The Outcomes Of New Teachers Being Reflective

John Whittington Seddon

Edith Cowan University

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The Outcomes Of New Teachers Being Reflective

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THE OUTCOMES OF NEW TEACHERS BEING REFLECTIVE

John Whittington Seddon
BSc (Multimedia Technologies) First Class Honours

This thesis is presented in fulfilment of the requirements for the degree of
Doctor of Philosophy

Faculty of Education and Arts
Edith Cowan University

July, 2014
DEDICATION

This thesis is dedicated to my late father Professor George Seddon
USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.
DECLARATION

I certify that this thesis does not, to the best of my knowledge and belief:

i. incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education;

ii. contain any material previously published or written by another person except where due reference is made in the text of this thesis; or

iii. contain any defamatory material.

Signed:

John Seddon
ABSTRACT

New university teachers are typically advancing scholars who have recently commenced academic teaching duties. Referred to as neophytes in this study, these teachers are usually early career academics, postgraduate students or sessional lecturers who begin teaching with little more training than attendance at short professional development courses or seminars. Their teaching and learning theories are generally naive and their practice is often limited. In view of the already substantiated connections that have been found between teachers’ conceptions of teaching (COTs) and their practical approaches to teaching, the COTs held by neophytes are of consequence, as they are usually indicative of the quality of their teaching practices.

The topic of the quality of teaching in universities is presently under scrutiny by governments and their agencies, educational institutions and researchers, the community at large, university students and the teachers themselves. Since most university teaching is conducted by sessional staff, many of who are neophyte teachers, the problem of how to ensure high-quality teaching is significant. Subsequently, the development of neophyte tertiary teachers continues to be a concern across the higher education sector. While the value of reflective practice as part of professional development programs for university teachers has been somewhat established, research into the needs and practices of neophyte teachers is an under-represented area of higher education literature. This gap in our understanding of how to meet the needs of this group of university teachers is made particularly challenging by the increasing numbers of neophyte teachers in universities and the likely impending retirement of a high proportion of current university teachers.

This study examines the changes that occurred in the COTs of a group of neophytes as a result of their participation in a professional development program. Utilising elements of cognitive apprenticeship (A. Collins, Brown, & Newman, 1989) and conceptual change theories (Posner, Strike, Hewson, & Gertzog, 1982), the program scaffolded teachers to become reflective practitioners (Biggs, 2003; Boud, 2001; Boud, Keogh, & Walker, 1985; Schön, 1983, 1987). By adopting a mixed methods case-based research design, this study provides an example of a program that was largely administered using online technologies that were tailored to meet the needs of the neophyte teachers. During the study, an interventional program of reflective practice was developed and implemented across a semester period. Five neophyte teachers at
one Australian metropolitan university engaged in this program and evidence of their developing COTs was documented by gathering interview, journal and questionnaire data. From an analysis of these data, evidence emerged of how the neophytes’ COTs had changed. The most effective elements of the reflective practice program were also identified.

This study revealed the benefits of neophyte tertiary teachers engaging in professional development teaching programs, especially when reflective practice is used as a strategy within the context of an online teaching program. These findings have significance for the design of professional development programs for neophyte teachers in university contexts. After participating in a theoretically informed program of reflective practice, the neophyte teachers in this study developed their reflective practice skills. Although the neophytes did not opt to engage in collaborative reflective practices, instead appearing to need a period of reflective incubation, they developed their COTs, which increased their capacity to think about their own teaching. This enabled them to consider how they could make improvements to the quality of their teaching.

**Keywords:** neophyte teachers, reflective practice, university teaching, conceptual change, cognitive apprenticeships, reflective incubation, online professional development
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CHAPTER ONE
INTRODUCTION

Overview of the Study

This study was an investigation into the changing conceptions of teaching (COTs) held by five neophyte or beginning teachers within the setting of a large Australian metropolitan university. The neophyte teachers’ COTs were identified early in the study and at the end of the study by gathering data from interviews, questionnaires and personal journals. An interventional program of reflective practice, which incorporated a Reflective Practice Website (RPW) (Seddon, 2006), guided the study’s participants through a series of activities and resources related to effective teaching in higher education contexts. By tracking their engagement with this interventional program of reflective practice, facilitated largely in an online context, the study provided a model by which neophyte teachers identified, reflected on and made plans to improve the quality of their teaching. The interventional program of reflective practice was designed by drawing on the principles of reflective practice (Boud et al., 1985; Schön, 1987), cognitive apprenticeship (A. Collins, Brown, & Holum, 1991; A. Collins et al., 1989) and conceptual change (J. Davis, 2001; Kuhn, 1970; Posner et al., 1982). The study specifically focused on a group of neophyte teachers who were typical of those regularly brought into teaching duties at universities as a continuation of their academic advancement and institutional involvement.

Background to the Study

University students are taught by teachers with a range of disciplinary backgrounds who possess varied levels of expertise and come to higher education teaching with a diverse set of teaching skills. Many of these teachers in tertiary education contexts are employed on a casual or part time basis, and some are typically postgraduate students who are themselves enrolled in courses at honours, masters or PhD levels. Depending on the university, these teachers may or may not receive opportunities to engage in professional development or training activities before they begin teaching students. Whether university tutors and lecturers are considered effective teachers, the impact of their teaching practices on their students’ learning is direct: effective teaching practices positively affect student learning, whereas ineffective teaching practices often result in the opposite (for example, Gibbs & Coffey, 2004). As teachers’ teaching practices are informed by their COTs (Eley, 2006; Kember, 1997; J.
F. Meyer & Boulton-Lewis, 1999; Virtanen & Lindblom-Ylänne, 2009), the identification of COTs is often one of the first areas of focus within university professional and academic development programs for new university teachers (Gibbs & Coffey, 2004; Hemmings, 2012; Ramsden, 2003).

Professional development programs can be customised to suit the needs of teachers who are new to university teaching. Sometimes these teachers are referred to as ‘neophytes’ (Hemmings, 2012; Simmons, 2011), a term that has been adopted for this study. Neophytes may lack many of the attributes of effective teachers or may exhibit less well-developed versions of these attributes. Consequently, many new lecturers and tutors in universities are viewed as less competent than their more experienced colleagues in teaching students to the level of learning outcomes expected by course designers, institutional standards and, increasingly, the community as a whole. How neophytes develop an appropriate understanding of effective university teaching and how they apply these ideas to practical teaching situations are problems that are often approached by defining effective teaching and the attributes of an effective teacher. There are, not surprisingly, as many compilations of attributes of good teaching as there are theories of teaching and learning. This makes it difficult to reconcile a definitive list of prescriptive attributes of good teaching. A more thorough review of the attributes of good university teachers is presented in the following chapter.

Improving the quality of teaching and learning is a concern of individual universities. It is also of concern to national bodies such as The Tertiary Education Quality and Standards Agency (2011) and previously The Australian Universities Quality Agency, organisations that have been responsible for regulation and quality assurance in Australia’s higher education sector. The quality of teaching has always been one of the factors that concern those interested in the development of tertiary education, and it is especially prominent at present in Australia, where a framework for higher education teaching and learning standards is in development (Krause, Barrie, Scott, Sachs, & Probert, 2012). In previous years, The Australian Commonwealth Government’s higher education Nelson reforms package, Our Universities Backing our Future (Nelson, 2003), focused on quality as one of its four foundation principles—the others being sustainability, equity and diversity. Through processes such as Area of Scholarship Reviews, which were conducted by The Australian University Quality Agency, Australian universities and their individual departments were guided through strategies to reflect critically on and seek external feedback on the effectiveness of their activities, systems and outcomes (Edith Cowan University, 2004).
One of the challenging issues associated with the implementation of standards of teaching in higher education is the diverse backgrounds of the university teachers who are expected to operationalise these standards. Increasing numbers of casual staff (commonly referred to as ‘casuals’ or ‘sessionals’), many of who are neophytes, are being employed as university teachers to teach on-campus and online university courses in Australia and worldwide. In a report on the casualisation of university teaching in Australia, May and her colleagues (May, Strachan, Broadbent, & Peetz, 2011) claimed that: ‘The majority of undergraduate teaching at Australian universities is performed by casual, hourly paid, staff’ (p. 188). Other higher education scholars have also identified the casualisation of the higher education teaching workforce as a challenge for institutions and the teachers themselves, especially in relation to the quality of teaching (Bradley, Noonan, Nugent, & Scales, 2008; Kift, 2002; McAlpine, 2002).

The enculturation of new academic teachers into good teaching practice has developed into an increasingly difficult issue that has become more prominent in recent decades. Most universities are exploring ways in which they can ensure that neophyte teachers can acquire skills to equip them to teach well, or at least to teach at an acceptable standard. The accreditation or registration of new teachers as tutors is becoming the model in the United Kingdom (UK) and the United States (US), and is gaining acknowledgement in other countries, including Australia. Most universities provide some sort of induction or training for neophytes; however, whether such training affects neophytes’ existing COTs has yet to be fully investigated. Some universities have responded to the challenges associated with the increasing casualisation of university teaching staff by designing tailored professional development programs that target casual staff. In addition to the more traditional resources and activities associated with the professional development of university teachers (such as workshops, instructional sessions and standards frameworks), alternative programs have recently been developed and made available in flexible, online learning contexts (Bell & Morris, 2009; Mathis & Lecci, 1999; Thorpe & Gordon, 2012).

Progressively, some of these professional development programs include reflective practice components because many scholars and researchers believe that designing such training programs could enhance the effectiveness and quality of a neophyte’s teaching development (Bell, Mladenovic, & Segara, 2010; Chappell, 2007; Hubball, Collins, & Pratt, 2005; J. F. Meyer & Land, 2005). An early awareness of reflective practice, with its loop of continual improvement, may position a neophyte to develop the attributes of quality teaching. Precognition of reflective practice skills may
be a logical point at which to begin neophyte training. The formation of a strong cognitive grounding, along with experiences to nurture continually the skills encapsulated in the reflective practice cycle, may allow neophytes to make the most efficient and pertinent use of available professional development opportunities. Further, where a neophytes’ comprehension of reflective practice techniques is established early, they may begin to drive the content and purpose of their own development by choosing to participate in professional development programs that are more focused towards their individual needs.

Overall, the ‘professionalisation of teaching’ (Ginns, Kitay, & Prosser, 2008, p. 175; Rodaway, 2007) in the higher education sector is becoming more widespread; however, one of the current challenges for the sector is how to include casual and part-time teaching staff, many of who are neophytes, in this trend. The multiple issues associated with the quality of university teaching, the nature of effective professional development for university teachers, the role of reflective practice and the casualisation of university teaching staff have intersected, resulting in the problem of how to educate or train neophyte university teachers in efficient and effective ways that will positively influence students’ learning experiences. This multi-dimensional problem is addressed in this study, the significance of which is now outlined.

The Significance of the Study

Universities worldwide are struggling to find cost-effective and time-efficient models for educating new university teachers (Devlin, 2006; Ginns et al., 2008; Harris, 2009), many of who are subject-matter experts but are not necessarily formally qualified educators. The transition from being an expert in their field to the point at which they are effective educators of tertiary education students often begins with an awareness of best practice teaching and learning practices. However, knowledge of practices also requires grounding in an understanding of theoretical principles of effective learning and teaching. This understanding of teaching is often described as a ‘conception of teaching’, with any change in such conceptions representing development in how a person understands the teaching and learning process. Kember (1997) argues that ‘teaching conceptions have been shown to be related to measures of the quality of student learning’ (p. 255) and that the quality of teaching should be examined in connection to teachers’ teaching conceptions, since teachers’ beliefs strongly influence their teaching practices. Improved understanding of this connection between teaching beliefs and practices may provide evidence for increasing opportunities for neophyte
teachers in the professional development programs organised for them. This may further result in better student learning in both the short and long term.

This study has implications for increasing the quality of teaching at university as it adopts an approach of providing neophyte tertiary teachers with a self-paced, structured set of activities based on the reflective practice cycle (Biggs, 2003; Chappell, 2007; Ginns et al., 2008; Hubball et al., 2005). These activities were designed to engage each participant in a process of analysing and improving their own teaching ideas and practices. As the activities and their associated resources were constructed and made available within a self-contained website, the Reflective Practice Website (RPW), this approach to the advancement of neophyte teachers is significant, as it represents a capacity-building approach to professional development (Eade, 1997; Jackson et al., 1994; Mitchell & Sackney, 2000) and is a process that may be used by individual neophyte teachers or groups of neophyte teachers in other university contexts. This study’s findings provide evidence of how a group of neophyte teachers have been equipped to increase their capacity to develop professionally as university educators.

**Problem Statement**

Many previous studies in tertiary education contexts have identified the COTs held by tertiary teachers at one point in time. While useful in some respects, Lindblom-Ylänne (2009) suggests that: ‘More studies are needed to follow how the variation in conceptions changes over time as a result of the experiences in this learning/teaching context’ (p. 14). This research has extended the snapshot approach by determining how a group of teachers’ COTs developed across a given period; that is, one semester. By investigating how each participant’s decision-making abilities grew across one semester, this study has provided evidence of the developmental nature of early tertiary teachers’ COTs.

Universities face a continuing problem of the quality of teaching (S. J. Marshall, Orrell, Cameron, Bosanquet, & Thomas, 2011). Many of their new teachers adopt teaching duties during their postgraduate degrees having had little or no teaching training or experience, with the exception of those within the field of education. Consequently, the quality of their teaching and their confidence in their teaching abilities may be low, while their anxiety levels may be high (Simmons, 2011). The often inadequate teaching abilities of neophyte teachers affect the quality of teaching occurring at university, compounded by the increasing casualisation of university lecturers (May et al., 2011) and rising proportion of neophytes. The result is that students’ learning experiences may be of a lesser quality than preferred by the
university. Hence, the problem of how to educate university lecturers and tutors about relevant teaching beliefs and practices is the dominant issue to solve to improve students’ learning experiences.

Research Purpose and Research Questions

The purpose of the study was to explore and identify the COTs held by five neophyte teachers before and after they engaged in a process of reflecting on their teaching through an interventional program of reflective practice, much of which was administered online. Further, the study was designed to document how the neophytes’ engagement in the interventional program of reflective practice influenced their COTs, especially in relation to their engagement in reflective practice techniques.

This research was conducted using a mixed methods research methodology, structured within five case studies. The study was designed to answer the following four questions. The first three questions focused on the neophyte teachers’ COTs, while the fourth question focused on the influence of the interventional program of reflective practice:

1.1 What COTs are held by each neophyte before the intervention?
1.2 What COTs are held by each neophyte after the intervention?
1.3 How did each neophyte change his or her COTs?
2.1 How did the interventional program of reflective practice influence the neophytes’ COTs?

