the 'chalk and talk' classrooms of the past will, not unreasonably, find the challenges of school redesign deeply taxing, both professionally and personally (Hatton, 1985).

To effectively prepare teachers entering the workforce, teacher preparation must therefore reflect an understanding of, and affinity with, the latest in teaching and learning spaces and styles. Imbuing graduates with the skills and knowledge to work in these flexible communities of learning, with the emphases on collegiality and reflection that characterise the 'learning community' approach, can be of great benefit, not only for those who graduate, but also for the future students of these graduates (Cornu, 2005).

Data and findings identified in this thesis were gleaned from a teacher preparation program built around identified, 21<sup>st</sup> century needs of education provision in Regional Victoria. Developed by Bendigo educators, and a precursor to the School Centres for Teaching Excellence (SCTE) Program, the Bendigo Education Plan (BEP) strove for improved retention and outcomes for secondary students in Bendigo's Government school sector, through redesign of teaching practice, teaching spaces and teacher preparation (Department of Education and Early Childhood Development, 2005). From the aims of the BEP, La Trobe University's pre-service teacher preparation program known as 'P2' enshrined the BEP's emphasis on communities of students and teachers, and involved co-deployment of pre-service teachers, in communities of practice, across an extended period. The resultant outcomes from this project intended to provide understanding into the integration of professional experience and university courses (Pridham, Deed, & Cox, 2013), but this thesis intends to conduct additional analysis of these data to provide insight into how the community focus benefitted collegiality among the pre-service teachers involved.

## **1.2 Research problem, background and need**

Establishing a rationale for the benefits of peer-based and team deployment of pre-service teachers for professional experience is based on research undertaken in countries with a similar economic structure, educational system, and teaching role description. As a result, much of the research reviewed in this thesis is drawn from the United States, Europe, Great Britain, Australia and New Zealand.

Design and development of contemporary pre-service teacher professional experience in these countries can be seen to intersect with three main concepts: teaching practice, teaching spaces and teacher preparation. These three concepts form the basis for the conceptual framework of this thesis, and exploration of the subsequent connections can be found in Chapter 2: Critical Review of Literature.

Each segment of this conceptual framework presents its own considerations when envisaging professional experience models and design, and each has undergone change and development in the last half century of education.

### **1.2.1 Teaching practice and contemporary professional experience models**

This section identifies what teaching practice requires and how contemporary professional experience models can provide for this.

#### ***1.2.1.1 Problem***

Development of effective teaching practice is central to every teacher preparation program, and the prevailing notions of what constitute the most important practical skills of teaching have developed and changed over time (Darling-Hammond, 2006, 2010).

In schools, continued emphasis is being placed on teaching as a collective activity, with focus on teachers working as a team for planning, implementation, and assessment of curriculum. This collegial emphasis requires development of teamwork skills in both graduating and experienced teachers (Johnson, 2003).

Pre-service teacher professional experience has traditionally been a solitary affair, with single mentor/pre-service teacher relationships the norm (Aubusson, 2003; Korthagen, Loughran, & Russell, 2006). If teaching practice is moving to a team focus, professional experience design has a role to echo this.

When designing a contemporary professional experience model, it is also important to consider the specific teaching practices required for satisfactory completion. This requires re-examination and a questioning of some core connections between the professional experience and the development of teaching practice, considering whether pre-service teachers are learning how to teach, or whether the focus should be on learning how to think about teaching (Loughran, Brown & Doecke, 2001).

The mounting pressure is also on experienced teachers to think about their teaching, reinvent their approaches, and improve over time. If these reflective approaches are accepted as important skills for teachers, then these skills need to be integrated into teacher preparation. Professional experience design needs to facilitate the opportunity for pre-service teachers to witness this reflective practice among trained and experienced teachers, and provide opportunity for the pre-service teachers themselves to develop reflective practice techniques (Loughran, 2002).

#### *1.2.1.2 Background and need*

Graduate teachers face a 30–40% risk of leaving the teaching profession within three years of graduation, according to research from the United States, United Kingdom and Australia (Gallego, 2001; Paris, 2010). Stress, isolation, and an inadequate mentoring/induction program on graduation have been identified as key contributory factors (Hartsuyker, 2007).

Demands on teachers are intensifying, and the introduction of NAPLAN (National Assessment Program, Literacy and Numeracy) has increased scrutiny on teaching technique and school efficacy Australia-wide (Smeed, 2010). As part of this emphasis on teacher professional development, teachers are being encouraged to become reflective practitioners, developing strategies for analysing teaching techniques, collaboratively establishing performance benchmarks, and working as professional learning teams (Johnson & Thomas, 2003).

As well as establishing these professional learning teams for the purposes of teacher development, teachers are also being encouraged to work in teams while in front of the class. However, teacher teaming has often been classified as problematic, as teachers themselves are underprepared or inadequately trained to deal with the professional and interpersonal complexities that team teaching can present (Main, 2012; Pendergast, 2006).

Implementation and development of well-structured teacher professional learning communities can increase the resilience of both graduate and experienced teachers, and help bridge the knowledge



gap between the two groups, particularly when challenging educational theories are introduced (Le Cornu & Ewing, 2008).

Establishment of professional experience programs that embrace notions of community, peer mentoring, and development of long-lasting support networks can consolidate and develop skills, and can potentially reduce the attrition of new teachers from the profession (Australian Curriculum Assessment and Reporting Authority, 2013; Cohn & Gellman, 1988; Le Cornu, 2009; Le Cornu & Ewing, 2008). However, it is critical that these innovative professional experience programs ensure that effective role clarity and preparation occur, to ensure that peer-coaches and mentors are aware of their responsibilities within the relationship (Gardiner & Robinson, 2009).

## **1.2.2 Teaching spaces and contemporary professional experience models**

### **1.2.2.1 Problem**

In any professional experience program, it is vital to consider the spaces in which the pre-service teachers interact with their charges and colleagues. Commonly utilised professional experience teaching spaces (standard, traditional classroom layouts) may not always take into consideration the effective preparation of the pre-service teachers involved, nor allow for scaffolded development of skills with students, and effective supervision and support from staff. The spaces may not always replicate a contemporary teaching environment accurately, and as teaching spaces in schools are now moving towards the 'community' focus, simply placing pre-service teachers in traditional classrooms no longer effectively allows for a comprehensive understanding of the diversity of the learning environment.

The challenge is to locate schools that can effectively cater for placement of pre-service teachers into the 'community' classrooms of today.

### *1.2.2.2 Background and need*

Traditional teaching spaces have been criticised for preparing learners for an industrial-based economy, not a knowledge-based one. Modern societies are embracing notions of globalisation, multiculturalism, and a focus on technology in order to progress, therefore teachers' awareness of the impact of sharing and co-operation in learning settings should shift accordingly (Dumont & Istance, 2010).

Teaching in a 21<sup>st</sup> Century classroom may (but will not necessarily) incorporate flexible, multiple use facilities, which may utilise both technology and functionality for the benefit of student inquiry. Teachers may be working in teams with up to 125 students in a community, with learners highly autonomous and mobile within an agreed space (Department of Education and Early Childhood Development, 2009).

Reimagined teaching spaces, variously labelled, but known as 'open' classrooms, require specific teaching skills and capabilities. Teaching in these spaces can be stressful and confronting to both beginning and experienced teachers. Failure of open classroom environments has been attributed to teacher breakdown, and so training, resilience, preparation, and commitment are therefore integral to success in teaching from the graduate years onwards (Rothenberg, 1989).

Teachers must also develop highly capable approaches to team management in an open classroom situation. This is a complex notion when individual approaches to teaching have traditionally been the norm (Main, 2012).

Establishing a professional experience model that enables pre-service teachers to develop collegial dialogue, and to undertake team planning and collaborative endeavour, can ensure that graduate teachers are resilient and prepared for the learning community style of teaching space (Cornu, 2005; Le Cornu, 2009, 2010).

### **1.2.3 Teacher preparation and contemporary professional experience models**

#### ***1.2.3.1 Problem***

Reimagining professional experience should take into account exposure to the newer teaching spaces, while also encompassing concepts of teaching practice, including reflection, collegial communication, and team-based teaching.

Designing a professional experience model that successfully incorporates these components will provide a significant challenge both economically and logistically. The challenge in pre-service teacher preparation has long been to provide an ideal learning experience for pre-service teachers both in delivery of theory and practical aspects, but also to ensure that the experiences are representative of the demands placed upon a graduate teacher. Criticism has thus been levelled at the effectiveness of the traditional, individual block professional experience model as a method of preparing teachers.

#### ***1.2.3.2 Background and need***

Traditional professional experience has focused on block-based, single mentor/pre-service teacher relationships: little emphasis has been placed on risk-taking, collaborative activity, and problem solving. This arrangement has remained largely unchanged for the last half-century, despite the considerable adaptations in the teaching role (Bullough et al., 2003).

However, it has been recognised that the 'block' placement structure needs revisiting. The Top of the Class report on the Inquiry into Teacher Education (Hartsuyker, 2007), noted that while block-style placements were popular with Australian teacher preparation institutions, a style of professional experience that involved concurrent attendance at both university and professional experience could more effectively provide opportunities for both integration of theory and practice, and reflection on classes observed and taught.

The Top of the Class Report (Hartsuyker, 2007) also recognised that while adapting and expanding professional experience would lead to greater reflective practice opportunities, other concerns existed within the placement schools themselves, largely due to time and budgetary constraints. Lack of placement opportunities in schools, inability or unwillingness of trained teachers to take on mentoring roles, and lack of opportunities for supervision and feedback from university staff all contribute to a lack of connectedness between the theoretical basis of university-based teacher preparation, and the hands-on approach of professional experience (Hartsuyker, 2007).

Redesigning professional experience to involve 'clustering' of pre-service teachers within placement schools (as is done in a co-deployed professional experience) serves the purpose of allowing university staff to spend a greater proportion of time at each site visit (Cohn & Gellman, 1988). While an economically pragmatic solution to the cost of university site visits, subsequent evolution of relationships in this model of professional experience also allows mentors and university staff to learn with, and from, pre-service teachers. This highlights the co-mentoring aspect (Le Cornu & Ewing, 2008), recognises the value of pre-service teachers as emerging professionals, and grows the notion of the 'practicum' into one of 'professional experience'.

Establishing co-deployed professional experience with a focus on co-mentoring can also establish collegial networks. In turn, these networks result in opportunities during observation and coaching sessions, for both the observed, and for those doing the observing – if the *observer* views the experience *as one in which they are there to learn from their peer* (Showers & Joyce, 1996).

In addition to better matching the roles and structures of current, emergent classroom and teacher communities, establishment of clustered, co-deployed professional experience can also assist to embed collegial techniques into existing school staff. By establishing communities of learners, pre-service teacher programs can challenge the traditionally individual nature of teaching, both during the professional experience period, and later on, when pre-service teachers become graduate teachers (Cornu, 2005; Hatton, 1985).

The role of teacher preparation is to prepare pre-service teachers for the roles and environments of teaching (Darling-Hammond, 2006, 2010). Professional experiences, considered a vital part of any teacher preparation program, can be reimagined to encompass support networks, co-mentoring relationships, and professional communities that can potentially continue after pre-service teachers complete their teacher preparation program. This could therefore mitigate the stress, isolation, and lack of mentoring support that are commonly highlighted as causes of graduate teacher attrition (Le Cornu, 2009).

### *1.2.3.3 Existing needs: Contemporary professional experience design*

In order to encompass the abovementioned requirements of teaching practice, teaching spaces, and teacher preparation, a contemporary professional experience needs the following:

#### *Teaching practice and contemporary professional experience design:*

- Encouragement to develop networks of colleagues, both within pre-service, graduate and experienced realms
- Continual opportunity to reflect on teaching practice
- Opportunities to question, challenge, and risk take while developing teaching skills

#### *Teaching spaces and contemporary professional experience design:*

- Exposure to re-imagined learning spaces, team teaching structures, and collaborative endeavours

#### *Teacher preparation and contemporary professional experience design:*

- Structures that prepare, train, and advise pre-service teachers on how to effectively peer coach while on professional experience
- Opportunities for peer support, reflection, and coaching, in addition to mentor and university support

### **1.3 Purpose of the study**

The purpose of this study is to investigate whether placing pre-service teachers into co-deployed, community-based teaching environments contributes to collegial contact. It will also identify what the pre-service teachers themselves perceive to be the enablers and constraints of such an arrangement.

### **1.4 Research questions**

The following research questions will guide this study:

Question One: Can co-deployed pre-service teacher professional experience provide collegial support to pre-service teachers?

Question Two: Can co-deployment facilitate the 'learning community' approach to teaching?

Question Three: What do pre-service teachers perceive as the longer-term benefits of co-deployment in professional experience?

Question Four: What do pre-service teachers perceive as enablers and constraints to collegiality and peer mentoring, in co-deployed professional experience deployment?

### **1.5 Significance to the field**

In 2005, the Victorian Minister of Education invited representatives from the City of Greater Bendigo, the Bendigo Regional Institute of TAFE, La Trobe University, and representatives of the Government Primary, Secondary, and specialist schools in Bendigo to come together in a steering committee, with the aim of regenerating Government education in Bendigo.

This steering committee, and the associated working party, formulated the Bendigo Education Plan, a strategy that proposed a number of recommendations that centred on students, curriculum, teachers, community and governance, and school design. These outcomes intended to increase student retention rates, encourage challenge and variety in curriculum, improve engagement, and

improve the knowledge and practice of teaching (Department of Education and Early Childhood Development, 2005).

Publication of this document, and the development of the Bendigo cluster of the School Centres for Teaching Excellence (SCTE) program, resulted in inception of a two-day per week, semester-long professional experience model. This program was run as a partnership arrangement between La Trobe University and the four Years 7–10 Government secondary schools. The program, which became known as P2 (for the two day per week placement arrangement) focused on co-deployed planning and development of curriculum, co-deployment of pre-service teachers, introduction of expert mentor–teacher mentor– pre-service teacher triads, and teaching within a community-style learning environment (Department of Education and Early Childhood Development, 2013; Pridham et al., 2013).

It was recognised by both the coordinators of this program and the author of this thesis that pre-service teachers tended to communicate while involved in professional experience. As the P2 program focused closely on the co-deployed aspect of the professional experience, analysis of the collegial aspects of P2 could potentially identify how co-deployed professional experience occurs, what enables and constrains the experience, and how this is viewed by the pre-service teachers involved in the program.

Results derive from investigating the collegial aspects of the P2 experience could potentially add to the extant pool of knowledge on co-deployed professional experience, but may also be of value in adaptations and development of future P2-style programs.

## **1.6 Scope of the study**

This study was borne from the SCTE P2 program, and will be based on surveys conducted with pre-service teacher participants over 2011 and 2012. In addition it is intended that a sample of participants from the 2011 and 2012 cohorts of the P2 will be surveyed in detailed, individual email

interviews. These data will be thematically analysed and will subsequently form the basis for this study.

## **1.7 Definitions**

### **Block-style professional experience**

Also colloquially referred to as ‘block prac’, an immersion-style pre-service teacher professional experience arrangement that traditionally takes place in a single school, over a blocked timeframe, with a 1:1 pre-service teacher/mentor ratio.

### **Co-deployment**

Pre-service teachers that are deployed on professional experience to the same school or site. Pre-service teachers may be deliberately placed together, or the placement may be co-incidental.

### **Collegiality**

A co-operative relationship between employees, in the context of this thesis, teachers working together on professional dialogue, peer mentoring, constructive coaching and feedback, and development of techniques, skills and resources.

### **Pre-service teacher**

A training teacher, usually participating in an accredited university course. Also known as teachers in training, or traditionally, as student teachers.

### **Mentor teacher**

Traditionally the experienced teacher assigned to a pre-service teacher for the course of the professional experience. Generally these teachers volunteer to take on a pre-service teacher, or are nominated due to their expert teacher status in a school. Can be known as expert teacher-mentors.

### **Reflective Practice**



A cyclic professional development notion that involves identifying aspects of teaching practice, analysing assumptions and habitual or reactive behaviours, and identifying areas for improvement in future situations.

### **Teacher preparation (also known as teacher education)**

Preparation of teachers to enter the profession can take a number of forms. In Australia, pre-service teachers generally undertake formal, tertiary education, with a period of practical experience in classrooms. The pathways to certified teaching status can involve completion of a four-year Bachelor degree, a one year Diploma of Education, or a Master of Teaching. Other forms of direct entry to teaching are available, but fall outside the scope of this study.

### **Team-teaching**

Teaching in a team can take a number of forms. Teachers may take lead/support roles or deliver material individually to small groups. The main distinction of team-teaching is that there is more than one teacher to a group of students in any one teaching period.

### **Traditional classroom**

A generally recognised classroom system of one class and teacher per room, closed to other learning areas. Each classroom generally possesses a blackboard or whiteboard, student desks in rows, and a teacher delivery space. Classrooms may also be set up for specific class purposes such as Technology.

### **Learning community**

A somewhat ambiguous term in literature, but in terms of this study, relates to a group of teachers who work together to engage in professional dialogue, to plan, deliver and assess curriculum, and to engage in mentoring and coaching activities. As with many definitions, a learning community may comprise teachers of varying experience and skill base.

## **Professional experience**

Known in the United States as the fieldwork phase, or field experience, and previously known in Australia as the Practicum, the professional experience is generally accepted as the period of school placement undertaken by a training teacher.

## **1.8 Limitations**

### **1.8.1 Sample, population and gender**

The P2 project, which provided the data for analysis within this study, ran for two years, in 2011 and 2012. In order to glean effective long-term information, both cohorts form an appropriate population from which to sample.

Additionally, as the majority of P2 participants were female, ensuring adequate gender representation for the study could prove difficult.

### **1.8.2 Accessibility of participants**

Participants in both the 2011 and 2012 cohorts had, by 2013, become geographically dispersed in both teaching and non-teaching positions. Gaining contact with those deemed most suitable may, therefore, be difficult.

## **1.9 Ethical considerations**

All research undertaken as part of this study, as well as within the wider P2 program, will be directed by the Human Research Ethics Guidelines set down by La Trobe University.

All participants will participate on the basis of informed consent, with the knowledge that they can opt out or abstain from the project at any time.

All participants' details, responses and correspondence will be securely located, with no access available to any persons other than the researcher and supervisors of this study.

For the purposes of publication, all respondents will be assigned a coded initial, allowing for anonymity and risk mitigation.

This study is covered by the La Trobe Ethics Committee Approval Number R004/11 School Centres for Teaching Excellence.

### 1.10 Summary

The adaptation and evolution of education has necessitated a review of educational provision for the needs of the economy and society of the 21<sup>st</sup> Century.

After development of the Bendigo Education Plan, the School Centres for Teaching Excellence initiative led La Trobe University to develop a contemporary professional experience program for pre-service teachers. This became known as 'P2'.

Participants in this program have been identified as potentially able to provide feedback on the co-deployed professional experience focus of P2, and how this focus could have enabled or constrained collegiality between participants.

This introductory chapter has outlined the background and basis for this study. Identification of literature that discusses the changing needs of teaching practice, teaching spaces, and teacher preparation, and the subsequent re-design of pre-service teacher professional experience as a result, will be undertaken in Chapter 2: Critical Review of Literature.

## Chapter 2. Critical Review of Literature

### 2.1 Introduction

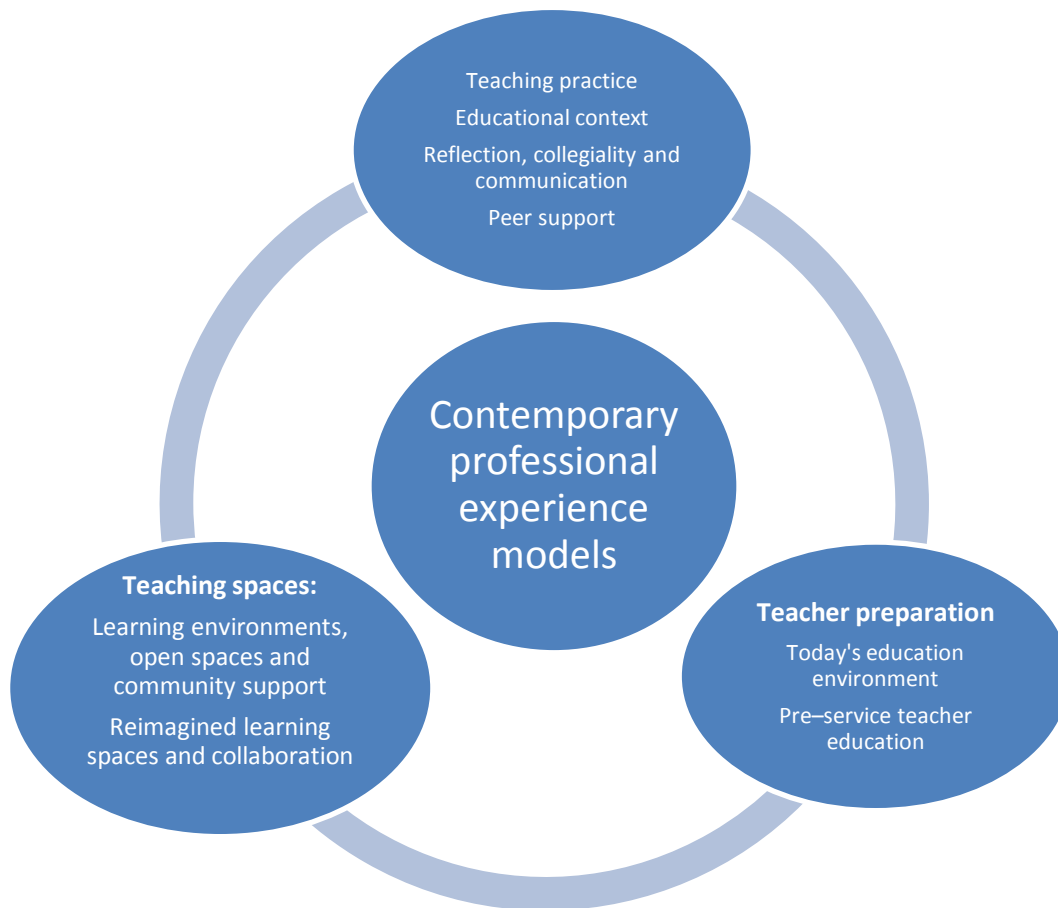
Literature surrounding education is almost as old as the field of formal education itself, both thinkers and writers of classical philosophy continually discuss and reinvent the notions of what education *should* look like, create, and produce. Subsequently, many authors have sought to identify how to create effective education from the physical resources available, and, perhaps more importantly, to prepare the *educators* for their teaching careers.

This review of literature focuses on the field of pre-service teacher preparation: in particular, the impact that engaging in a non-traditional model of professional experience has on effective pre-service teacher outcomes.

Based on an assessment of extant literature, coupled with firsthand experience with pre-service teacher preparation in the secondary context, a conceptual framework has been adopted. This framework connects three notions: teaching practice, teaching spaces, and teacher preparation (see Figure 2.1). The review then discusses the intersection of these three with the literature surrounding contemporary professional experience design.

This conceptual framework provides a boundary to the notions of what implicitly influences contemporary professional experience: it suggests that the ideas of teaching practice, teaching spaces, and teacher preparation all play an interlinked role in best-practice professional experience design.

Through identifying and critiquing this framework, a case has been built for analysing co-deployed professional experience in a 21<sup>st</sup> Century Australian context. It obliges the subsequent methodology of this thesis to investigate how the links between teaching practice, teaching spaces, and teacher preparation have been experienced by the pre-service teacher participants of a recent, Bendigo based program.



**Figure 2.1. Co-deployed professional experience – a conceptual framework**

## **2.2 Teaching practice**

Australia in the 21<sup>st</sup> Century can be conceptualised as being markedly different from the Australia of the past. Changes to economy, society and technology have occurred since the original establishment of the Australian education system. Consequently, pre-service teacher preparation has been pressured to respond to the needs of today's learners.

This section discusses the thinking and structures of teaching practice, both in Australia and internationally. It identifies how a greater focus on student performance is influencing teaching practice, and highlights the views of, and subsequent responses to, some current findings in this field of educational research.

This section also investigates the increased support for teachers to recognise a model of reflective practice: a process of thinking critically and analysing teaching, with the aim of improving teaching methods in a continuous cycle. It examines the call for teachers to work more as a collegial team, rather than in isolation, acknowledging endorsements for teachers to communicate with colleagues and peers on an open, regular and constructive basis.

### **2.2.1 The educational context today**

Education in industrialised nations has seen much change in recent decades. With the variation in Government funding structures, changes in population density and diversity, and the restructuring of many educational facilities, schools may be distinctly different from those of the 1950's (Fullan, 2013).

The job of the teacher is also evolving as the twenty-first century progresses. Generally, class sizes are increasing, there has been development of support for performance-based pay, and the requirements for knowledge and professionalism on the part of every teacher are changing, as is the shape of the school in which they teach. Alongside this, teachers are progressively being encouraged to develop their collegial approaches and to work within a community of professional learners, all of whom are facing the same challenges and goals (Louis, Marks, & Kruse, 1996).

As an example of Governmental pressure on education, continued scrutiny of Australia's educational scorecard in comparison with similar OECD countries culminated in commission of a report by the Australian Government in 2012, the findings of which have recommended broad-sweeping reforms of educational funding. These included adjustments in funding for socially or economically disadvantaged students and schools, additional control of facilities, design and layout by school communities, increased focus on supporting students with learning difficulties and those from Aboriginal and Torres Strait Islander backgrounds, and development of a national Australian curriculum (Gonski, 2011). Adoption of this report, at the time of writing this thesis, is still unconfirmed.

Development and release of the MySchool website in 2010 placed school performance in focus for many parents, the key consumers of Australia's education system. When combined with the availability of data from NAPLAN, considerable pressure has been placed on every school to justify its outcomes and perform at a best-practice level, and subsequently, for teachers to be readied for these requirements (Smeed, 2010).

Many new teachers are finding the combined challenge of policy and community too immense. For a range of reasons, 30% of graduate teachers in the United States quit in the first three years of teaching (Gallego, 2001), similarly the graduate attrition in Australia and many other developed nations is as high as 40%, particularly in rural and remote areas (Paris, 2010).

Korthagen et al. (2006) discussed the changing and conflicting goals of teaching, and in particular identified how much of the decision making of a teacher requires compromise or trade-off between two competing scenarios. His perceptions concur with Schön (1983), who noted that "practitioners are frequently embroiled in conflicts of values, goals, purposes and interests" (p. 17) when creating and developing the professional ethic. Korthagen et al. (2006) went on to assert that in dealing with these conflicts, "reflection and intercollegially supported learning are viewed as important cornerstones of practice" (p. 1025). A number of authors, including Le Cornu (2009,2010) and Loughran et al. (2001) believe that championing this focus on reflection and the value of the colleague will, in part, reduce the transition shock suffered by graduate teachers.

This review of literature will therefore create a number of connections between teaching practice, teacher spaces and teacher preparation, principally by focusing on what teachers need to be, how and where they must work, and subsequently, what they must know. It is then that Korthagen's (1999; 2006) *changing and conflicting goals* can be envisaged in the context of innovative professional experience approaches.

### 2.2.2 The call for reflection, collegiality and communication

In the views of, Handal and Vaage (1994), Korthagen (2004), Loughran (2002) and Zeichner (1994) all practising teachers must be prepared (and therefore trained) to be reflective practitioners.

Teachers are now strongly encouraged to “better understand what they know and do” (Loughran, 2002, p. 34), a term widely recognised as Reflective Practice. Loughran (2002) asserted that the adoption of reflective practice for teachers would assist in informing the whole profession, and thus increase the knowledge base far more effectively than the “routinized” (p. 34) approaches offered by teaching experience alone. Loughran (2002) theorised that teachers tend to rationalise a repeated problem as just a routine part of teaching, and until they developed the skill and capacity to differentiate between rationalising a situation and reflecting on it critically, “alternative ways of seeing [cannot] be apprehended” (p. 35). Loughran (2002) therefore advocated not only development of reflective capacities, but also a recognition among teachers that simply teaching, then analysing the outcome, was not an adequately reflective approach.