Answers to Questions 1.1 and 1.2 were sought by analysing the data collected during interviews with each of the participants at the beginning and end of a semester period, and by analysing their responses to a questionnaire that was administered at the beginning and end of the semester. The participants’ journal entries, which were recorded during the semester the study took place, also provided data to help answer these two questions. The answer to Question 1.3, focusing on the changed teaching conceptions of the neophytes, was determined through comparison of each neophytes’ pre-existing COTs with the conceptions they held at the end of the study. The triangulation of three sets of data for each participant, gathered specifically to answer the first three questions of the study, was conducted to ensure that the findings of the analyses were substantiated across all data sets.

The final question of the study, Question 2.1, focused on the influence of the interventional program of reflective practice on the neophytes’ COTs. This question was answered by analysing the data gathered across the three sets of data for each participant. Evidence was sought regarding how the resources and activities in the RPW
catalysed reflection in the participants’ thoughts and intentions about their teaching ideas and practices. More detail about the data gathered, the instruments used to gather the data, the methods of data analysis and how these processes were aligned to the study’s research questions can be found in Chapter 3: Methodology.

**Operational Definitions Used in This Study**

The following set of operational definitions has been included at the beginning of this thesis to provide a coherent way to guide the reader’s interpretation of these terms within the context of this study. The researcher acknowledges that some of the terms, included below, may be defined in alternative ways by other researchers and educators.

Table 1

*Definition of Terms used in this Study*

<table>
<thead>
<tr>
<th>Term/source</th>
<th>Operational definition</th>
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<tr>
<td><strong>Cognitive apprenticeship</strong> (A. Collins et al., 1989)</td>
<td>A framework of teaching and learning development and support that draws on a set of five component scaffolding techniques used to improve the uptake of knowledge and skills through the stages of modelling, coaching, articulation, reflection and exploration. Cognitive apprenticeships invest much in the confidence of the student by incorporating processes of expert support that is faded over time. The theory also embraces authentic learning situations.</td>
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<td><strong>Conceptions of teaching</strong> (Devlin, 2006; Eley, 2006; Ginns et al., 2008; Kember, 1997; Lucas, 2002; Pratt, 1992; Virtanen &amp; Lindblom-Ylänne, 2009)</td>
<td>Conceptions are our interpretation of phenomena. These conceptions influence how we deal with practical situations. COTs incorporate a person’s beliefs about the act of teaching and its impact on student learning.</td>
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<td><strong>Conceptual change</strong> (J. Davis, 2001; Hewson, Beeth, &amp; Thorley, 1998; Posner et al., 1982)</td>
<td>Conceptual change is generally defined as learning that changes an existing conception (that is, belief, idea or way of thinking). In this study, the changes in a neophyte’s COTs are viewed as conceptual change.</td>
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<td>Term/source</td>
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| **Loop of reflective practice** (Biggs, 2003; Hubball et al., 2005) | The cycle of phases that reflective practitioners participate in to improve their understanding and practices in an area of endeavour. The phases include:  
  - planning;  
  - performing;  
  - reflecting/reviewing; and  
  - improving. |
| **Neophyte/s** (Hemmings, 2012; Simmons, 2011) | New or beginning tertiary teachers. Teachers who are at the start of their tertiary teaching career, often as a continuation of their involvement with a faculty when their undergraduate degree finishes. Neophyte teachers are often honours or postgraduate students, usually casually employed, but may also be drawn from industry or the community. |
| **Reflective practice** (Biggs, 2003; Boud, 2001; Boud, Cressey, & Docherty, 2006; Boud et al., 1985; Schön, 1987) | Reflective practice is an action theory that leads those participating to mentally construct and utilise a loop of practice that logically employs the following four phases:  
  - plan;  
  - perform;  
  - reflect; and  
  - improve.  
It is a cycle of reflective thinking with an intention to improve and is used frequently in professional development. Those who practice this cycle within their professional domains are referred to as reflective practitioners. |
| **Unit** | A single course of study within a degree program. For example, a lecturer may teach two or three units per semester in a Bachelor of Arts degree. |

**Structure of the Thesis**

This thesis begins with an overview of the study (Chapter 1), a review of the literature related to the focus of the study (Chapter 2) and information about and justification for the methodology used (Chapter 3). The results of the study are then presented (Chapters 4 to 9), followed by a discussion of these results (Chapter 10). Finally, the conclusions to the study are presented, alongside recommendations for practice and ideas for further research (Chapter 11). Following is a brief overview of each chapter in this thesis.

The Introduction chapter (Chapter 1) provides an overview of the study’s topic, as well as the research questions and the setting and boundaries of the study. Chapter 1 also outlines the key concepts related to the research topic and explains the significance of this area of study. The Review of the Literature (Chapter 2) synthesises findings from a collection of studies of effective university teaching and presents the major theoretical
influences upon which the study is based. As well as providing the foundations of the conceptual framework of this research, this chapter presents the theoretical framework that determined the direction and procedures adopted throughout the study. Themes, gaps and inconsistencies across previous literature are identified in this chapter.

The Methodology chapter (Chapter 3) outlines the reasons for selecting a mixed methods case study approach for this research study. Other methodological approaches that have informed the sampling, data collection and analysis methods are incorporated into this chapter, in relation to the research questions. Decisions regarding the overall methodology and the specific methods used to conduct the research can be linked back to Chapter 2, in which the conceptual and methodological literature was reviewed. The evaluation criteria used to uphold the quality of this research are also described in Chapter 3.

The results of this study are presented across six chapters: Chapters 4–9. To answer the first three research questions of this study, which focused on the five neophytes’ COTs, Chapters 4–8 provide an account of the COTs held by each of the five neophyte teachers, presented as five separate case studies. The neophytes’ COTs before and after the intervention are presented, followed by an account of how these conceptions changed. Representative quotations and examples from the participants’ interviews, journals and questionnaire responses are included as evidence to support the outcomes of the data analysis procedures in each of the case accounts, along with regular summaries, which have been used as mechanisms to synthesise and refine the way in which the findings are presented. In Chapter 9, the fourth and final research question (2.1) is answered in relation to all five of the participating neophyte teachers. The ways in which the interventional program of reflective practice influenced the neophyte teachers’ COTs are identified in Chapter 9.

The Discussion chapter (Chapter 10) begins by providing a short summary of the research results to contextualise the discussion of the study’s findings. The chapter then provides an account of how the results of this study relate to previous literature on conceptions of effective teaching (and how these change), reflective practice, professional development and neophyte teachers’ experiences. The meaning of the results is investigated, especially in terms of how the findings of this study contribute to, overlap with and differ from what previous researchers have found. Lastly, the Conclusion chapter (Chapter 11) summarises the findings of the study in relation to the four research questions, provides recommendations for practice and outlines opportunities for future research.
CHAPTER TWO
REVIEW OF THE LITERATURE

Chapter Overview
This chapter provides a synthesised account of the major theories, themes, approaches and controversies in the literature on the topic of university teaching and the conceptions held by teachers about university teaching, with a special focus on new tertiary teachers, or neophytes as they are sometimes called. The conceptual and methodological lessons learned from this review of the literature have been used to design and conduct the study outlined in this thesis. While most of the research referred to throughout this literature review would be described as current, being published within the last decade or so, some seminal articles are referred to that were published more than 10 years ago. They have been included in this literature review because they represent some of the major theoretical and practical paradigm shifts that have influenced the topics addressed in this thesis.

Introduction
This literature review is primarily centred upon the concepts, contexts and processes associated with teaching in universities by new tertiary teachers, known as neophytes. The critical review and critique of the literature associated with university teaching, neophyte teachers, reflective practice and conceptual change has informed the development of precise research questions (McNiff & Whitehead, 2002, p. 43), outlined in Chapter 3, based on areas of research as demonstrated through this literature review.

The literature review is presented in three sections. In the first section, the ideas and practices that constitute our understanding of effective university teaching are considered alongside some of the key principles that drive the theories of adult learning and the professional development of teachers. The professional learning about teaching experienced by neophyte tertiary teachers is acknowledged as a process in which they engage as they teach their students, learn about learning, evaluate their own teaching and practise the skills of a reflective practitioner (Parsons & Brown, 2002; Schön, 1983, 1987). In the second section, Major Theoretical Influences, the theoretical constructs of cognitive apprenticeships, reflective practice and conceptual change are investigated in light of effective university teaching. While a short account of online education has been included in this literature review, it is acknowledged that online education is a much larger field than this component of the literature review indicates. Rather than
attempting to address this wide and growing field, the literature review has concentrated on the affordances of online learning as it is these affordances that were utilised in the development of the Reflective Practice Framework used in the latter part of the thesis. Further, based on this literature review, these theoretical constructs were applied in the design and development of the RPW, the central resource used by this study to introduce a group of neophyte university teachers to an interventional program of reflective practice. The third section, Theoretical Framework of the Study, synthesises the major theoretical principles and guiding practices that emerged from this review of the literature and their implications for this study. A summary diagram (Figure 8, p. 70) depicts the thrust of the study’s design and intention.

**Effective University Teaching**

This first section of this literature review focuses on the context of effective university teaching, the characteristics of the people involved in such teaching processes, some of the major changes in teaching that are currently affecting the university sector and the actual teaching that takes place within the sector. This section sets the scene of the field of research under study. Following this, the second section of the literature review, Major Theoretical Influences, provides a synthesised account of the major ideas and theories recently influencing the context of effective university teaching.

**Quality of Higher Education Teaching and Learning**

Educators have long been calling for change in the quality of tertiary teaching (Ho, Watkins, & Kelly, 2001); however, owing to its ‘multidimensional, difficult and contextual’ nature (Healey, 2000), how to describe effective university teaching is a challenge that continues to face many higher education institutions (Dow & Braithwaite, 2013; Krause et al., 2012; May et al., 2011; Skelton, 2004; Trigwell, 2001). Some would argue that the quality of teaching and learning in the university sector must first be widely understood before such qualities can be implemented in practice (Devlin & Samarawickrema, 2010). Others remind us that teaching standards need to be considered in terms of process and delivery (Krause et al., 2012, p. 1).

The standards-based movement in education has had a major influence on how the quality of higher education is defined and perceived (Biggs, 2003; Biggs & Collis, 1982; Harris, 2009; Kember & Gow, 1994), especially in terms of identifying benchmarks that can be used to compare and contrast standards across educational institutions and countries. Benchmarks are often described as ‘statements about the “threshold quality” or “minimum standards” of graduates’ achievements, attributes and
capabilities relating to the award of qualifications at a given level in each subject’ (Fry, Ketteridge, & Marshall, 2009, p. 194). While outcomes-based education was primarily concerned with defining what the learner should know and be able to do, the standards-based movement has defined the skills and knowledge required by teachers.

In his review of national academic standards in the US and Australia, Watt (2009) found that ‘policy makers in each country argue that national academic standards are needed to raise declining, or inequitable, student performance due to increasing variability in academic standards and assessments across state jurisdictions’ (p. 49). However, he also found that the implementation of such national academic standards is at risk because the type of organisational structure required to put such standards into practice is lacking (Watt, 2009, p. 52). Similarly, in universities, James, Baldwin, Farrell and Devlin (2007) found that it is difficult to apply generic standards in practical terms.

Whether the standards-based movement or earlier outcomes-based movement in education have been successful in actually raising standards of learning and teaching in higher education is under question. Some have opposed these movements (Kohn, 2000; Sacks, 2000) and others have supported them (Schmidt, Houang, & Shakrani, 2009) or embraced their associated guidelines as a basis for setting standards, but have reservations about national standards claiming to be the answer for all programs (Watters, 2006). Beyond the varied opinions about the standards-based and outcomes-based movements, the complexities of their history, their political drivers and the gradual adoption of academic standards has affected Australia and the US in recent years (Watt, 2009). For their part, business and industry are demanding ways of defining graduate suitability for employment (Precision Consultancy, 2007) and are pushing for a standards-based approach.

The message emerging from recent reviews of the quality of teaching in higher education is that the quality of teaching is under scrutiny, especially as the links between teachers’ COTs, teaching approaches and students’ learning approaches are now firmly established (Devlin, 2006; Grossman, 2008; Kember & Kwan, 2000). Nonetheless, it has long been recognised that teaching is a very complex process (Chappell, 2007; Ginns et al., 2008) and lecturers’ COTs vary greatly in their nature and complexity (K. Murray & Macdonald, 1997). Defining standards of high-quality teaching in higher education institutions has always been (J. F. Meyer & Boulton-Lewis, 1999; Roth, 1998; Taylor, 1996) and probably always will be challenging. The need to devise teaching standards that are at the same time flexible and robust enough to
provide guidance for the implementation of high-quality learning standards is recognised by Krause et al. (2012): ‘We endorse the view that approaches to assuring and demonstrating learning standards need to be sufficiently flexible to accommodate sector diversity, yet they also need to be defensible and robust, scalable and sustainable’ (p. 7). Despite the discussion about how to define higher education teaching or learning standards, some researchers debate the validity of attempting to define the characteristics that are essential to being a good teacher (Feldman, 2007). Nevertheless, some teachers, in the face of the complexity of university teaching, ‘ask for a set of rules that will solve all their difficulties’ (Ramsden, 2003, p. 14). The ongoing debate about how to provide high-quality teaching in the tertiary sector is thus influenced by varied groups of stakeholders.

Effective university teaching practices are no longer the focus solely of academic developers and higher education specialists. Members and leaders of faculties across all university disciplines are concerned about the challenge of achieving high standards of university teaching (for example, Allen & Seaman, 2007; Bell et al., 2010; Biggs, 2003; R. Collins, 2008; Devlin, 2006); however, how academic staff are to gain the teaching skills required to raise the standards of teaching remains a problem (Hemmings, 2012, p. 171). Professional development is often seen as the means by which to address this problem, by assisting teachers to acquire skills associated with high-quality teaching (for example, Bell & Morris, 2009; R. Collins, 2008; Ginns et al., 2008; Matzen & Edmunds, 2007). Even so, difficulties arise when a predetermined set of criteria or characteristics are applied to wide-ranging contexts and disciplines. It is challenging to devise a comprehensive set of standards or descriptors that are accepted across a diverse range of educational settings within the higher education sector.

**Disciplinary Context**

How to implement the pedagogical and andragogical (Henschke, 2010; Knowles, 1990; Savicevic, 1999) foundations of best practice university teaching is, subsequently, currently under investigation by researchers and academic staff across many disciplines, including geographical sciences (Chappell, 2007; Healey, 2000), biosciences (Virtanen & Lindblom-Ylänne, 2009), business (K. Murray & Macdonald, 1997), accounting (Lucas, 2002) and nursing (McArthur-Rouse, 2008; Oldland, 2011). Not every set of effective teaching characteristics is as relevant to one discipline as they are to another. As Kandlbinder (2011) notes: ‘every discipline has a unique combination of theoretical frameworks that structure the key intellectual traditions of the field’ (p. 12). Conversely, Skelton (2004, p. 15) warns about focusing too much on the
disciplinary context, at the cost of reducing the scope of what becomes the established practice of effective teaching.

Whether the disciplinary context or the institutional setting in which teaching takes place in an instrumental factor in affecting the quality of university teaching is an unresolved area of the literature (Devlin & Samarawickrema, 2010; Kember & Gow, 1994; Lucas, 2002; K. Murray & Macdonald, 1997), although some researchers (Biggs, 2003) purport strong views about the direct effect of context on teaching. Devlin and Samarawickrema (2010), in their review of effective teaching criteria in a changing higher education context, argue that ‘context is critical’ and that the consideration of effective teaching practices must occur in a manner that continues to respond to ‘the contexts in which learning and teaching is undertaken’ (p. 111) and ‘the ways in which teaching should be practiced within multiple, overlapping contexts’ (p. 122). The context of teaching has a direct influence on the quality of teaching and, subsequently, on the quality of learning (Biggs, 2003). Murray and Macdonald note that a ‘number of studies suggest that the conception of teaching may depend on the context of the teaching’ (1997, p. 336). Overall, despite some controversial views on the issue, it appears from past literature that there is an established understanding among scholars of teaching and learning in university contexts that context matters.

The debate surrounding whether each discipline requires a specific way of teaching is a controversial issue (A. Anderson & Barham, 2010), but there are other contextual factors that affect how teaching takes place in universities. As well as being influenced by the disciplinary context, standards of, and orientations to, university teaching are also affected by curriculum design, the learning tasks and the teaching method used (Kember & Gow, 1994, p. 70). Thus, the elements of the curriculum itself influence the quality of teaching enacted by various teaching approaches. Lucas (2002) suggests that ‘as conceptions of context change so, too, do approaches to learning and teaching’ (p. 185). As well as being influenced by disciplinary and institutional contexts, some researchers believe that teaching needs to be differentiated according to whether a course is delivered via an online, blended or on-campus teaching mode. For example, in their investigation of the design and conceptualisation of online learning environments, Thorpe and Gordon (2012) suggest that the mode of delivery dictates particular standards of teaching and learning. The influence of the online context will be specifically addressed later in this literature review in the section titled, Major Theoretical Influences.
To summarise the research on effective university teaching, it is evident that much of the literature on effective teaching suggests that the most effective teacher is one who is able to respond to his or her changing contexts of university teaching, while also meeting the differentiated needs of his or her learners. As Paul Ramsden (2003) reminds us in his book, *Learning to teach in higher education*, ‘teaching in higher education could also be conceptualised as context-dependent, and lecturers could be expected to adopt different approaches in differently perceived circumstances’ (p. 237). From this perspective, teaching is affected by the educational context, but teachers also represent a significant force due to their inverse influence on their teaching contexts.

Now that the complexity and some of the controversies associated with the standards of effective university teaching have been outlined, the following section considers how the changing contexts of global, national and local university teaching affect our concept of effective teaching and how such understandings are applied in practice, especially by the neophyte tertiary educator.

**Changing Contexts of University Teaching**

As illustrated above, the context of university teaching influences the quality of teaching. University teaching has characteristically undergone major changes during the last few decades, from a content focus to a teacher focus and, in more recent years, to a focus on learning (Biggs, 2003). The complexities associated with university teaching can be overwhelming to some lecturers (Ramsden, 2003, p. 14). Light and Cox (2001) liken the collection of changes facing university teachers to ‘riding the storm’ (p. 12). Although related to the context of schools, the more recent work of John Hattie (2009) has reinforced the significance of the teacher and the act of teaching in relation to improving the quality of students’ learning experiences.

The topic of university teaching will always be associated with one focus or another, depending on changing political influences, governmental structures, contemporary research findings and recent pedagogical trends. Today, teaching in university contexts continues to undergo change, and this change is both experienced and driven by those who enter the university teaching profession. The very definition of the university academic is undergoing considerable change, and while this change is typically related to scholarly expectations and definitions, the source of such change may be related to management styles, governmental policies and institutional visions (Billot, 2010, p. 718). The role of neophyte teachers within this complex cycle of change is emerging as an area of focus (Hemmings, 2012; Simmons, 2011) and is especially significant considering ‘the majority of undergraduate teaching at Australian
universities is performed by casual, hourly paid, staff (May et al., 2011, p. 188). Neophyte teachers typically enter a university teaching context in which they, like their more experienced colleagues, will meet an unsettled institutional and scholarly landscape:

Academic professionals are grappling with a fluid identity during continual change within the tertiary sector. Over time, academics have developed a professional sense of self, an identity that is now being challenged by institutional change. Roles and responsibilities are becoming more demanding and conflicts occur where priorities clash. (Billot, 2010, p. 718)

When neophyte tertiary teachers enter this changing context, they often find themselves confronted with issues associated with a changing institutional environment. They may meet blurred expectations of their services, which, in turn, may affect their academic identities. It is this backdrop of changing agendas, philosophies, expectations and qualities associated with effective teaching that can cause consternation for neophytes (Devlin, 2006; Hemmings, 2012; Hemmings & Kay, 2010; Nyquist & Wulff, 1996; Oldland, 2011; Whelan, Smeal, & Grealy, 2002), who are typically in the early stages of developing their academic identities (Billot, 2010; Hemmings, 2012). They are regularly faced with ‘multiple adjustments and corresponding anxiety of moving from the familiar role of graduate student to a new one as faculty member’ (Simmons, 2011, p. 229).

One way in which university teachers can deal with the changing arena of the university sector is to instigate change themselves by being proactive definers of effective teaching. While some changes in universities occur in response to external forces, some researchers, such as Chappell (2007), suggest that university teachers must be proactive in their change: ‘If lecturers are to become proactive in their professional development, to question their teaching practice and become reflective practitioners, then our teaching culture must embrace the need for change and differences in teaching and learning’ (p. 257). Such change can be addressed within the bounds of professional development programs (such as those referred to by Billot, 2010; Ginns et al., 2008; S. J. Marshall et al., 2011; Matzen & Edmunds, 2007; Skelton, 2002) that aim to assist academic teaching staff to define their own roles within changing academic and institutional settings. These changing teaching contexts within universities are not confined to specific institutions. Academic teaching staff worldwide typically experiences these changes.
Global University Teaching Practices and Trends

Globally, governments and educational planners are showing interest in research concerning the quality of teaching in higher education systems (Tight, 2007) and the professionalisation of university teaching (Ginns et al., 2008; Light & Cox, 2001; Rodaway, 2007). This resolute approach to examining the scholarship of teaching started late in the previous century and has been described by Biggs (1999) as 'putting teaching under the spotlight’ (p. 74). In many countries, the quality of education is now seen as a paramount issue. In North America, educationalists are greatly concerned with the quality of educational processes. For example, Martin (2003, p. 2) reports that higher education institutions across the US are scrambling for competitive advantage and that high service quality is necessary to protect competitive advantage. The impact of the growing context of online learning has also been thoroughly researched (Means, Toyama, Murphy, Bakia, & Jones, 2010). Likewise, in the UK, there is significant interest in the quality of teaching and many political and educational institutions are engaging in research in this field. The link between the quality of university teaching and students’ approaches to learning is being researched alongside professional development programs for university teachers (for example, Gibbs & Coffey, 2004; Ginns et al., 2008; Kember & Gow, 1994; S. J. Marshall et al., 2011; Matzen & Edmunds, 2007; Mitchell & Sackney, 2000; Oldland, 2011; Skelton, 2002). Overall, the most recent trend in the debate on worldwide academic standards is the focus on student learning as the means to improve academic teaching standards (Harris, 2009), albeit often through the pathway via effective teaching (Biggs, 2003; Hattie, 2009; Ramsden, 2003).

While academic teaching staff in previous decades were charged with the duty of transmitting knowledge to their students through the voice of their expertise and authority via an objectivist philosophy of teaching (Herrington & Standen, 1999), modern academics are faced with the challenge of understanding and applying ‘a constructivist epistemology ... which has come to dominate the field’ (Kandlbinder, 2011, p. 13). The experience of the learner has become the primary focus of higher education teachers and the institutions in which they are employed (Boud, 1993; Harris, 2009). Through their understanding of constructivism, teachers have become more focused on what the student does, what the student experiences and what the student learns (Biggs, 1999; Ramsden, 2003). The way in which higher education teachers have typically come to view learning through a constructivist lens has meant that most dialogues about university teaching typically concentrate on learning-related issues. In
his seminal paper, *What the student does: Teaching for enhanced learning*, Biggs (1999) explains that:

> At all events, the current revolution in universities is putting teaching under the spotlight, which at least provides an opportunity for some reflection on current practice. Certainly, students are not learning as well as they might be. Aligning practice on the basis of what the students should be doing is likely to be more fruitful than focusing on what teachers and administrators do.
>
> (p. 74)

Experienced and neophyte university teachers typically encounter collegial conversations about the quality of student learning in professional development programs. They may also read scholarly articles about research and teaching, and come across criteria incorporated into promotion applications that request examples of how they focus on student learning in their day-to-day teaching approaches. Further, the way in which university courses are accredited through national and state- or territory-based bodies places student learning as a central focus of teachers’ attention (Tertiary Education Quality and Standards Agency, 2011).

Various accrediting bodies scrutinise the courses delivered and the teaching within these courses across the higher education sector. In Australia, these bodies include The Tertiary Education Quality and Standards Agency and previously The Australian Universities Quality Agency, while important bodies abroad include The Higher Education Academy and The American Association for Higher Education and Accreditation. In the US and the UK, the accreditation and/or registration of neophyte teachers is linked heavily to assuring quality teaching at universities. Martin (2003) further posits that issues of accountability and monitoring are possibly just as significant in the processes of accreditation as the quality of learning and teaching:

> It is clearly of the utmost importance to ensure that a quality ‘product’ is offered, and is seen to be offered by HEIs [higher education institutions], it is perhaps more important to ensure that both the teaching provided and the learning achieved are *continually monitored* [emphasis added] to ensure that they are the best possible within the constraints of available resources.
>
> (p. 2)

Accreditation is also seen as an important dimension in the professional development of neophytes because the benchmarks associated with such processes are acknowledged as being pivotal to the everyday teaching tasks of the neophyte teacher. Neophyte teachers characteristically come upon the concept and processes associated with the accreditation of university courses through official documentation such as course outlines, university mission statements and promotion or employment
applications (Hemmings, 2012; Simmons, 2011). However, despite the governmental and institutional documentation that oversees and sometimes directs the day-to-day actions of a neophyte teacher, their fundamental focus is predictably on their teaching and their students: ‘At the centre of these wide-ranging activities are the individual learner and lecturer and what happens in their classroom and programmes’ (Fry et al., 2009, pp. 197-198). Nyquist and Wulff (1996) refer to this focus as survival for the new university teacher.

Although neophyte teachers will almost certainly encounter some form of documentation or come under the influence of national accreditation processes in the university within which they teach, the influence of such standards-focused documentation will no doubt serve to bring neophyte teachers’ academic practices closer to the expectations of the institution in which they teach. For example, in their handbook for teaching in higher education, Fry et al. (2009) describe the process of accreditation as being essential in terms of national recognition of courses of study. They also explain accreditation in association with the budding academic as a process that directly influences their teaching practices, especially in terms of quality assurance: ‘This in turn enables staff to develop understanding and skills in QA [quality assurance] processes, better preparing them to take part in external and institutional QA events’ (Fry et al., 2009, p. 190).

In addition to the increasing influence of accreditation on a worldwide scale, the demand for online learning and teaching practices is one of the most substantial areas of change being experienced within the tertiary education sector (Allen & Seaman, 2007; Bell & Morris, 2009; Koch & Fusco, 2008; Thorpe & Gordon, 2012; Wiesenber & Stacey, 2006). Meeting student demand is becoming increasingly linked to the quality of teaching as expressed by the authors of the recent Bradley Report in Australia: ‘The most effective way to ensure that students enjoy a stimulating and rewarding educational experience is to encourage Australia’s higher education sector to be responsive to student demand’ (Bradley et al., 2008, p. 69). The students themselves are changing. However, in Reeves and Herrington’s (2010) account of how to respond to students of ‘Generation Me’, they advise that widespread improvement in higher education teaching is needed not just for the current generation of students:

Instead of concluding that the teaching methods of higher education need to be adjusted to accommodate the learning styles and preferences of GenMe, we prefer to argue that the pedagogy of higher education needs to be enhanced for other reasons. (p. 212)
Such changes in actual teaching practices, learning strategies and course design features are often driven by the demand for geographical- and time-independent course access by students (L. Johnson et al., 2014; L. Johnson, Levine, & Smith, 2009). On a global scale, online learning is no longer seen as an innovation; it is an expectation. Institutions and their student bodies alike view the offering of online courses as commonplace and this shift in delivery mode of university courses has influenced the way in which students learn, the way in which university lecturers teach and the way in which university courses are designed. These changes have implications for university teachers and the institutions in which they teach; in the drive to design courses for delivery in online environments, teachers need to develop online teaching skills, which can be confronting and challenging (Shepherd, Alpert, & Koeller, 2007).

The changes associated with and catalysed by the use of technological learning and teaching tools can be cathartic in their impact on the quality of learning and teaching (K. A. Meyer, 2010) by instigating positively framed change (Matzen & Edmunds, 2007; McKenzie, 2001). This phenomenon is sometimes referred to as disruptive technology (K. A. Meyer, 2010), growing from the term ‘disruptive innovation’ coined by Christensen (2011). However, while many of the changes occurring in university contexts are positively influencing the quality of teaching and, subsequently, the quality of learning experienced by students, some changes are proving challenging for university teachers such as increased casualisation and more intense scrutiny of the quality of university teaching (Means et al., 2010; Shepherd et al., 2007). Reeves and Herrington (2010) believe that higher education learning could be further enhanced through the integration of authentic tasks within university course materials, rather than the continuation of the delivery of traditional, content-focused university education, albeit using modern technologies. Fiedler and Väljataga (2010), however, suggest that ‘if one tries to intervene into current teaching and studying practices in formal higher education’ (p. 91), even more problems and barriers could arise.

While many of these barriers may not be experienced as deeply by neophyte teachers, who are typically younger and may be more technologically familiar than their older, more experienced university teaching colleagues, the pressures felt by such colleagues no doubt affect the experiences of neophyte teachers. The trend towards learning environments that are heavily reliant on online technologies may even negatively affect some students (Bradley et al., 2008, p. 72), although Prensky’s (2009) more recent work has suggested that the divide between digital natives and digital immigrants is not as obvious as noted in his earlier work (Prensky, 2001). In addition to
the growing trend by universities to engage in online learning contexts, the theoretical influences of online learning are further investigated later in this literature review, in the section titled **Major Theoretical Influences**.