Zeichner (1994) identified the “reflective practice movement” as a “recognition that teachers have good theories too” (p. 10), and noted that the uptake of reflective practice training for practising and pre-service teachers represented a realisation that “learning to teach continues throughout a teacher’s entire career” (p. 11). He proposed that reflective practice enables teachers to “play active roles in formulating the purpose and end of their work, a recognition that teaching and educational reform need to be put into the hands of teachers” (p. 10). Therefore, reflective practice requires more of today’s teacher than just teaching, it involves them *thinking about teaching*.

Coupled with the notion of reflecting on action in teaching, and often a key vehicle for achieving it (Binks, Smith, Smith, & Joshi, 2009), is the development of a more collaborative, collegial approach to teaching in the twenty-first century classroom. Johnson and Thomas (2003) ascribed the process of teachers working as a team as a way to “maintain their commitment to improving student learning, develop their professional knowledge and enjoy a sense of professional wellbeing” (p. 5).



They also recognised the broad-ranging benefit from collaborative approaches, noting that teachers' "productive teamwork...has the power to change the culture of schools and make continuous learning and improvement not only possible, but manageable" (p. 5).

The current Victorian Department of Education and Early Childhood Development now recommends *Working in Teams* by Johnson and Thomas (2003) as part of its push to create more teamwork within the teaching profession, thus identifying the objectives of the current Victorian Government in terms of teacher practice.

### *2.2.2.1 Solitary versus collaborative approaches to teaching*

Classroom teaching has traditionally been a single, isolated experience, with one teacher taking sole responsibility for a classroom and all its achievements – be they successful or otherwise (Lortie, 1964). Teachers have often supported this "individualistic approach to their work" (Hatton, 1985, p.228) and adhered to "rigid traditionalism" (Pendergast, 2006, p. 18) when pressured to adapt or change teaching practice.

Literature frequently recognises that teachers are resistant to collegial activity, including collaborative approaches to thinking and teaching, with the traditional practising teacher unwilling to adapt to shifts in thinking purported by policy (see: Hatton, 1985; Johnson & Thomas, 2003; Korthagen, 2004; Louis et al., 1996; Pendergast, 2006). Cornu (2005) concurred with the findings of Bullough et al. (2003), in highlighting that the solitary approach to planning and execution of teaching in solitude was a "major impediment" (p. 67) to progress in education. Hatton (1985) hypothesised that this impediment was attributable to both teacher resistance, and to teachers' traditional "value on privacy, autonomy and individualised practices" (p. 228).

The resistance of teachers in practice to engage in collective approaches was also highlighted by Pendergast (2006) as an inhibitor to successful implementation of educational reform. She noted that "unco-operative, non-supportive, or poorly trained" (p. 18) teachers were a significant risk to the development of new middle-schooling initiatives, a view echoed by Main (2012) who then noted

that these unsuitable candidates were subsequently “required to manage the process of forming and developing as a team and then sustaining effective team practices, in many instances, without any guidance or training” (p. 76). It is thus quite recognisable that poor teacher preparation, plus poor in-service training in collegial activity would result in a marked lack of participant enthusiasm for any ‘team’ approach.

The notion of *team-teaching* involves “the establishment of teaching teams to create small communities of learners” (Main, 2012, p.76) and assumes that a group of teachers will enthusiastically work together to achieve a common educational outcome. If, as in the view of Pendergast (2006), staff are unprepared for this reform process, then resistance to team teaching can, and very well may, occur. Havnes (2009) in discussing the findings of a Norwegian Interdepartmental Team Teaching (ITT) study, acknowledged that resistance from traditional “status quo” (p. 165) thinking seriously hindered both development of a teaching team, and the *renegotiation* of teaching preparation – the “historically mediated institutional practice” (p. 165) of teachers unfamiliar with interdepartmental team approaches, eventually led to a covert resistance of the team concept.

Hatton (1987) ascribed much of the resistance expressed by practising teachers to innovation as a symptom of the *hidden pedagogy* – a notion of a shared collective subconscious that informs typical practice as a teacher originally coined by Densgombe (1982). Hatton (1987) paraphrased Densgombe (1982) by stating that “there is a hidden dimension to the work of teaching, a ‘hidden pedagogy’ which imposes strong although not insuperable constraints on innovation” (p. 457).

Hatton (1987) then expanded this theory to include the normative pressures of parents and society on what *they* consider appropriate practice, when external pressures were combined with the prescriptive and traditionalist nature of pre-service teacher preparation, she noted that educational change of this nature became extremely difficult to enact in practice. She saw pre-service teacher preparation as having a key role in “bringing the attention of beginning teachers to the intricacies of

these too often hidden processes” and voiced the hope that this “might help break a cycle which hinders the realisation of educational goals” (p. 468). In relation to reflecting on professional experience while in the pre-service, she suggested, “the work situation should be addressed as one which not only places limits on teacher work but also has possibilities awaiting exploitation. [Pre-service teaching] students might be encouraged to see that, by steering a judicious path between strategic conformity and strategic redefinition, beginning teachers can start to implement progressive change in educational practice” (p. 468).

Hatton (1987) therefore saw an opportunity for pre-service teacher preparation to take a role in developing the questioning, reflective aspect of pre-service teachers, ones that would enact change as they entered the graduate workforce.

### **2.2.3 The importance of peer support in facilitating critical reflection**

It is difficult as a teacher to learn, let alone critically reflect, when much of the teacher’s daily tasks occur in isolation. In an oft-cited work on public education, Dewey (2004) observed that learning was subject to the influences of the community (p. 10), a notion examined and expanded by Schmidt (2010), who noted that education in conjunction with others “tested one’s ideas against the experiences of others, in addition to one’s own experiences” (p. 132).

Similarly, Showers and Joyce (1996) identified that teachers who “shared aspects of teaching, planned together, and pooled their experiences” (p. 14) demonstrated greater retention and practice of new teaching techniques over an extended period of time: they *reflected and changed* their actions, based on the thinking they had shared with others. However, Showers and Joyce (1996) did insert a strong caveat in their recommendations: the process of gaining maximum benefit from peer support relied heavily on establishment of a suitable mindset among teachers, as well as structured peer-based support processes from the schools.

Sorensen (2004) supported this view, noting that “where the most effective practice has been identified, it has tended to be in schools where there has already been a strong commitment to

collaboration” (p. 17). Therefore the school needs to create a positive environment for the collegiality to take place – a notion which raises a number of logistical concerns. It has previously been established by a number of authors (Hatton, 1985; Johnson & Thomas, 2003; Korthagen, 2004; Louis et al., 1996; Pendergast, 2006) that the school itself, or more specifically, the teaching population can be the source of resistance, so pre-service teacher preparation has an opportunity to enact pre-emptive change in its graduates’ mindsets.

In a similar call to that of Hatton (1987), Margetts and Nolan (2008) elucidated the flow-on benefits of teaching peer-based, reflective practice skills within pre-service teacher preparation, identifying that “as they become more comfortable with the process and gain confidence in exposing their own work and ideas to the critique of others, they will become more assertive in challenging their own beliefs and practices as well as those of others” (p. 66).

In essence, the connection is made by these authors between the value of peer-based discussion and that of reflective practice, and the impetus that pre-service teacher preparation can provide to enacting progression and change in teacher culture: whole communities of reflective, collegial-minded graduate teachers have the opportunity to re-write the *hidden pedagogy* of the future (Denscombe, 1982).

## 2.3 Teaching spaces

This section discusses the evolution of teaching spaces. In schools, spaces for teaching (and learning) have been traditionally referred to as classrooms. Now in the second decade of the 21<sup>st</sup> century, teaching and learning spaces are realised in both a variety of forms, and with a range of labels, including learning communities, learning hubs, learning neighbourhoods, flexible learning spaces, and learning centres. Current literature does provide both nomenclature and definition for these learning spaces, and these are reviewed as part of this section. By reviewing the literature on learning spaces and the effect these have on teaching practice, this section subsequently infers that

reflective and collegial practice intersects with, and is integral to, the reinvention of the eponymous classroom system.

### **2.3.1 A brief historical and etymological overview of the 'open' classroom space**

Rothenberg (1989) outlined the background of the non-traditional classroom system by recounting the situation in post-war Britain, which saw schooling move to a more flexible, integrated curriculum. He noted that the educational discontinuity caused by resettlement of children during wartime resulted in a need for re-examination of both classroom layout and subject integration.

Rothenberg (1989) claimed that the subsequent flexible learning spaces, amalgamated age and ability groups, and desegregated subject matter were identified and studied by visiting American educators in the 1960's, who adapted many of the tenets of the system into what they termed "open classrooms" (p.71). Their subsequent definition of this re-imagined learning involved adoption of several key features, including co-operative and collaborative learning, a high level of mobility within and between learning spaces, and student-centred autonomy over activity choice. Structurally, a number of small stations were set up, with "a teacher stationed in each" (p. 71). This design is comparable to that developed as part of the Bendigo Education Plan (BEP), the model utilised in this thesis.

Literature surrounding the modern (and Australian) interpretation of the 'open' classroom is isolated in nature and challenging to locate. This may be due to the variety of labels assigned to the non-traditional classroom, it may also be attributable to the subtleties in defining what a non-traditional classroom *looks* like.

A reimagined learning space may comprise a large number of students housed within a flexible-space-oriented "neighbourhood," educated by a team of teachers, with a key focus on facilities being used "concurrently and consecutively" by staff and students (Department of Education and Early Childhood Development, 2009, p.17).

It may, instead focus more on the intangible aspects of learning. The Organisation for Economic Cooperation and Development (2006) emphasised the notion of family as a key educational framework. In its discussion of 21<sup>st</sup> Century Learning Environments, it referenced New Zealand schools' labelling of open spaces through the Maori term 'Whanao,' meaning 'family'.

Mäkitalo-Siegl, Zottmann, Kaplan, and Fischer (2010) urged reconceptualization of the learning space, they therefore encouraged redesign and relabelling of *classrooms* (in the traditional sense) to "collaborative spaces" (p. 2). They argued that the notion of collaboration enabled schools to enhance focus on student-centred learning. Mäkitalo-Siegl et al. (2010) also highlighted the notion of "built pedagogy" as identified by Monahan (2002), and drew a strong connection between the physical environment of learning, and the subsequent development of social interactions. They asserted that not only would taking the teacher from the "frontal position" (p. 2) require major redesign of learning spaces, but that such collaborative classrooms would also require the teacher to "scaffold" the learning experiences, an intricate and complex role.

Bunting (2004), labelled the redesigned learning structures in Australian schools both as *houses* and as *studios*, and acknowledged that the design of such facilities needed to provide for both formal and informal learning spaces for its residents, and serve as connected hubs between the schools and the wider community.

Fisher (2005) allocated similar labels to those used by Bunting (2004), discussing *hubs*, *studios* and *group learning spaces* as key areas for collaborative learning.

The varied interpretations by all the above mentioned authors create a clear assumption for teaching, that in reimagining the learning space, at least some redesign of the teaching role would be inherent.

### 2.3.2 Learning environments, open spaces and 'community' support

We suggest that a good deal of the research needs to be interpreted and “translated” into a more holistic perspective as this is precisely the one relevant for many practitioners and decision makers. Their guiding questions are less of the sort “how can I improve this particular aspect of learning of this particular individual” and more “how can we organise matters to optimise conditions for learning for all those for whom we are responsible?

(Dumont & Istance, 2010 p. 318)

Dumont and Istance, writing for the OECD Centre for Educational Research and Innovation (2010), thus noted that developing an understanding of *learning environments* was of greater value to education in general than of developing educational opportunities for *specific individuals*. They asserted that the move towards a “global village” (p. 21) incorporating diverse cultures, prolific contact with ICT, and lifelong learning requires “teamwork, social and communication skills [which are] integral to work and social life in the knowledge society” (p.23). Dumont and Istance (2010) subsequently contended that the currently recognised structure of schooling prepares people for an industrial economy, not a knowledge-based one.

Thus their framework for an effective learning environment possesses the following characteristics:

- *Learner-centred*: focus of all activities
- *Structured and well-designed*: to employ the role of teachers in supporting inquiry and autonomous learning
- *Profoundly personalised*: sensitive to individual and group differences in terms of background, prior knowledge, motivation, and abilities
- *Inclusive*: sensitive to individual and group differences in terms of learning needs
- *Social*: learning most effective when cooperative and in group settings (Dumont & Istance, 2010, p. 18).

They ultimately contended that learning spaces, curriculum design and community involvement all play a part in rethinking the way teaching and learning is delivered.

The Department of Education and Early Childhood Development (2009) identified similar requirements for reconsidering schooling, when endorsing the design rationale for 21<sup>st</sup> Century Victorian learning spaces including the Bendigo Education Plan (BEP) (p. 17). As well as identifying the importance of creating spaces to support “both teacher and student centred learning” (p.17), the report stipulates that “the resulting schools [developed under the BEP] should also be part of their community rather than being isolated facilities that operate for only a small part of each day” (2009, p. 19).

#### *2.3.2.1 Connecting the classroom and the community*

The notions of community, collaboration, and the formation of the knowledge economy seem common concepts in relation to rethinking school design, with authors such as Darling-Hammond (2010), Dumont and Istance (2010), Gislason (2009) and Margetts and Nolan (2008) connecting the 21<sup>st</sup> century economy and society with the need for 21<sup>st</sup> century educational facilities – a departure from the traditional classroom.

Bickford and Wright (2006) extolled the need for rethinking learning spaces as “a way to improve student (as well as faculty and staff) learning and engagement” (p. 4.2) in the wider community, both inside and outside the school. They noted that “fostering community is critical to learning” (p. 4.1) and subsequently held that the impetus of a community could enhance student learning through improvement of learning spaces, enhancing ICT based collaboration, and improving “pedagogical, curricular and co-curricular environments” (p. 4.2). As with the approach espoused by Dumont and Istance (2010), Bickford and Wright (2006) presented the tertiary education model as a key example of community centred learning: the notion of collective tutorials, learner-centred approaches and use of less instructional classrooms as seen in universities was cited by these



authors as a key facilitator of the community notion of learning, and one that would be effective in a middle and upper secondary context.

Thus, re-thinking learning to support the community's ideals has been proposed. This does lead to some ambiguity within the definition of community, as it can mean a collection of learners, as noted by Gislason (2009), a collection of colleagues, as identified by Le Cornu (2010), a group of people *outside* the school, as suggested by Bickford and Wright (2006) and Blackmore et al. (2010), or a fusion all of these things, as endorsed by Dumont and Istance (2010). The common thread through this literature is the notion that a group of people work together towards a common goal, rather than working in parallel, or in isolation. The physical and spatial dynamics of a community remain standard, as does the grouping of people by background and aim.

This thesis focuses most closely on preparation of *teachers* to plan, deliver and assess knowledge in the 21<sup>st</sup> century environment, thus, discussion on the learning merits of redesigned school spaces *per se* is outside this scope of this thesis.

However, this review does intend to discuss the impact of these spaces on pre-service teacher preparation, specifically during the professional experience, and the requirements of these spaces on the capacities of teachers form the basis for the next section.

### **2.3.3 Reimagined learning spaces and increased collaboration**

Discussions by Rothenberg (1989) surrounding the role of the teacher in a reimagined learning space identified three main departures from the 'traditional' notion of the teacher:

- Teacher is an *instructor* – working with small groups, and only occasionally working with a larger class
- Teacher is a *record keeper* – monitoring, collating and recording achievements, and redirecting where necessary

- Teacher is a *director* – managing and creating an environment to elicit learning outcomes (pp. 72–73).

Rothenberg (1989) contended that these evolved teaching roles demanded effective skill development from teachers:

It is not easy to be an effective open classroom teacher. It takes training and preparation...teachers must be professionals in the best sense of the term. They must use their expertise continually – to make decisions, to modify the instructional format to fit the situation and students. Not everyone can do this well. Proper organisation of activities, materials, and time, together with effective management strategies, can reduce the strain on teachers (Rothenberg, 1989, p.80).

The strain on teachers responsible for enacting open classroom style change is not limited to the current cycle of educational change. Writing on the complexities of working in open classrooms, Kohl (1969) noted the strain that he felt when he first encountered open classrooms, and what happened when he formed a collegial relationship with another, more successful and experienced teacher:

What he had achieved seemed unattainable for me...but we talked about my problems and he told me of his own difficulties during his early years as a teacher. Knowing that he had similar problems made me, somewhat more hopeful. He helped me to locate the source of my difficulties in myself and in the pathology of the classroom instead of in the students. He also showed me the need to find alternatives to textbooks and to the domination of the teacher (Kohl, 1969, p.3).

Kohl further contended that teachers benefit greatly from having an “ally” (p. 33) within the school, with whom they can openly discuss and plan, as well as structure connected classes, teach together, and support each other’s students. His findings, therefore, suggest that collegial support in an open learning environment are intrinsically linked to a teacher’s sense of wellbeing.

Cornu (2005) endorsed and identified this kind of shift in professional thinking about teachers working together in re-imagined learning spaces, urging a move towards “collegial learning relationships,” and away from in-service mentoring being viewed as a “hierarchical” approach. She proposed that by encouraging teachers to adopt co-mentoring as a “collaborative” approach (p. 356) effective, constructivist *learning communities* would evolve:

The work of such communities is to promote professional dialogue, which aims to enable teachers to ultimately change practices and social relationships in classrooms and schools, so that learning outcomes are maximized for all learners (Cornu, 2005, p. 356).

Cornu (2005) saw initial teacher preparation as a key player in acquainting pre-service teachers with the notions, philosophies, and principles of these communities, in order to best prepare the teachers of the future. She argued that it is imperative for pre-service teacher preparation programs to be committed to the priorities of “mentoring, interpersonal skills and critical reflection skills” (p. 359).

Cornu (2005) identified that teachers tended to be more comfortable working with children than with other teachers, particularly when called upon to critically reflect and improve. Given that she recognised that teachers traditionally work in isolation, her recommendations for encouraging pre-service teachers to co-mentor in preparation for learning communities would most effectively prepare them for what the school (and its new learning spaces) may be supporting, but practising teachers within those spaces may not.

The entreaty for enhanced use of collaborative pedagogy has been previously highlighted in an historical context by Hatton (1985). She noted that the initial push of the 1960s and 1970s towards team-teaching remained largely unheard in the 1980s, but that the move toward open-plan classrooms was a mandate for major cultural shift in teacher thinking, for both pre-service and in-service teachers. Teachers’ “cultural support of an individualistic view of their work”(p. 240) was cited by Hatton (1985), and highlighted earlier in this review of literature, as a major impediment

towards collaborative thinking. She believed that teachers are traditionally, intrinsically individual in their approach, and therefore suggested that the “changed structures of the open–plan setting allow for cultural interruption” (p. 240) and that such settings can facilitate appreciation of a changed approach to teaching. She further encouraged pre–service programs to inspire teachers (both pre–service and practising) to use the changed structures “corporately” (p. 240) in an effort to promote progressive, collaborative change, and collegial support.

Gislason (2009) envisaged these corporate connections, and saw implementation of open–plan settings as a key instigator to developing collaborative planning, teaching and assessment opportunities for teachers, thus combining “design, instruction and curriculum...in a mutually supportive fashion” (p. 17). He argued that the *house* system of classroom design, with open spaces, interdisciplinary teaching, and block scheduling of learning groups “actually demand collaboration among the teachers” (p. 26).

A conceptual connection can subsequently be drawn, based on the notions of Hatton (1985), Cornu (2005), Gislason (2009) and Le Cornu (2010) between learning communities, open–plan spaces, increased collaboration among teachers (practising and pre–service) and a departure from traditional models of teacher training. If teachers are exposed to open–plan teaching and learning spaces and techniques, this experience may form the catalyst for change in teaching practice.

## **2.4 Teacher preparation (pre–service teacher education)**

This section discusses the role that teacher preparation plays in ensuring adequate preparation of graduate teachers. It emphasises the role that pre–service teacher preparation plays in creating teachers that are not only ready to teach, but that are graduating with the reflective, collegial skills that principals and schools seek in their staff profiles.

The importance of a carefully crafted professional experience is analysed, with reference to several authors who question the validity and authenticity of the traditional professional experience, and draw contrasts between these and redesigned, innovative models.

#### **2.4.1 The current educational environment and its pre-service teacher preparation requirements**

Teacher education programs have a critical role in preparing quality, competent teachers for schooling, and the environment for teacher education is under significant pressure to adapt (Ramsey, 2000).

Darling-Hammond (2010) held a similar view to Ramsey (2000), arguing that the onus of providing quality teachers rests significantly on structured training programs that provide contextual, comprehensive coursework components. More significantly to her study, she identified “careful oversight of the quality of student teaching experiences [as a feature of] exemplary” teacher preparation programs (p. 40).

Thus, Darling-Hammond (2010) emphatically connected quality student teaching experiences (professional experience) with the eventual presentation of trained, competent teachers. “Learning to practice, in practice, with expert guidance, is essential to becoming a great teacher of students with a wide range of needs” (Darling–Hammond, 2010, p. 40).

Zeichner and Gore (1989) asserted that the quality of the pre-service professional experience is vital to the individual development of quality teachers, they cited free access to a range of classrooms and support for collegiality and discussion as significant impacts on the learning experience.

Le Cornu (2010) also endorsed the professional experience process for pre-service teachers, but while she identified the importance and support for professional experience she also maintained that the changing landscape of education towards *learning communities* has prompted the need for reinvention of professional experience structure and associated nomenclature.

Le Cornu (2010) viewed these *learning communities* as playing a role in bringing together practising teachers as reflective practitioners. However, she also endorsed the learning community as a key model for pre-service teacher preparation. Le Cornu (2010) encouraged pre-service teacher educators to “focus on reciprocal learning relationships and a deepening participatory process” (p. 196), suggesting that the communities of practice that eventuated would benefit both the pre-service teachers and those already teaching. Additionally, Le Cornu (2010) highlighted the benefits of clustering pre-service teachers in a school on professional experience deployment, citing as benefits the opportunity for pre-service teachers and mentor teachers to support their peers, as well as the opportunity for strengthened relationships between the school and the university.

In discussing a reconceptualisation of pre-service teacher preparation, and particularly the professional experience, Le Cornu and Ewing (2008) identified a secondary, far-reaching benefit: that of the learning opportunities for the *practising mentor teachers*. “High quality professional experiences, we would argue, are underpinned by a commitment to professional learning communities where all teachers’ ongoing professional learning journeys are prioritised” (p. 1799). In an educational landscape that is endorsing professional learning and reflective practice for *all* teachers, (see Chapter 1.2 of this thesis) Le Cornu and Ewing (2008) proposed that reconceptualising the professional experience could provide “collegial learning relationships” (p. 1803), and increase the co-deployed learning for all participants – even those representing the university.

Thus, it can be conceptually envisaged that the learning opportunities for mentor teachers (Le Cornu & Ewing, 2008), coupled with the clustering of pre-service teachers (Le Cornu, 2010), could overcome some of the resistance to collegial activity purported by practising teachers (Hatton, 1987).

In developing understanding of how best to prepare teachers to work in teams, Podeschi and Messenheimer-Young (1998), like Le Cornu and Ewing (2008), advocated challenging the norms and assumptions of the experienced, individualistic teacher. They argued that in creating truly dynamic

change in teacher preparation, delivery of pre-service teaching experiences should also comprise team-teaching approaches on the part of the *lecturers*, at least as part of the overhaul of pre-service teaching professional experience design. In assessing the findings and experiences of this team of university staff as they grappled with interdepartmental, co-deployed teaching programs, Podeschi and Messenheimer-Young (1998) did deduce that such a structure enhanced inquiry into goal setting, interpersonal and classroom dynamics, and the subsequent “dilemmas” (p. 214) of logistically managing such a system within university structures and confines. This concurs with the broader assertions of Billett (2001) who identified the importance of co-participation in any vocational learning of this nature. Billett (2001) asserted that effective learning was enabled by “encouraging participation by both those who are learning and those guiding the learning” (p. 213), and further suggested that this co-participation would provide benefits to both the employees and the employers. In relation to this thesis, this would involve the pre-service teachers, pre-service education lecturers, and the school community at large.

The Australian Government’s discussion on the approaches to funding teacher training identified the value of the professional experience to creating a sound teacher workforce (Ramsey, 2000).

Therefore, redesigning the professional experience may create reciprocal benefits for the parties involved: the pre-service teachers are effectively prepared for teaching (Grudnoff, 2011), practising teachers mentor and develop reflective capacity (Le Cornu & Ewing, 2008), and universities will glean knowledge in practice (Podeschi & Messenheimer-Young, 1998), as the educational landscape continues to move towards a 21<sup>st</sup> century frame (Darling-Hammond, 2006, 2010).

#### **2.4.2 Current thinking in pre-service teacher preparation – creating sound teachers**

Darling-Hammond (2000) saw effective pre-service teacher preparation programs as having a vital role in preparing teachers who were “both more effective, and more likely to stay in teaching” (p. 166). She asserted that pre-service teacher preparation must:

Engage prospective teachers in studying research and conducting their own inquiries through cases, action research, and the development of structured portfolios about practice. [The programs] envision the professional teacher as one who learns from teaching rather than one who has finished learning how to teach, and the job of teacher education as developing the capacity to inquire sensitively and systematically into the nature of learning and the effects of teaching...one that aims to empower teachers with greater understanding of complex situations rather than to control them with simplistic formulas or cookie-cutter routines for teaching. (Darling-Hammond, 2000, p. 170)

Subsequently, in her 2006 recommendations for teacher preparation in the 21<sup>st</sup> century, Linda Darling-Hammond proposed a framework for teaching and learning that encompassed three key areas of knowledge: knowledge of learners, knowledge of subject matter and knowledge of teaching. The intersection of these three aspects created a “vision of Professional Practice” (p. 304), and served as a key ideal to which teacher educators could aspire.

Korthagen et al. (2006) contended a similar framework from their comparisons of systems in the Netherlands, Australia and Canada, but expanded the key aspects to seven “fundamental principles” (p. 1020) with the aim of addressing entreaties “for a radical new and effective pedagogy of teacher education in which theory and practice are linked effectively” (p. 1020). They listed these principles (in summary) as:

1. Learning about teaching involves continuously conflicting and competing demands
2. Learning about teaching requires a view of knowledge as a subject to be created, rather than as a created subject.
3. Learning about teaching requires a shift in focus from the curriculum to the learner
4. Learning about teaching is enhanced through (student) teacher research
5. Learning about teaching requires an emphasis on those learning to teach working with their peers



6. Learning about teaching requires meaningful relationships between schools, universities and student teachers
7. Learning about teaching is enhanced when the teaching and learning approaches advocated in the program are modelled by the teacher educators in their own practice.

(Korthagen et al., 2006, pp. 1025-1036)

These principles paralleled Darling–Hammond’s (2006) ideals. Her notion of “knowing learners” (p. 304) matched with the third principle of Korthagen et al. (2006), that “Learning about teaching requires a shift in focus from the curriculum to the learner” (p. 1029). Similarly, Darling–Hammond’s (2006) “knowledge of teaching” (p. 304) emphasised “preparing teachers as classroom researchers and expert collaborators who can learn from one another.” (p. 305). The correlating principle envisaged by Korthagen et al. (2006) identified pre–service teachers “actively researching their own practice” (p. 1030) as a catalyst to learning to teach.

Perhaps most significant, though, is the emphasis placed by both studies on peer collaboration in pre–service education. Both authors assert that the need for collaboration is strongly driven by teaching practice in the field, and that collegiality is an essential part of both teaching practice and pre–service teacher preparation.

Darling-Hammond (2006) asserted that “the range of knowledge for teaching has grown so expansive that it cannot be mastered by any individual” (p. 305), and contended that it is an expectation in today’s teaching environment that teachers work collaboratively to continue to develop shared knowledge.