A further issue facing experienced and neophyte lecturers alike, whether they are employed on a full-time, part-time or casual basis, is that it is commonly accepted that all university academics are expected to conduct and publish research just as much as, and in some cases more than, they are expected to teach effectively (Tight, 2007). The cry of ‘publish or perish’ resounds in most universities across the world. Amidst the demand for increased quality of teaching is the demand for research output by the same academics who are being pressured to become better teachers (Cole, 2000; Paul, Rubin, & Paden, 1984; Reeves, McKenny, & Herrington, 2011). Therefore, although the neophyte may not be under the same level of expectation as their supervising mentors to publish their research findings, the neophyte will still be influenced by the institution’s emphasis on the value of research publications (Billot, 2010; Hemmings, 2012). There is also an imperative to begin publishing as a postgraduate student/neophyte teacher, especially if one wishes to gain the status of an early career researcher (MacDonald, Cruickshank, McCarthy, & Reilly, 2014). As well as experiencing the impact of many of the global trends associated with the changing context of university teaching, Australia is also experiencing some localised issues influencing the quality of university teaching and, accordingly, the experiences of neophyte tertiary teachers.

**National University Teaching Practices and Trends**

There is wide recognition that ‘the reach, quality and performance of a nation’s higher education system are key determinants of its economic and social progress’ (Dow & Braithwaite, 2013, p. 3). Just as there are global trends that focus on the quality of teaching in higher education through an array of governmental and institutional innovations, policies and programs, in Australia the issue of quality in education is also a high profile issue.

Currently, Australia is in a state of flux in relation to its nationwide framework for higher education teaching standards. Calls have been made for an overall framework with a specific focus on teaching and learning standards, but that also unites the current mix of regulatory frameworks and organisational structures (Krause et al., 2012, p. 3). Much of this work appears to be the responsibility of The Higher Education Standards Panel, which operates under the authority of the Tertiary Education Quality and Standards Agency Act 2011 (Tertiary Education Quality and Standards Agency, 2011):
It has become clear that a map is necessary to chart the standards territory across the higher education sector, particularly in relation to teaching and learning standards. While all five standards domains in the TEQSA [Tertiary Education Quality and Standards Agency] framework are important, arguably the teaching and learning standards warrant considerably more informed, evidence-based debate across the sector, along with practical proposals for implementation. (p. 1)

Recently, in August 2013, the authors of the report titled *Review of higher education regulation*, published by The Australian Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education, found that ‘having one body responsible for compliance and monitoring is crucial to maintaining the quality of Australia’s higher education sector’ (Dow & Braithwaite, 2013, p. 1). This recent development in which government bodies oversee the quality of teaching in higher education reflects concerns that can be traced back to the 1990s.

The quality of teaching practices in Australian universities began to be recognised more widely in the 1990s, as explained by Boud in 1993: ‘teaching is beginning to be treated more seriously in Australian universities and it is becoming increasingly legitimate to engage in teaching innovations’ (p. 42). Since that moment, various iterations of the current Office of Learning and Teaching (November 2011) body have come and gone, including The Carrick Institute for Learning and Teaching in Higher Education (2004–2008) and The Australian Learning and Teaching Council (2005–2011). Before this time, other bodies included The Australian Universities Teaching Committee (2000–2004), The Committee for University Teaching and Staff Development (1997–1999) and The Committee for the Advancement of University Teaching (1992–1996). Many of these organisations funded and facilitated the administration of research projects as well as higher education teaching awards associated with university teaching. Funds such as The Learning and Teaching Performance Fund (Bradley et al., 2008, p. 78) have been set up to enable university educators to focus intensely on the quality of teaching and learning.

Overall, the status of teaching, incorporating its theoretical foundations and practical applications, has increased in recent decades. Along with this amplified interest in teaching has come corresponding attention to student learning. This focus on student learning in the Australian context mirrors the global focus on student learning as an avenue by which to improve university teaching standards (Biggs, 1999; Kandlbinder, 2011; Ramsden, 2003). While recognising the need to address issues of high teaching quality at institution-wide and nationwide levels, there is still strong
recognition of the centrality of the students’ experience: ‘a high-quality student experience is central to the future of higher education’ (Bradley et al., 2008). The need to consider teaching standards alongside learning standards has become an accepted element of the higher education landscape in Australia (Krause et al., 2012).

The way in which higher education standards in Australia are compared against those of other countries places Australia within the global context of learning and teaching: ‘A set of public performance indicators to allow assessment of how well the Australian tertiary education system is performing against other countries would assist public understanding of where we are internationally’ (Bradley et al., 2008, p. xvii).

Consequently, since neophytes comprise such a large proportion of teaching populations in Australian universities, they will be required to possess teaching skills that meet these newly established standards. Rigorous professional development and training initiatives will be required to assist neophytes to achieve this aim.

Teaching at an Institutional Level

How a university’s policies are applied in practice, especially in relation to how good teaching is recognised and rewarded, is a critical aspect to any institution (Ramsden, 2003). The teaching practices at the metropolitan university in which this study was conducted are similar in many ways to the national teaching agenda. The University takes the issue of teaching quality seriously and is continually trying to improve the services and training that are made available to inexperienced and experienced teaching academics. This university has initiated a Teaching and Learning Functional Plan (2010–2012) to reform new-teacher training to encapsulate role-based professional development programs, the modelling of good teaching, reflective practice techniques and increasing support for sessional staff. Some of these professional development offerings are compulsory for new staff. A training course for teachers and coordinators of online learning is also obligatory for those engaging with online teaching and learning. These measures aim to improve the base from which neophytes begin their academic teaching duties, and in turn should enhance the quality of learning experiences for students. Further discussion about the professional development of casual staff is provided in the Professional Development of University Teachers section of this literature review.

As with the university in which this study took place, learning and teaching processes are central to how the management of higher education is organised and implemented in a tertiary education institution. This is illustrated in the diagram below (see Figure 1), taken from an article by S. J. Marshall et al. (2011).
Figure 1. Leadership, management and the domains of practice in learning and teaching.

The four sectors shown in Figure 1—curriculum, organisational enablers, students and staff—all bear on an institution’s responsibility to teaching and learning. Each institution must facilitate a vision of its curriculum through sound decisions that plan, organise, monitor and, above all, motivate the staff and students to strive towards achieving that vision. University planners are responsible for providing the means to meet the needs of the staff and students by establishing the institution’s direction of purpose, giving meaning to their mission and providing sufficient funds to staff its operations adequately, while continuing to solve arising problems. Moreover, they must empower and inspire the staff and students to push for the best possible outcomes. These elements are central to the organisational teaching and learning effort as a whole.

While this diagram (Figure 1) establishes the important link between leadership and management and learning and teaching, the composition of most institutions’ teaching staff is typically volatile. Many current university lecturers are close to
retirement age and a majority of teaching staff are casual. New university teachers are required to fill the positions of departing teachers as well as to cater for new and expanding teaching needs. While these new teachers, often drawn from among those moving into postgraduate studies or from industry positions outside the universities, are undoubtedly chosen for their expertise in their field, many bring with them little knowledge or experience of teaching. More often than not, they have had little exposure to teaching theories, methods or practices beyond their own previous experiences of learning.

The COTs that new teachers hold have been shown to be the prime drivers of how they think about and conduct their teaching duties. Neophytes cannot be expected to teach effectively without having been offered relevant professional development opportunities. For neophytes to teach in a manner facilitative of quality learning, their COTs must be aligned with sound educational principles. If universities have a responsibility to train their neophytes to teach in ways that will provide for quality learning outcomes, it reasonably follows that universities should be fostering effective COTs that will allow neophytes to think about teaching in ways that will promote their adoption of teaching best practices as soon as possible.

**Background to COTs**

There is broad agreement that COTs have great impact in higher education, especially on the way in which teachers teach and learners learn. Kember and Gow (1994) suggest: ‘We might want to speculate whether there is a similar relationship between conceptions or orientations to teaching and the way courses are taught, for this relationship might, in turn, affect the quality of student learning’ (p. 59). Later, Kember (1997) argued that ‘measures to enhance the quality of teaching should take account of teaching conceptions if they are to be effective as teaching approaches are strongly influenced by the underlying beliefs of the teacher’ (p. 255). Kember further notes that teaching conceptions are very important because they influence how teachers teach in practice. The COTs of teachers, in turn, influence the way in which students conceive learning to take place (Entwistle, 1998). As teachers’ ideas of teaching directly influence their teaching practices and in turn influence students’ learning practices (Dart et al., 2000), strong links are evident between what university teachers believe to be good teaching and the quality of teaching and learning. With all of the connections being made between COTs and conceptions of learning (COLs), this is a poignant point at which to mention that this study focuses on COTs and their importance to neophytes in becoming better teachers.
Virtanen and Lindblom-Ylänne (2009) define COLs and teaching as beliefs that form the basis for learning and teaching approaches, practices and strategies. Their implementation influences whether students experience surface or deep learning. Ho et al. (2001) found encouraging results in a study investigating the changing COTs of nine teachers and the effects on their teaching, concluding with a hypothesis that:

‘Advancement in conceptions of teaching is a basis for improvement in teaching practices’ (p. 164). Consequently, one way to improve teaching practices is to assist neophytes to develop their COTs further. The aims to improve the quality of teaching and learning and to conduct regular appraisals of teaching quality are two of the concerns presently being addressed in Australian universities. These concerns are reflected in planning statements such as The University of Queensland’s Strategic Plan (University of Queensland, 2013), Edith Cowan University’s 2003–2007 five-year plan (Edith Cowan University, 2003) and the reports of monitoring bodies such as The Tertiary Education Quality and Standards Agency’s (2012, April) audit of Queensland University of Technology, The Australian Universities Quality Agency’s (2007, pp. 17-20) audit of the University of Sydney and the Australian Government’s Bradley Report (Bradley et al., 2008).

In an attempt to improve teaching practices by beginning with an understanding of advanced COTs, the past few years have seen many researchers across the world grapple with describing the typical COTs held by academic staff in the higher education sector. Many of these studies have taken a phenomenographic approach to describe and classify various COTs (Kandlbinder, 2011; Marton, 1986). With the general acknowledgement and agreement of the importance and influence of COTs, it is a good time to take stock of the COTs that have been identified in the research literature.

**Identification of COTs**

One of the most immense challenges associated with COTs and identified by COT researchers is how to describe them. To complicate the situation further, the term ‘conception’ is not consistently used in educational research. Fox (1983) refers to teaching and learning conceptions as ‘elusive concepts’ that are ‘very difficult to pin down’ (p. 151). More recently, Devlin (2006) notes that the terms ‘conceptions’, ‘beliefs’, ‘orientations’, ‘approaches’ and ‘intentions’ are used interchangeably: the constructs of COTs are elusive because they are difficult to define. In his seminal paper, Pajares (1992) described them as ‘a messy construct’ (p. 307).

While some researchers provide lists of characteristics or COTs, others provide frameworks, models or continua to classify COTs. Often, researchers divide COTs into
two qualitatively different categories: teacher-centred COTs and student-centred COTs. Trigwell, Prosser and Waterhouse (1999) and Prosser and Trigwell (1998) describe two of the main categories of COTs as being teacher-focused, in which the teacher is primarily concerned with the transmission of knowledge, and student-focused, in which the teacher places more emphasis on the conceptual change and understandings undergone by students. Similarly, Kember (1997) categorised COTs into teacher-centred/content-oriented and student-centred/learning-oriented.

Whether teachers hold teacher-centred or student-centred COTs, their COTs influence their students’ approaches to learning (Prosser, Martin, Trigwell, Ramsden, & Lueckenhause, 2005). That is, a surface learning approach is promoted by teachers who primarily adopt teacher-centred COTs, associated with transmission approaches to teaching, whereas deeper approaches to learning tend to be adopted by students with teachers who hold student-centred COTs and who place more emphasis on conceptual change. Recent research has also suggested that teachers with student-centred COTs may indeed enjoy teaching more than their content-centred counterparts (Postareff & Lindblom-Ylänne, 2011). In addition to student-centred and teacher-centred COTs, Kember (1997) further suggested the existence of a transitory category that he referred to as student–teacher interaction, ‘characterised by a realisation that interaction between teacher and student is important’ (p. 266).

In addition to the teacher-centred/student-centred continuum of COTs, many researchers have identified and published a range of lists, classification systems, frameworks and models of the COTs held by university teachers. Table 2 outlines some of the historical categorisations used by various researchers. Following Table 2 is a synthesis of the previous research that has reported on these COTs and categories of COTs. The purpose of this synthesis was to inform the design and development of the interventional program of reflective practice, incorporating the RPW, outlined in the following chapter. This program provided the research participants with exposure to some of the seminal research studies of COTs.
Table 2

**Categorisations of COTs**

<table>
<thead>
<tr>
<th>Authors/Researchers</th>
<th>COTs</th>
</tr>
</thead>
</table>
| Fox (1983), Lucas (2002) | Fox’s conceptual model for thinking about teaching and learning is derived from the question: ‘What do you mean by teaching?’ Fox’s model is based on four theories of teaching, based on metaphors acknowledging the subject, or content, and the student:  
1. transfer theory (one vessel to another);  
2. shaping theory (shaping or moulding students);  
3. travelling theory (subject as terrain to be explored with the teacher as expert guide); and  
4. growing theory (intellectual and emotional development of the learner).  
Lucas (2002) notes that Fox uses the term ‘theory’ instead of ‘conception’ and that his ‘theories’ of teaching and learning are seen to be especially relevant to discipline-specific contexts. |
| Chickering and Gamson (1987), Barr and Tagg (1995), Cross (1998) | Chickering and Gamson’s seven attributes of good teaching were derived from a broad body of educational research on the topic:  
1. encourages contact between students and faculty;  
2. develops reciprocity and cooperation among students;  
3. encourages active learning;  
4. gives prompt feedback;  
5. emphasises time on task;  
6. communicates high expectations; and  
7. respects diverse talents and ways of learning.  
These have since been analysed and considered against a wealth of educational research over the last few decades and have found wide acceptance in the modern climate of student-centred learning (Barr & Tagg, 1995; Cross, 1998). |
<table>
<thead>
<tr>
<th>Authors/Researchers</th>
<th>COTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entwistle and Tait (1990)</td>
<td>Entwistle and Tait’s nine aspects of good teaching were reported in a study that explored the relationships between approaches to learning and perceptions of the academic environment:</td>
</tr>
<tr>
<td></td>
<td>1. interest and relevance;</td>
</tr>
<tr>
<td></td>
<td>2. workload;</td>
</tr>
<tr>
<td></td>
<td>3. organisation;</td>
</tr>
<tr>
<td></td>
<td>4. explanations;</td>
</tr>
<tr>
<td></td>
<td>5. enthusiasm;</td>
</tr>
<tr>
<td></td>
<td>6. openness;</td>
</tr>
<tr>
<td></td>
<td>7. empathy;</td>
</tr>
<tr>
<td></td>
<td>8. assignments; and</td>
</tr>
<tr>
<td></td>
<td>9. assessment.</td>
</tr>
</tbody>
</table>

| Pratt (1992) suggested five classifications for conceptions/perspectives of teaching. These were furthered developed by Pratt and Associates (1998), then Pratt, Collins and Selinger (2001). | Pratt worked on five COTs over time with colleagues, Collins (Pratt & Associates, 1998; Pratt & Collins, 2011) and Selinger (Pratt et al., 2001): |
| | 1. engineering (delivering content; later became transmission); |
| | 2. apprenticeship (modelling ways of being); |
| | 3. developmental (cultivating the intellect) |
| | 4. nurturing (facilitating personal agency); and |
| | 5. social reform (seeking a better society). |

These researchers now refer to ‘perspectives’ rather than ‘conceptions of teaching’. It is also worth noting that Pratt’s original ‘conception of engineering’ (delivering content) (Pratt, 1992) has become a ‘perspective of transmission’ in later work (Pratt & Associates, 1998).
<table>
<thead>
<tr>
<th>Authors/Researchers</th>
<th>COTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samuelowicz and Bain (1992)</td>
<td>Samuelowicz and Bain’s dimensions of COTs are represented in a continuum of pedagogic practices that changes as teachers move towards either teacher-centred to student-centred educators:</td>
</tr>
<tr>
<td></td>
<td><strong>Teacher-centred</strong></td>
</tr>
<tr>
<td></td>
<td>• imparting information;</td>
</tr>
<tr>
<td></td>
<td>• transmitting structured knowledge;</td>
</tr>
<tr>
<td></td>
<td>• providing and facilitating understanding;</td>
</tr>
<tr>
<td></td>
<td>• helping students to develop expertise;</td>
</tr>
<tr>
<td></td>
<td>• preventing misunderstandings;</td>
</tr>
<tr>
<td></td>
<td>• negotiating understandings; and</td>
</tr>
<tr>
<td></td>
<td>• encouraging knowledge creation.</td>
</tr>
<tr>
<td></td>
<td><strong>Student-centred</strong></td>
</tr>
<tr>
<td>Parpala and Lindblom-Ylänne (2007)</td>
<td>Parpala and Lindblom-Ylänne proposed six dimensions with sub-dimensions that occurred in two descriptive modes, based on the questions: What is important in a lecturer’s own teaching, and What is ideal or good teaching?</td>
</tr>
<tr>
<td></td>
<td>• teaching practice (interaction, putting teaching into a larger context and variety in teaching methods);</td>
</tr>
<tr>
<td></td>
<td>• teaching context;</td>
</tr>
<tr>
<td></td>
<td>• teacher’s role (to inspire and be expert);</td>
</tr>
<tr>
<td></td>
<td>• student’s role (to be motivated and to process knowledge);</td>
</tr>
<tr>
<td></td>
<td>• atmosphere; and</td>
</tr>
<tr>
<td></td>
<td>• physical environment.</td>
</tr>
</tbody>
</table>
When the collection of lists, classification systems, frameworks and models of COTs (Table 2) identified by a range of researchers across a multitude of research studies and educational contexts is combined with the paradigm of a teacher-centred/student-centred continuum, they represent the various ways in which COTs have been labelled over the past few decades. As suggested by Devlin (2006), within all of these different ways of describing COTs exists a range of pedagogical practices that teachers adopt, depending on which COT or category of COTs best reflects their pedagogical beliefs and practical teaching intentions. Further, the process of identifying currently held COTs provides future opportunities for extending current research into this field and, consequently, adding to our understanding of the role of COTs in quality teaching.

As well as exposing areas of COTs research that require further investigation, the previous research on COTs reveals that, methodologically, most previous studies have tended to focus on measuring COTs at one point in time, with no comparison of these measurements across multiple timeframes or contexts. Accordingly, additional research is required to investigate the development of lecturers’ COTs across time. Further, some researchers implore future researchers of COTs to not only focus on teachers’ current COTs but to also be future oriented (Devlin & Samarawickrema, 2010, p. 114) and to incorporate the study of conceptions and practices within the same study (Virtanen & Lindblom-Ylänne, 2009, p. 5).

Most of the conceptual structures used to identify and categorise COTs from previous literature appear to assume a hierarchical division of COTs; namely, ranging from teacher-centred to student-centred. Moreover, many researchers indicate that a student-centred COT is superior to a teacher-centred COT, or that the ‘transition from lecturer to facilitator’ (Chappell, 2007, p. 265) indicates a change in teaching conception that involves the acknowledgement of some perceived loss of power as a teacher. However, recent researchers have caused a questioning of the hierarchical stance, instead suggesting that it may be possible for teachers to hold both student-centred and teacher-centred COTs (Devlin, 2006). In addition to Devlin, other researchers (for example, K. Murray & Macdonald, 1997; Pajares, 1992) warn against neatly categorising COTs, recalling that COTs are typically messy and, more often than not, overlap within individual teachers’ mind-sets. This study intends to present evidence to contribute to this debate.
The above analysis of the allocation of labels and categories of descriptions used to identify COTs has revealed some common themes and trends, as well as some shortfalls in the research to date. The majority of methods used by previous researchers to describe COTs have relied upon terms that express how teaching is conceived as a combination of cognitive and skills-based processes that focus heavily on teachers’ intentions to foster their students’ development of knowledge, understanding and skills. While some researchers have identified COTs that recognise the more holistic, social, emotional or developmental aspects of teaching (Hagel & Armstrong, 1997; Postareff & Lindblom-Ylänne, 2011), such as nurturing, showing empathy and changing as a person, the predominant commentary on COTs to date has focused on the intellectualised terrain and observable skills associated with teaching.

One further acknowledgement is required when considering COTs. COTs and COLs inexorably share close relationships, and the conceptions of one tend to correlate with those of the other (Marton, Dall'Alba, & Beaty, 1993; Trigwell & Prosser, 1996). Although the focus of this study is predominantly on COTs, the link that they share with COLs means that there are congruencies that intertwine the two. With this in mind, COLs need to be considered when reviewing COTs. For example, the COLs used by Marton et al. (see Table 3) identified six different ways of understanding learning that can be likened to several of the COTs listed in Table 2.

Congruencies can be noted between Marton et al.’s COLs of ‘increasing one’s knowledge’ and ‘memorising and reproducing’ and Samuelowicz and Bain’s (1992) COTs dimensions of ‘imparting information’ and ‘transmitting structured knowledge’, as outlined in Table 2. However, at times, congruencies between COTs and COLs are not clear and they have been called into question. Murray and Macdonald (1997) found disjunction between teachers holding COTs that favoured student-centred methods while still enacting their lectures in teacher-centred ways, for learners to acquire information and knowledge. They concluded that lecturers can ‘express attitudes and beliefs about teaching which are not translated into their teaching strategies and methods’ (p. 331). Murray and MacDonald attributed this incongruity to ‘individuals with insufficient support or training. ... [who] were only going part way round the learning cycle and not closing the loop by using reflection on practice to change that practice’ (p. 347).
Table 3

Conceptions of Learning (Marton et al., 1993)

<table>
<thead>
<tr>
<th>COL</th>
<th>COL explanation</th>
<th>Example of aligning COT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing one’s knowledge</td>
<td>Learning is knowing more than you did before in a quantitative sense</td>
<td>Transfer theory (Fox, 1983)</td>
</tr>
<tr>
<td>Memorising and reproducing</td>
<td>Learning is remembering information and being able to repeat it when necessary</td>
<td>Transmitting structured knowledge (Fox, 1983)</td>
</tr>
<tr>
<td>Applying</td>
<td>Learning is knowing more so you can use it later</td>
<td>Helping students develop expertise (Samuelowicz &amp; Bain, 1992)</td>
</tr>
<tr>
<td>Understanding</td>
<td>Learning is understanding so you can make sense of your knowledge</td>
<td>Providing and facilitating understanding (Samuelowicz &amp; Bain, 1992)</td>
</tr>
<tr>
<td>Seeing something in a different way</td>
<td>Learning is opening up your mind so you can see things in different ways</td>
<td>Teaching for conceptual change (Hewson et al., 1998)</td>
</tr>
<tr>
<td>Changing as a person</td>
<td>Learning is a continuous journey where understanding new things makes you grow and change as a person</td>
<td>Growing theory (Fox, 1983)</td>
</tr>
</tbody>
</table>

Along with the landscape of how COTs and COLs are represented, the attention being given to new tertiary teachers is gathering momentum (Devlin, 2006; Hemmings, 2012; Hemmings & Kay, 2010; May et al., 2011, p. 188; Nyquist & Wulff, 1996; Oldland, 2011; Simmons, 2011; Tight, 2007; Whelan et al., 2002), as is the focus on how COTs change. For example, when considering changing COTs in parallel with effective teaching, teachers with student-centred COTs are more likely to modify their beliefs than are teachers with teacher-centred COTs, whose beliefs tend to be more stable (Virtanen & Lindblom-Ylänne, 2009). The study documented in this thesis represents and extends some of the current research into this area.

Moving beyond classification, recent researchers in the study of teaching, such as Hattie (2009), aim to go further than providing ‘a litany of what works, as too often such lists provide yet another set of recommendations devoid of underlying theory and messages’ (p. 3). Instead, based on his analysis of over 50,000 studies and more than 800 meta-analyses, Hattie, rather than constructing yet another list of traits of effective teaching, simply concludes that: ‘what teachers do matters’ (p. 22). His book, Visible learning, includes detailed descriptions of what teachers need to do, how they need to be actively and passionately engaged in their teaching and how they need to
communicate and relate to their students. The conclusions in his book are not simple recipe-type statements; rather, he describes in detail the teaching approaches that appear to work, reflecting the complexity and contextual nature of good teaching. Although Hattie’s work is targeted towards schools, many of the underlying ideas are transferable to the andragogical context of university teaching. He found that what teachers do and think matters and affects the quality of students’ learning.

Informed by the findings from this literature review, the study documented in this thesis heeds the cautions and synthesised findings presented by previous researchers of COTs. These conclusions have determined the overall research design and the structures and instruments used in the study. Despite the wealth of research into the identification of COTs held by university academics, and the breadth of ways in which they have been documented and described, Devlin (2006, p. 118) urges researchers to investigate further how COTs influence the quality of teaching and, subsequently, the quality of student learning. Such investigations could extend previous research that has identified lecturers’ COTs by studying how lecturers, especially neophyte lecturers, develop their COTs during their involvement in professional development programs and activities.

**Professional Development of University Teachers**

As Gibbs and Coffey (2004) explain, the training of university teachers ‘is now well embedded in many institutions, is often compulsory and is sometimes linked to probation or tenure’ (p. 88). The process of participating in professional development programs that aim to train university teachers frequently affects their COTs, which, consequently, influences how they will teach (Gibbs & Coffey, 2004). This relationship between COTs and teaching practice has been well established and addressed in-depth earlier in this literature review (see the section titled, **Background to** above).

Over the last two decades, much professional development that has been designed and delivered to improve the quality of university teaching has focused on the scholarship of teaching (Ramsden, 2003, p. 245). These programs are variously referred to as professional development, professional learning or academic development, depending on the nomenclature used by the institution involved. These approaches have typically emphasised student experiences in the learning process and the ways in which good teaching can facilitate a high quality of learning. Rodaway (2007) further notes that, although professional development programs for school teachers are well entrenched and accepted in school cultures, the same cannot yet be said for the higher education sector. He calls for the professionalisation of the teaching role in universities.
Lueddeke (2003, p. 224) examined the links between the emergent drive for the formal professionalisation of teaching and the factors that characterise the scholarship of teaching, concluding that teachers need to be able to appreciate what they do not know, research their teaching along with their practice and take themselves beyond a few skills and courses.

The scholarship of teaching was first outlined by Boyer (1990) when he defined the notion as a need to form an independent whole from four categories of scholarship: ‘The scholarship of discovery, of integration, of application and of teaching’ (p. 16). Specifically, he says the ‘scholarship of teaching—both educates and entices future scholars by communicating the beauty and enlightenment at the heart of significant knowledge’ (p. 23). Trigwell, Martin, Benjamin and Prosser (2000) developed the ideas of scholarship of teaching further, proposing a multi-dimensional model (see Table 4). Their work relates categories of approaches to the scholarship of teaching, with a focus on practice (strategy and intention). Their hierarchical model moves through levels of increasing complexity of information gathering and processing, reflective practice skills, communication strategies and an overall conceptual shift from a teacher-centred to a student-centred focus on teaching.

Table 4

*Multi-dimensional Model of Scholarship of Teaching (Trigwell et al., 2000, p. 11)*

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Informed</th>
<th>Reflection</th>
<th>Communication</th>
<th>Conception</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Uses informal theories of teaching and learning</td>
<td>Effectively none or unfocused reflection</td>
<td>None</td>
<td>See teaching in a teacher-focused way</td>
</tr>
<tr>
<td></td>
<td>Engages with the literature of teaching and learning generally</td>
<td></td>
<td>Communicates with departmental/faculty peers (tea room conversations, department seminars)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Engages with literature, particularly the discipline literature</td>
<td>Reflection in action</td>
<td>Reports work at local and national conferences</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conducts action research, has synoptic capacity and pedagogic content knowledge</td>
<td>Reflection focused on what I need to know about X here, and how I will find out about it</td>
<td>Publishes in international and scholarly journals</td>
<td>See teaching in a student-focused way</td>
</tr>
</tbody>
</table>
In addition to acknowledging the role of scholarship in teaching, many professional development activities that are designed for higher education teachers also harness reflective practice principles, believing that they can foster appropriate development and advancement of teachers’ COTs (Bell et al., 2010; Bell & Morris, 2009; Hubball et al., 2005; Wiesenberg & Stacey, 2006). By examining their COTs, university lecturers can develop their teaching skills through the process of reflection as part of their professional development, especially when such activities provide opportunities for teachers to question and re-evaluate their own teaching practices and philosophies within an accepted teaching culture (Chappell, 2007).