Korthagen et al. (2006) identified this need for collaboration and shared knowledge among teachers as the fifth key principle for teacher preparation, noting that “when a restructured teacher education program deliberately emphasizes working with one’s peers, the stage is also set for peer learning about teaching to continue into a teacher’s career” (p. 1033).

Thus, Korthagen et al. (2006) contended that establishment of collegiality in the pre-service teacher preparation program eventually benefitted the participants' capacities to be collegial in their eventual careers:

If, in teacher education, students get used to learning in collegial relationships, this will help to bridge the gap between what is done in teacher education, and what those learning to teach actually need in their future practice. (Korthagen et al., 2006, p.1034)

As has been previously cited from the research of Le Cornu (2005; 2010; 2008), formation of *learning communities* can occur in the pre-service experience, and then continue to flow on to the evolution of practising teachers.

#### ***2.4.2.1 Evolving teacher preparation in order to evolve teaching***

Teacher resistance to change has been discussed in this review, and it has been noted that the culture of teachers can be entrenched and static, particularly in relation to working in teams (Densgombe, 1982; Hatton, 1987).

Bullough et al. (2003) saw the potential in professional experience to enact teachers' cultural change, they observed that when placed in partnerships in professional experience, pre-service teachers came to "appreciate the value, when learning to teach, of working closely with others" (p.68). Alternatively, Korthagen (2004) noted that connecting with reflective practice, as well as developing collegial support within the teacher preparation experience creates teachers who are in touch with their key "mission" (p. 87).

In emphasizing the importance of evolving pre-service teacher professional experience programs, Loughran et al. (2001) articulated a number of key features of the Monash University Diploma of Education program. Primarily the focus of both the Diploma of Education and the study was examination of the transition process from pre-service to practising teacher. The authors asserted that challenging traditional forms of learning is the fundamental imperative, and that confronting

and extending understanding of teaching practice is an important part of professional experience. While they did identify the roles of the university mentor and co-operating teacher as key participants in this process, the support networks and value of teacher socialization were also highlighted in this study. “Without support structures...the transition into full-time teaching may be made all the more demanding and difficult” (p. 16). They further suggested that, “Teacher preparation programs should therefore be able to help graduating student teachers...to keep in touch with their peers” (p. 16). The discussion within this study highlights the connection made by the authors between supportive collegial peer networks during and post-pre-service, and the subsequent ability for pre-service teachers to cope in the early years of teaching.

The need for both teaching and teacher preparation to change has been highlighted by numerous authors (Darling-Hammond, 2006; Korthagen et al., 2006; Loughran et al., 2001). Furthermore, professional experience is a valuable form of teacher preparation (Bullough et al., 2003; Grudnoff, 2011). Learning about teaching, learning about learners and viewing teaching as an evolving process are still significant aspects of teacher preparation (Darling-Hammond, 2006; Korthagen et al., 2006), however it is now recognised that the support and guidance of the peer network can be beneficial in pre-service teacher and in-service teacher preparation (Bullough et al., 2003; Darling-Hammond, 2006; Korthagen et al., 2006; Loughran et al., 2001).

## **2.5 Unpacking the conceptual framework**

This section elucidates and links three concepts: that the notions of teaching practice, teaching spaces and teacher preparation are vital components in creating effective graduate teachers. In reviewing the literature, further connections can be drawn between each of these three conceptual points and the requirements of design in the pre-service professional experience.

It is certainly obvious that pre-service teacher preparation has a significant connection with professional experience design, and professional experience is part of most recognised teacher preparation courses.

Development and evolution of the approaches to teaching, what it means to be a good teacher, and how teaching is moving from a solitary task to a co-deployed program impacts on professional experience design.

Contemporary teaching involves skill in managing a range of learning spaces: be they physical, virtual or flexible in nature. It may be that any one school incorporates a range of learning space designs, and teachers may be called upon to utilise them all. Therefore, preparing teachers for this environment is, potentially, a significant factor in professional experience design.

Designing pre-service professional experience that establishes, nurtures and consolidates reflective, collegial practice is a method of 'starting as we mean to go on', and has the potential to proliferate throughout established school practices.

## **2.6 Professional experience models**

Paraphrasing Guyton and McIntyre (1990), Bullough et al. (2002) noted that "little is known about the effectiveness of the various models for the delivery of field experience. All too often, models for student teaching are developed out of convenience or tradition" (pp. 68–69).

This section therefore assembles a formative framework of professional experience models – establishing various structures that have been studied in recent literature. Included in this section is an interpretation of these concepts in a tabular form (see Table 2.1, p.54). This table has been provided as the extant literature appears to concur with the findings of Guyton and McIntyre (1990) – the various models utilised for professional experience do not appear to have a wealth of empirical basis, and their labelling and definitions vary significantly.

In order to identify contemporary approaches, the most commonly seen, traditional approach will first be explained, and the other approaches depicted in contrast.

### 2.6.1 Contemporary professional experience models

Dewey (2004) is commonly cited (see Anderson, Barksdale, & Hite, 2005; Gallego, 2001; Schmidt, 2010) as identifying personal experience in schools as being critical, but he also stated that a school experience was not always educative. Ostensibly to identify successful educative experiences for pre-service teachers, a number of contemporary models of professional experience are illustrated in this review.

Contemporary professional experience models can take a myriad forms, and generally lacks consistent design specification and labelling in literature. As identified in Table 2.1, contemporary models are known by various names, can contain ambiguities and commonalities in both form and feature, and can vary in nomenclature between countries.

However, in the context of this review, contemporary professional experience' has been identified as containing the following features:

- deviation from the 'traditional' block structure in number of pre-service teachers deployed at each location (known as clustering)
- Mentoring arrangements being wholly or partly peer-based, with peer coaching, observations and support included as an adjunct to 'traditional' experienced teacher mentoring,
- Use of pre-service teaching teams for planning, delivery, and evaluation of student work, rather than pre-service teachers working in isolation in the classroom,
- Major variation from the four or five days per week, 1–2 month duration and timeframe.

Each of these models is discussed below.

#### 2.6.2.1 Co-deployed and clustered

The notion of co-deploying pre-service teachers on professional experience can be interpreted in two ways. First, it can comprise two or more pre-service teachers deployed at a professional

experience location together, without specific team-teaching instruction or scheduling. In many cases, this is coincidental, and is dependent on the size and capacities of the school in accepting pre-service teachers.

The second co-deployment/clustered model follows the thinking of Le Cornu (2010) , Le Cornu and Ewing (2008) and Cohn and Gellman (1988) who recognised that collecting a group of pre-service teachers in a professional experience situation provides many collegial benefits.

Le Cornu and Ewing (2008) discussed programs run by the University of Sydney and the University of South Australia, where professional experience involved establishment of a community of up to 25 pre-service teachers and a designated campus lecturer. These students were grouped in their tutorial classes, and were then deployed collectively on professional experience.

Le Cornu and Ewing (2008) noted that a number of benefits were apparent from this system: the lecturer came to know the pre-service teachers and their strengths and weaknesses, the pre-service teachers found it easy to approach their lecturer with concerns, pre-service teachers created invaluable support networks that endure through the professional experience, and overall, the notion of *community* was endorsed throughout the process.

Clusters of between four and ten pre-service teachers occurred as part of the School Based Teacher Education Programs (STEP) at Washington University, and Cohn and Gellman (1988) noted that the program “foster[ed] within teachers an inquiry orientation which can eventually empower them to be autonomous and analytical professionals” (p. 8). Perhaps more pragmatically, Cohn and Gellman (1988) identified clustering of pre-service teachers as an opportunity for university staff to spend more time in schools, certainly a factor that is relevant to the country Victorian environment in which this study is taking place.

### 2.6.2.2 Peer observed, coached and/or mentored

The notion of peer coaching is ambiguous: Showers and Joyce (1996) stated that the nature of a peer coaching relationship is a delicate one, and that coaching can be misinterpreted and misdirected.

Perhaps a more traditional approach to peer observation and coaching, and one that mirrors the supervisory role of a trained mentor teacher, is the peer coaching model developed in a study by Smith (2004). It appears as if the risks of dominance, interpersonal disagreement, lack of role clarity for pre-service teachers, and confusion among class pupils were more prevalent in Smith's (2004) findings. He also noted that in some cases, class teachers left pre-service pairs to "train each other" rather than learning from each other *as well as* the class teacher.

This study by Smith (2004) has been cited by several authors somewhat critically – Nokes, Bullough Jr, Egan, Birrell, and Merrell Hansen (2008) noted that his "model actually limited opportunities for engagement" (p. 2169), while Gardiner and Robinson (2009) argued that Smith's (2004) study was "unlike" the study undertaken by Bullough et al. (2003), which "focus[ed] on collaboration".

However, Gardiner and Robinson (2009) did point out that both these studies identified the need for role clarity and support (both for pre-service teachers and their mentor teachers) in a peer-observed/coached placement.

Anderson et al. (2005) believed that observation by a peer, *in addition to* the traditional mentor observation program, could provide even greater benefit to the pre-service teacher's professional progression, at least when compared to the traditional mentor/student relationship:

In addition to sharpening observation, this experience can provide more frequent, on-site feedback to the pre-service teacher and reduce the sense of unease that often accompanies observations by the co-operating teacher or university supervisor...it can also develop mutually supportive bonds as the peers progress in their development. (p. 98)

Anderson et al. (2005) identified an aspect here that Showers and Joyce (1996) have noted – that the act of observing a peer is beneficial not only to the observed pre-service teacher, but also serves to improve the observational capacities of the peer *performing* the observation. Furthermore, the authors note that the pre-service teachers continued to participate in informal observation and feedback as the professional experience progressed, and subsequently the authors recommend “training in guided observation techniques” (p. 114) in pre-service teacher preparation programs, with the hope that this mindset and practice will “lead them to seek additional observation opportunities as in-service teachers” (p. 114).

Hasbrouck (1997) supported the notion of peer-coaching in professional experience, providing skills for “strengthening their own teaching skills, and at the same time, providing them with a professional tool for the future” (p. 253). However she urged caution in implanting widespread use of peer coaching in pre-service education, noting that pre-service teachers required considerable training in technique, coding and feedback methods in order to effectively critique their peers. She advised using the Scale for Coaching Instructional Effectiveness (p. 251) for recording pre-service teachers’ observations of their peers, then providing mediated coaching/debriefing sessions for all parties, under the guidance of an experienced teacher. She did note that although the pre-service teachers who participated generally supported the process, those who were defensive or unwilling to receive peer coaching demonstrated less skill improvement across the process.

Showers and Joyce (1996) noted that formal coaching and feedback arrangements among practising teachers provided mixed results. “When teachers try to give one another feedback, collaborative activity tends to disintegrate...peer coaches told us they found themselves slipping into supervisory, evaluative comments, despite their intentions to avoid them” (p. 15). They subsequently recommend a very different peer coaching model from that of Hasbrouck (1997), and Smith (2004).

Rather than the notion of a teacher (or pre-service teacher) providing a lesson, and a peer observing, critiquing and offering constructive feedback to the delivery teacher, Showers and Joyce



(1996) recommended a totally opposite model: that the person being observed in a peer coaching situation is the 'coach', whereas the person observing the material is the 'coached'. No formal feedback is presented, and the person being 'coached' has pre-arranged to sit in on the coach's lesson as if they were any other learner in their classroom. By arranging the relationship in this manner, the person delivering the lesson feels less pressure that they are being assessed. Showers and Joyce (1996) endorsed this system as it reduces training time for participants, allows for coaching to begin immediately after hiring of new staff, and facilitates collaboration outside of the formal classroom setting.

Peer coaching in pre-service professional experience is not a common feature in teacher preparation literature, nevertheless it is accepted by a number of authors as a supportive and beneficial process for pre-service teachers on professional experience rounds. Lu (2010) noted that peer coaching in pre-service teaching has "been evidenced in literature as helpful in various aspects" (p. 748), but concedes that it has not been generally accepted in pre-service teacher preparation. Through compiling a literature review of eight studies, Lu (2010) concluded that peer coaching of this type, while valuable, beneficial and productive, was not sufficiently researched and required some degree of standardization in order for effectiveness to be sufficiently measurable. In the absence of these structures, the feasibility of peer coaching in pre-service education was subsequently called into question.

#### *2.6.2.3 Team deployed*

Deploying a team of pre-service teachers to a school should be disambiguated from the concept of clustering, as has been discussed in this section. Where pre-service teachers are deployed in teams, the intention is for them to plan, deliver, and assess delivery of student work as a collective.

A number of authors have discussed the benefits of deploying pre-service teachers as larger teams on professional experience placement. Turner (2006) discussed the benefits of restructuring professional experience to allow for a team of 25 students to work at a local school for an extended

professional experience, noting that such a program created an “authentic partnership between schools and the university” (p. 24). He reported that the “Teaching School” (p. 25) approach involved extended, co-deployed deployment of pre-service teachers into a local school, with a focus on close involvement with day-to-day activities, staff and the school community at large. Interestingly, the schools selected were within a close geographic proximity to the university, and lecturers and students utilised both locations for resource sharing and visits.

In discussing the outcomes of this pilot project, Turner (2006) noted a significant finding. “The small, self-contained cohort of students – typically much smaller than the cohorts in more traditional teacher education programs – has developed into a professional learning community” (p. 26). He subsequently recommended additional research into deployments of this kind, as there were potentially benefits to both resource management and learning effectiveness for pre-service teachers. He noted that the use of technology effectively allowed the group to work together offsite, using online course material as a prompt to their discussions. “The small group means a significantly more interactive learning environment has replaced the normal lecture style transmission of knowledge” (p. 26).

Turner’s (2006), model closely mirrors the ideals and structures of the Professional Development Schools movement in America (Darling-Hammond, 1994, 2006) in that it focuses on a stronger collaboration between the university and the school, and pre-service teachers are deployed with the intention of collaborating as a team, both inside the classroom and as part of the school community.

Taking the notion of creating a cohesive, team-oriented group of pre-service teachers in a professional experience context, Peters (2006) used a professional experience simulation situation to develop a Problem Based Learning program for Bachelor of Education students at the University of South Australia. By encouraging pre-service teachers to conceptualise “presentation, investigation and resolution of a messy, real world problem” (p. 3) Peters (2006) discovered that pre-service teacher teams engaged in effective reflective practice, engaged in “powerful debate

about real issues” (p. 9), engaged in collaborative learning, and developed effective, group based planning processes.

Although this study was not undertaken in a school-based professional experience situation, the findings of Peters (2006) identify with some assertions made previously in this thesis. First, Peters (2006) notes that the participants avoided being caught up in routine survival techniques. As previously asserted by Loughran (2002), focusing on reflective practice enables pre-service teachers to glean greater meaning from a professional experience. Additionally, Peters (2006) found that by considering the concerns of other stakeholders in a given situation, connection with the wider school community (as discussed by Bickford & Wright, 2006) was enhanced. Perhaps more significantly still, this approach allowed students the “opportunity to talk to peers about our experiences and fears” (Peters, 2006, p. 7) while connecting theory and practice in teaching. This identifies with the notions of Cornu (2005), and presumably assists in creating graduate teachers who maintain collegial communication and planning strategies, as espoused by Scantlebury, Gallo-Fox, and Wassell (2008).

#### *2.6.2.4 Professional experience models: A tabular overview*

Table 2.1 identifies the key models and structures of professional experience deployment as investigated by this study.

**Table 2.1. Professional experience models – a tabular overview of literature**

Name	Features	Supporting studies
Individual block	Block timeframe (four– five days per week)  Single student to mentor (sometimes two mentors per student)	Aubusson (2003)
Co-deployed/ Clustered	Two or more pre-service teachers deployed together, but not necessarily as a teaching team.  Traditionally block format.	Cohn and Gellman (1988)  Le Cornu and Ewing (2008)  Le Cornu (2010)
Peer observed/ Peer coached/ Peer mentored	Two or more pre-service teachers deployed together	Bullough et al. (2003)  Forbes (2004)  Gatfield (1999)  Gardiner and Robinson (2009)  Hasbrouck (1997)  Kurtts and Levin (2000)  (Lu (2010); Smith (2004))  White and Le Cornu (2002)
Team deployed	Timeframe can be block or part-time. Team of pre-service teachers deployed to collectively teach a cohort of students.	Hatton (1985)  Podeschi and Messenheimer-Young (1998)

### 2.6.2 Traditional professional experience design

Traditional pre-service teacher training has taken the form of single pre-service teacher to mentor, block-deployed professional experience placement (Aubusson, 2003; Korthagen et al., 2006). This system, designed to provide what has been variously described as student-teaching experience (Angus, 2001), an apprenticeship stage (Boydell, 1986), field experience (Moore, 2003) and school teaching rounds (Loughran et al., 2001), and has been standard practice in Australia, New Zealand and America for the latter half of the 20<sup>th</sup> Century. It still reigns as a common practice among

teacher training institutions today, particularly in the preparation of secondary teachers (Zeichner, 1992).

Timeframe designs of this block-style professional experience vary, with full and part-time deployments occurring currently in Australian institutions, often dependant on whether these are rural or metropolitan teacher placements. In terms of supervision, it is most common for a pre-service teacher to work with an experienced mentor, who either volunteers or is selected by the school to instruct and support the novice (Boydell, 1986).

#### *2.6.1.1 Limitations and critics of the traditional professional experience model*

Cameron and Wilson (1993) noted that the teacher/mentor relationship is not always a successful one. Though the role of the teacher-mentor in coaching a pre-service teacher is well established, it can range from being a productive, supportive experience to an abrasive and fraught relationship for both parties involved, often conflicts require university intervention to mediate and successfully navigate (Cameron & Wilson, 1993, p. 163).

Bullough et al. (2003) noted that the “typical pattern of student teaching has little changed for 50 years” (p. 57) but pointed out that in this time, the “challenges of teaching have dramatically increased” (p. 58). Korthagen et al. (2006) described the shift in thinking from being overly theoretical to highly practical in teacher preparation, but stated that a successful program needed to effectively “integrate these two perspectives” (p. 1022).

In order to evaluate the relevance and currency of this traditional block teaching model, Bullough et al. (2003) undertook parallel, comparative studies of the traditional structure against a paired placement model. When data around roles, relationships, expectations and relative success of each model were evaluated, the authors noted that the participants in the traditional model were less connected with their mentor teacher than those in a paired placement, and may have required a change in mentor or school in order to successfully complete the professional experience. They further speculated that the presence of a partner in such an arrangement could have reduced this

potentiality. Concerns about the power relationship between mentor and pre-service teacher, workload and time management, and engendering collegiality were also raised by Bullough et al. (2003) within the context of this traditional approach to teacher preparation.

Grudnoff (2011) in presenting findings of a New Zealand study into the effectiveness of traditional teacher training programs, called for the professional experience to be “reconsidered” (p. 223) in order to reduce the transitional shock between the pre-service and graduate years. Grudnoff (2011) noted that the new teachers reported a lack of understanding about what starting up as a new teacher really entailed. Furthermore, *all new teachers responding* in Grudnoff’s (2011) study noted that “they had not seen teachers starting from scratch, but were running someone else’s programme.” (p. 228). She then questioned the relevance of these traditional professional experiences, citing the new focus on pre-service teachers as learners, taking opportunities to experiment with, and reflect on, different teaching approaches. Her recommendations ultimately cited the push for collaborative endeavour espoused by Groundwater-Smith, Le Cornu, and Ewing (1998), in order to mitigate the perceived “limitations” (p. 232) of this traditional approach to professional experience.

Ewing and Lowrie (2010) were critical of overcoming these limitations via simply increasing days on professional experience for pre-service teachers. They argued that it is “the quality of the experience for pre-service teachers rather than its duration that is most important in teacher preparation” (p. 8). They also urged recognition of the difficulties of placing pre-service teachers in meaningful, “quality professional experiences” (p. 4) while school and university resources are under considerable pressure. Moore (2003) noted that the day-to-day “procedural and management concerns” (p. 32) of this traditional professional experience reduced the opportunities for pre-service teachers to engage in reflection. Instead of focusing mostly on lesson plans and classroom behaviour, she recommended utilising the professional experience at an earlier stage in the school

year, with a “situation specific” (p. 32) focus on pedagogical technique, and a greater focus on reflection and thoughtful praxis.

Numerous authors (Aubusson, 2003; Cohn & Gellman, 1988; Ewing & Lowrie, 2010; Le Cornu & Ewing, 2008; Richardson & Watt†, 2006) cite the imperatives of the report by Ramsey (2000) for development of “partnership models between universities and employers [to] increase the amount and quality of professional experience” (p. 57). Ramsey (2000) also suggested that it was imperative to place professional experience at the “centre of teacher education” (p. 58) rather than approach professional experience as “brief trial and error” (p. 19), separate to core theory components of teacher preparation. He suggested that the model of “professional development schools” (p. 57), as also endorsed by Darling-Hammond (2006, 2010) would more effectively support the transition of teachers from the pre-service to graduate years.

#### *2.6.1.2 Support for traditional professional experience*

Though the collected critics of traditional block-style professional experience are numerous (Bullough et al., 2002; Groundwater-Smith et al., 1998; Grudnoff, 2011; Zeichner, 1992; Zeichner, 2010), the counter-argument appears to be a common anecdotal finding—most of Australia’s, if not the developed world’s schools still contain traditional classrooms and single teaching formats (as opposed to teams), with a smattering of redesigned classrooms across the K–12 spectrum.

Aubusson (2003) argued that change in teacher preparation in Australia, although potentially warranted, should be approached for the right reasons. He did not advocate removing a successful program, and suggested that the block model utilised by the University of Technology Sydney (UTS) demonstrated the kinds of positive outcomes that this ‘traditional’ approach can provide:

Teachers in schools find the block professional experience more convenient. Some are concerned that if we modify the professional experience to a model unattractive to schools, some schools may simply accept student teachers from other institutions rather than

UTS....the change in timing of professional experience requires negotiation if working with our students is to remain attractive to supervising teachers. (Aubusson, 2003, p. 185)

Aubusson (2003) also contended that response to the Ramsey (2000) report commissioned by the New South Wales Government should be “based on evidence related to the particular programme” (p. 175) rather than a “reaction to a general review” (p. 175). In other words, results from data collected by the UTS team demonstrated success with the block-style professional experience program of that institute, and instead suggested combining a standard block professional experience in first semester with a problem-based, collaborative inquiry in semester two.

Although the results tabled by Aubusson (2003) demonstrated satisfaction from recent graduates, pre-service teachers, and employers (pp. 175–176), the arguments put forth as a result could be difficult to generalise –it cannot be assumed that all institutions running a block-style Diploma of Education professional experience, in all areas and demographics, would be experiencing such positive satisfaction levels. Additionally, although Aubusson (2003) argued that innovative professional experience arrangements proved a “time consuming task” (p. 184) when undertaken as a pilot study within UTS, it cannot be assumed that other institutions could not adopt a resource-conserving approach that engendered more suitable and sustainable results.

### **2.6.3 Linking collegiality and reflective practice in professional experience models**

Research and literature by Cornu (2005), Forbes (2004), Jenkins, Hamrick, and Todorovich (2002) and Kurtts and Levin (2000) all draw connections between collegial mentoring, support, and encouragement of reflective practice. It is notable that the concepts of *mentoring* and *coaching* are used synonymously by many authors, with common focus areas being to “give and receive support” (Cornu, 2005, p. 355), “providing structured opportunities for reflection (Kurtts & Levin, 2000, p. 289) and increasing pre-service teachers’ opportunities to actively develop collaborative problem solving skills (Bullough et al., 2003). The mandate for additional study into the benefits of peer support in the professional experience appears to be commonly hailed in the literature.



Smith (2004) identified the intended benefits of broadening “teaching repertoire” (p. 99) and encouraging critical reflection through paired placement professional experience programs, but due to a number of planning and individual personality clashes with participants, recognized major flaws in the design of such a deployment. In planning the subsequent model and methodology, Smith (2004) strongly recommended explicit role clarity for all participants, including defining leading and supporting teacher roles in a pre–service team–teaching environment. He claimed that this reduced uncertainty, allowed for clear understanding of tasks, and also reduced pupil confusion. He did note that the relationship could be highly “fragile” (p. 103), and that peer feedback should be limited to positive comments, with critical feedback the sole responsibility of the mentor teacher. He discovered as a result of this structure, that the pre–service teachers actually *sought* peer feedback. Discussion and criticism of the model developed by Smith (2004) has already been included in this thesis. However, both the push for role clarity, and the realisation that peers will *inevitably seek feedback* are significant to effective program design.

In preparing a paired placement model, Nokes et al. (2008) identified the unintended outcomes noted by Smith (2004), notably the structured approach’s limitations to collaborative freedom. As a consequence they deliberately intended to focus on the collaborative aspects of the relationship, and examine the more naturally occurring, individual nature of a peer–peer–mentor arrangement. Perhaps the most intriguing result noted in this study is the identification of a reduced workload for pre–service teachers working in pairs, particularly in relation to roll–marking, behaviour management and other “survival mode” (p. 2173) tasks. Both pre–service teachers and mentors reported that the experience allowed for a deeper, more critical analysis and understanding of the teaching experience. Considering many pre–service teachers identify the professional experience workload as intense, this presents significant opportunities for investigation. A model that combines the notions of Peters (2006), with co–deployed problem solving, and that of Nokes et al. (2008), allowing peer–peer support, would ostensibly benefit all parties.

The benefits outlined by Forbes (2004) of peer-based professional experience deployments also stretch beyond the realm of teaching and learning, other professional aspects of teaching were also noted in a case-study analysis of three beginning science teachers. Dealing with parents, administrators and non-teaching staff, for example, was identified as easier under the support and guidance of the peer deployment system. Forbes (2004) did suggest that although peer-supported professional experience deployment helped pre-service teachers make sense of the demands of graduate teachers, *this should not be the role of such programs*. This seems to be in contrast with many of the arguments put forward by authors including Darling-Hammond (2010) and Le Cornu (2010) who suggested that peer-supported initiatives in pre-service teaching programs had a significant role in effective pre-service teacher preparation.

Scantlebury et al. (2008) also proposed arguments contrary to the belief of Forbes (2004), and contended that:

When introduced into a teacher preparation programme and conceptualised as a dialectic, co-teaching and co-generative dialogues are strategies that can promote learning communities based on collective teaching, respect and responsibility within classrooms and departments. (Scantlebury et al., 2008, p. 968)

The findings from this three-year study by Scantlebury et al. (2008) involved co-deployed pre-service teachers in a Professional Development School. They found that not only did the pre-service teachers develop both formal and informal networks for resource sharing and collegial support while co-deployed, but more significantly that the pre-service teachers subsequently continued to develop these relationships and collegial approaches once they entered graduate teaching positions.

Scantlebury et al. (2008) ultimately recommended further longitudinal study into the effects of these co-teaching experiences on pre-service teachers, as well as a relative comparison with other pre-service teaching professional experience models.

## **2.7 Summary: Co-deployed, team-based professional experience – intended and unintended collegial outcomes**

Showers and Joyce (1996) noted that “a serendipitous by product” of peer coaching studies undertaken in the 1980’s found that teachers who had participated often wished, without any formal structures in place, to continue their “collegial partnerships after they finished their initial goals” (pp. 12–13).

It also is interesting to find that paired deployment can facilitate team-teaching, even when the university does not specifically aim for this. This is illustrated in the case of Bullough et al. (2003), when the paired placement of two pre-service teachers actually resulted in creation of a team-teaching environment: a mentor teacher who had never initiated a team approach set up learning rotations “for the first time in her career” (p. 64). Thus, the potential exists for paired placement to enhance the collaborative thinking endorsed by Hatton (1985), Le Cornu (2010) and Levin (2000) to evolve the thinking of teachers already in practice.

Schools now often value collaborative endeavour among teachers (Johnson & Thomas, 2003).