Notwithstanding recognition of the value of reflection generally in teacher professional development programs, over the last decade researchers have been calling for a more systematic approach to investigating how reflection is taught. According to Ryan and Ryan (2013), this does not happen intuitively but requires specific instruction:

Despite the rhetoric around the importance of reflection for ongoing learning, there is scant literature on any systematic, developmental approach to teaching reflective learning across higher education programmes/courses. Given that professional or academic reflection is not intuitive, and requires specific pedagogic intervention to do well, a programme/course-wide approach is essential.

(p. 244)

Hubball et al. (2005) have also lamented the lack of professional development programs that incorporate explicit reflective practice techniques: ‘Reflecting on one’s teaching practice is often an implicit goal for faculty development programs. Yet very little has been documented how programs for diverse groups of university teachers actually engage faculty in such reflection’ (p. 57). Although there is not yet an extensive collection of professional development programs specifically designed to teach and engage academics in the processes of reflective practice, there is wide theoretical agreement that: ‘Effective self-reflection is a key component of excellent teaching’ (Bell et al., 2010, p. 57), and that the leadership and management of effective learning and teaching could also be enhanced through engagement with reflective practice (S. J. Marshall et al., 2011, p. 101).

As well as incorporating systematic, explicit strategies into professional development programs that engage academics in reflective practice, such programs must devote time and energy to addressing teachers’ theoretical COTs. Indeed, Devlin (2006) suggests that this element is essential in a professional development program, and is perhaps even more important than the practices; she sees: ‘changing conceptions
as a necessary first step in the process of improvement’ (p. 112). Similarly, other researchers have highlighted the need to acknowledge and emphasise the purpose of teaching, in addition to the COTs and practical approaches teachers adopt (Virtanen & Lindblom-Ylänne, 2009, p. 5).

In addition to the pedagogical and practical approaches that previous researchers have recommended for incorporation into effective professional development programs for teachers, the use of the online learning context for professional development purposes has been explored in recent years (Bell & Morris, 2009; Ellis & Phelps, 1999; Koch & Fusco, 2008; Matzen & Edmunds, 2007; Shepherd et al., 2007; Thorpe & Gordon, 2012; Wiesenberg & Stacey, 2006). Increasingly, researchers and educators alike recognise the potential of online learning contexts to engage teaching staff in the processes of reflective practice, as this type of thinking about teaching and learning can enhance the quality of teaching in higher education (for example, Bell & Morris, 2009, p. 708). This issue is discussed in more detail later in this literature review, under the subheading, Affordances of Online Education.

Although the findings in the literature on professional development and higher education teaching offer a range of recommendations and positive features for potential inclusion in professional and academic development programs aimed at enhancing the quality of teaching and learning in universities, the current tertiary education landscape presents challenges that render the enactment of such programs problematic. The casualisation of university teaching across the higher education is one such challenge (D. Anderson, Johnson, & Saha, 2002; Bradley et al., 2008; Kift, 2002; May et al., 2011). In their report into changes in academic work in universities, D. Anderson et al. (2002, p. 35) found that the increased casualisation of university teaching staff was having a negative impact on the quality of academic standards. More recently, the Bradley Report (Bradley et al., 2008) came to a similar conclusion: ‘Research has argued that the use of casual staff is damaging the quality of teaching at Australian universities because of the lack of effective training opportunities for casual academics’ (p. 71). Further, the D. Anderson et al. (2002) report identified postgraduate students as comprising a significant proportion of higher education teaching staff, noting that: ‘some universities and their faculties made no attempt to prepare casuals for their teaching or monitoring of their progress’ (p. 30).

While there are many benefits associated with casualising a proportion of the teaching workforce in universities, this process has presented university administrators with specific problems, especially in association with the professional development
programs offered, or not offered, to casual teaching staff, many of who are neophytes. May et al. (2011) suggest that teaching at some universities in Australia is conducted by up to 74% casual staff. Kift (2002) notes that newly enrolled students will almost certainly encounter teaching conducted by casual academics: ‘the casual staff member will be their earliest point of personal contact in their transition to tertiary study’ (p. 1). While tertiary institutions are increasingly committing to the training of their teachers, problems arise with the casualisation of the teaching workforce, an outcome that appears to clash with the overall intention of the sector to professionalise teaching (D. Anderson et al., 2002; Ginns et al., 2008; Kift, 2002).

The quality of professional development programs offered to casual staff also poses a problem in that such programs do not always provide adequate support for their target audience. In fact, McAlpine (2002) states that: ‘casuals are, almost routinely, excluded from training and staff development opportunities’ (p. 37). A Department of Education Science and Training survey found similar results, describing casual teachers as ‘existing on the margins of the departmental community’ (D. Anderson et al., 2002, p. 30). As the casualisation of teaching increases, there must be an effort to satisfy the real requirements of neophytes and acculturate them more fully as regular university employees (Knight, 2002). Further, as Kift (2002) suggests, to ensure that the new paradigm of constructivist student-centred teaching in universities is firmly embedded across the sector, professional development programs that reflect this new approach must be made clearly available to casual teachers. As the semester progresses, neophytes often receive little or no ongoing support to develop their strategic use of the target teaching strategies, with the result that they often flounder as they strive to conduct their classes as well as they are able. A survey of over 2000 academics conducted by the Department of Education Science and Training in 2002 (D. Anderson et al., 2002) on the changes in the academic workplace partially focused on the use of casuals for teaching, revealing that: ‘they are employed at the last minute and spend their whole contract time trying to learn, catch up, survive and cope’ (p. 33).

Since this study was initiated many research projects addressing the issue of casualisation in higher education have and are being conducted. In particular, the Australian Teaching and Learning Council (ALTC) funded Preparing Academics to Teach in Higher Education (PATHE) project (2010) has systematically worked through the issues confronting foundational teaching courses for tertiary teaching. The PATHE project has developed materials to identify the relevant issues and to model, benchmark and evaluate such foundational courses (p. 60) that are now becoming common across
Australian universities. The PATHE consortium has linked with other projects, for example Harris's (2008) the Peer review of teaching in Australian higher education. Furthermore, the PATHE website (2008) is now freely disseminating the resources it has developed. Many universities are conducting their own reviews and studies to look closely at teaching in their own institutions such as RMIT's Professional Development for Tertiary Teaching Practice Review (2011).

With the recent emphases in universities on measures of quality and the scholarship of teaching, it is appropriate to find ways to help neophyte teachers, who deliver such a significant proportion of teaching in universities, to develop and prosper in their teaching endeavours. Intervention is needed both for their benefit and for the benefit of the large numbers of students they are teaching. How to intervene is the question.

**Neophyte Teachers’ Development**

The challenges associated with designing and providing professional development to experienced university teaching staff are relevant, but these challenges are intensified when the pool of teaching staff being addressed are new to university teaching. These teachers are referred to interchangeably in much of the literature as ‘neophyte teachers’, ‘new academics’, ‘novice academics’, ‘neophyte academics’ or ‘neophytes’ (Hemmings, 2012, p. 172; Oldland, 2011, p. 799; Simmons, 2011, p. 230). The term ‘neophyte’ is used to describe someone who is in the process of learning. For the sake of consistency in this thesis, the terms ‘neophyte teachers’ and ‘neophytes’ have been used:

A ‘neophyte’ is someone who has recently become involved in an activity and is still learning about it.


Etymologically, neophyte is Middle English, from Late Latin *neophytus*, from Greek *neophytos*, newly planted, from *ne- + phyein* to bring forth.


Typically, neophyte teachers do not occupy ongoing employment positions but are employed on a casual or sessional basis in one of the most casualised sectors in Australian industry, the tertiary education sector (Kift, 2002). They may be subject domain experts with substantial industry experience who are not necessarily trained or experienced teachers. Alternatively, they may be postgraduate students earning a part-time income while pursuing their postgraduate studies and continuing an academic apprenticeship (D. Anderson et al., 2002). Some neophytes are community members
who wish to contribute to the tertiary education sector or add university teaching to their curriculum vitae. Others may be seen or see themselves as having value to offer in a particular field of study.

In a sector in which the casualisation of teaching staff is increasing (D. Anderson et al., 2002; Bradley et al., 2008; Ginns et al., 2008; Kift, 2002; May et al., 2011; McAlpine, 2002), the problem of how neophyte teachers adjust to their position and contribute positively to the quality of university teaching and learning is a current challenge for both the neophyte teachers themselves and the institutions that employ them. As Simmons (2011) reminds us in his article titled *Caught with their constructs down? Teaching development in the pre-tenure years*, the typical neophyte academic requires assistance to transition from being a postgraduate student to an academic staff member: ‘Although there are programs to prepare doctoral students for how to teach in post-secondary education, the neophyte academic must still adjust to the specific context of a new position’ (Simmons, 2011, p. 229). As their levels of experience are, on average, lower than those of their more experienced colleagues, neophytes’ self-perception of their abilities are typically characterised by lesser levels of confidence and self-efficacy.

In the past, the development of neophytes’ teaching knowledge, skills and ways of thinking about teaching have been neglected, ignored or overlooked (K. Murray & Macdonald, 1997; Prosser et al., 2005). Where programs were made available to neophytes, these were often poorly attended (Stefani & Elton, 2002). In the past decade and a half, however, more effort has been made to include neophytes (particularly causal teachers) in professional development programs. Yet despite this, courses offering depth in both theory and practice often continue to be oriented towards full-time and part-time teaching staff with ongoing positions. Moreover, many of these professional development programs are offered in on-campus mode, which does not always suit the neophytes’ requirements. On the whole, many of these courses offered to university teaching staff are comprehensive and reasonably effective (for example, Ginns et al., 2008; Matzen & Edmunds, 2007; Skelton, 2002) and with most universities now requiring more than just attendance at simple induction sessions, the situation has vastly improved. However, such courses may not always be appropriate for the teaching needs of all neophytes.

Improving the efficiency of neophyte development may have the flow-on benefits of reducing the high rate of attrition and staff turnover represented by the pool of university teachers who are employed in the tertiary education sector. Developing
neophytes’ early appreciation of reflective practice as a method of continually improving their teaching (Hubball et al., 2005; Trigwell et al., 2000) may also produce perceptual change in the *worthiness* they believe they can offer and go some way to lowering the attrition rate that many universities experience with their casual employees. Professional development programs for experienced teachers are more effective when they integrate the theoretical aspects of teaching, such as COTs and reflective practice, with practical skills-based instruction (Devlin, 2006, p. 112; Virtanen & Lindblom-Ylänne, 2009, p. 5). Alongside skill development opportunities, neophyte teachers also require professional development programs to introduce them to pedagogical and conceptually focused reflection processes (Oldland, 2011, p. 779). The neophyte teachers’ stage of development as early career academics requires recognition. While teachers in their more advanced stages of development are, more often than not, focused on students and student learning, beginning or novice teachers are typically more focused on themselves as ‘surviving’ teachers who need to develop their practical teaching skills (Devlin, 2006; Nyquist & Wulff, 1996).

This issue of how to provide professional development opportunities for neophyte teachers that cater for their current needs and stage of development is an area that appears somewhat lacking in reports of recent research studies investigating the successful components of professional development programs, reflective practices and the quality of university teaching. As Hemmings suggests, as recently as 2012, this remains an under-researched area: ‘There is a dearth of studies investigating how Australian early career academics form work attitudes and foster work skills in research, teaching and service’. He also asks: ‘How do early career academics gain skills in teaching?’ (p. 171). Many professional development programs and resources are aimed at experienced university teachers who are advanced or at an intermediate point in their practice (Skelton, 2002). Of particular interest and relevance to the study reported in this thesis is the deficit in research into the most suitable professional development programs and activities for neophyte teachers.

The challenge of how to educate teachers once they begin teaching in tertiary educational institutions is often met by administration teams, discipline leaders and academic development staff. Ramsden (2003) suggests how to meet this challenge: ‘If we understand how to help students, we understand how to improve teaching’ (p. 252). This recurring theme in the literature about the significance of the professional development of university teachers reinforces the strong connection between students’ learning experiences and teachers’ teaching principles and practices.
In addition to the interconnection of theoretical ideas with practical skills, within the context of focusing on students and student learning, many professional development research projects of recent years have produced findings that underline the significant role that reflective processes and practices have during the journeys of developing teachers (Bell et al., 2010; Chappell, 2007; Hubball et al., 2005; Light & Cox, 2001; Oldland, 2011; Wiesenberg & Stacey, 2006). For example, Kane, Sandretto and Heath (2004) specifically suggest that purposeful reflective practice ‘can be used to assist novice or less experienced university academics in their development and understanding of teaching excellence at the tertiary level’ (p. 283). These studies indicate that the very process of reflection can be taught through the use of pedagogical consideration of one’s own teaching, by providing novice university teachers with opportunities to develop their teaching skills in conjunction with, not divorced from, a consideration of the theoretical concepts of teaching. This amalgamated approach to reflective practice in professional development programs, in which skills-based and conceptually based activities are combined, is considered by Oldland as the preferred approach:

As a new academic, I was immersed in training and professional development activities designed to assist me to perform in this new environment. Most of these activities were skills-based. However, the support I found most beneficial was that which was directed at helping me to develop as a reflective practitioner. It was learning to view my teaching through a multiplicity of perspectives or through different ‘lenses’ that assisted me in the early days of navigating my way and answering the questions that I asked myself during this transition. Indeed, giving due attention to each of the four lenses has become more firmly embedded in my practice and I learn more every day. I believe that being intentionally reflective has been a valuable strategy in making the transition and in developing effective teaching practices that promote deep learning, particularly in the large lecture format. (Oldland, 2011, p. 789).

Oldland’s (2011, p. 789) work suggests that a framework supporting critical reflection may offer significant benefits for new academic staff, especially as such a framework has the potential to accelerate the personal and professional growth of new academic staff in their teaching practice.

As this study’s focus is on neophyte teachers who are beginning to develop their teaching skills, often underpinned by very little theoretical understanding, consideration is given to recommendations from previous researchers and educators in this field. In refining the focus and methodological design of the study, particular attention has been
paid to the links between teaching practice and theory, student-focused and learning-focused teaching and reflective practice (described fully in Chapter 3: Methodology).

**Summary of Effective University Teaching**

Recent research about university teaching has been influenced by attempts to define effective teaching and learning and the recognition that high-quality teaching is affected by international and local educational issues, as well as political, financial and institutional influences (D. Murray, Hall, Leask, Marginson, & Ziguras, 2011). The latest trends in defining teaching processes and outcomes using learning outcome statements, teaching standards and benchmarks have resulted in these measures often being used to define quality in the realm of university education. Even so, the complexity of generating quality teaching within the tertiary sector can be overwhelming for teachers and administrators alike, and the introduction of online education further adds to the complexity of teaching and learning contexts in higher education.