Therefore it is valuable and warranted to research and recognise pre-service teacher preparation programs that engender collaborative graduates.

The P2 program, developed from the School Centres for Teaching Excellence Project (Loddon Mallee Region) deployed pre-service teachers as a clustered project in two cohorts in 2011 and 2013. Both the 2011 and 2012 cohorts engaged in some team teaching, participated in a non-traditional professional experience timeframe, and have already consented to participate in research relating to the project. Based on the literature outlined in this study, selection of a sample from these cohorts

will provide further information on the intended and unintended collegial outcomes from this program.

By studying the findings from the P2 professional experience program undertaken by La Trobe University as part of the SCTE program, the benefits of working in a collegially supported environment can be elucidated further.

The next chapter discusses the methodological framework for this thesis. By purposefully sampling those participants in the P2 program who experienced co-deployed professional experience, and identifying the collegiality that occurred as a result, data can be collected to substantiate the claims made in Chapter 2, the Critical Review of Literature. Primarily, the Methodology chapter discusses the approach taken to collecting the relevant collegial data from P2 participants in the 2011 and 2012 cohorts of P2, and a justification of the methods by which these data will be collected and analysed.

## **Chapter 3. Methodology**

### **3.1 Statement of objectives and research questions**

This thesis investigates the intended and unintended collegial outcomes of co-deployed professional experience placement of pre-service teachers in a secondary environment.

The impetus for this research was borne from the involvement of La Trobe University with the Bendigo Education Plan, and the subsequent School Centres for Teaching Excellence (SCTE) Project in the Bendigo Cluster. The project, known as 'P2', engaged pre-service teachers from the La Trobe Faculty of Education in a professional experience structure that aimed to "develop, implement and refine pre-service teacher team immersion in new school contexts" (Deed, 2012, p. 2). Pre-service teachers were deployed to four local Government schools (offering Years 7 to 10) and worked in an open-plan learning environment over a period of two days each week for the duration of a school term. While completing this professional experience, participants were simultaneously completing their Diploma of Education, attending lectures and tutorials on the other three days per week.

Taking into account the features of this initiative, this chapter outlines the methodological basis for a mixed-methods study of these La Trobe University pre-service teachers co-deployed on professional experience. Subjects for this study were only those pre-service teachers who participated in 'P2'.

The study involves analysis of pre-collected data from both pre-service teachers and teacher mentors within the programs, combined with individual, email-based interview data from a sample of pre-service teachers in both the 2011 and 2012 cohorts.

#### **3.1.1 Theoretical and conceptual context for this study**

This study is based on a conceptual framework surrounding models of contemporary pre-service education professional experience. This conceptual framework was articulated in Chapter 2.

The rationale for this study took into account the thinking of a number of authors, with notions centring on the ideas of teaching practice, teaching spaces and teacher preparation. It subsequently identified the centrality of contemporary professional experience design to these three ideas.

The notion of developing teaching practice as integral to professional experience was highlighted by a number of authors, (Darling-Hammond, 2010; Le Cornu & Ewing, 2008; Zeichner & Gore, 1989) with extensive discussion in associated literature surrounding how professional experience could best replicate a realistic training ground for teachers.

Redesign of the pre-service professional experience from the traditional 'block' structure to a model that allows for greater flexibility in timing and teaching opportunities has been featured in a number of studies, including those discussed by Bullough et al. (2003) and Grudnoff (2011). A variety of models have been proposed, but one common concept to emerge from literature surrounding contemporary professional experience design is the notion that combining pre-service teachers together in a non-traditional setting can have positive effects on their capabilities as teachers of the future.

### **3.1.2 My role in this research**

I have taught English and Business Management (with a smattering of Japanese) at Secondary level for the last twelve years. In between Secondary teaching, I have also designed curriculum and delivered training at TAFE, developed and delivered numerous professional development sessions for teacher in-service purposes, have tutored students individually, and been a tutor in Adult Education. My experience within teaching, and interest in pre-service, graduate and retraining teachers led me to develop the position of pre-service teacher coordinator, Victorian Institute of Teaching (VIT) liaison and staff induction coordinator at my last school.

Within this role I encountered many pre-service teachers. I also had opportunity to witness and analyse the various approaches of institutions to effective teacher training. I noticed that pre-service teachers often collected together (of their own volition) while on professional experience,

whereupon they would share experiences with one another, consult with one another to clarify application of theory to practice, and provide moral support to combat the emotionally intense nature of the teaching professional experience.

When I familiarised myself with many of the challenges of effectively preparing teachers for the rigours of practice, I felt that I could contribute to the body of knowledge on the subject. The development of the P2 project by La Trobe University, coupled with my own associations with the La Trobe University Diploma of Education course, provided a good 'fit' for my interest in completing a research-based Masters study.

### **3.1.3 Objective and research problem**

The purpose of this study was to investigate whether placing pre-service teachers into co-deployed, community teaching environments contributes to and enhances collegial contact. It also aimed to identify what the pre-service teachers themselves perceive to be the enablers and constraints of such an arrangement.

### **3.1.4 Research questions**

The following research questions will guide this study:

Question One: Can co-deployed pre-service teacher professional experience provide collegial support to pre-service teachers?

Question Two: Can co-deployment facilitate the 'learning community' approach to teaching?

Question Three: What do pre-service teachers perceive as the longer-term benefits of co-deployment in professional experience?

Question Four: What do pre-service teachers perceive as enablers and constraints to collegiality and peer mentoring, in co-deployed professional experience deployment?

## 3.2 Rationale for the research approach undertaken

This section discusses the rationale for the research approach undertaken in this study: that of a mixed-methods inquiry into the identified collegial benefits of co-deployed learning community professional experience. It identifies the benefit of approaching a study of this nature using both qualitative and quantitative measures, and identification of the subsequent findings.

### 3.2.1 Theoretical overview: Mixed methods research

Traditional research has centred on two distinct paradigms, that of the quantitative, positivist approach, and the qualitative, constructivist approach. Evolution of these approaches has been endorsed by polarised endeavours of study, and until the 20<sup>th</sup> Century, the approaches were considered distinct, and specific to the purpose of a particular field of research.

Tashakkori and Teddlie (2010) discussed the historical and scholastic evolution of a third paradigm, that of *Mixed Methods Research*, they subsequently labelled this the ‘third methodological movement’ (p. ix) and identify it as a combination of quantitative and qualitative approaches, developed as a third approach in the development of research methodology in the social sciences.

Creswell and Plano-Clark (2007) discuss mixed methods research development in terms of four overlapping time periods: *formative*, between c1950 and c1980, *paradigm debate*, between c1980 and c1998, *procedural development*, between c1989 and c2000, and *advocacy*, between c2003 and c2010. They noted that the turn of the millennium saw a “growth in the interest in mixed method research” (p. 16) and cited a number of prominent authors in research who supported it as a design structure to be considered truly distinct from pure quantitative and pure qualitative research, particularly as the needs of research in the new millennium develop.

Johnson, Onwuegbuzie and Turner (2007) coined what has been identified by several (Cresswell, 2012; Denscombe, 2009) as a key definition and parameter for the mixed methods approach:



[It] is an intellectual and practical synthesis based on qualitative and quantitative research, it is the third methodological or research paradigm...It recognizes the importance of traditional quantitative and qualitative research but also offers a powerful third paradigm choice that often will provide the most informative, complete, balanced, and useful research results (Johnson et al., 2007, p. 19).

In presenting this definition, Johnson et al. (2007) suggested that mixed methods research has a set of characteristics that allow for both generation of important research questions, and collection of data that answer those questions. They proposed the notion that mixed methods research “relies on qualitative and quantitative viewpoints, data collection, analysis and inference techniques combined...to address one’s research question(s), and is cognizant, appreciative, and inclusive of local and broader socio–political realities, resources and needs” (p. 19). This emphasis on the wider role played by society on respondents’ experiences subsequently lends it, as a practice, to education–based research studies.

### **3.2.2 A Mixed Methods approach: Justification for this study**

It is practical to recognise and identify the legitimacy of approaching a study of this type utilising quantitative data as an adjunct to qualitative practices. Developing a structured, pragmatist methodology on this basis will potentially provide the best possible results (Johnson and Onwuegbuzie, 2007).

The methodological approach undertaken in this thesis closely followed that taken by Ivankova and Stick (2007), who, within the field of higher education research, undertook a quantitative survey, then purposely selected four interview participants through whom the data could be explored. They noted that “the rationale for mixing both types of data is that neither quantitative nor qualitative methods are sufficient by themselves to capture the trends and details of situations” (p. 97). They also argued that application of both qualitative and quantitative data together would “provide a more complete picture of the research problem” (p. 97).

For this study, both qualitative and quantitative methods of data collection were employed.

Quantitative methods formed the preliminary basis for investigation, in order to collate and analyse the surveys undertaken as part of the overall project. From these findings, survey participants were selected for the qualitative stage of the study. This then ensured that the unit of analysis for the individual interviews reported a measurable incidence of peer-supported events.

In order to effectively organise and analyse the subjective nature of the research questions, qualitative research methods (interviews and subsequent thematic analysis) were most effective.

Each participant interprets a situation individually, and the operational definitions of *collegiality* and the *perceptions of pre-service teachers* were best assessed via the qualitative framework.

Furthermore, qualitative processes allowed for more meaningful interpretation of responses, timely member checking and intuitive grouping of each participant's response.

### 3.2.3 Explanatory sequential design

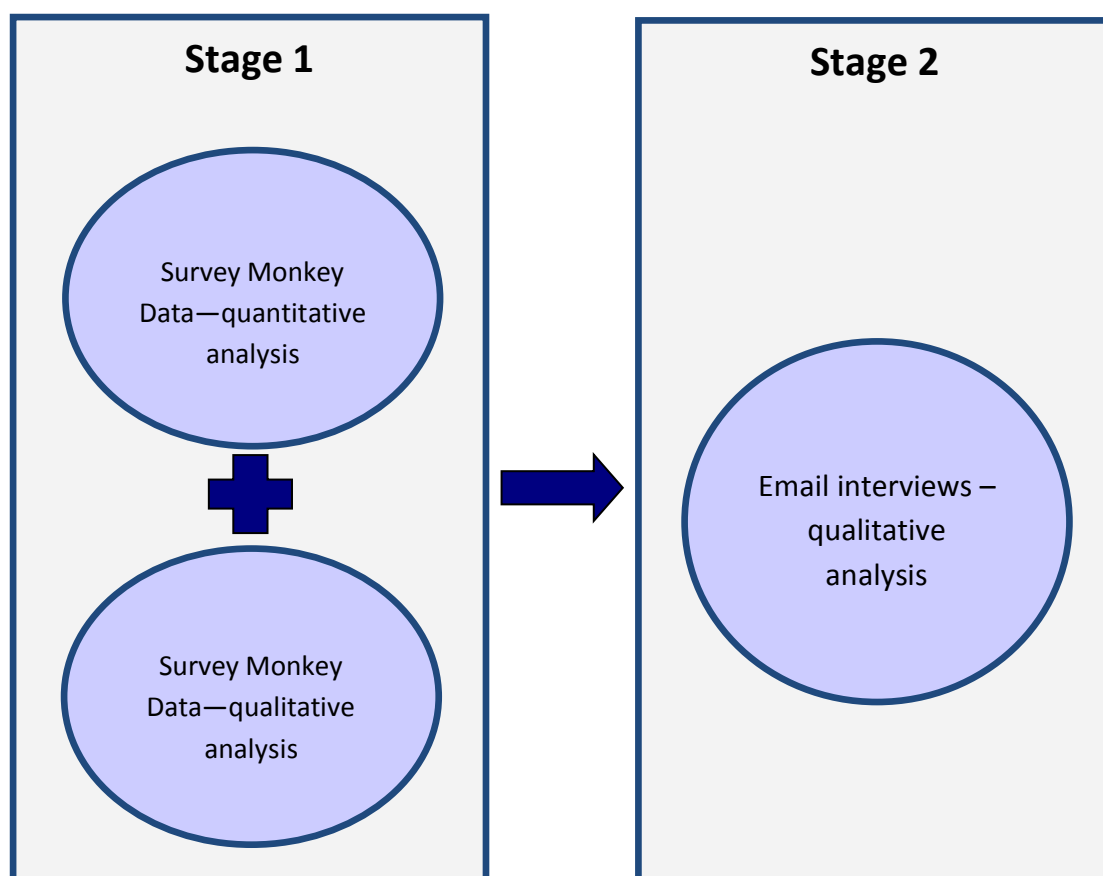
Explanatory Sequential Design “consists of first collecting quantitative data and then collecting qualitative data to help explain or elaborate on the quantitative results” (Creswell, 2012). The cohort of participants in the P2 programs were deployed in 2011 and 2012, and preliminary surveys were completed in two stages as part of these deployments. Therefore significant volumes of quantitative and qualitative data had already been amassed from the 2011 and 2012 participants in the program. Preliminary quantitative analysis (referred to in this study as Stage 1) of these data served several purposes:

- to enumerate responses that match with the abovementioned research questions
- to sort unrelated responses for formation of a baseline of participant numbers, and
- to identify cohorts in the study who would be most appropriate to participate in the subsequent qualitative research approach.

In this study, Stage 1 also involved a degree of qualitative analysis, in order to utilise relevant comments written by the pre-service teachers.

On conclusion of Stage 1 of the data analysis, a sample of participants was selected using a purposeful sampling framework. This sample comprised the participants for Stage 2. As Figure 3.1 demonstrated, the initial quantitative and qualitative data collected allowed for preliminary, inductive reasoning to occur, based on the entire population of the P2 program cohorts. By adding a qualitative phase, the data were able to be expanded to include individual response material.

The aim was to select a balanced range of participants from each of the 2011 and 2012 cohorts, with a representative from each of the placement schools in that time.



**Figure 3.1. Explanatory sequential design representation**

### **3.3 Description of each instrument used to collect data and details of pilot studies carried out**

#### **3.3.1 Surveys (Stage 1)**

Online surveys (via Survey Monkey) were implemented as part of the overall SCTE program for all participants in P2. These were distributed at the end of Professional Experience (practicum) One (in May) and Professional Experience (practicum) Two (in September) for both 2011 and 2012. All pre-service teachers participating in the program were surveyed.

The surveys were of cross-sectional survey design, primarily examining participants' opinions and reflections on the effectiveness of the P2 experience. These surveys had been initially designed and utilised to evaluate the wider P2 program, and in turn the greater pre-service teaching program at La Trobe University Bendigo, but this data collection process yielded sufficient data for use in Stage 1 of this study.

The surveys were between five and thirteen questions each (in the 2011 surveys) and twelve and nineteen questions (in the 2012 surveys) with a combination of open and closed questions. Each survey took between fifteen and thirty minutes to complete via Survey Monkey.

Copies of each Survey Monkey survey distributed are attached at Appendix 1.

#### **3.3.2 Email interviews (Stage 2)**

Following quantitative and qualitative analysis of the Survey Monkey surveys, including identification of potential interview respondents, individual interviews were conducted with a sample of participants in the program. The interviews were collected via email, using individual message conversations to expand or explain initial responses. These interviews were collated with the aim of creating thematic analysis.

The interviews were one-on-one, completed in one to three sessions for each participant, and were of a semi-structured nature. A combination of closed, semi-closed and open-ended questions were

designed, with the aim of encouraging unprompted and expansive responses from all participants. All interviewing, collation and analysis of these data was conducted by the author of this study, under guidance of the Supervisors of the project.

### **3.4 Rationale for each data collection instrument used**

#### **3.4.1 Survey Monkey Surveys (Stage 1)**

It was both logical and relevant to analyse data that had been previously collected from the 2011 and 2012 cohorts of this program. Placement of participants at four local schools allowed for some triangulation of data, and allowed for identification of individual placement concerns or considerations that may have been inherent to one participating school, or one participant's personality.

Use of the Survey Monkey web-based survey tool to gather data was critically evaluated by Marra and Bogue (2006), who identified it as comparatively effective in terms of cost, customisability and secure storage and manipulation of data. The functionality of the Survey Monkey program also allowed specific extraction of relevant data to a Microsoft Excel spreadsheet, which proved effective for Stage 1 of this research.

#### **3.4.2 Individual interviews (Stage 2)**

It had been indicated that the P2 project's Ethics Committee approval, Approval Number R004/11 School Centres for Teaching Excellence, covered follow-up surveys of past participants in the program. A range of participants in the individual interviews were therefore selected from both the 2011 and 2012 cohorts. This enabled participants to reflect on the *longer-term* benefits of the program.

Individual email interviews allowed the participants to expand on the responses given in previous surveys, and enabled development and enhancement of responses that matched well with the research questions. The original surveys designed for the project, although used in Stage 1, did not

directly cover the research questions of this study, therefore extended interviews consolidated already existing data.

After analysing the results presented in Stage 1 of the research (the Survey Monkey survey data) a revisitation of the survey questions for this study revealed a number of areas for further investigation.

First, some research questions were covered well by the Survey Monkey surveys, but others were not adequately addressed. Focus then needed to be placed on individual interviews to provide for this deficit.

Second, some comments provided, and some quantitative data, indicated intriguing findings that fit well within the scope of the research questions. Therefore additional crafting of the email interviews to capitalise on these indicative findings was warranted.

Individual interviews were conducted via email based conversations, involving individually addressed messages that were replied back and forth between the respondent and the interviewer.

Meho (2006) stressed the importance of correct nomenclature and methodological process in approaching email interviews, he noted that “online, asynchronous, in–depth interviewing” (p. 1284) should be viewed as a distinct category, and differentiated from an email survey that would potentially not require any form of repeated discussion between interviewer and interviewee.

Subsequently, Stage 2 of this methodology has been classified as an ‘email interview’ rather than a ‘survey’, as participants often sought feedback and clarification on questions, similarly, additional material was requested from participants on a number of occasions.

Although not as commonly utilised in qualitative, ethnographic research, selection of email as a valid data collection tool has been endorsed by a number of researchers, including McCoyd and Kerson (2006), Reid, Petocz, and Gordon (2008) and Seymour (2001), who note that the method carries with it a number of benefits to both researcher and participant. Reid et al. (2008) justified use of the

email interview, as it “enables respondents to participate in the process of collaborative knowledge building as co-researchers, by reflecting on and analysing their own responses in the email interviews.”

McCoyd and Kerson (2006) identified a number of advantages of email interviews:

- respondents can complete the interview at their convenience, and at their own pace
- written text responses (able to be copied and searched electronically) do not need transcription
- less social pressure, few visual cues to create judgement
- more extensive, richer data than telephone interviews (3–8 pages longer)
- respondents perform their own member checking and confirmation
- respondents feel comfortable with typing open, revealing material that they may find confronting in person or over the telephone

McCoyd and Kerson (2006) did identify several potential disadvantages to email interviews, namely the risk of confidential data being seen by a third party, as well as potential risk for data loss if electronic or user failure occurred.

In order to mitigate these potential concerns, all data were securely managed, participants were also notified of a save/archive procedure to ensure their responses were not lost in the event of email failure.

Meho (2006) noted that a potential disadvantage of email-based surveys was the tendency of participants to ignore or delete messages, for this reason regular reminder emails were important.

### **3.5 Sampling and administration of research instruments**

This section identifies and discusses how participants in Stage 1 and Stage 2 were selected, and how each of the instruments – the Survey Monkey internet-based surveys, and the individual email

interviews – was administered. The intended schedule for administration and analysis of these instruments is identified at Figure 3.2.

		Stage 1					Stage 2	
		P2 Survey 1 2011	P2 Survey 2 2011	P2 Survey 3 2011	P2 Survey 1 2012	P2 Survey 2 2012	Survey Monkey Analysis	Interviews
2011	M							
	J							
	J							
	A							
	S							
	O							
	N							
	D							
2012	J							
	F							
	M							
	A							
	M							
	J							
	J							
	A							
2013	S							
	O							
	N							
	D							
	J							
	F							
	M							
	A							
2014	M							
	J							
	J							
	A							
	S							
	O							
	N							
	D							

Figure 3.2. Intended schedule – administration and analysis of research instruments

### 3.5.1 Population and sampling: The structure and selection of P2 participants

#### Population

La Trobe University, Bendigo, has a secondary school pre-service teacher population of approximately 180, of which 22 (in the 2011 cohort) and 28 (in the 2012 cohort) participated in the P2 program. Only the P2 participants were considered as an eligible pre-service teacher population



for the purposes of this study, as the majority of pre-service teachers enrolled at La Trobe University do not participate in any team or co-deployed professional experience deployments.

The population of P2 comprised fourth year students of both the Bachelor of Physical and Health Education and the Bachelor of Physical and Outdoor Education, as well as students of the Graduate Diploma of Education seeking a Secondary teaching qualification. This population did not include pre-service teachers who were only trained for Primary level teaching, nor did it include pre-service teachers enrolled in the Bachelor of Technology Education course.

### 3.5.2 Sampling for stage 1: Survey Monkey online surveys – 2011 and 2012

In this phase, all pre-service teachers and mentors who participated in the P2 program were surveyed via Survey Monkey, an online surveying tool. As is shown in Table 1, response rates for these surveys were higher in the 2011 cohort than the 2012 cohort. However, both cohorts had a high response rate overall, which allowed for meaningful collection of data for Stage 1.

Table 3.1. Stage 1 surveys sample size and response rates

#### 2011 P2 Cohort

Survey Number	Sample	Male	Female	Respondents	Response rate %
1	22	9	13	20	90
2	22	9	13	18	81
3	22	9	13	20	90

#### 2012 P2 Cohort

Survey Number	Sample	Male	Female	Respondents	Response rate %
1	28	10	18	22	78
2	28	10	18	9	40

### 3.5.3 Sampling for Stage 2: Individual interviews – August to October 2013

Following analysis of responses from the Stage 1 surveys collected, a sample of eight pre-service teachers were selected for individual interviews. These were conducted in 2013, when the participants had moved into the teaching profession, for the following reasons:

- Ethics clearance covered this eventuality
- The researcher's timeframe fit well with this structure
- Pre-service teachers will have had an opportunity to 'reflect' on the experience
- Potentially, after experiencing the teaching profession as a graduate, pertinent recommendations could be made
- Selection of participants was purposeful and meaningful, with one participant from each of the four schools in both the 2011 and 2012 cohorts approached.

#### *Selection of interview participants*

Meaningful selection of interview participants occurred after discussions with the P2 project coordinators. On investigating the participant lists from both cohorts, participants were selected based on:

- *Successful completion of the P2 program.* Participants must have had a pass grade awarded and completed professional experience placement.
- *Continued availability for interviewing.* Some participants were no longer teaching, or on leave at the time of the study, so were discounted from the sample.
- *Distribution across the participating schools and cohort years.* One participant from each participating school and cohort was selected.
- *Relevance of placement structure.* Only Diploma of Education participants (not those undertaking the Bachelor of Physical and Outdoor Education) were deemed to be suitable for interview, as these placements within schools more closely matched the purpose of this study.

All participants in P2 had previously indicated their consent to participate in further studies.

### *Summary of participants in Stage 2 interviews – background and cohort.*

Eight participants were selected from the P2 cohorts of 2011 and 2012:

Respondent A (female) was from the 2011 cohort, and completed P2 at School 1

Respondent B (female) was from the 2011 cohort and completed P2 at School 2

Respondent C (male) was from the 2011 cohort and completed P2 at School 3

Respondent D (female) was from the 2011 cohort and completed P2 at School 4

Respondent E (female) was from the 2012 cohort and completed P2 at School 1

Respondent F (female) was from the 2012 cohort and completed P2 at School 2

Respondent G (female) was from the 2012 cohort and completed P2 at School 3

Respondent H (female) was from the 2012 Cohort and completed P2 at School 4

### *Gender representation*

It was difficult to ensure effective gender representation of respondents, particularly in Stage 2 of the program.

As can be seen in Table 3.1, there were more females enrolled in both the 2011 and 2012 P2 cohorts, and some of the males enrolled failed to complete the professional experience. Of the eligible sample, the two males failed to respond to several requests for assistance. Therefore, one male and seven females comprise the sample for this thesis.

### **3.5.4 Reasoning behind selection of P2 specific data**

The required scope for research towards a Master's Degree lent itself well to the size and nature of the P2 Program. Although at La Trobe University Bendigo there are approximately 180 students completing secondary teaching qualifications annually, not all of these participate in a placement

that coincides with other pre-service teachers. Therefore, as this research specifically sought to investigate the collegial aspect of professional experience co-deployment, the P2 structure was deemed most suitable.

The program of P2 had similar expected outcomes to this study, and was based on the following indicators of success, as identified by Deed (2012):

- Engagement of teacher-mentors, pre-service teachers, and university staff in a co-deployed approach to teacher preparation
- The generation of practical teaching knowledge about teaching in flexible and differentiated learning environments
- Use of technology for teaching and learning – personal, mobile, and networked.

Thus these indicators of success match closely with the purpose of this study:

The purpose of this study is to investigate whether placing pre-service teachers into co-deployed, community teaching environments contributes to and enhances collegial contact. It will also identify what the pre-service teachers themselves perceive to be the enablers and constraints of such an arrangement.

### **3.6 Ethical considerations**

All research undertaken conformed strictly to the National Statement on Ethical Conduct in Human Research (2007). Subsequently, all possible care was taken to ensure the health and welfare of human participants, and reduction of any risks associated with the study. All research undertaken as part of this study, as well as within the wider P2 program, was directed by the Human Research Ethics Guidelines set down by La Trobe University, Approval Number R004/11 School Centres for Teaching Excellence. All participants participated on the basis of informed consent, with the knowledge that they could opt out or abstain from the project at any time.

All participants' details, responses and correspondence were securely located, with no access available to any persons other than the researcher and supervisors of this study.

For the purposes of publication, all respondents were assigned a coded initial, allowing for anonymity and risk mitigation. Any identifying names or details, including names of participating schools, were removed from the data prior to analysis. As Stage 2 emails were easily able to be analysed and confirmed by the sender prior to transmission, no transcript member checking was required.

There was some inherent sensitivity in the responses provided in the interview section of the interview. As there was only a limited sample of participants in the two professional experience programs, members of the community potentially reading any published findings may have been able to identify the school or participants. Interview participants were notified of this potentiality, and quotations and data were selected to mitigate this likelihood.

All information was treated with discretion and appropriate confidentiality. Data collected from surveys and interviews (particularly data that could identify an individual) was destroyed at the conclusion of the research project.

### **3.7 Computer programs used to analyse the data and justification of their methods**

Surveys of both mentors and participants in the programs were undertaken using Survey Monkey ([www.surveymonkey.com](http://www.surveymonkey.com)). Cresswell (2012) identified a number of advantages of using web-based surveys of this nature, including the speed of data gathering, accessibility for participants and efficient analytical tools. He also highlighted potential problems with technological issues and low response rates, but due to the relatively low number of participants (under 30 in any one cohort of pre-service teachers or mentors) these potential risks were deemed unlikely to reduce the effectiveness of the survey.

Microsoft Excel was used to quantify, tabulate and graphically organise much of the survey data. It is a common export method for any data that can be comma separated (CSV), is readily available and familiar to many computer users.

Microsoft Word formed the basis for transcription of individual interview material, with capacity for comments to be copied across to Microsoft Excel after thematic coding and analysis.

### **3.8 Data analysis**

This section discusses the analytical processes that were applied to the data, and how the data collected were matched to the Research Questions of this study.

#### **3.8.1 Analysis of surveys in relation to research questions**

The questions prepared in the pre-existing surveys of P2 participants can be matched against the four research questions:

Question One: Can co-deployed pre-service teacher professional experience provide collegial support to pre-service teachers?

Question Two: Can co-deployment facilitate the 'learning community' approach to teaching?

Question Three: What do pre-service teachers perceive as the longer-term benefits of co-deployment in professional experience?

Question Four: What do pre-service teachers perceive as enablers and constraints to collegiality and peer mentoring, in co-deployed professional experience deployment?