Despite the complications and controversies associated with defining, promoting and measuring quality in university teaching, there is general agreement among researchers about the significance of addressing teachers’ COTs as an avenue to improve teaching practices (Dart et al., 2000; Ho et al., 2001; Kember, 1997; Kember & Gow, 1994). Typically, research about teachers’ COTs has been conducted from a constructivist epistemology, in which the learner is viewed as the ideal focus. COTs have been traditionally described on a teacher-centred ⇄ student-centred continuum, with an underlying assumption that COTs that are skewed towards the student-centred end of the scale are of a higher quality (Postareff & Lindblom-Ylänne, 2011; Prosser et al., 2005). Typically, research into COTs has been qualitative in nature, with phenomenological methods in particular having been commonly used. Further, investigations of COTs to date have typically focused on measuring university teachers’ COTs at a particular moment, giving a snapshot in time. Fewer studies have explored the development of COTs across extended periods. Although some areas of research into effective university teaching have grown over the last few decades, the study of effective teaching continues to focus on the intellectual and academic aspects of teaching. As of yet, no significant efforts have been made to integrate emotions such as enjoyment into the study of teaching in higher education.

The scholarship of teaching movement and the growing use of reflective practices in university teaching and professional development have affected how teachers approach and locate themselves in their practice, especially by focusing on the
relationship between the quality of teaching and students’ learning experiences. In relation to neophyte teachers especially, reflection has been shown to be a powerful way to help neophytes to grapple with their teaching practice. Although some tried and tested professional development programs have been implemented and evaluated within tertiary teaching sectors for relatively experienced teachers, the study of effective university teaching is still an under-researched area in relation to neophyte teachers and their professional development needs. Whereas the bulk of research about effective teaching by neophytes has focused on the teacher and his or her responsibility to facilitate students’ learning, some studies investigating learning and teaching at a university-wide level have recognised the role of institutional leadership and structures in high-quality teaching and learning standards. Further, some institutions consider: ‘The potential for educational benefits to all participants, and ultimately their students, makes the incorporation of ethical characteristics a high priority for those in leadership and for those responsible for program design and implementation’ (Willison, 2007, p. 84).

Alongside issues associated with the quality of teaching and professional development in higher education is the debate of how best to assist neophyte teachers in their development as effective university teachers. Since casual teachers, many of who are neophytes, comprise a large percentage of university teachers, this situation presents challenges in terms of the effectiveness and quality of university teaching and learning. It is this area of research, which simultaneously represents an area of need and a gap in our current knowledge, that the study documented in this thesis aims to address.

The next section of this literature review, Major Theoretical Influences, augments the contextual, topical and historical issues associated with effective university teaching, presented above, with some of the deeper and tacit ideas that have influenced the theoretical focus, methodological direction and practical design of this study, and the way it has been conducted.

**Major Theoretical Influences**

This second section of the literature review addresses the major theoretical influences that guided the inception and implementation of this study: cognitive apprenticeships, reflective practice, online education and conceptual change. While some of these theories have been alluded to in the previous section of this literature review, the key ideas associated with these theoretical influences are now harnessed to explain how they informed the overall design and methodology supporting this study.
Cognitive Apprenticeships

A cognitive apprenticeship is a constructivist approach that facilitates learning through the use of guided-experience to concentrate on fostering cognitive and metacognitive skills by extending traditional apprenticeship methods (Brown, Collins, & Duguid, 1989; A. Collins et al., 1991). The cognitive apprenticeship approach is particularly appropriate for tertiary neophyte teachers who are, by their nature, typically in the early stages of their university teaching careers. As A. Collins et al. (1991) explain in their appropriately named article, *Cognitive apprenticeship: Making thinking visible*, neophytes benefit from one of the key affordances of a cognitive apprenticeship, in that this form of learning enables them to ‘see the processes of work’ (p. 38). The theory of cognitive apprenticeship (Brown et al., 1989; A. Collins et al., 1991) bases its framework on a set of elements that are used to improve the uptake of knowledge; namely, modelling, coaching, scaffolding, articulation, reflection and exploration (A. Collins et al., 1991, pp. 482-486). The first three elements are common to the traditional apprenticeship model of a novice working under a master or expert to learn a trade or a set of basic skills or practices while ‘on the job’:

- **Modelling** allows a learner to observe the performance of an expert practitioner accomplishing a task in order that the learner may build a conceptual model of the processes.

- **Coaching** allows learners to perform a task while an expert observes their progress and offers guidance, such as hints, feedback, modelling and reminders.

- **Scaffolding** or support is provided by the expert and faded over time, relative to the learner’s level of attainment, to allow the learner to gain authority over the domain.

The final three elements of the cognitive apprenticeship framework add complexity to the model by emphasising the cognitive aspects of the framework:

- **Articulation** allows learners to articulate their growing knowledge, reasoning and problem-solving skills.

- **Reflection** allows learners to compare their own processes and performances with the processes and performances of an expert practitioner or another student or to their internal cognitive model of expertise.
• **Exploration** allows learners to solve problems on their own and, in doing so, practise forming questions or problems that are interesting and solvable.

The work of Collins and his colleagues was built upon by Lave and Wenger (1991), who observed situated learning occurring within communities of practice. Wenger (1998) later expanded on these ideas, coining three interrelated terms: ‘mutual engagement’, ‘joint enterprise’ and ‘shared repertoire’ (Wenger, 1998, p. 72), terms that remind us of the value of collaborative learning practices. With the advance of the internet and its associated collaborative tools, the use of communities of practice in online context processes has expanded in recent years (Koch & Fusco, 2008; Reushle & McDonald, 2012). As well as the affordances for group processes offered by the Community of Practice model, one of the major realisations from Lave and Wenger’s work was the exposure of an expert’s tacit knowledge and the value of bringing it to the explicit attention of the learner; a process referred to by A. Collins et al. (1991) as ‘to make thinking visible’ (p. 38). Just as Willison’s (2010) Research Skill Development Framework enables research students ‘an explicit, incremental and coherent development of students’ skills from the first year of university study’ (p. 12.17), the utilisation of a cognitive apprenticeship form of professional development can serve to make tacit knowledge about teaching more explicit.

In the sphere of academia and the practice of tertiary teaching, the principles of cognitive apprenticeship can be particularly useful. Expert teachers possess domain-specific knowledge of the processes and skills that are required for efficient, competent practice in the teaching of their particular field. By its internal nature, the expert’s knowledge of the interaction between theory and practice is held tacitly. Since the expert’s knowledge is often hidden from neophytes, it can pass unnoticed during a demonstration of practice. Use of the cognitive apprenticeship approach attempts to reveal tacit knowledge, processes and skills held by experts to make them explicit for the learner. Consequently, this process has the potential to improve neophytes’ awareness of how experts think about their practice. Thus, as tacit knowledge becomes more explicit to neophytes, their increased understanding sets the stage for broadening their metacognitive abilities. Eventually, this process of making tacit knowledge and thinking more explicit will enable the neophyte to expand their capacity to think more expertly as they develop their COTs and teaching practices.

This study plans to utilise cognitive apprenticeship principles in designing an online program of reflective practice. This program aims to assist neophyte teachers to
develop their COTs and better their teaching practices by equipping them with the skills to develop more effectively as teachers in the future. Programs of this type have been used to some extent with new teachers in the field of education. For example, Liu (2005) conducted experiments in instructional planning to explore how a web-based cognitive apprenticeship model might improve pre-service teachers’ performance and attitudes towards instructional planning. He concluded:

…the web-based course group had many chances to experience the complexity of actual teaching situations and to consider the importance of the teacher designing, implementing, and reflecting on instructional plans as helping improve teaching … expert teachers and web technologies offer opportune and timely assistance to support pre-service teachers to construct, modify, and elaborate their conceptual models.

(Liu, 2005, pp. 146-147)

Although cognitive apprentice approaches have been used in some limited fields such as teacher education, they are not widely used in higher education. Nevertheless, much of academia bases the progression of scholars though its ranks on a model of apprenticeship: for example, students’ progress from their undergraduate beginnings to postgraduate levels via doctoral qualifications. Tutors typically progress to lecturer status and then, sometimes, onto professoriate status, predominately using a model of apprenticeship. It would thus seem appropriate to acknowledge cognitive apprenticeship principles when developing new university teachers. Further, with the prominence of COTs in the debate of how teachers think about their teaching, and how this thinking affects how they actually teach (Dart et al., 2000; Gibbs & Coffey, 2004; Ho et al., 2001; Kember, 1997; Kember & Gow, 1994; Pratt & Associates, 1998; Virtanen & Lindblom-Ylänne, 2009), it could be fruitful to integrate elements of cognitive apprenticeship within the design of a model for conceptual change.

**Conceptual Change**

This study describes neophytes’ COTs, but also attempts to influence their improvement by using a conceptual change strategy. Posner et al. (1982) developed a theory of conceptual change in the early 1980s based on Piaget’s notions of disequilibration leading to accommodation and Thomas Kuhn’s (1970) description of scientific revolution, which suggested that two conditions are required to increase the probability of a paradigm shift or the adoption of a new framework for thinking. Specifically, Kuhn’s conditions were that the current way of thinking falls into a cognitive ‘state of growing crisis’ (p. 67) by failing to provide solutions or explanations to identified problems, and that an alternative paradigm is available with the potential to
solve these problems (p. 77). Posner et al. (1982) goes further, delineating four conditions required to bring about conceptual change (see Table 5).

Table 5

Conditions Required to Bring about Conceptual Change (Posner et al., 1982)

<table>
<thead>
<tr>
<th>Conditions required for conceptual change</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissatisfaction</td>
<td>There must be dissatisfaction with a currently held conception. If the learner’s current understanding and ideas are satisfactory for making sense of a given phenomenon, the learner will be less likely to accept a new conception.</td>
</tr>
<tr>
<td>Intelligibility</td>
<td>The alternative conception must be intelligible. Learners must be able to understand what the alternative conception means.</td>
</tr>
<tr>
<td>Plausibility</td>
<td>The alternative conception must appear plausible. Even if the learners understand the alternative conception, they may not be able to see how it can be applied in a given situation or used to solve a particular problem.</td>
</tr>
<tr>
<td>Fruitfulness</td>
<td>The alternative conception must appear fruitful. It should do more than potentially solve current problems or answer questions. It must be useful in a variety of new situations.</td>
</tr>
</tbody>
</table>

In addition to Kuhn (1970) and Posner et al.’s (1982) work, Zirbel (2004) recently drew attention to a condition influencing the effectiveness of conceptual change: the participant’s openness or willingness to engage in conceptual change. Utilising the strength of Zirbel’s suggestion, this trait was considered when selecting participants for this study. It is likely that teachers with higher levels of openness or willingness to engage in conceptual change would benefit the study by bringing richness to the data that would otherwise be lacking.

**Phases of conceptual change.**

Whereas conceptual change is often explored in the context of students learning about a particular concept in science, mathematics or other disciplines, the objective of conceptual change for teachers in association with their COTs may be seen as analogous to a paradigm shift from one way of thinking to another. An example of a paradigm shift for an individual teacher might be their passage from a teacher-centred to a learner-centred view of teaching. In education, conceptual change can be viewed as learning that changes an existing conception, belief or idea (J. Davis, 2001). J. Davis typifies the phases of interaction that occur between learner and instructor during the process of conceptual change (see Table 6).
Table 6

Instructor/Learner Interactions during the Conceptual Change Process (J. Davis, 2001)

<table>
<thead>
<tr>
<th>Phase</th>
<th>Role</th>
<th>Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>Instructor:</td>
<td>A question is posed.</td>
</tr>
<tr>
<td></td>
<td>Learner:</td>
<td>An answer is given.</td>
</tr>
<tr>
<td>Phase 2</td>
<td>Instructor:</td>
<td>Replies with alternative concept that raises conceptual conflict (dissatisfaction) in the learner.</td>
</tr>
<tr>
<td></td>
<td>Learner:</td>
<td>Questions the intelligibility of the alternative conception.</td>
</tr>
<tr>
<td></td>
<td>Instructor:</td>
<td>Explains the logical reasoning of the alternative concept (correction).</td>
</tr>
<tr>
<td>Phase 4</td>
<td>Learner</td>
<td>After reflection, realises that the alternative conception is plausible and fruitful, leading to acceptance and accommodation of the new conception.</td>
</tr>
</tbody>
</table>

On consideration of J. Davis’ list of phases, it is worthwhile noting the importance of the role played by reflection in the last phase (Phase 4) during the conceptual change process. Hewson (1992) also calls attention to the quality of such an interaction by stating that: ‘learning involves an interaction between new and existing conceptions with the outcome being dependent on the nature of the interaction’ (p. 8). The process of interaction involving new and old conceptions mentioned by Hewson (1992) is actually a reflective process. Therefore, it appears that it is the reflective element in the conceptual change process that determines the outcome for the learner, and which might thus be seen as the pivotal activity in conceptual change. Although reflection is not specifically given a phase of its own in either J. Davis (2001) or Hewson’s (1992) work, the reflective process is active across the process of conceptual change. Figure 2 depicts the relationships between the phases of conceptual change aligning with the conditions that are required for efficient, effective conceptual change to take place (Posner et al., 1982) and after Davis’s work (2001). The points at which reflection is most active are also depicted in this diagram.

Two further notions are central in conceptual change theory and are particularly relevant to a learner’s psychological demeanour. Firstly, ‘concept status’ (Hewson et al., 1998) is the degree to which learners know and accept an idea. According to Hewson et al.’s model, a concept is raised or lowered in importance according to how intelligible, plausible and fruitful the idea appears to the learner. Secondly, ‘conceptual ecology’ is the compilation of all the learner’s knowledge and beliefs to include prior knowledge and existing conceptions, relationships among various conceptions, new knowledge
about alternative conceptions and epistemological beliefs. Hewson et al. (1998) deduced that the interactions of the components of a learner’s conceptual ecology determine the status of a conception.

The principles of Posner et al.’s (1982) theory of conceptual change have been widely accepted. As it has been used to guide the development of instructional strategies, it has been reviewed and extended (Duit, 1999). Pintrich, Marx and Boyle (1993) suggested that the conceptual change theory needed to embrace affective aspects and social components of a learner’s conceptual ecology. Hewson et al. (1998) viewed social constructivist and cognitive apprenticeship perspectives as having influenced conceptual change theory by introducing affective, social and contextual constructs to balance a mainly cognitive focus. Duit (1999) further points out that all these factors need to be considered when teaching for conceptual change. Thus, the model of conceptual change aligns to the holistic view of teaching—incorporating cognitive, skills-based and affective dimensions—upon which this study is based.
This study is concerned with how to train neophyte teachers to be metacognitive of their own development, to help to develop teachers with the capacity to cultivate skills and strategies that will allow them to teach more effectively, sooner. To observe the change in the conceptions of neophytes over a duration requires a model. The next section of the literature review provides an overview of models of conceptual change and shows how conceptual change can be observed and captured. This will assist the researcher to move towards an understanding of how to incorporate a conceptual change model into an interventional program that has the potential to enable the development of neophyte teachers’ COTs.
Observing conceptual change.