Matches between survey questions and the scope of the above research questions allowed for the Stage 1 analysis, and provided a frame for further investigation during the interview process in Stage 2. Preliminary matches for the pre-existing survey responses are shown in Table 3.2.

**Table 3.2. Match between Survey Monkey questions and research questions**

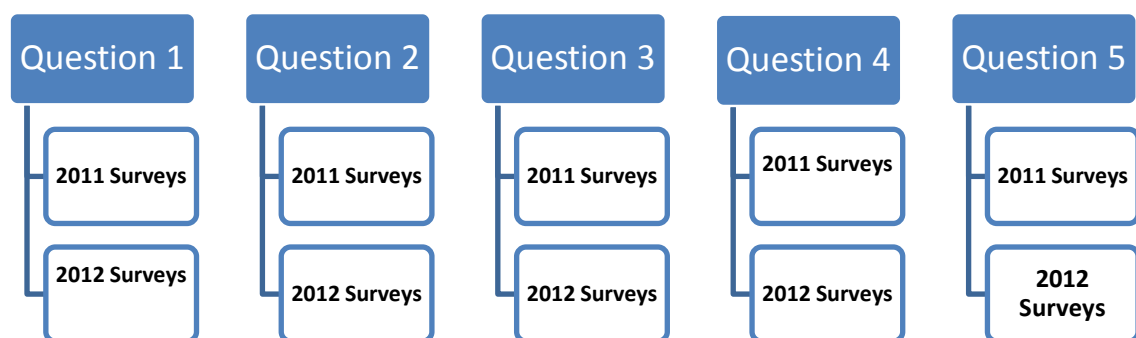
Research Question	Survey Questions
<b>Question One:</b> Can co-deployed pre-service teacher professional experience provide collegial support to pre-service teachers?	What are the positive aspects to the P2 experience so far? (2011 Surveys: Survey 1) Given your P2 experience, if you had your time again, would you elect to participate in P2? Please explain your response. (2011 Surveys: Survey 2) This question is seeking preference between the two practicum models you have experienced. Please provide comments on positives about the P2 model. (2011 Surveys: Survey 3) How much interaction have you had with your P2 peers during placements? (2012 Surveys: Survey 1) What is the nature of interactions between you and other pre-service teachers? (2012 Surveys: Survey 2) In your opinion, how can pre-service teachers be most helpful to each other while on practicum? (2012 Surveys: Survey 2)
<b>Question Two:</b> Can co-deployment facilitate the 'learning community' approach to teaching?	What are the positive aspects of the P2 experience so far? (2012 Surveys: Survey 1) For each of the following sources of knowledge and skills (first column) please indicate what type of knowledge and skills they provided. You can indicate more than one item in each row. (2011 Surveys: Survey 2) What knowledge and skills do you think you did gain by completing the teacher-as-researcher project? (2011 Surveys: Survey 3) This question is seeking preference between the two practicum models you have experienced. Please provide comments on the positives about the P2 model. (2011 Surveys: Survey 3) Why did you elect to join the P2 program? (2012 Surveys: Survey 1) Please indicate what type of knowledge and skills (interaction with peers at my school) provided. (2012 Surveys: Survey 1) Please comment on the reasons for any differences in the nature of interactions between Prac A and Prac B (2012 Surveys: Survey 2)
<b>Question Three:</b> What do pre-service teachers perceive as the longer-term benefits of co-deployment in the professional experience?	Why did you elect to join the P2 Program? (2011 Surveys: Survey 1) What specific knowledge and skills do you think you are developing through the P2 program? (2011 Surveys: Survey 1) What are the positives of the P2 model? (2011 Surveys: Survey 3) What are the positive aspects or benefits of the P2 experience? (2012 Surveys: Survey 1) What issues are you experiencing on P2? (2011 Surveys: Survey 1) What are the positive aspects to the P2 experience so far? (2011 Surveys: Survey 1)
<b>Question Four:</b> What do pre-service teachers perceive as enablers and constraints to collegiality and peer mentoring, in co-deployed professional experience deployment?	For each of the following sources of knowledge and skills (first column) please indicate what type of knowledge and skills they provided. You can indicate more than one item in each row. (2011 Surveys: Survey 2) What are the negatives of the 'block prac' model? (2011 Surveys: Survey 3) What are the main issues you have experienced on P2? (2012 Surveys: Survey 1) What other knowledge and skills do you think you developed through the P2 program, and who helped you develop these skills? (2012 Surveys: Survey 1) What things could the university do to assist pre-service teachers to help each other while on practicum? (2012 Surveys: Survey 2)

The first stage in analysing these data was to tabulate Survey Monkey results as collected by the P2 project coordinators at various stages throughout 2011 and 2012.

Data were extracted from Survey Monkey to Microsoft Excel. As these data incorporated numerous fields unrelated to this study (incorporating name fields, addresses, IP addresses, methods etc.) these were considered irrelevant to this study, and 'hidden' within the spreadsheet (not visible in hard copy or on-screen form).

The data were then tabulated and adjusted to form cohesive, easily comprehensible spreadsheet structures, and each spreadsheet was printed and collated as a large sheet. Although this formed a very large spreadsheet printout (approximating a single bed sheet on two occasions) visual representation of the data allowed patterns to occur, when thematically identified, it became clear that specific questions were yielding data of particular relevance to this study.

Data were approached on a survey to survey basis, in ascending year order. The approach to match research questions in this study with the material previously collected from P2 cohorts is represented in Figure 3.3.



**Figure 3.3. Methodological approach to Stage 1– qualitative and quantitative match to Survey Monkey data**

From these, relevant findings could be extrapolated and interpreted.



### *3.7.1.1 Approach to Stage 2 – Interviews*

Email interviews were constructed around the four main research questions, therefore data could be easily compartmentalised and collated from each participant. The research questions included terminology that may have been unfamiliar to the P2 participants, so each research question was restructured into a more general topic ‘area’ to assist respondents to consider the central focus for each question.

Correlating headings for each survey ‘question’ are identified at Table 4.10.

**Table 3.3. Research questions and corresponding ‘area’ labels as provided to Stage 2 respondents**

<b>Research question (as defined in thesis)</b>	<b>Redesigned question ‘area’</b>
Question One: Can co-deployed pre-service teacher professional experience provide collegial support to pre-service teachers?	Collegiality and P2
Question Two: Can co-deployment facilitate the ‘learning community’ approach to teaching?	P2 and the ‘learning community’
Question Three: What do pre-service teachers perceive as the longer-term benefits of co-deployment in the professional experience?	Longer-term benefits of co-deployed professional experience
Question Four: What do pre-service teachers perceive as enablers and constraints to collegiality and peer mentoring, in co-deployed professional experience deployment?	Enablers and constraints of collegiality

Communication between the interviewer and the participants may have involved two to three interviews, so this information was stored and coded individually.

### *3.7.1.2 Analysis of interviews in relation to research questions*

Each individual interview transcript was analysed (after thorough familiarisation) using a consistent process. First, preliminary coding of transcript segments/keywords was undertaken, and these were

matched with one or more research questions. Second, relative, thematic responses were grouped together. Third, each of these themes was summarised and collated, and then commonalities and trends were identified, to identify if there were any patterns within each cohort. These findings then allowed presentation of the resulting discussion.

### **3.8.2 Methodological triangulation: Survey Monkey survey data and interview data**

Both pre-service teachers and mentors completed surveys as part of P2. This subsequently allowed triangulation of the responses between pre-service teachers and mentors on areas of significance, particularly in relation to collegial contact and support.

Matching and triangulation between survey responses of mentor teachers and pre-service teachers at each participating school could potentially have assisted in compiling a representative sample of interview respondents across the four schools and two years' worth of cohorts involved. After considering the scope of responses from mentor teachers, identifying the questions asked on the Survey Monkey surveys, and considering the scope of research for this thesis, Mentor surveys were not used for triangulation.

Additionally, discussions with the supervisors of the P2 project allowed for some confidential triangulation of results based on a thorough knowledge of the placement specifics.

### **3.8.3 Investigator triangulation**

Dr Peter Cox is principal research supervisor for this Masters thesis, and is also one of the researchers working on the P2 program. This means that his research, expertise and knowledge of the project can be utilised when compiling and analysing datasets. Other investigators identifying aspects of the project, Dr Craig Deed (co-supervisor for this thesis) and Scott Alterator provided validation of results.

### 3.8.4 Cohort triangulation

Participants were selected from both cohorts (2011 and 2012) to ensure that the specific scenarios unique to that timeframe did not affect the validity of the findings. Significant or concerning findings from the interviews could then be member checked, discussed with other researchers involved in the project, and taken into consideration accordingly.

## 3.9 Limitations of the methodology

This research was limited to a specific number of responses from a small cohort of participants enrolled in one university. This could be seen as limiting generalizability of the conclusions to pre-service teachers in other institutional settings.

All of the schools that have hosted pre-service teachers as part of this program are Government schools. Identification of the differences in Catholic and Independent schooling structures could potentially alter the perceptions or experiences of pre-service teachers co-deployed on professional experience, and so may limit the generalizability of findings.

P2 is a recently introduced program. Extended longitudinal research (although not part of the scope of this research) is thus not possible for the two cohorts of participants.

In Stage 1, specific encouragement or coaching of survey participants to reflect on collegiality did not occur, due to the more general nature of the Survey Monkey questions, as well as the online method by which the responses were collected. This potentially meant that respondents, who were unaware of the scope of this research, may not have reflected fully on the aspects required most from the responses. As the relevant responses from the survey research informed selection of participants for the one-on-one interviews, this may have resulted in a flawed sample that did not fit the *purposeful* approach required by the *concept sampling* methodology.

Undertaking investigation of participants' perceptions of P2 after conclusion of the professional experience potentially involved attempting to locate interview subjects distributed locally, across the

state and interstate. Their accessibility, enthusiasm and conscientiousness in responding had the potential to affect the overall quantity and quality of responses.

Utilising an email interview structure was recognised as potentially resulting in the inability of the interviewer to 'guide' the participant, or to encourage expansion on any responses given.

### **3.10 Summary**

This chapter discussed the methodological basis for data gathering in this research. Through an explanatory sequential approach, data was collected first via Survey Monkey, then analysed to identify thematic matches with the Research Questions of this study.

The next chapter will discuss the findings developed from these data, and identify whether co-deployment of pre-service teachers in a professional experience setting leads to collegiality, and how this collegiality can be enabled or constrained.

## Chapter 4. Results

### 4.1 Introduction

This chapter presents the findings from the two stages of data collection, the initial Survey Monkey surveys, taken from the 2011 and 2012 P2 cohorts, and the individual email interviews, taken from eight purposely sampled members of these P2 cohorts. These findings will be presented in two sections, one for each stage of the study.

### 4.2 Stage 1 – Survey Monkey surveys

This section presents the findings of the first stage of this study: it comprises quantitative and qualitative analysis of the Survey Monkey data from the 2011 and 2012 P2 cohorts.

The intent, within an explanatory sequential framework, was to identify data related to the research questions of this study, and further investigate and extrapolate these data to fully address all aspects of the four research questions posed.

Each research question has thus been approached individually, sequentially and against every survey undertaken by both P2 cohorts in the sample frame. Resultant discussion and analysis identified a number of areas for further investigation in Stage 2 of the Methodology, and is explored further as part of the qualitative interview process of Stage 2.

Each respondent noted in this section has been identified with an individual number pseudonym. As each survey's results were randomly ordered, Respondent numbers will correspond with varied P2 participants.

#### 4.2.1 Survey responses matched to Research Question One: Can co-deployed pre-service teacher professional experience provide collegial support to pre-service teachers?

Question One revolved around the notion of 'collegial support,' a term with a number of arbitrary definitions that remain contested in literature, and often subjected to contextual analysis (Waters, 1989). However, in terms of this study 'collegial support' encompassed ideas of sharing, debrief and

stress mitigation strategies, professional and non-professional communication, development of social connections with colleagues, and distribution of common resources between pre-service teachers. Throughout the surveys these notions were commonly articulated by pre-service teacher respondents.

### **2011 Surveys: Survey 1**

*Question: What are the positive aspects to the P2 experience so far?*

30% of respondents identified the connection that was created with other pre-service teachers as a positive, with one respondent highlighting “the friends I have made and the opportunity to teach with a fellow student.” ([Respondent 5](#)). This response suggested that there was a crossover between the professional and interpersonal aspects of teaching, matching closely with the definition of a ‘collegial’ atmosphere. Another respondent ([Respondent 6](#)) stated that the presence of “other student teachers at the school” was a significant positive of the program, but did not elucidate as to how these other student teachers were supportive or beneficial.

One respondent more explicitly articulated the notion of collegiality whilst on the program, noting as a positive “the sense of collegiality with the group across schools and methods and the chance to get really embedded in a staff.” ([Respondent 19](#)). Another respondent echoed the benefits of the wider P2 cohort as a positive: “people, not only the ones at your school, but the students in the wider P2 group are there for you as support.” ([Respondent 23](#)). This leads to an assumption that, at least in some cases, P2 students from the different placement were in contact at some point. It further suggests that P2 pre-service teachers felt the need to be ‘supported’, and the nature of this support was beneficial.

The nature, forms and frequency of pre-service teacher contact were only summarily explained in the above responses, and require further clarification. This will be further examined in Stage 2.

### **2011 Surveys: Survey 2**

*Question: Given your P2 experience, if you had your time again, would you elect to participate in P2?*

*Please explain your response.*

**Table 4.1. Respondents who would elect to participate in P2 again**

	Number of respondents (N=18)	%
Yes	13	65
No	2	10
Maybe / NA	5	25

65% of the respondents nominated their willingness to participate in P2 again, and many of those who responded identified the extended time in schools as a major benefit of the program. Many responses endorsed the opportunities to develop meaningful relationships with students and teachers, and be involved more deeply in planning and other school activities.

Respondent 12 noted that “Our whole group bonded pretty well which was nice”. ~~one~~ This inclusive language suggests that the group had a collegial connection, and that this was a salient reason that the pre-service teacher would once again participate in a P2 program. Use of the term ‘whole’ also could imply that all the co-deployed pre-service teachers communicated collectively, rather than just forming paired friendship groups.

Relationships with experienced, onsite staff were also noted as significant collegial outcomes of this program. One respondent noted that the longer time frame involved in this style of deployment had “given me the opportunity to develop positive relationships with the teachers” [\(Respondent 5\)](#).

Another highlighted that relationships with peers, students and teachers were of greater value in the co-deployed professional experience, when compared to traditional professional experience structures (colloquially known as block prac), stating that “I felt like I got to know the staff and students at my school much better than the block prac students.” [\(Respondent 8\)](#).

### **2011 Surveys: Survey 3**

*Question: This question is seeking preference between the two professional experience models you have experienced. Please provide comments on the positives about the P2 model.*

Response to this survey was similar to that of Survey 2: when comparing the P2 model of deployment with standard *block prac* respondents positively identified the notion of the wider 'group' – students and other teachers in the school, not just the other pre-service teachers.

The idea of 'strong working relationships' was regularly mentioned (50% of responses) and 'feeling part of' both the team and school (45% of responses).

### **2012 Surveys: Survey 1**

*Question: How much interaction have you had with your P2 peers during placements?*

**Table 4.2. Interaction with P2 peers during placements**

Frequency	Number of responses (N=22)
None	3
Monthly	2
Weekly	6
Daily	11

Responses to this question strongly indicate regular interaction between P2 pre-service teachers during the course of the professional experience program. Of the 22 responses to this question, 77% noted that they interacted with peers either weekly or daily. Given that team teaching processes were not necessarily involved in professional experience loads (particularly in the 2012 cohort), the interaction and collegial contact could potentially have been instigated by the pre-service teachers themselves.

Perhaps more interesting from this result is the knowledge that pre-service teachers were deployed in schools for two days per week. The indication that respondents were in daily contact suggests that



they remained in contact even while not on professional experience. The nature of this contact, and further discussion on what ‘daily’ contact involved, will be investigated in Stage 2.

## 2012 Surveys: Survey 2

*Question: What is the nature of interactions between you and other pre-service teachers?*

**Table 4.3. Nature of interactions between pre-service teachers**

	<b>Professional experience A (P2, open style professional experience)</b>	<b>Professional experience B (Traditional, block style professional experience)</b>
Frequency (N=9)	Frequent 7 Infrequent 2	Frequent 1 Infrequent 8
Formality (N=9)	Formal 3 Informal 6	Formal 2 Informal 7
Critical/non critical (N=9)	Critical 1 Non-critical 8	Critical 1 Non-Critical 8

Table 4.3 illustrates a number of patterns of communication between pre-service teachers, but does not specify whether the communication occurred while on professional experience or during other times – including at university, over holidays etc. However, from Table 4.3, it does appear that

- In the P2 professional experience, the majority (75%) of pre-service teachers communicate frequently. In comparison, very few of the same pre-service teachers on *block style* professional experience communicate frequently with other pre-service teachers.
- In both P2 style professional experience and block style professional experience situations, informal communication was identified as the most common form of interaction.

- Similarly, the nature of critical and non-critical communication is the same between both professional experience models identified, non-critical communication comprised nearly 90% of interactions between pre-service teachers.

These findings provoke a number of follow-up interview questions:

- If communication is so frequent, but seen as non-critical, what is the nature of the communication? Is this still collegial, and contributing to reflective practice and learning communities? How did the respondents interpret the notion of critical/non critical communication? This will be further investigated in Stage 2.
- Similarly, how do the respondents interpret formal and informal communication? Further examination of situations that could be interpreted as informal will be undertaken in Stage 2.

## 2012 Surveys: Survey 2 (continued)

*Question: In your opinion, how can pre-service teachers be most helpful to each other while on practicum?*

The notions of collegial support came through strongly in responses to this question. Of the nine respondents to this survey, five chose to respond to the question, and *every response identified sharing* as a key opportunity.

Two main forms of disclosing information to colleagues were evident in responses: that of sharing professional information, such as resources, ideas and “experiences,” and that of providing interpersonal moral support. One respondent suggested that peers could provide “friendship and confidential debriefing opportunities, as well as sharing learnings and information,” ([Respondent 4](#)), demonstrating a comfortable awareness of the dual professional and personal roles that collegial support can take. Another response identified the organic, unstructured nature that support could take, recommending pre-service teachers “just converse with each other. Share ideas and

strategies. If you get the chance, team teach with each other. If you both work well together and complement each other's styles it is a blast-" [\(Respondent 9\)](#).

It can be deduced from these responses that pre-service teachers recognise, and value the role that support from colleagues can take. Further investigation in Stage 2 will focus on specific recommendations for how this support can be endorsed and facilitated within a professional experience placement.

#### *4.2.1.1 Summary of findings for Question One, and directions for Stage 2: Interviews*

Respondents to these surveys generally believed that co-deployed professional experience was both a supportive and conducive structure in development of a sense of collegiality among pre-service teachers.

P2 participants noted that they regularly engaged in dialogue with each other, sharing lesson ideas, classroom management strategies, and learning experiences from the classroom.

They also utilised one another for non-class based advice, indicating that they turned to one another for de-briefing and stress reduction opportunities or support. The mix between professional and personal relationships and support is significant, and should be clarified in Stage 2.

Responses indicate that pre-service teachers continued this collegial approach when not onsite at professional experience, and that much of the dialogue took an informal form. This requires further investigation and expansion in Stage 2.

The notion of team development (in a collegial sense, as distinct from a 'learning community') should also be deemed as a noteworthy aspect, and respondents in Stage 2 will be asked to examine the notion of team development, and how this is could be enhanced. Some connection can be made between this and Question Four of this study.

#### 4.2.2 Survey responses matched to Research Question Two: Can co-deployment facilitate the learning community approach to teaching?

Building on the notions of “learning community” as espoused by Cornu (2005), as well as the reflective practice discussions of Loughran (2002), Margetts and Nolan (2008), this question seeks to establish whether co-deployment can facilitate development of a ‘learning community’ approach to teaching. Based on the extant literature as discussed in Chapter 2 of this thesis, and adopting several ‘learning community’ ideals from the abovementioned authors, four aspects that could illustrate development of a learning community have been utilised in order to examine this data – those of professional dialogue, co-mentoring, collaborative activity and professional reflection.

As co-mentoring and professional dialogue were not specified as key aims of the project, findings in relation to this question are co-incidental, and rely on the approach taken by the respondent themselves. Many of the responses were occupied by day-to-day concerns of classroom management, time management, planning and assessment, and how taxing the process was for respondents.

##### 2011 Surveys: Survey 1

*Question: What are the positive aspects of the P2 experience so far?*

Respondents generally noted the value of being involved in a different, non-traditional professional experience, with 70% identifying as benefits the extended timeframe, flexibility of the program, or community aspect (all unique to P2). As ~~one~~ Respondent 1 stated, the “dynamic teaching environments, modern facilities, IT support, unique learning spaces” were a feature of this non-traditional program that provided positive outcomes. The same respondent also noted that they valued “being at the frontier of the new project,” which demonstrates the commitment of this pre-service teacher to innovative methods of teacher professional practice.

One respondent noted two key aspects of a 'learning community' from this program: "I find that [it] helps develop flexibility in planning and allows time for reflection:" [\(Respondent 13\)](#).

~~One~~ Respondent [20](#) identified the 'community' notion explicitly:

[A positive aspect] would have to be the way in which the P2 group has really banded together and has in some ways developed our own little community. It is helpful to know the other people, not only the ones at your school, but the students in the wider P2 group are there for you as support. It has also been good to see actual units of subjects taught, not just one, but a few. It has helped me see the way in which some teachers plan for these units of work and which methods I would like to use when I'm a REAL teacher!

The notions described in this response articulate many of the key aspects of a 'learning community' approach: collecting together for professional dialogue (identified here as 'support'), professional learning and planning groups, co-mentoring (seeing how teachers plan, developing methods for practice) and professional reflection (internalising and analysing other teachers' techniques, testing these and refining them during professional experience).

## 2011 Surveys: Survey 2

*Question: For each of the following sources of knowledge and skills (first column) please indicate what type of knowledge and skills they provided. You can indicate more than one item in each row. – (includes only the section on ‘Interaction with peers at my school’ from this question)*

Table 4.4. Skills and knowledge provided by peers at my school

Type of knowledge or skill	Number of Responses (N=18)	%
Classroom Management	17	94
Lesson planning and delivery	11	61
Working in a modern school setting	15	83
Working in a range of learning environments	14	78
Relationships and Communication	18	100
Engagement and motivation of students	16	89
Working as a team	16	89
Coping with the demands of teaching	13	72
Reflection on my classroom experience	16	89
Personal knowledge and skills	13	72

Response to each aspect was optional, and response to more than one aspect was possible.

Respondents to this question opted to select several aspects of this question.

From Table 4.4 it can be deduced that respondents placed emphasis on peers to provide ‘relationships and communication’, with every respondent nominating this aspect. This exhibits the value respondents placed on relationships with co-deployed pre-service teachers, and as this is the second survey, could demonstrate the development of these peer relationships as the professional experience progressed.

The role of professional advice and support from peers was also shown in the high response rate to the aspect of ‘classroom management’ – 17 of the 18 respondents demonstrated that their fellow

pre-service teachers provided support and advice on classroom management issues. This finding can be deemed relevant in relation to development of a 'learning community' – as development of dialogue, feedback and co-mentoring presumably occurred when pre-service teachers sought advice on these concerns. Similarly, 16 respondents noted that peers provided knowledge and support towards 'engagement and motivation of students', demonstrating a skill-sharing approach that warrants further investigation in Stage 2.

High responses to aspects of 'working as a team' (16 of 18 respondents), 'reflection on my classroom experience' (16 of 18 respondents) and 'working in a modern school setting' (15 of 18 respondents) further demonstrated that the ideals espoused in reflective, community based practice were supported in a co-deployed professional experience program such as P2.

### **2011 Surveys: Survey 3**

*Question: What knowledge and skills do you think you did gain by completing the teacher-as-researcher project?*

The aims of the teacher-as researcher project were to:

- Provide a means of responding to the dynamic needs of teaching in new school contexts
- Assist pre-service teachers develop a better sense of the breadth and depth of teaching and learning
- Draw upon a range of perspectives as part of a collaborative school-based investigation
- Collectively construct practical knowledge about teaching
- Provide a critical lens for reflecting on teacher learning.

Thus a parallel could be drawn between the project's outcomes and the learning community reflective practice model. However, respondents did note a number of outcomes from the project that point to their own development as reflective practitioners.

Respondents identified key reflective practice techniques, including the “ability to critically analyse observations,” (Respondent 5), while another noted that through the project they “gained the ability to take this research and put it into practice.” (Respondent 13). One respondent clearly identified their own finding of reflective practice, noting that “teaching and learning go hand in hand,” (Respondent 9), while another recognised the self-questioning nature of reflective practice raised by the project, noting that “after the project I feel even less capable with my questioning skills and abilities.” (Respondent 20).

The technique of working collaboratively, within a community of learners, utilising professional dialogue was also considered a key skill by some respondents, with four pre-service teachers identifying the value of “group work strategies” and “working as a professional team.” The identification by one respondent of the value of “collaborative, school based research” undertaken as part of the project demonstrates that the Teacher as Researcher Framework within the P2 program facilitated and supported the development of a ‘learning community’ for the pre-service teachers involved.

### **2011 Surveys: Survey 3 (continued)**

*Question: This question is seeking preference between the two professional experience models you have experienced. Please provide comments on the positives about the P2 model.*

Respondent 20 noted the benefit of “working very closely with other student teachers and qualified teachers,” -demonstrating the connection and co-mentoring aspect of working in a community that included fully qualified and experienced teachers, as well as novices. The functionality of the group was also demonstrated ~~in one response~~ by Respondent 11: “we became a cohesive group of people quickly, and this allowed regular reflection in a friendly environment,” a statement that not only identifies the effective working relationships developed, but the resultant flow-on effect to development of reflective professional practice.



## 2012 Surveys: Survey 1

*Question: Why did you elect to join the P2 program?*

Pre-service teachers' responses indicated that they were keen to embrace the notion of 'community' in teaching. Of the twenty-two responses to this question, eight mentioned team teaching, and three identified the chance to work in an open plan learning community as a key reason. Respondent 1 identified this, stating that "the open-plan teaching and team-teaching strategies really interest me".

Three respondents noted that the timing and structure of this professional experience would support their reflective practice, as respondents were placed in schools for two days per week over a whole term. Respondent 3 noted that it was "important for me to have time to reflect on my teaching", while Respondent 20 stated that the two-day per week professional experience would "provide me with the time and space to really think through my learning/ teaching process as a pre-service teacher, really bring out my own development as a person", demonstrating the commitment to maximising the professional experience.

In further support of the commitment to the notions of dialogue, learning communities and reflective practice, seven respondents noted that they wanted to see the continuity and progression of a whole term within one learning community. This is evidenced by Respondent 13, who stated that "I thought it would provide me with an opportunity to do some team teaching and get an overview of how a school functions over the duration of a term".

## 2012 Surveys: Survey 1 (continued)

*Question: Please indicate what type of knowledge and skills (interaction with peers at my school) provided. You can indicate more than one item in each row.*

**Table 4.5. Skills and knowledge provided by peers on P2**

Type of knowledge and skill	Number of Responses (N=22)	%
Classroom management	8	36
Discipline content knowledge	8	36
Teaching strategies and advice	12	54
Lesson planning and delivery	7	31
Working in a flexible spaces setting	10	45
Communication	9	40
Engagement and motivation of students	13	59
Working as a team	10	45
Coping with the demands of teaching	11	50
Reflection on my classroom experience	7	31

Responses to this question consolidate the indications that team–deployed professional experience encourages development of professional dialogue between pre–service teachers. Table 4.5 indicates that discussions between respondents (established as frequently occurring in results of Question One of this chapter, and discussed earlier in Question Two, 2011: Survey 1) tended to revolve around day–to–day management tasks like engagement of students (59% of respondents) and teaching strategies and advice (54% of respondents). The daily ‘mechanical’ considerations of classroom management and teaching technique were also very common statements throughout the surveys conducted.

The indication that 45% of respondents developed skills from working as a team, and working in a flexible spaces setting, demonstrates that this kind of professional experience deployment provided

a 'learning community' atmosphere, with connections to both people of greater experience and those on a similar experience level, as well as an understanding of the dynamic approaches to working in a community space.

Comparison of 2011 and 2012 cohort responses to 'skills and knowledge provided by peers' will be undertaken in Section 4.2.1.

## **2012 Surveys: Survey 2**

*Question from survey: Please comment on the reasons for any differences in the nature of interactions between Prac A and Prac B.*

~~One respondent~~ Respondent 3 identified the regular contact organised between pre-service teachers as a whole group and the group mentor as a key difference between the professional experiences: "In Prac A we had a weekly meeting with pre-service teachers and [the] leading mentor. In Prac B there were no group meetings arranged and no contact with leading mentors." This comment demonstrates that the 'learning community' of pre-service teachers and mentor teachers, from around the learning space, were encouraged to engage in dialogue, discussion and potentially, reflection activities as part of the meeting.

### ***4.2.2.1 Summary of findings for Question Two, and directions for Stage 2: Interviews***

Survey responses indicate that co-deploying pre-service teachers on the P2 program can facilitate key aspects of the 'learning community' approach to teacher practice.

The opportunities for reflective practice were also highlighted by respondents, with the part-time, extended placement timeframe seen as providing effective time for reflection to take place.

Development of team dynamics, group-work skills, and the opportunity to meet as a team with mentor teachers were all highlighted as benefits of this program. When compared with standard

‘block prac’ placements, the indication is that P2 deployment allowed for greater fluidity of dialogue within the community.

#### **Comparison between 2011 and 2012 data: Knowledge and skills provided by peers.**

Respondents strongly indicated, both here and elsewhere in the study, that support from peers on developing classroom management, teaching delivery, and student engagement strategies was very common. In both the 2011 and 2012 surveys, a similar question based on ‘knowledge and skills provided by peers’ was asked. These results have been independently reported earlier in this section. However, some discussion of these data in relation to the structural context of the program is warranted by the difference in response from the two cohorts.

In the 2011 program, significant emphasis was placed on development of peer-based teams. Both La Trobe University and the placement schools worked to structure a ‘team-based’ deployment. Conversely, in 2012 facilitation of team-based activities and contact was largely organised by the individual placement schools only.

This structural difference is evident when responses from the two cohorts are compared, as in Table 4.6. Only the types of knowledge and skills that matched in both surveys were compared.

**Table 4.6. Knowledge and skills from peers – comparison of 2011 and 2012 data**

<b>Types of knowledge and skills</b>	<b>2011 Percentage</b>	<b>2012 Percentage</b>	<b>Difference (2011–2012)</b>
Classroom management	94	36	–58
Lesson planning and delivery	61	31	–30
Relationships and communication	100	40	–60
Engagement and motivation of students	89	59	–30
Working as a team	89	45	–44
Coping with the demands of teaching	72	50	–22
Reflection on my classroom experience	89	31	–58
Working in a modern school/flexible spaces setting	83	45	–38

In every comparable aspect presented in Table 4.6, respondents in the 2011 cohort placed greater emphasis on their peers than those in 2012. The greatest percentage difference was identified in relationships and communication, and reflective practice, both key aspects identified in the 'learning community' models described in Chapter 2 of this thesis.

When the supportive structures of the University and placement schools are taken into account, it appears as though the emphasis placed on supporting pre-service teachers as part of a team affects the development of a 'learning community' model of practice.

This finding connects strongly with Question 4 of this chapter. It will be further discussed in section 4.2.4.

### 4.2.3 Survey responses matched to Research Question Three: What do pre-service teachers perceive as the longer-term benefits of co-deployment in professional experience?

#### 2011 Surveys: Survey 1

*Question: Why did you elect to join the P2 program?*

Some respondents to this survey question demonstrated that they were thinking beyond the period of the professional experience, while 50% of respondents noted that the structure would fit better with work and family commitments, 20% identified the potential employability opportunities and skills development that they felt were on offer. One of these four respondents noted that they joined "to get a greater insight into the BEP [Bendigo Education Plan] especially in regards to team teaching. I hoped it would give me a wider experience in the school environment. I also believed that it would extend my teaching skills and improve my chances of employment-" [\(Respondent 16\)](#).

Another of these four respondents stated that they wanted to experience the "new Bendigo schools" [\(Respondent 18\)](#) to participate in team teaching, and to increase their employability.

These responses indicate that some of the respondents in the program were familiar with the adaptations and designs of teaching and learning that were occurring as part of the BEP project, and were interested in developing skills that would make them more readily employed after the conclusion of their qualification.

### **2011 Surveys: Survey 1 (continued)**

*Question: What specific knowledge and skills do you think you are developing through the P2 program?*

The majority of responses to this question centred on several key themes, with 40% of respondents stating that they developed classroom management skills, while 45% identified development of teaching techniques. This finding concurs with common themes discussed in other surveys throughout the program, and demonstrates that pre-service teachers are commonly concerned with developing key 'teaching' skills.

One respondent identified the holistic and long-term approach that P2 placement offered to pre-service teachers, stating that "[P2] is not just a 4 week block you have to 'get through' but ongoing practical learning experience in which you are really taught and shown all areas and aspects to being a teacher. It really opens your eyes-" [\(Respondent 20\)](#). This statement suggests a belief on the part of the respondent in the difference between P2 and block professional experience, with greater long-term benefits assigned to P2.

Although the question specifically asked respondents what skills and knowledge were being developed through the P2 program, few responses identified that these skills were different to what would be found in any other professional experience situation. Further exploration of responses will occur in Stage 2 of the study to identify whether pre-service teachers believed that there was a specific advantage to P2.

### **2011 Surveys: Survey 2**

No relevant responses.

### **2011 Surveys: Survey 3**

*Question: What are the positives of the P2 model?*

90% noted that P2 contributed to some aspect of their teaching experience, with 50% of respondents identifying that P2 offered the opportunity to develop relationships with students and teachers, and 40% of respondents identifying the positives of being part of the school. Both of these positive aspects could be interpreted as benefits to teaching practice over the longer-term.

More specifically, two of the respondents in this survey stated that they hoped to gain work at the placement school after completing their qualifications. One respondent identified the relationship developed with their mentor teacher as potentially establishing for the long-term, “hoping this trust may at least lead to CRT work in the future-” [\(Respondent 12\)](#). Another respondent stated that the P2 program gave the opportunities to “build relationships with students and teachers, increasing job opportunities-” [\(Respondent 20\)](#). Both these respondents, therefore, considered future employment when participating in P2.

### **2012 Surveys: Survey 1**

*Question: What are the positive aspects or benefits of the P2 experience?*

Respondents highlighted a number of activities that occur across the course of a school year, and 36% of respondents highlighted as a benefit the opportunities to witness additional tasks including parent/teacher interviews, report writing and NAPLAN test completion. As these activities are not always coincidental to professional experience rounds, it could be assumed that this provides greater teaching practice experience than a traditional professional experience. Respondents did not specifically articulate whether they felt these were longer-term benefits of P2.

As with the 2011 cohort, establishment of relationships with mentor teachers were seen as a longer-term benefit of P2, with one respondent noting that they had “been offered to come back and keep in touch so I can attend other events with the school.” [\(Respondent 5\).](#)

## **2012 Surveys: Survey 2**

No relevant responses.

### *4.2.3.1 Summary of findings for Question Three, and directions for Stage 2: Interviews*

Questions in the initial surveys were not designed to specifically gather data on pre-service teachers’ views of long-term benefits, nonetheless, two main themes emerged.

Some of the respondents believed that involvement in the P2 program would enhance their employability. The ways in which they believed this occurred needs to be investigated further in Stage 2.

A small number of respondents believed that P2 provided a stronger long-term relationship with the placement school, and that this increased the likelihood of being considered for subsequent teaching work, either on a casual or ongoing basis. Relationships with mentor and experienced teachers within the school, and any work opportunities that have arisen as a result of P2 involvement will be investigated as part of Stage 2.

Regular reference was made by survey respondents to teaching skills, reflective practice skills, classroom management techniques, and planning processes, gleaned as part of the P2 process. It is unclear from these data whether respondents believed that the quality, frequency and long-term benefit of these skills were greater in P2 than that of traditional professional experience placement. Stage 2 will investigate this further.



#### 4.2.4 Survey responses matched to Research Question Four: What do pre-service teachers perceive as enablers and constraints to collegiality and peer mentoring, in co-deployed professional experience deployment?

This question seeks to establish how collegiality and peer mentoring was facilitated or prevented by various structures surrounding the pre-service teachers and the P2 professional experience.

Structures could be interpreted as timeframes, location, timetabling, meeting locations and attendances, co-deployment and team-teaching, or aspects of the program as interpreted by the University.

##### 2011 Surveys: Survey 1

*Question: What issues are you experiencing on P2?*

##### *Constraints*

Respondents were vocal about the pressures of workload, assignments and managing the connection between professional experience, university, and personal commitments: with 40% stating that they felt the workload to be challenging. While the survey did not specifically seek pre-service teachers' feedback on collegial/peer mentoring structures, it could still be surmised that heavy workloads and assignments could have limited the opportunities for pre-service teachers to connect, constructively communicate, and support one another.

##### 2011 Surveys: Survey 1 (continued)

*Question: What are the positive aspects to the P2 experience so far?*

##### *Enablers*

60% of respondents felt that the P2 timetable (two days per week across the course of a school term) was the major catalyst for developing friendships, collegial relationships, and opportunities to reflect. ~~One~~ Respondent 5 noted that the P2 structure gave them “the opportunity to teach with a

fellow student,” while ~~another~~ Respondent 13 noted that “the extended time in the school” allowed for “building of relationships with staff and students.”

P2 involved immersion in ‘community’ style learning spaces, with open-plan classrooms, and greater contact between students and teachers than many pre-service teachers may encounter from a traditional professional experience. To Respondent 1, this was a key positive, highlighting “dynamic teaching environments— modern facilities, IT support, unique learning spaces.”

The opportunity for the wider P2 group to communicate and share experiences was noted by ~~one~~ Respondent 19. “The sense of collegiality with the group across schools and methods” potentially denotes a peer-supportive environment outside of the professional experience setting, perhaps within the University itself. This will be investigated further in Stage 2.

## **2011 Surveys: Survey 2**

*Question: For each of the following sources of knowledge and skills (first column) please indicate what type of knowledge and skills they provided. You can indicate more than one item in each row.*

*Enabler:*

This question asked respondents to assess from where they gleaned knowledge and skills of:

- classroom management
- lesson planning and delivery
- working in a modern school setting
- working in a range of learning environments
- relationships and communication
- engagement and motivation of students
- working as a team
- coping with the demands of teaching
- reflection on my classroom experience

- personal knowledge and skills

The sources of these skills are listed below in Table 4.7. Each respondent could select more than one source.

**Table 4.7. Sources of knowledge and skills by category – sorted by number of responses for each source**

<b>Source</b>	<b>Number of responses</b>
Interactions with peers at my school	149
Mentors	125
Drawing on my personal beliefs and values	107
University lectures and tutorials	101
Method Lecturers	86
Personal prior experience	81
Ideas from teaching and learning literature	63
Online Resources	61
Subject textbooks	59
Ideas from official education websites	34

The rank order of these findings demonstrate clearly that pre-service teachers, while on P2 professional experience, sourced considerable skills and knowledge from their peers at the school, and that these occurrences exceeded those of any other source. It is notable that there are greater incidences recorded here for peers than for mentors, and it appears from these findings that the structures that support the P2 pre-service teachers, and enable them to be in close contact while on professional experience, does enable communication and peer-coaching opportunities. It also appears that pre-service teachers have voluntarily opted to seek opportunities for collegial contact and co-operative learning.

It is also interesting to compare the breakdown of the above table, and to identify the ways in which pre-service teachers more commonly consulted their peers than with their mentors.

**Table 4.8. Source of knowledge and skills: Comparison of mentors and peers – sorted by peer responses**

<b>Knowledge/Skill</b>	<b>Mentors</b>	<b>Peers</b>
Relationships and communication	12	18
Classroom management	16	17
Engagement and motivation of students	14	16
Working as a team	13	16
Reflection on my classroom experience	12	16
Working in a modern school setting	14	15
Working in a range of learning environments	7	14
Coping with the demands of teaching	10	13
Personal knowledge and skills	13	13
Lesson planning and delivery	14	11

Table 4.8 clearly demonstrates that in eight of the ten categories, respondents approached their peers more than they did their mentors. While it would be expected that a pre-service teacher would rely upon advice of their mentor when planning lessons (as it was the mentor's class that was being taught) consistently higher peer interactions in the eight categories are notable. The results that show respondents more frequently identifying peers than mentors as a source of classroom management knowledge, as well as in engagement and motivation of students, may demonstrate peer-coaching or sharing opportunities, with respondents subsequently utilising strategies that were successful.

As has been discussed in the Methodology chapter of this study, the 2011 cohort of P2 were briefed and supported to become a more cohesive team, an approach that was not replicated to the same degree in the 2012 cohort. It could then be construed that the provision of support and structure for team building in pre-service professional experience programs such as P2 is an enabler for collegiality and peer mentoring.

Stage 2 will investigate the degree to which the structure of the P2 cohorts enabled collegial contact and peer-coaching opportunities, and will seek to identify how these structures could be further supported to enhance interactions between peers.

### **2011 Surveys: Survey 3**

*Question: What are the negatives of the 'block prac' model?*

*Enabler*

Responses to this question indicated that features of the P2 model that enabled peer mentoring and collegiality were deemed as missing from the traditional professional experience arrangement. ~~One~~ Respondent 11 noted that there “was not enough communication between student teachers” demonstrating that the co-deployed experience of P2 had led them to seek out peer contact in the subsequent, traditional professional experience. Development of relationships with other teachers in general was also seen as more beneficial in P2 when compared to block professional experience, with ~~one~~ Respondent 12 stating that they “didn’t feel had the same opportunity to get to know as many staff, at least not to the same degree as P2 program.” Development of relationships, and opportunities to learn from all other staff in an environment, have been frequent themes reported throughout all the data collected in this stage.

Stage 2 will investigate the indications from respondents that co-deployed professional experience provides greater opportunities to develop relationships with other teachers, specifically in relation to peer-based opportunities for growth and development of skills.

### **2012 Surveys: Survey 1**

*Question: What are the main issues you have experienced on P2?*

*Constraints:*

~~One-r~~ Respondent 9 noted “adjusting to a highly social professional environment” as an issue on P2.

This finding could be expanded further in Stage 2 to discover how structures could be put in place to minimise the ‘culture shock’ aspect of being surrounded by other teachers in the workplace. Stage 2 will also investigate how respondents believe pre-service teachers could be taught about the benefits and techniques involved in peer-based mentoring and coaching arrangements.

Several respondents identified the part-time nature of P2 as a general issue with 55% of respondents highlighted issues such as increased and disjointed workload, catching up on the occurrences of the remaining three days, and delivering partial curriculum as concerns.

This could be interpreted as a constraint to peer-based opportunities for collegiality and reflection, particularly if P2 participants spent the majority of their time catching up on days missed at the placement school, and left themselves little time to reflect, share and debrief with peers.

### **2012 Surveys: Survey 1 (continued)**

*Question: What other knowledge and skills do you think you developed through the P2 program, and who helped you develop these skills?*

*Enablers:*

Three respondents noted the value of working with other teachers at the school, but did not specify whether these were peers or experienced teachers. ~~One-r~~ Respondent 1 noted that “other teachers besides your mentor are a useful source for improvement and ideas for knowledge and skills,” demonstrating that the collegial environment facilitated contact and coaching between teachers.

Respondent 12 identified the opportunity to observe other teachers in the community space as a benefit: “I gained a lot of knowledge about the range of teaching approaches and philosophies about relating to students.” Stage 2 investigations will expand on respondents’ observations within the P2

environment, and investigate how much peer observation took place as a result of the learning space layout.

A tabular representation of results for this survey question has not been included in this section's discussion – these results will be discussed as part of Section 4.2.4.1. The 2012 results are notable in comparison to the 2011 data only, and did not yield otherwise relevant data.

## **2012 Surveys: Survey 2**

*Question: What things could the university do to assist pre-service teachers to help each other while on professional experience?*

### *Enablers*

Three respondents were keen to embrace structures that supported collegial contact, with one recommending that the University “group students together so they have other students to talk to and share experiences about teaching in their school.” [\(Respondent 2\)](#). Respondent 4 encouraged the university to brief and prepare pre-service teachers for the collegial approach to professional experience, urging to “encourage preservice [sic] teachers to see each other as supportive colleagues, not the competition.”

The P2 program sought to place pre-service teachers in a co-deployed, community learning environment, which endorsed contact between pre-service teachers. These responses indicate that this co-deployed structure of P2 would both group pre-service teachers together, and encourage them to see each other as supportive, collegial co-mentors.

### ***4.2.4.1 Summary of findings for Question Four, and directions for Stage 2: Interviews***

Results from analysis indicate that there were four main themes that could be interpreted as enablers of collegiality and peer mentoring in co-deployed professional experience deployment.



Enabler 1: the longer timeframe of the P2 program enabled respondents to develop stronger relationships with peers, students and other teachers in the school, leading to greater opportunities for collegial contact.

Enabler 2: the P2 community style learning spaces at the participating schools allowed for regular contact between pre-service teachers and their peers, and pre-service teachers and experienced teachers. It also facilitated opportunities for observation of classes and techniques.

Enabler 3: the P2 team developed across the course of the professional experience, and results indicate that the respondents were in regular contact unrelated specifically to professional experience. How this occurred will be investigated in Stage 2.

Enabler 4: the P2 structure allowed pre-service teachers to approach one another regularly while on professional experience, and results indicate that they sought opportunities to learn from one another. Data also indicate that the interaction and impartation of knowledge from peers was greater than that of mentors or lecturers.

Three commonalities in responses could be interpreted as constraints of collegiality and peer mentoring in co-deployed professional experience deployment.

Constraint 1: the heavy workload cited by many respondents that accompanied the P2 program was seen as a concern to respondents, as was the difficulty in meshing with the university's traditional 'block' program. It could be surmised that being heavily involved with university commitments while on professional experience could limit respondents' willingness or opportunities for collegial contact.

Constraint 2: pre-service teachers who were not ready, or briefed on the social environment of co-deployed teaching could have struggled to adapt to the intricacies of team-based deployment.

Constraint 3: the part–time nature of the placement could have led to respondents spending excessive time catching up on missed class content delivered by existing teachers, this could have limited collegial opportunities.

### **Comparison between 2011/2012 data –Constraints and enablers of collegiality/ peer mentoring.**

Reference has been made in Question 2 of this chapter to the increased peer focus in the 2011 cohort, when compared to that of 2012. The results indicate that facilitating and supporting teams of pre–service teachers enables collegiality and peer mentoring. This is also evident when the results from Survey 2, 2011 (Table 4.7) and Survey 1, 2012 are compared in Table 4.9.

**Table 4.9. Comparison of responses: Skills and knowledge from various sources**

<b>Aspect</b>	<b>2011 (18 respondents)</b>	<b>2012 (20 respondents)</b>
Interaction with peers at my school	149	102
Mentor	125	151
Drawing on my personal beliefs and values	107	97
University lectures and tutorials	101	126
Method lecturer	86	66
Personal prior experience	81	124
Ideas from teaching and learning literature	63	77
Online resource	61	58
Subject textbooks	59	61
Ideas from official websites	34	43
Expert Mentor		85

The increased team focus in 2011 appears to be linked to the pattern of responses present in Table 4.9:

- In 2011, greater emphasis was placed on peers (149 incidences, compared to 102 in 2012).  
This corresponds with the team structured approach undertaken with this cohort.

- In 2012, pre-service teachers identified support from their mentors in more instances (151, plus 85 'expert mentor' incidences, compared to 125 in 2011). In 2012, greater autonomy over placement teams was left to individual placement schools, and project coordinators reported that there was a reduced focus on team-building.
- In 2012, pre-service teachers identified and attributed knowledge and skills to university lecturers and tutorials, and personal prior experience, more than that of 2011. This could be interpreted as a greater reliance of the 2012 cohort on their own resources, rather than those of their peers.

Therefore, the increased focus placed on peer and collegial support appears to be related to the increased recognition of collegial contact by respondents. If co-deployment and peer-based support are reduced (as occurred in the 2012 cohort), the incidences of peer interactions between pre-service teachers fall.

*Further directions:*

Stage 2 of the program should investigate how respondents viewed the structure of the P2 in facilitating collegial contact, as well as seeking recommendations for how the university can structure future professional experience to enhance opportunities for peer coaching and contact.

Identifying in detail how the co-deployment of pre-service teachers (and which structures of P2) led to their collegial and peer coaching opportunities will be a priority in Stage 2.

## 4.3 Stage 2: Email interviews

Following interpretation of the results from Stage 1, and based on the findings correlating to each research question, email-based interviews were developed and distributed to a selection of respondents from both the 2011 and 2012 P2 cohorts.

These email interviews were designed to gather responses directly related to the four research questions. Each question was restructured into a more general topic 'area' to reduce confusion and assist respondents to understand the intrinsic focus of each question. Discussion of how the research questions were reinterpreted to become question 'areas' is provided in section 3.7.1.1.

Respondents were encouraged to contribute their own responses in as much detail as they were comfortable to provide.

### 4.3.1 Area One: Collegiality and P2

Five of the seven respondents agreed that the P2 program resulted in increased collegiality.

Respondents commonly identified a contrast between P2 participants and those in the wider Diploma of Education program, identifying themselves as a separate group who shared a closer bond through their experiences in classrooms together. "Because we were a smaller group than the whole Dip. Ed. cohort it was much easier to get to know one another and build relationships," noted Respondent B, while Respondent C identified the social networks that P2 participants used between university and placements, stating that they "instantly brought the group closer together because it meant we had more uni class time and placement time together."

Respondent A identified both the collegial aspect of the program as well as the notion of a structured, productive team: "P2 participants definitely felt part of a unique team, and the regular morning meetings between the schools, as well as the contact of respondents within the schools did help everyone to work together and support each other and share ideas" (Respondent A).

The notion of collegial support through debriefing opportunities was also identified, with four of the seven respondents stating that the nature of P2 enabled them to share their events and encounters.

“As a larger group we discussed our experiences, situations, concerns, problems and good times”

(Respondent D). “I found the regular contact over the longer-term great in debriefing” (Respondent H). “Everyone was really excited to share their experiences when they got together again, which was usually a couple times a week (at uni)” (Respondent A).

It could be interpreted from the tone of these comments that discussing and sharing outcomes was seen by respondents as a positive, enthusiastic and social experience, certainly stresses and concerns were shared, but much of this language appears very positive in nature.

This scenario of P2 participants ‘banding together’ formed a common theme with respondents, and demonstrates their interpretation of the program as one of a collective, co-deployed activity with shared experiences and goals. This closely follows the notions of collegiality in the literal sense.

It is interesting to note that one of the two respondents who stated that the P2 program did not offer collegial opportunities also clearly mentioned that they were alone in their learning community/environment for the placement, with no other pre-service teacher present (as distinct from the placements that co-deployed P2 participants within the same community). Thus, they identified the lack of opportunity that this isolation presented, stating “I very rarely, if at all, saw the other teaching students whilst in the P2 program, and therefore found it hard to debrief and share experiences with them” (Respondent G). Discussion of the isolation of this respondent, and the subsequent constraint this placed on their learning, will be discussed as part of Area Four – Enablers and Constraints, within this chapter.

The respondents that *did* report collegial contact noted one or more of the following:

- informal discussions about teaching: “many, many discussions...at morning tea or lunch” (Respondent B).

- Discussions and sharing sessions when P2 participants met up at university
- Communication via texts, emails and phone calls both within and outside of school
- Meeting up for social occasions

Respondents sought to extend their collegial relationships to times outside of allocated teaching/planning time, with one response highlighting that “outside of placement we also met up in groups to discuss coursework” (Respondent B). This collegiality also appears to have been shared among the wider P2 community, with several respondents mentioning that they were in contact with P2 participants placed at other schools.

Extension of collegial relationships to outside of university/placement structures appears to reflect on the respondents’ definitions of ‘critical and non–critical contact with peers’. Although several respondents remained unclear as to what this question sought in the previous Survey Monkey stage, Respondent G clarified their interpretation clearly, they noted that critical contact would be directly regarding professional experience, and took place at university or on placement. Non–critical contact conversely, could occur outside of work hours, and involve a number of non–work related (presumably social) topics. Respondent B noted that “non–critical was more about debriefing, sharing advice and keeping each other from stressing or becoming overwhelmed.”

#### *4.3.1.1 Key findings: Collegiality and P2*

Overall, the majority of respondents interviewed believed that P2 engendered collegiality. Reporting of collegial incidences in P2 appeared to be linked to co–deployment – those who were alone on professional experience reported less of a sense of collegiality and support from peers, and fewer opportunities for reflection.

Collegial contact between P2 participants was also recognised to involve co–deployed respondents, respondents placed at different P2 schools, and respondents in the wider P2 cohort generally. P2

participants identified themselves as a discrete, close-knit 'team', working together on a shared goal, and distinct from the wider La Trobe Dip. Ed. Community.

Respondents identified the P2 program as containing many 'collegial' characteristics, including: debriefing opportunities, developing and sharing goals, provision of support to fellow participants, and open and constructive lines of communication.

Respondents used their own communication channels to share information and make contact, this included text messaging, social media, emails and personal telephones (not solely school – based or university-based communication channels). This contact continued to occur outside of designated teaching/learning times, and commonly took place during and in between university classes

Non-critical contact, seen as a significant proportion of the contact that occurred between peers, could be assumed to comprise non-work related or social discussions, or general, debrief-style discussions and support. This non-critical contact was thus commonly identified in these data.

#### **4.3.2 Area Two: P2 and the 'Learning Community'**

As identified in Chapter 2: Critical Review of Literature, and discussed in Section 4.2.2 of this thesis, the notion of a 'learning community' of teachers is variously defined and labelled, and a range of ideal characteristics and qualities of such a practice in the pre-service has been discussed by a number of authors including Cornu (2005) and Margetts and Nolan (2008). In assessing the results of both Stage 1 and Stage 2 of this thesis, the four themes of professional dialogue, co-mentoring, team planning and professional reflection have been utilised to span the thematic commonalities identified in Chapter 2's discussion.

##### **Professional Dialogue**

Discussions around professional development and learning within the P2 professional experience were consistently identified by respondents – every one of the seven respondents noted professional dialogue as valuable and beneficial. As Respondent A enthused:

It [professional dialogue while on P2] was fantastic as my mentors and members of their teaching team had very different approaches and beliefs etc. It was interesting to see how it could all fit together for the benefit of the student. (Respondent A)

This contact and professional dialogue with experienced teachers was also noted in several responses, with four of the seven respondents specifically mentioning the knowledge gleaned from meetings and discussions with mentors and other teachers in the 'community'. One respondent noted that the team meetings provided "a great opportunity to meet teachers from other communities and methods" (Respondent G). Scheduled meetings and planning sessions with mentors and other experienced teachers appeared to have been the ideal catalysts for professional dialogue between experienced and novice teachers in the 'community'.

Dialogue between P2 participants was also clearly mentioned in several responses. "Massive amounts of professional dialogue occurred in my situation... I found many instances where there was reflection, discussion, criticism and compliments that triggered great discussion regarding pedagogy" (Respondent H). Respondent B stated that P2 participants found many opportunities to engage in this dialogue:

Usually over coffee/lunch after a lecture or workshop or while completing an assignment, we would have many many discussions around pedagogical technique, learning, behavioural theory, classroom management, or while on placement (again usually at morning tea or lunch) discussion about all of these points. (Respondent B)

The commonly occurring theme of P2 participants meeting up outside of 'formal' occasions was again highlighted, this time by Respondent C, noting that professional topics were "discussed casually amongst the P2 students usually when we had free time that lined up on placement but also in between uni lectures." This again demonstrates the emphasis respondents placed on professional



and collegial relationships, and the organically forming professional/social relationships that participants formed when they were working together in a community.

One respondent noted the benefits of an open-plan learning space in participating in professional dialogue, stating “As most classrooms were open we saw more, and we were able to observe more, and thus have more informed discussions with regard to things we had seen as a group”

(Respondent D). This leads to the notion that placing pre-service teachers in a space that allows observation of practising teachers (at all levels of experience) enhances the opportunities for these pre-service teachers to seek observation opportunities as part of their normal daily procedure, as distinct from ‘traditional’ professional experience that requires formal liaison with teachers for the purposes of observing their classes.

### **Co-mentoring**

The process of supporting, motivating and sharing resources with one another, as well as providing encouragement and feedback, appears from participants to have been a key benefit of the P2 program. Three of the participants were vocal in their appreciation of the co-mentoring aspect of P2:

This was happening all the time and was soo [sic] important to keeping us sane! Lots of making sure we were doing ok, reassurance that we weren’t the only one worried/frustrated/stressed/confused etc...having each other to work through it was essential. (Respondent B)

The P2 participants where I was were all very supportive of each other. When one of us was having a low spell the others picked up and encouraged/supported and if one of us saw something great we shared constantly with our other pre-service teachers. I also found as I build relationships with other teachers within the community I was able to get advice from different teachers to my mentor as well, which was great. (Respondent H)

Support from peers on the program was considered absolutely critical by one respondent, stating that:

This [co-mentoring] became an essential part of my experience. My 'mentor' was not the nicest person, actually she was quite mean. Many nights I went home crying because of her actions, and I almost gave up. If it was not for the support and actual mentoring that I received from the other pre-service teachers who were there with me, and were able to debrief with me, I would not have continued with this career that I love. Much of what I learnt was from them. (Respondent D)

In Respondent D's situation, it appears as if the mentor/pre-service teacher relationship has been unsuccessful. While causal factors have not been identified (and are irrelevant to the scope of this research), the noteworthy finding here is that the support of peers stepped in when mentor support was unavailable or inappropriate – and as a result, a person who identifies themselves as 'loving' teaching, could find the strength to continue with professional experience. In generalizable terms, this does assert strongly that the co-mentoring aspect of P2 can provide a community-based network of support for pre-service teachers, as distinct from the mentor-dependence characterised by traditional professional experience arrangements.

Instances of co-mentoring, as well as a true understanding of the role of a co-mentor appeared to be difficult for some respondents to articulate, with one noting that "I found co-mentoring largely came from our specific mentors rather than other P2 students although we all would have had our down moments that would have been discussed with others in the P2 program" (Respondent C).

This respondent has, in fact, participated in co-mentoring, but perhaps required additional briefing in how to recognise and engage in co-mentoring conversations.

Further to this notion that respondents felt uncertain about taking a co-mentoring role, one respondent felt uncomfortable with the notion of co-mentoring, noting that "as a pre-service

teacher I didn't feel I was in a position to provide feedback to other teachers although I did ask a lot of questions" (Respondent E). This could be attributed to an individual personality trait, or lack of encouragement/structure to undertake co-mentoring duties. Both these responses indicate that the respondents were co-mentoring, but may not have truly understood how to undertake effective critical and support roles.

### **Team planning**

Respondents generally noted that team planning was a feature of the professional experience. Most of this planning involved the wider staff cohort at the participating school, the learning community specific staff, or a mentor/pre-service teacher partnership. Pre-service teachers did not appear to engage in much team planning among themselves. Nonetheless, four of the seven respondents stated that they observed team planning, and two respondents stated that they participated actively in team planning while on placement.

Respondent D identified the benefits of observing team planning in practice amongst experienced teachers, noting that it "was observed on a daily basis in the learning communities from the other teachers, and the different ideas they had utilising the learning communities. It really opened my eyes to the possibilities." This approach of teachers working together in multidisciplinary groups was thus, still a notion that characterised P2.

### **Professional Reflection**

All seven respondents in this survey stated that they undertook professional reflection as part of the P2 program, with Respondent H identifying its value: "I had lots of professional reflection and found this a great learning tool." Four of the seven respondents noted that their professional reflection took place in conjunction with their mentor, while four of the seven respondents identified their peers as important sources for professional reflection.

Respondent D identified the peer supported reflection as distinctly beneficial, stating:

This was very valuable with my co pre-service teachers, being in the same learning community they were familiar with the physical environment in which we worked and had a better understanding on how to enhance learning and troubleshoot any problems.

(Respondent D)

Respondent D thus highlighted the unique and common challenges faced within the professional experience, and stated that “The differing areas in the learning communities provide very different challenges than one would have ordinarily, and it can be difficult to describe to others unfamiliar with them.”

Two of the seven respondents identified both mentors and peers as sources for professional reflection.

Some barriers to professional reflection were identified by respondents. The lack of access to peers on P2 was noted by Respondent A, who felt that the lack of other P2 participants in their “end of the pod” (a reference to the section of the learning environment in which this respondent was located) inhibited opportunities for meeting up and reflecting.

Respondent C noted that the structure of P2 “definitely facilitated these discussions,” and stated that reflection was “the topic most often discussed” amongst the pre-service teachers involved.

#### ***4.3.2.1 Key findings: P2 and the ‘Learning Community’***

P2 participants identified with several aspects of the *learning community* approach to teaching.

Generally, respondents found that professional dialogue within their P2 experience was commonly undertaken, and was considered of benefit to development of teaching practice. Professional dialogue involved pre-service teachers and their peers, but also involved pre-service teachers engaging with mentor teachers, experienced teachers and other members of the relevant learning

‘community’, as structured by the professional experience placement. Considering that professional dialogue in the P2 program was both horizontal and vertical in nature, it can be assumed that teachers working together in this ‘community’ shared considerable, constructive professional dialogue.

Co-mentoring between pre-service teachers was recognised as being important, but this largely depended on the nature of the placement, and contact between pre-service teachers. Where one pre-service teacher experienced a negative mentor/pre-service teacher relationship, peer-based co-mentoring was considered critically important. Another found that the reassuring aspect of co-mentoring was of great benefit.

Alternatively, when respondents felt that they were not comfortable in a co-mentoring role, or did not fully understand what was required, consequently they did not value co-mentoring aspect of the program as highly.

Team planning between pre-service teachers appeared to be a seldom occurrence on P2, but team planning with other teachers in the ‘community’ did take place. P2 respondents had the opportunity to watch and sit in on team planning meetings, and develop understanding of how a multidisciplinary team could work in practice.

All respondents identified professional reflection as a component of the P2 program. Professional reflection took place in conjunction with mentors, peers and/or a combination of both.

Opportunities to undertake professional reflection with peers tended to be dependent on proximity and co-location – where peers were more accessible, peer-based reflection was more common.

#### **4.3.3 Area Three: Longer-term benefits of co-deployed professional experience**

The most common theme identified by respondents was that of relationship building – four out of the seven respondents specifically used the word ‘relationship’ in a positive context.

Respondents identified with the effect that extended placement had on developing better pedagogical practice, and teaching skills to help them in their future careers. Respondent C noted that “I was able to make stronger connections with students throughout the placement than I usually would have and so I was able to take them further than I otherwise would have.” Similarly, Respondent G highlighted the benefit of seeing “across an entire term’s worth of student learning and growth – 11 weeks is a long time!” while Respondent H recognised the challenges that lay ahead for the qualified teacher, stating that “It is exhausting, however seeing a term gave me an idea of what was required, and how well prepared you needed to be prior to starting that term.” Respondents tended to distinguish between the longer elapsed timeframe and that of the ‘block’ placement, and the resultant opportunities that P2 offered in witnessing how a school term transpired.

Three of the respondents identified the opportunity to develop strengthened relationships with students as a benefit, while three of the responses specified relationships with P2 peers and other teachers (one of the respondents valued both relationships). “Because we were in the school for a majority of the term it seemed easier to develop strong working relationships with the students and teaching and non-teaching staff rather than the intense few weeks others had” (Respondent A).

The extended, term-long duration of P2 was also popularly cited as providing a longer-term benefit to respondents, with comments citing “a more complete experience” (Respondent D), and the value of a “real world” professional experience (Respondent B). Respondents’ support of a longer-term professional experience was also strongly identified by the Survey Monkey surveys undertaken while the pre-service teachers were on professional experience, discussed in this Chapter as Stage 1. As completion of Survey Monkey surveys could have occurred up to two years ago for some respondents, it is interesting to note that this perception has altered little in the intervening period of time.

The connectedness felt by participants frequently appeared in responses to this question in the surveys. Respondent A felt this was a long-term benefit:

Everyone who participated in the program felt connected and looked out for each other. It was something we all had in common and spent a lot of time sharing and comparing our experiences. Because we were in the school for a majority of the term it seemed easier to develop strong working relationships with the students and teaching and non-teaching staff rather than the intense few weeks others had. Teachers I worked with in the P2 program I still have contact with now. (Respondent A)

Respondent A's statement that there remains contact between P2 participants is particularly noteworthy in terms of this study: as contact between participants could identify the 'enduring' nature of the collegial relationships formed while on professional experience. Indeed, it is anecdotally recognised that teachers keep in contact, or can end up teaching with people who they met while training. Thus, respondents were specifically asked whether they were in contact with participants from P2, how many and for what purposes, the resultant responses mirror the abovementioned statement by Respondent A.

Of the seven respondents to this study, six still keep in contact with other P2 participants. While it is impossible to identify where crossovers might occur, Table 4.10 identifies the number of participants of P2 who potentially still make contact:

**Table 4.10. Longer-term contact between P2 participants**

<b>Participant</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>TOTAL</b>
<b>P2 Contacts</b>	10	10	3	8	6	N/A	0	1	<b>38</b>

Considering a total P2 population across 2011 and 2012 of 50 participants, it could be extrapolated from these data that approximately 86% of P2 participants remain in contact after graduating from university.

Some patterns emerge from this finding. Participants A, B, C and D were all members of the 2011 cohort of P2, and all participants interviewed stated that they remained in contact with their peers. The 2011 cohort has been described by university coordinators as one of greater cohesion, connectedness and rapport across the placement schools, when compared to the cohort of P2 participants in 2012. Therefore, it appears that a more cohesive and connected, team-supported cohort of pre-service teachers will stay in contact over the longer-term.

There also appears to be a trend in the purposes of contact between respondents. Four respondents stated that they used P2 participant catch-ups for social purposes. Three respondents noted that the P2 catch-ups were a great opportunity for professional and collegial co-mentoring: Respondent B noted that they “See how we are all travelling, share experiences (good and bad) and just be around people that know!!!” Respondent B’s identification of peer support “people that know” demonstrates the value that is placed on those with a similar level of experience, a notion echoed by Respondent E who stated that they made contact in order to “offload about the ups and downs of being a graduate teacher!”

Respondent D held a similar, but more professional view, noting that their catch-ups were for “coffee, cake, [to] socialise and [have] some good quality teacher talk – different schools, different ideas etc.” Potentially the lines between social and professional blur somewhat during these discussions, but they are still seen as positive by all respondents.

Respondent B noted that their contact was particularly productive:

One [P2 participant] also works at the same school as me now (different teaching area) so we catch up and check in about how we are going, stress levels at different times of the year, PD discussions (and just helping each other navigate the general school processes) and also VIT full registration discussions. (Respondent B)



The relationship that Respondent B has identified generates some interesting notions. Effectively, the P2 relationship has progressed from supportive collegiality in the pre-service period, to one of support in the graduate period. The topics of discussion – navigating school processes and qualifying for full VIT registration, would be very similar for both graduates, and they would again be in a situation where they could potentially share resources. The discussions that Respondent B has identified also transcend method areas, while still retaining validity and meaningful pedagogical outcomes.

#### *4.3.3.1 Key findings: Longer-term benefits of co-deployed professional experience*

The P2 style professional experience was identified by the respondents as possessing a number of longer-term benefits.

First, being placed in a school over a longer period taught the participants how to form, maintain and develop relationships with students and staff, the identification of changes across the whole term was seen as quite different to the shorter, block experience.

Second, respondents believed P2 provided a more ‘real-world’ experience, incorporating activities that would more closely mirror the evolution of a typical school term.

Third, and most enthusiastically identified by respondents, the P2, co-deployed style of professional experience created in its participants long-term, professional and personal relationships, with many participants still in contact and meeting regularly. These meetings are a combination of peer support and coaching, success sharing and stress mitigation, and the support from peers with similar levels of experience are seen as useful and morally supportive.

#### 4.3.4 Area Four: Enablers and constraints of collegiality

##### Enablers

Respondents were asked what they believed would make it easier to work with one another while on professional experience.

The most commonly cited enabler for collegial contact was access to an appropriate shared space, both in teaching and non-teaching contexts.

Respondents particularly valued having a designated planning/non-teaching space that they could share. Respondent D noted that a designated space allowed for debrief opportunities: “We had a meeting room of our own in the learning community...this enabled us to talk freely together.”

Respondent B agreed that a dedicated office space allowed for additional contact between peers, “we shared an office so contact was more face to face.” Determination of space as exclusively for P2 use was identified as important by Respondent E, stating that “we had a common work preparation area, which wasn’t ideal as it was in the common area which was often used for students and staff activities and we were asked to move somewhere else.”

Establishment of structured meetings, shared professional experience group projects, and team teaching opportunities also featured in responses to this question, with four respondents identifying the collegial opportunities that arose from sharing a common goal. Respondent C stated that “the extended time spent together...for most of the P2 placement we also had lectures to attend so we saw each other on an almost daily basis.” Respondent B agreed, “As we had dedicated meeting time and projects designed around working together, working together was built into the P2 program.”

When identifying how collegiality was enabled by P2, Respondent H tied a number of commonly identified themes together – the relationships developed through the longer-term timeframe, the beneficial co-mentoring and peer coaching that occurred when peers were in close contact on professional experience, and the development of a shared goal approach within the team.

The fact that we had built good friendships and developed professional respect for each other over the longer time frame allowed us to trust each other and share our weaknesses, or when we had a bad class trust them to bounce ideas off. I felt the support was mutual and not competitive, but allowed us to work together to help each other learn as much as possible. (Respondent H)

It is interesting to note that Respondent H specified the mutually supportive approach of participants – a key indicator of collegiality.

### **Constraints**

Respondents noted the discontinuity of a professional experience that operated on a part-time basis as a constraint to collegiality, a circumstance which prompted a number of participants to complete extra working days. Participant E noted the biggest constraint as the “part-time nature, making it difficult to plan and come together.” This two day per week timeframe was identified commonly throughout both the Survey Monkey surveys and the email interviews, and opinion is mixed over whether it *enhances* collegiality (by allowing longer immersion and relationship building across the course of a term) or *constrains collegiality* (with discontinuity in each week’s progress)

Several references, both in this section of the email interviews, and elsewhere, mention the role that isolation from other P2 participants had in constraining collegial opportunities. As Participant C noted, “Open plan community workspaces made it much easier to communicate with other staff, but the P2 students weren’t in together, so although this was a benefit to general communication it probably didn’t help the P2 students.”

“What made it more difficult was that each of the P2 students really didn’t work outside of our own building, as this was the structure of the school. This meant at times we didn’t really run into each other” (Respondent C).

Thus, when respondents were asked about potential structures or systems that could be put in place to support peer contact, five respondents indicated that structuring in greater contact between peers, mentors and the university would improve peer based communication.

Respondent A reiterated the isolation that P2s who were alone in their learning community experienced, recommending “more even allocation of students to pods and schools (the other pods had three or four students to my one).”

Respondent G suggested that more structure be given at university level to developing links between P2 participants:

Schedule in mandatory regular times for peers to meet up and debrief, feed off each other, learn from one another’s experiences whilst on P2. Maybe allocate 1 day out of the 22 to attend the school but not have designated classes, instead just get together and talk about things we are enjoying or not enjoying so much. I realise it is difficult for the uni to get us all placements, but being in schools where the staff and buildings are very segregated makes it difficult to catch up with other peers. (Respondent G)

Respondent C cited similar concerns:

As P2 students when we were on placement and so was everyone else...we should have scheduled time to catch up and just discuss and debrief on what had been going on...we probably didn’t communicate as well as when we were also attending classes.  
(Respondent C)

#### ***4.3.4.1 Key findings: Enablers and constraints of collegiality***

P2 participants appear to have found shared spaces as an opportunity to develop collegial activities. Open-plan classrooms allowed for observation and discussions, and shared non-teaching space facilitated opportunities for debrief and resource sharing.

Structured meetings, projects, and team teaching activities formed strong enablers of collegiality, as they provided a structure, location and timeframe for P2s to work together, and work with other teachers in their immediate community.

Isolation from other P2 participants was cited as a major constraint to collegiality, and did affect the respondents' impressions of the collegial value of the professional experience.

When asked how collegial contact between peers could have been improved, the most common notion was to increase contact between peers as part of the program, through co-location within the learning communities, establishment of shared staff spaces, and facilitation of timetabled meeting opportunities.

## **4.4 Answers to research questions**

### **4.4.1 Question One: Can co-deployed pre-service teacher professional experience provide collegial support to pre-service teachers?**

Co-deployed professional experience can be both a supportive and conducive structure to develop a sense of collegiality among pre-service teachers. Co-deployment provides debriefing opportunities, allows for developing and sharing goals, provides peer support to participants, and engenders open and constructive lines of communication. Co-deployed pre-service teachers regularly engage in dialogue with each other, share lesson ideas and classroom management strategies, and reflect on learning experiences from the classroom.

Collegial incidences appear to be linked to co-deployment. Pre-service teachers who are alone on professional experience report less of a sense of collegiality, fewer opportunities to engage in professional reflection activities, and less of a sense of support from peers.

Co-deployed pre-service teachers also use their own communication channels to share information and make contact, which continues to occur outside of designated teaching and learning times. Pre-

service teachers with collegiate affiliations also utilise one another for non–class based advice, turning to one another for de–briefing and stress reduction opportunities or support.

#### **4.4.2 Question Two: Can co–deployment facilitate the ‘learning community’ approach to teaching?**

Co–deploying pre–service teachers can facilitate key aspects of the ‘learning community’ approach to teacher practice.

When compared with traditional models, co–deployed professional experience provides greater opportunities for professional dialogue between pre–service teachers and their peers, mentors, and other members of the teaching and learning community. Participants value the professional dialogue on development of pedagogical practice.

Co–mentoring between pre–service teachers is valuable, but dependent on careful training and management. In situations of dysfunctional mentor and pre–service teacher relationships, peer–based co–mentoring can be valuable.

Co–deployment of pre–service teachers allows for team planning and professional reflection, but is dependent on proximity and co–location – where peers were more accessible, peer–based reflection was more common.

#### **4.4.3 Question Three: What do pre–service teachers perceive as the longer–term benefits of co–deployment in professional experience?**

Pre–service teachers believe that co–deployment provides a stronger long–term relationship with the placement school, and that this can potentially increase their employability.

Respondents believed that co–deployment developed teaching skills, reflective practice skills, classroom management techniques, and planning processes.

Respondents generally contended that co–deployed professional experience created enduring, long–term professional and personal relationships.

#### **4.4.4 Question Four: What do pre-service teachers perceive as enablers and constraints to collegiality and peer mentoring, in co-deployed professional experience deployment?**

Co-deployment allows pre-service teachers to approach one another regularly while on professional experience, and results indicate that co-deployed pre-service teachers seek opportunities to learn from one another. Pre-service teachers, when co-deployed on professional experience, seek support, advice and knowledge more frequently from peers than they do from mentors.

Shared spaces enable collegial activities. Open-plan classrooms allow for observation and discussions, while shared non-teaching spaces facilitate opportunities for debrief and resource sharing.

Team-based meetings, projects, and team teaching activities formed strong enablers of collegiality, as they provide a structure, location, and timeframe for pre-service teachers to work both together and with other teachers in the community.

Co-locating pre-service teachers in shared spaces, with programmed meeting opportunities, enables collegiality. Isolating pre-service teachers during professional experience constrains collegial opportunities.

### **4.5 Overview of results**

Participants in the program known as 'P2' provided a range of results in two methodological stages. Stage 1 involved analysis of data from Survey Monkey, while Stage 2 involved email interviews based on the results of Stage 1.

Results of Stage 1 were directly connected to each Research Question in this thesis, while the results of Stage 2 were adjusted slightly to focus on the thematic basis for the question, and were labelled as 'areas' accordingly.

Results analysed suggested that placing pre-service teachers into co-deployed, community-based teaching environments does contribute to collegial contact. Results also suggested a number of connections between contemporary professional experience design and its connection to teaching practice, teaching spaces and teacher preparation, the basis for the conceptual framework identified in Figure 2.1, and revisited in Figure 5.1.



## Chapter 5. Discussion

### 5.1 Introduction

As stated in Chapter 1, the purpose of this study was to investigate whether team-based, community-based professional experience placement of pre-service teachers contributed to collegial outcomes.

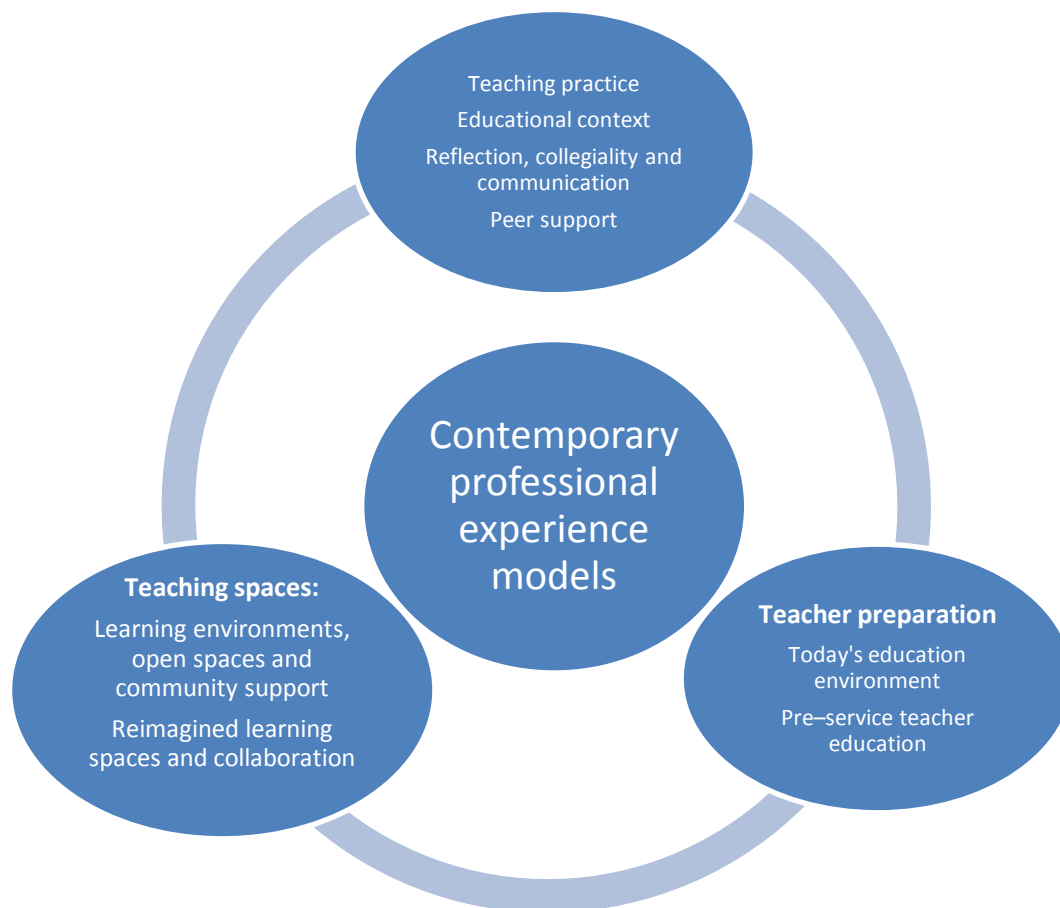
Data and findings identified in this thesis were gleaned from La Trobe University's P2 program, a pre-service teacher preparation program developed from the School Centres for Teaching Excellence (SCTE) Program, and the new learning environments in the Bendigo Education Plan (BEP). 'P2' enshrined the BEP's emphasis on communities of students and teachers, and involved team-based, co-deployment of pre-service teachers, in communities of practice, across an extended time period.

Two cohorts of P2 participants, in 2011 and 2012, participated in Survey Monkey surveys and email-based interviews. The data gathered from these instruments formed the basis for this thesis.

Analysis of extant literature identified a thematic link between each of these aspects and design of best-practice, contemporary professional experience. Therefore, the discussion and comparison of results in this study to the literature reviewed in Chapter 2 will be separated into teaching practice, teaching spaces and teacher preparation, and will conclude with an identification of the emergent themes for contemporary, team-based, co-deployed professional experience design

## 5.2 Revisitation of the conceptual framework: Co-deployed professional experience

In order to connect the data collected under the research questions with the literary framework for this study, it is useful to restate the conceptual framework (Figure 5.1) as first identified in Chapter 2.



**Figure 5.1. Co-deployed professional experience – a conceptual framework**

This conceptual framework identified three main areas of focus for the study: teaching practice, teaching spaces, and teacher preparation. These areas will be used as the framework for the following discussion.

## 5.3 Discussion and application of results to the conceptual framework

### 5.3.1 Teaching practice

Reviews of literature surrounding teaching practice in Chapter Two identified several key themes.

First, a number of authors (see Handal & Vaage, 1994; Johnson & Thomas, 2003; Korthagen, 2004; Loughran, 2002; Zeichner, 1994) extolled the significance of reflective practice, collegiality and open lines of communication between teachers. Second, available and accessible peer support networks were seen by authors such as Densgombe (1982), Dewey (2004), Margetts and Nolan (2008) and Showers and Joyce (1996) as important aspects of effective teaching practice.

Participants in P2 commonly identified the value of peer networks to developing professional practice. Participants in the surveys identified a connection between the communication channels provided by peers, and the subsequent evolution of teaching practice, and placed emphasis on peers for supporting each other's learning during the professional experience period.

A team-based, co-deployed professional experience such as P2 has therefore been identified as a structure that supports reflective practice, collegiality, open communication, and peer support networks to develop reflective practice.

#### *Collegial practice*

Respondents to these surveys generally believed that the co-deployed, community-style professional experience characterised by P2 was both a supportive and conducive structure, and that it benefited both the students and the pre-service teachers participating. Respondents identified the P2 program as containing many 'collegial' characteristics, including debriefing opportunities, developing and sharing goals, provision of support to fellow participants, and open and constructive lines of communication.

Respondents also felt that this collegial approach allowed them to develop a better understanding of the practice of teaching over the longer-term, created better student/teacher cohesion, and

allowed a more 'real world' professional experience. These results align with the assertions of Darling-Hammond (2000), who noted that exemplary teacher education programs are obligated to expose pre-service teachers to complex teaching situations and ideas. The notion that P2 placed, in the eyes of the respondents at least, greater emphasis on longer-term student relationships, contemporary teaching approaches and revised curriculum, also appears to intersect well with the "vision of Professional Practice" (p. 304) as identified by Darling-Hammond (2006), in recognising the importance of learners, teaching practice and subject matter. A clear connection between ideal teacher preparation program components, and those benefits of P2 identified by respondents, may therefore be readily drawn.

P2 participants noted that they regularly engaged in dialogue with each other, sharing lesson ideas, classroom management strategies, and learning experiences from the classroom. They also utilised one another for non class-based advice, indicating that they turned to one another for de-briefing and stress reduction opportunities and support, as well as social interactions. These findings concur with those of Scantlebury et al. (2008), who noted that pre-service teachers co-deployed on professional experience developed both formal and informal networks, and also continued to develop these relationships when they entered the graduate sphere. Scantlebury et al. (2008) ultimately concluded that co-locating a group of pre-service teachers at a single location would, given the correct structures and supports, result in formation of a learning community of practice.

It could also be deduced that these supportive, enduring opportunities for stress mitigation and debriefing could serve to reduce desertion of participants from the pre-service program – and if continued into the graduate years, could also potentially combat the graduate attrition identified by Gallego (2001), and Paris (2010).

Collegial contact between P2 participants involved a range of contributors, including pre-service teachers who were co-deployed, those placed at different P2 schools, and members of the wider P2 cohort. All participants developed various collegial networks, which supports the second theme of

available and accessible peer support networks as suggested by Densgombe (1982), Dewey (2004) Margetts and Nolan (2008) and Showers and Joyce (1996).

Professional dialogue was frequent, and involved pre-service teachers and their peers, pre-service teachers and mentors, and pre-service teachers and other members of the relevant learning community. Respondents placed great value on the participation in professional dialogue to their development of pedagogical practice. This suggests that the P2 structure provided what Sorensen (2004) identified as a “commitment to collaboration” (p. 17), encouraging and enhancing the opportunities for co-deployed pre-service teachers to engage in discussions about teaching.

Team planning between pre-service teachers appeared to be infrequent on P2, but team planning with other teachers in the community did take place. P2 respondents had the opportunity to watch and sit in on team planning meetings, and develop understanding of how a multidisciplinary team could work in practice. The incidence of team-based planning and cooperation demonstrates an approach that may overcome the “hidden pedagogy” (Densgombe, 1982, p. 457) traditionally preventing collaborative activity among teachers, and could have potentially established an alternative view of collaboration in the pre-service teachers’ mindsets.

When greater emphasis was placed on the ‘team’ aspect of the P2 (as was identified by the 2011 cohort of participants), the incidence of peer-based support and knowledge seeking increased. Participants maximised their opportunities to work collaboratively and learn from one another in a team-based focus when they were supported, encouraged, and trained to do so by their host school and university. In fact, participants reported that they sought their peers’ advice more frequently than they did their mentors – a clear indication of the worth placed by pre-service teachers on the knowledge and advice of their pre-service contemporaries.

Facilitation of team-based learning and teaching practice, as was seen in the P2 program, could potentially reduce the resistance to team-based teaching identified by Main (2012) and Pendergast

(2006). Upon graduation and employment in schools, P2 participants would be equipped to act as supporters of (and perhaps even experts in) team-based approaches. Given the emphasis on team-teaching in schools, as endorsed by the Victorian Department of Education via Johnson and Thomas (2003), graduate teachers who have developed these skills in the pre-service period may be considered better prepared for teaching than those from a 'traditional' placement.

The emphasis of the P2 program on development of co-mentoring, collapsing traditional mentor and mentee roles, and an open sharing of professional experience aligns closely with the structures recommended by Cornu (2005), who noted that engaging pre-service teachers in mentoring one another reduced isolation, increased professional learning, and made all members of the community accessible and valued by one another. Survey respondents identified co-mentoring as beneficial, particularly when the mentor relationship was ineffective or dysfunctional, or when peers held similar concerns over a teaching situation. Those respondents who were isolated from other P2 participants did not identify the same frequency of co-mentoring, proving that accessibility and co-location should be taken into account when co-mentoring is an objective of the professional experience.

### *Reflective practice*

Louis et al. (1996) encouraged teachers to be reflective, collegial practitioners, working within a community of committed professional learners. They argued that the effects of a collegial approach could have positive impacts on both teacher and student outcomes.

Survey respondents commonly identified professional reflection as a component of the P2 program. Professional reflection took place in conjunction with mentors, peers, or a combination of both, a situation which effectively represents what Cornu (2005) saw as integral to development of the 'learning community', as it was non-hierarchical, introduced pre-service teachers to the philosophies of reflective practice, and focused on "mentoring, interpersonal skills and critical reflection skills" (Cornu, 2005, p. 359).

Opportunities to undertake professional reflection with peers tended to be dependent on proximity and co-location – where peers were more accessible, peer-based reflection was more common. The opportunities for reflective practice offered by the P2 timeframe were also highlighted by respondents, with the part-time, extended placement timeframe seen as providing effective time for reflection to take place. Identification of the opportunities to discuss professional experience, and the value that pre-service teachers placed on these opportunities, concur with the findings of Schmidt (2010) and Showers and Joyce (1996), who identified considerable value in peer-based communication and reflection.

Reflective practice, as a component of pre-service professional experience, is seen by Loughran (2002) as integral to developing teaching practice, and takes the learning teacher through the practice of “rationalising” (p. 36) an experience, to the process of true reflection. He sees that reflecting through sharing of anecdotes about a teaching experience helps the pre-service teacher to both recognise the student’s perspective, as well as continue to develop as practitioners. Certainly the peer-contact element of P2 facilitated discussion of situations as they occurred, and the more organic nature of pre-service teacher discussions led to much anecdotal sharing and subsequent reflection. This built the reflective practice capacity of a community of pre-service teachers as supported by Louis et al. (1996) and Loughran (2002), but it could also be surmised that, as identified by Margetts and Nolan (2008), participants became confident in the collegial environment in “exposing their own work and ideas to the critique of others” (p. 66), and established a positive culture in relation to professional reflection.

### *Enduring professional relationships*

Respondents used their own communication channels to share information and make contact. These methods included text messaging, social media, emails, and personal telephones (not solely school or university based communication channels). This contact continued to occur outside of designated teaching and learning times, and commonly took place during and in between university classes

while the pre-service teachers were in training. Respondents also commonly stayed in contact on a professional and personal level after conclusion of the professional experience process, with this contact continuing three years after participation in the P2 program.

Continued, enduring contact between P2 participants concurs with Showers and Joyce's (1996) "serendipitous by-product" (pp. 12–13) of peer coaching— participants who engage in programs that encourage peer contact, coaching and mentoring are known to continue this program after the formal aspects have concluded. Certainly, participants in P2 were in close contact outside of designated programmed collegial time, and this contact was seen as overwhelmingly valuable to the learning process of the participants. The networks that have been formed as part of P2 have been maintained after the formal conclusion of pre-service preparation, and are still utilised by participants as a professional and moral collegial support network.

### 5.3.2 Teaching spaces

All participating schools on the P2 professional experience program comprised open, decentralised learning spaces, known as 'learning neighbourhoods'. Survey responses indicated that co-locating pre-service teachers in these 'neighbourhoods' (discussed in this thesis as 'communities') facilitated key aspects of the 'learning community' approach to teacher practice as suggested by Hatton (1985), p. 229: that by encouraging pre-service teachers to work together, they "develop and value a corporate orientation" to the practice of teaching. As Hatton (1985) argued, placing teachers together both in teams and in open plan classroom spaces assists not only in developing teaching practice, but it can assist in developing a culture of change that embraces innovative teaching in these open-plan spaces. Findings from the study of P2 concurred with Hatton (1985), with the enthusiastic support of *co-location* (although team teaching was not a major feature of the professional experience) identified almost unanimously by the P2 respondents. Respondents who were co-located enjoyed and appreciated the ease of access to peers in open classrooms, whereas respondents who had the open classrooms, but not the peers available, identified this as a deficit.



Development of team dynamics, group–work skills, and the opportunity to meet as a team with mentor teachers were all highlighted by respondents as benefits of this program. When compared with traditional placements, with pre–service teachers usually alone at a school, and teaching in individual, traditional classrooms, the indication is that P2 deployment in a reimagined learning space allowed for greater fluidity of dialogue within the learning community. This concurs with the findings of Gislason (2009) who noted that “open plan architecture positively contributes to social climate at the school” (p. 18).

This productive ‘social climate’, including collegial and peer support, appeared in P2 to be linked with co–deployment – those who were alone on professional experience reported reduced opportunities for collegiality, professional reflection or seeking support from peers. Considering P2 participants generally made contact outside of the professional experience space, it is therefore notable that the respondents still sought that support within the learning space itself. In fact, isolation from other P2 participants *within the learning community space* was cited by participants as a major constraint to collegiality, support and shared reflective practice, and did affect the respondents’ impressions of the collegial value of the professional experience. This concurs with the experiences identified by Kohl (1969), who connected the complexities of teaching and learning in an open–plan classroom with the benefits of peer support from other teachers, and equated these with higher satisfaction levels and mitigation of stress, when teachers in the same school, with the same approaches to open space teaching, had a like–minded “ally” (Kohl, 1969 p. 33).

In this study it was found that when the university and the placement schools supported the ‘team’ focus of pre–service teachers, there was even greater development of ‘learning community’ professional dialogue, co–mentoring, team–based planning, and professional reflection activities. This is consistent with the findings of Cohn and Gellman (1988), who reported that ensuring organised, transparent role clarity, and focus on both peer and team interactions would lead to greater opportunities for participants to “foster inquiry” (Cohn & Gellman, 1988 p. 3).

Opportunities for pre-service teacher learning and inquiry certainly occurred as a result of the learning community approach. P2 meetings, projects and team teaching activities formed strong enablers of collegiality, and provided a structure, location, and timeframe for pre-service teachers to work together, and work with other teachers in their immediate community.

P2 participants appear to have found shared spaces a good opportunity to develop collegial activities. Open-plan classrooms allowed for observation and discussions, and shared non-teaching space facilitated opportunities for debrief and resource sharing. Le Cornu and Ewing (2008) discussed a similar vision to that identified by P2 respondents – in constructing a professional experience for pre-service teachers that had ample opportunity and space “to engage in learning relationships with a range of colleagues, including their peers, mentors, other school-based colleagues, and university liaison...[they developed] a strong appreciation of the critical nature of professional conversations for ongoing professional learning” (Le Cornu & Ewing, 2008 p. 1803). Certainly the value of professional conversations was universally endorsed by P2 respondents.

Co-mentoring between pre-service teachers, as was also proposed by Le Cornu and Ewing (2008) was seen as valuable, but the quantities occurring were dependant on the contact available between pre-service teachers. Those participants who identified instances of co-mentoring found it useful and interesting, in the view of Le Cornu and Ewing (2008) and Le Cornu (2010), these co-mentoring opportunities in the pre-service actually enhanced the collegial relationships, and the opportunities to engage in meaningful , collaborative dialogue.

When asked how collegial activity between peers could have been improved and made more effective, the most common recommendation by survey respondents was to increase the frequency of contact between peers taking part in the P2 program. This contact could be best facilitated, respondents felt, through co-locating pre-service teachers within the learning communities, establishing shared staff spaces, and facilitating timetabled meeting opportunities.

Careful organisation of the procedures and resources required in open-space learning was also seen by Rothenberg (1989) as a vital component to reduction of the strain on teachers, and it certainly seems that the participants in the P2 program would welcome, and benefit from, scheduled opportunities of this type. The notions of a shared space, direct access during teaching and non-teaching times, and encouragement of open collegial dialogue are consistent with the recommendations by Cornu (2005) and Gislason (2009), who endorsed the creation of professional communities, and identified open and reimagined teaching spaces as powerful catalysts for collaboration among pre-service and practising teaching collectives.

### 5.3.3 Teacher preparation

P2 survey respondents believed that being placed in a school over a longer period taught them how to form, maintain and develop relationships with students and staff, subsequently developing networks for future employment.

Respondents believed P2 provided a more 'real-world' experience, incorporating activities that would more closely mirror the evolution of a typical school term, whilst developing teaching skills, reflective practice skills, classroom management techniques and planning processes. Respondents believed that this increased their links with the placement schools, and potentially, their employability post-graduation.

The longer-term approach of P2, the emphasis on working productively alongside mentors and peers, and utilising reflective practice techniques could be seen to complement Darling-Hammond's (2010) notions of "learning to practice, in practice" (p. 40), and the subsequent success of the teachers that such a professional experience produces. Certainly, the P2 participants studied as part of this thesis agreed that they had learnt much of their craft while on structured professional experience, and that this learning was superior in many ways to that of a block-style approach.

Respondents generally contended that the P2, co-deployed style of professional experience created in its participants enduring, long-term, professional and personal relationships. Regular meetings

between past P2 participants comprised a combination of peer support and coaching, success sharing and stress mitigation. Support from peers with similar levels of experience was seen as useful and morally supportive.

The longer timeframe of the P2 program enabled respondents to develop stronger relationships with peers, students and other teachers in the school, leading to greater opportunities for collegial contact, co-mentoring and development of reciprocal learning relationships. The combination of peer and collegial support, and the subsequent connections that were made as a response, ally with the findings of Le Cornu and Ewing (2008), who noted that enduring networks and communities of professional practice occurred when pre-service teachers were co-deployed or clustered at a site.

Le Cornu and Ewing (2008)

The P2 structure allowed pre-service teachers to approach one another regularly while on professional experience, and results strongly indicate that they sought opportunities to learn from one another. Results also indicate that the interaction and impartation of knowledge from peers was greater than that of mentors or lecturers, and that interaction took place in and around the learning spaces in the placement school, in shared non-teaching space, at university and online. As Zeichner and Gore (1989) indicated, this social and professional access, access to a variety of learning approaches and spaces, and opportunities for collegial contact may have enhanced the quality of the professional experience considerably.

Hatton (1987) argued that pre-service teacher preparation could potentially be the catalyst for challenging the “hidden pedagogy” (p. 457) symptomatic of teacher reluctance to change and collegial involvement. Participants in the P2 program seemed to engage in much open discussion, often with little involvement from mentors. Potentially, therefore, pre-service teachers who had engaged in co-deployed professional experience (such as P2) could therefore be encouraged to ‘challenge’ the traditional ‘hidden pedagogy’ as Hatton (1987) has suggested, and as Le Cornu and Ewing (2008) have implied, acting as both learners and change agents in reimagined learning

spaces. The heavy workload cited by many respondents that accompanied the P2 program was seen as a concern to respondents, as was the difficulty in meshing with the university's traditional professional experience program. It could be surmised that being heavily involved with university commitments while on professional experience could limit respondents' willingness or opportunities for collegial contact. The part-time nature of the placement could have led to respondents spending excessive time catching up on missed class content delivered by existing teachers, and this could have limited collegial opportunities.

Some pre-service teachers were unsure or lacked confidence or understanding about taking on a co-mentoring role. Where one pre-service teacher experienced a negative mentor and pre-service teacher relationship, peer-based co-mentoring was considered critically important. This is consistent with Anderson et al. (2005) and Showers and Joyce (1996), who emphasised the benefits that peer-based coaching could provide in the pre-service (and subsequently when the pre-service teachers became practising teachers) but encouraged appropriate training, instruction and preparation into peer mentoring and coaching strategies so that the process was productive, rather than one of critical feedback. Future alterations to the P2 program may wish to focus on these aspects.

## 5.4 Discussion summary

This chapter identified the link between the findings from surveys and interviews of P2 participants, and the literature surrounding co-deployed, team-based pre-service teacher professional experience.

Analysis of the literature determined that effective design and facilitation of co-deployed, team-based pre-service teacher professional experience is connected to the three aspects of the conceptual framework as discussed in Section 2.1. Teaching practice, including collegial practice, reflective practice, and enduring professional relationships, were identified in the literature, and highlighted by survey and interview participants as a valuable component of P2. Teaching spaces,

including co-location, team-based practice, and the productive 'social climate' were identified in the literature as effective, contemporary opportunities for teaching and learning, and formed a key component of the P2 setup. Teacher preparation, including the longer-term timeframe of professional experience, allowed for development of relationships between participants, students, and members of the wider school community, and these relationships were highlighted in literature as valuable in an effective teacher preparation program.

Chapter 6 of this thesis will discuss how eight themes, based on the concepts of teaching practice, teaching spaces and teacher preparation emerged from the findings in Chapter 4. These themes will then be discussed in terms of their implications for contemporary professional experience design, and how future research may be directed towards their exploration.

## Chapter 6. Conclusion

### 6.1 Introduction

This thesis was developed from surveys and interviews of two cohorts of participants in La Trobe University's P2 program, a pre-service teacher preparation program developed from the School Centres for Teaching Excellence (SCTE) Program, and the open-plan learning environments developed through the Bendigo Education Plan (BEP).

The two-stage, explanatory sequential study investigated whether co-deployment of pre-service teachers in a team-based, learning-community teaching environment contributed to collegial outcomes.

Discussion of results centred around a conceptual framework that related contemporary professional experience design to the three notions of teaching practice, teaching spaces, and teacher preparation. In analysing these results, links were made between current research on contemporary professional experience design, and the conceptual framework outlined in Sections 2.1 and 5.2.

Overall, the study concluded that co-deployment of pre-service teachers on professional experience provided a number of valuable benefits, both to participants, and to schools in which they were employed.

From the results and subsequent discussions of this study, eight key findings have emerged. These findings, and subsequent implications for co-deployed professional experience design have been determined as important considerations for professional experience models, and are discussed in the following section.

## 6.2 Eight implications for contemporary professional experience models

Analysis and discussion of the results of Stage 1 and Stage 2 of this study was undertaken in two forms: by application to the research questions of this study, and then by application to the conceptual framework outlined in Chapter 2.

After analysing the themes from both analyses of results, eight key findings, and the resultant implications of these, have been developed. These serve to connect the results, both to the recommendations for future study, and to the overall conclusion of this thesis. The eight key findings are as follows:

### 1. *Co-deployment and accessibility*

*Finding:* Collegial contact appears to depend on the accessibility of pre-service teachers to one another.

*Implication:* When participating in a co-deployed community-based professional experience, pre-service teachers seek to be in contact, and are interested in learning from one another while on professional experience. Co-deployment provides this accessibility.

### 2. *Team-based activities*

*Finding:* Structured meetings, team-teaching opportunities, group projects, and co-operative reflective practice are enablers of collegiality and, according to participants, provide structure that supports learning and pedagogical skill development.

*Implication:* Team processes that are supported and encouraged by the university and placement schools increase collegial activity. Regular, structured and meaningful co-deployed activities form a valuable collegial component of contemporary professional experience.

### 3. *Shared space*

*Finding:* Shared spaces, both for teaching and for planning, debriefing, and networking, are seen by participants as valuable places for collegiality to occur.



*Implication:* Spaces should be provided for pre-service teachers to interact. A contemporary professional experience model should take into account the learning and collegial space needs of pre-service teachers.

#### ***4. Training in co-mentoring and peer coaching***

*Finding:* Pre-service teachers who are more confident and familiar with the roles of peer coaching are more likely to engage in peer coaching and mentoring activities.

*Implication:* Co-deployed pre-service teachers could benefit from greater awareness of, and instruction in, processes and approaches for co-mentoring and peer coaching. This could be undertaken as part of the preparatory process by the university.

#### ***5. Opportunities to share outside of professional experience time***

*Finding:* Co-deployed pre-service teachers seek opportunities to make contact with one another outside of designated professional experience situations. The networks established have proven to be enduring and valued by the pre-service teachers.

*Implication:* Facilitating and enhancing contact networks, perhaps through structured timeframes within the university timetable, could encourage collegial networks of pre-service teachers.

#### ***6. Structured development of the wider learning community***

*Finding:* Participants in contemporary professional experiences value contact with members of the wider teaching community, including mentor teachers and other peers working in the same community environment. Observation and team-based planning opportunities assist in development of professional practice techniques, and provided broader experiences for the pre-service teachers.

*Implication:* Facilitation of a multidisciplinary teacher team, comprising co-deployed pre-service teachers and experienced teachers, will result in increased focus on the learning community during professional experience.

## ***7. Development of co-deployed professional reflection opportunities***

*Finding:* Pre-service teachers value the opportunity to reflect on professional experience. The opportunity to reflect, as well as access to other pre-service teachers for group discussion, enhances professional reflection.

*Implication:* Contemporary professional experience design that involves longer timeframes (such as over a school term's duration) as well as provision of space and time for pre-service teachers to discuss teaching practice, will enhance professional reflection opportunities.

## ***8. Establishment of networking structures for post-graduation contact***

*Finding:* Co-deployed participants tend to form long-term relationships that offer supportive mentoring after the conclusion of the university degree.

*Implication:* Utilising social networking (as has been reported as beneficial by participants) and encouraging development of longer-term connections could continue the organic co-mentoring relationships that are established during the professional experience.

## **6.3 Limitations**

A number of limitations to this project have been identified.

### **6.3.1 Government school-based focus**

The P2 program, due to its auspice under the School Centres for Teaching Excellence program, had a solely Government school focus. All four of the participating schools had facilities developed by the Federal and State Governments, and all associated learning spaces followed similar form and design. Thus, comparison with co-deployed community-based professional experiences in independent or Catholic schools did not form part of this study, and is a limitation to this study.

### **6.3.2 Peer coaching, co-mentoring and team-teaching**

Literature discussing peer coaching, co-mentoring, and team teaching has formed a significant part of this study, although the P2 program did not focus closely on these aspects of co-deployment.

However, continued reference to these aspects in the literature, most often in conjunction with co-deployed and neighbourhood-based learning, necessitated their inclusion in this study.

### **6.3.3 Gender representation in P2 and Stage 2 of this study**

The population of P2, and the sample of suitable participants for Stage 2 of this study, demonstrated an unequal gender balance. The higher proportion of female respondents, and potentially gender-biased responses may be present in the results, and is a limitation to this study.

### **6.3.4 Availability and accessibility of participants for Stage 2**

P2 participants from both the 2011 and 2012 cohorts who were invited to participate in Stage 2 of this study had, in the years since graduation from La Trobe University, dispersed geographically. Additionally, participants were employed full-time in most cases, and thus their responses may have been limited by time constraints. While the use of email as an interview method reduced the logistical complications, the availability of participants was a further limitation to this study.

## **6.4 Significance of the study**

This study identifies the collegial outcomes of co-deployed professional experience.

Schools are increasingly supportive of the notions of reflective practice, collegiality, and team-based activity, both within the classroom and in a non-teaching context. Many schools endorse and encourage their teachers to form professional learning teams, and registration with peak educational bodies (such as the Victorian Institute of Teaching and the Australian Institute for Teaching and School Leadership) endorse activities that involve both professional engagement with teachers, and professional learning.

Therefore, both graduate and experienced teachers are encouraged to understand, and embrace the benefits of working with their peers.

However, the industry push towards collegiality is encountering considerable opposition from many practising teachers. As has been discussed in Chapter 2, teachers often resist collegial contact, and aim to lead a separatist existence, at least in the classroom.

Thus, pre-service teachers who are competently trained and experienced in performing as part of a professional team, engage actively in co-deployed activities, and enthusiastically welcome peer-coaching and feedback techniques, are both likely to be valuable additions to schools, and catalysts for change as they evolve as school teachers.

The BEP, and as a result, the P2 program, had a focus on co-deployment of pre-service and experienced teachers, teaching within a learning community, and working to improve student outcomes through contemporary use of teaching practice and teaching spaces.

Where support structures existed, participants in P2 were involved in collegial activity, and both sought and continued these connections into their graduate teaching years.

Therefore, this study provides a link between co-deployment of pre-service teachers, and development of a 'learning community' approach to teaching. This approach then results in teachers who have both been exposed to collegial activities in professional experience, and can contribute this knowledge to their teaching, and to the teaching profession.

## **6.5 Recommendations for future research**

Future research on co-deployment of pre-service teachers in the professional experience can be focused on the eight implications for contemporary professional experience models, as discussed in Section 6.2:

### ***1. Co-deployment and accessibility***

It appeared from this study that co-locating pre-service teachers on professional experience enhanced the collegiality, but this could be further investigated to assess the ideal structures for co-deployment, and the degree to which isolation prevents collegial communication opportunities.

## ***2. Team-based activities***

Establishment of, and research into, pre-service teaching teams, either in pairs or clusters, would more effectively analyse the benefits of co-mentoring and peer coaching in a co-deployed professional experience situation. As it was, P2 did not offer ample opportunities for pre-service teachers to teach together, this deficit was noted by respondents.

## ***3. Shared space***

Investigation into the ideal shared spaces for collegial contact between pre-service teachers could be further researched. This could incorporate school-based spaces during professional experience, as well as established times and places within the university grounds to facilitate collegial contact and professional reflection opportunities.

## ***4. Training in co-mentoring and peer coaching***

The benefit gained from incepting a structured, practised peer coaching and peer mentoring program *prior* to deploying pre-service teachers on professional experience could yield interesting results, particularly since the structured role of the co-mentor was not explicitly established as an objective of the P2 program.

## ***5. Opportunities to share outside of professional experience time***

There would be merit in investigating how contact networks are established and used by pre-service teachers, both during and after the pre-service period. These could include the use of social networking, email and telephone communication, and the frequency of resource sharing opportunities among pre-service and graduate teachers.

## ***6. Structured development of the wider learning community***

Further research could investigate how the most effective 'learning community' teacher teams could be structured and administered. Investigation into the multidisciplinary aspects of such teams, including the co-mentoring aspects of graduate, early-career and experienced teachers, could be

further identified by establishing pilot studies of such teacher teams, and assessing the experiences of each team member.

Analysis and study of perceptions held by school principals and teachers could also help identify the employability and attractiveness of graduates who have been part of 'learning community' teacher teams in the professional experience. This could be undertaken longitudinally by surveying employers of past P2 graduates, and identifying the skillsets and applications that the P2 experience has awarded the participants.

### *7. Development of co-deployed professional reflection opportunities*

Research on how professional reflection should be taught, structured and facilitated within a co-deployed professional experience situation would provide information for both placement schools and university course providers.

### *8. Establishment of networking structures for post-graduation contact*

Dedicated establishment of peer networks as part of P2, supported and facilitated by the university, could potentially allow for greater longitudinal analysis of the relationships P2 participants form and maintain, both prior to graduation and beyond.

These implications can be interpreted within the conceptual framework as discussed in Section 2.1, which covers the considerations of contemporary professional experience design in terms of teaching practice, teaching spaces and teacher preparation. These considerations will now frame the conclusion to this study.

## **6.6 Conclusion**

### *Teaching practice and contemporary professional experience design*

Co-deployed, community-based professional experience participants develop teamwork skills, explicit and complex understandings of relationship building with peers and colleagues, and a keen awareness of the network of teachers involved in any community-based teaching environment.

Pre-service teachers develop a complex understanding of the role of a teacher through immersion in a school context over an extended period of time. The cycle of planning, preparation, delivery, assessment, and review all occur in the co-deployed environment, with regular 'lag time' to reflect on the cycle as it evolves.

Through participating in a co-deployed, team-based professional experience, pre-service teachers develop a network of collegial contacts, communication with whom continues into the graduate period. The moral and professional support that these networks provide are highly valued.

### *Teaching spaces and contemporary professional experience design*

Pre-service teachers who have participated in a co-deployed, 'learning community' style professional experience have a familiarity with contemporary teaching spaces. They are familiar with the teaching approaches to these spaces, and the requirements of teamwork, communication and flexibility within these spaces.

If they are required, as graduate teachers, to work within these contemporary teaching spaces, participants who have become familiar with these on professional experience will have an advantage over those graduates who have only worked within 'traditional' models.

### *Teacher preparation and contemporary professional experience design*

Pre-service teachers build and maintain enduring long-term relationships as a result of the co-deployed professional experience structure. These relationships extend to mentor teachers, peers from within the placement school, peers from the wider program, teaching colleagues, and members of the wider school community.

Thus, pre-service teachers who graduate from a co-deployed environment are equipped with the skills, experience, and enthusiasm to act as enthusiastic change agents in schools. They can call upon networks of associates, formed as part of professional experience, work with experienced teachers

in the delicate post–graduation period, and apply current knowledge to assist in actively evolving the professional learning environment.

Therefore, it is recommended that future pre–service teacher professional experience models, if based on co–deployment in a community–based learning environment, incorporate the eight features identified in Section 6.2. By developing, supporting and enhancing collegial professional experience, teaching will embrace collegial professional practice.



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