A number of models for teaching conceptual change have been developed over the past 30 years or so (Olsson & Roxå, 2012; Posner et al., 1982; Thagard, 1992; Vosniadou, Ioannides, Dimitrakopoulou, & Papademetriou, 2001; Zirbel, 2004); however, models that enable the observation and capture of conceptual change are more difficult to locate. A basic strategy for teaching for conceptual change has been put forward by Nussbaum and Novick (1982); it follows the conventional ‘Posnerian’ process and incorporates four elements:

- reveal student preconceptions;
- discuss and evaluate preconceptions;
- create conceptual conflict with those preconceptions; and
- encourage and guide conceptual restructuring. (Nussbaum & Novick, 1982).

In the context of the study, the four elements of the ‘Posnerian’ process would be orchestrated to catalyse the following interactive processes, in which the neophytes would identify or ‘reveal’ their COTs. This initial stage would be followed by opportunities to compare their COTs with those held by others, some of which may conflict with their own. Finally, the neophytes would be equipped to modify their COTs in ways that would advance and deepen their understanding of the theories and practices associated with effective university teaching. This interactive process of conceptual change is illustrated in Figure 3.
Additional fifth element to allow observation of conceptual change.

There is a scarcity of models to follow for observing conceptual change in a higher education teaching context. For the purposes of this study, it may be useful to extend the basic model for teaching conceptual change to include a fifth element similar to the first. This would enable the initial and final conceptions held by neophyte teachers to be identified and compared. With similar elements at the beginning and end of the model, comparisons could be made between the participant’s preconceptions (pre-intervention) and existing conceptions (post-intervention), thus revealing their changes in conceptions (see Figure 4).
In this model, elements 1 and 5 are the moments of observation of conceptual change and data gathering for the study. Elements 2, 3 and 4 take place during the interventional activities. Analysis of the data collected during elements 1 and 5 will expose changes that occurred, if any, in the neophytes’ COTs during the intervention. The following diagram (see Figure 5) illustrates the moments during the process of conceptual change at which the different reactions to conceptual conflict (Trumper, 1997) are likely to be experienced.
Figure 5. Model for observing conceptual change showing reactions to conceptual conflict.

**Centrality of conceptual change in the development of COTs.**

Previous literature has shown how conceptual change can occur through professional development and training programs. For example, in recent years, Olsson and Roxå (2012), in their discussion of teachers’ pedagogical competence, arrived at a model of teacher development that promotes conceptual change as a basis for a pedagogically sound understanding of theory, practice and planning. They believe this approach engenders a much wider scope in a teacher’s pedagogical competence than teaching skills alone. As conceptual change is viewed as an important factor in the development of teachers to help to bring about quality teaching (Biggs, 1989; Bowden, 1989; Duit & Treagust, 2003; Gibbs, 1995), it is increasingly important to consider how the changes in neophytes’ conceptions manifest as they develop their COTs.

The outcomes of conceptual change are being considered in formalised teaching qualifications. In the Ginns et al. study (2008), the researchers aimed to: ‘investigate the changes in experiences of teaching and the scholarship of teaching that could be ascribed to completion of a Graduate Certificate program in higher education’ (p. 183). This direction further suggests a requirement for the development of models of
conceptual change for neophytes, and in particular those new teachers coming from outside schools of education.

Further, Olsson and Roxå (2012) blend reflection as a critical ingredient leading towards conceptual change (p. 218). The theories associated with conceptual change have been embedded into many professional development programs that have aimed at increasing the quality of teaching. In terms of tertiary teaching, Ho et al. (2001) states: ‘The conceptual change approach has emerged as a promising means of achieving genuine development in tertiary teachers’ (p. 145). However, in terms of research evidence about the value of conceptual change, Murray and Macdonald (1997) warn: ‘Further research is needed to establish what are the main conceptions held by lecturers and whether or not these can be changed’ (K. Murray & Macdonald, 1997, p. 347). This study represents an example of how this further research could be conducted.

The following diagram (see Figure 6) illustrates the relationships between the phases of conceptual change, associates the elements of cognitive apprenticeship and locates moments of reactions to conceptual conflict across the process. This evolving model forms part of the theoretical framework of this study and guides the instructional design of the interventional program of reflective practice and the online tools (included in the RPW) that were used to implement the program.
Figure 6. Phases of conceptual change related to elements of cognitive apprenticeship.
Reflective Thinking and Reflective Practice

Since many of the principles underlying conceptual change and the processes of conceptual change are related to reflective practice, as cited above, the theoretical principles of reflective practice associated with higher education teaching are now examined. The practices, benefits and expected outcomes of reflective practice have been mentioned contextually throughout the above section of this literature review in the context of effective university teaching. However, this section of the literature review now considers theories of reflective practice at a more holistic level, to inform the research study’s design, the interventional program of reflective practice and the RPW, which functions as the hub of action during the research study for both the participants and the researcher.

While a substantial component of the previous literature on reflective practice has focused on the application of reflective practice theories by students (for example, Hatton & Smith, 1995; Moon, 2001; Yanes & Curts, 2002), more recent studies have presented reflective practice as beneficial for practising teachers in their day-to-day work as well as in professional development contexts (Bell et al., 2010; Ellis & Phelps, 1999; Hubball et al., 2005; Kane et al., 2004; Oldland, 2011; Wiesenber & Stacey, 2006). For example, it is now common for universities to include a module or set of activities focusing on reflection in formal programs such as Graduate Certificates in teaching (Chappell, 2007; Ginns et al., 2008; Hubball et al., 2005; Willison, 2007). Further, other researchers (such as, Biggs, 2003; Dewey, 1933; Ramsden, 2003) advocate the use of reflective practices for both students and teachers.

A collection of models of reflection and reflective practice has been documented over the years (see Table 7). They include multi-stepped, sequential frameworks, models and cycles, which are typically described in terms of thinking and/or writing processes and are frequently hierarchical, staged or linear in nature.
Table 7

<table>
<thead>
<tr>
<th>Author</th>
<th>Reflective model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sparks-Langer, Simmons, Pasch, Colton</td>
<td>Seven-level Framework for Reflective Pedagogical Thinking (p. 584), which ranges from descriptive thinking through to reflective explanations that acknowledge context and pedagogical principles and incorporate ethical and moral issues.</td>
</tr>
<tr>
<td>Hatton and Smith (1995)</td>
<td>Four levels of reflective writing including descriptive writing, descriptive reflection, dialogic reflection and critical reflection (p. 48).</td>
</tr>
<tr>
<td>Moon (2001)</td>
<td>Suggested that a two-stage approach should be used to guide students into the reflection process, including a presentation stage to introduce consideration of the what, why and how of reflection, and secondly the deepening of reflection by scaffolding in the constructed nature of knowledge and introducing exercises covering a range of deep aspects of reflection and reflective practice.</td>
</tr>
<tr>
<td>Bain, Ballantyne, Mills and Lester (2002)</td>
<td>The 5Rs framework of reflection includes the processes of reporting, responding, relating, reasoning and reconstructing. Often used in teacher education contexts.</td>
</tr>
<tr>
<td>Hegarty (2011)</td>
<td>A taxonomy of five levels of reflection, including descriptive reflection, explanatory reflection, supported reflection, contextual reflection and critical reflection (pp. 581, 584).</td>
</tr>
</tbody>
</table>

Other models of reflection and reflective practice are more descriptive (see Table 8), rather than staged or hierarchical, and tend to describe the reflective practitioner in action as someone who engages in thinking, writing and action. These descriptive models of reflection are often characterised by reference to the person involved and the learning that is experienced by that person.
Table 8

Descriptive Models of Reflection

<table>
<thead>
<tr>
<th>Author</th>
<th>Reflective model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dewey (1933)</td>
<td>Dewey establishes the idea of reflective thinking, especially in the way in which it had the potential to weave theory and practice together and, consequently, improve practice.</td>
</tr>
<tr>
<td>Schón (1983, 1987)</td>
<td>Schón further develops the practical aspects of reflective thinking and reflection by embodying the processes into the type of person he called a reflective practitioner.</td>
</tr>
<tr>
<td>Boud, Keogh and Walker (1985)</td>
<td>Boud, Keough and Walker describe reflection as a process in which a person recalls an experience, thinks about it and then evaluates it. They view this process of reflection as central to the process of learning.</td>
</tr>
<tr>
<td>Brookfield’s (1998)</td>
<td>Brookfield’s model for critical reflection explains how reflective practitioners reflect on their practice from the differing perspectives of their learners, their colleagues, themselves and the research literature. His view of reflection ensures that personal reflection is expanded to include the views of others, thus ensuring a more balanced and comprehensive consideration of our teaching practice and our students’ learning.</td>
</tr>
<tr>
<td>Light and Cox (2001)</td>
<td>Light and Cox’s describe the reflective professional in academic practice as someone who does more than reflect on his or her practice in unison, but as someone who engages in dialogic or relational activities with colleagues (p. 43).</td>
</tr>
<tr>
<td>Rodgers (2002)</td>
<td>Rodgers built upon the work by earlier researchers by acknowledging the role of emotion in the process of reflection: ‘At the same time that reflection requires cognitive discipline, it also calls upon an individual’s emotional discipline’ (p. 863). In her reconsideration of Dewey’s work on reflective thinking, she also reinforces the importance of using the language of reflection to enable reflection on the very process of reflection.</td>
</tr>
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</table>

The models cited above represent a sample of the multitude of reflective practice and reflection frameworks, cycles and models that abound in previous research. They are typically characterised by the inclusion of stages that begin with moments of recognition and acknowledgement, then move through to analytical processes and, frequently, culminate in some form of action. The processes associated with reflective practice and reflection have, based on a consideration of the models and frameworks...
noted above, typically been associated with analytical thinking and writing processes, the value of which can be enacted through reformed practice. Some of these models of reflective practice incorporate a recognition of the role of individual and collaborative reflection processes. However, whether reflection is assumed to occur on an individual or group basis is sometimes unclear in these reflective practice models and frameworks.

An important goal of reflection, cited since such authors as Dewey (1933) and Schön (1983, 1987), who viewed reflection as a specialised form of thinking, has been improvement and development gained through teaching practice. These early authors’ work was instrumental in linking reflective thinking to reflective practice in professional contexts and, from their research, terms such as ‘reflection in action’, ‘reflection on action’ and ‘reflective practitioner’ emerged.

Following in the footsteps of Dewey (1933) and Schön (1983, 1987), Moon (1999, 2006) also focuses on the practical uses of reflection, defining it as:

Reflection is a form of mental processing—like a form of thinking—which we use to fulfil a purpose or to achieve some anticipated outcome. It is applied to relatively complicated or unstructured ideas for which there is not an obvious solution and is largely based on the further processing of knowledge and understanding and possibly emotions that we already possess.
(2006, p. 34)

The usefulness of reflective practice can be further evaluated in terms of the practitioner’s plans and intentions to change his or her practice (K. Murray & Macdonald, 1997). Lucas (2002) suggests that if teachers reflect upon their teaching more frequently, this may enable them to develop a COT and improve their practice (p. 201). It is because of this relationship between reflective practice and teachers’ COTs that the theoretical and practical elements of reflective practice were incorporated as core processes and structures within the study documented in this thesis. Since Biggs’ (2003) description of reflective practice is both hierarchical and descriptive and incorporates the practices of both writing and thinking, Biggs’ four phases, shown in Figure 7, have been incorporated as a guiding structure for the RPW that was created for this study.
Biggs (2003) also expounds the benefits of reflective practice when teachers delve into their own beliefs and actions as reflective practitioners, seeing it as the highest form of learning about one’s teaching. Similarly, Ramsden (2003) notes the benefits of reflection when it is applied to teaching contexts: ‘good teachers are always evaluating themselves’ (p. 219). The process of reflective practice is seen as a catalyst for self-evaluation and the subsequent improvement of one’s teaching practices: ‘Unless lecturers engage in critical reflection and ongoing discovery they stay trapped in unexamined judgements, interpretations, assumptions and expectations’ (Chappell, 2007, p. 257). Chappell suggests that if lecturers do not become reflective, their development as teachers can be limited.

While much research into reflective practice has culminated in claims regarding the benefits of reflection, the enactment of change from reflection does not necessarily occur easily or naturally (Milton & Lyons, 2011). However, a reflective practice framework, when linked with specific evaluation-focused strategies, does offer the participants of this study a means to evaluate their practice, with the specific purpose of improvement. Recent developments in some reflective practice models have incorporated opportunities for communities of practice and reflective dialogues with colleagues. Using this, the interventional program of reflective practice in this study offered collaborative opportunities in which participants could compare and discuss their COTs.

The pedagogical and evaluation theories associated with reflection have provided researchers and educators with a purposeful context for extracting the benefits of reflective practice to apply them to the practice of teaching in higher education. Further, the wider global context of education requires consideration. While reflective practice has commonly encompassed thinking and writing processes, the context of
higher education is currently expanding to incorporate online education, which also has the likelihood to impact positively on university teaching practices: ‘Online participation also feeds back into practitioner reflection and has the potential to develop practice’ (Thorpe & Gordon, 2012, p. 1279). To this end, web-based conversational and writing tools are equipping online learning environments with greater opportunities for collaboration and reflective discussions. The online context of higher education is discussed further in the following section of this literature review, Affordances of Online Education.

In addition to the recognition of an expanding online educational setting, the individual nature of each tertiary institution in which teaching and learning takes place must be acknowledged when reflective practice is incorporated into a research study conducted within a university. Boud and Walker (1998) outline principles to underpin institutionally based reflective activities, and Moon (2001) has further incorporated them into a checklist for the formatting of questions in reflective activities. Although Moon’s checklist is primarily concerned with written activities, the points are easily restructured for use with other forms of reflective activities, such as those facilitated through an online portal. They may also be applied in collaborative contexts. Further, Boud and Walker (1998), when discussing the ‘local context’ of reflective practice, suggest the provision of a workspace for groups involved in reflective practice that is separate from the immediate pressures of organisational performance. These ‘lessons learned’ from previous researchers have been incorporated into the way in which this study was designed and conducted.

The application of these researchers’ (Boud et al., 1985; Boud & Walker, 1998; Moon, 2001) recommendations on reflective practice within institutions has been operationalised within the RPW in this study. These suggestions for the practical application of reflection in action have been implemented alongside consideration of the recommendations of other researchers, cited above. These considerations include the use of reflective practice for professional development purposes, the cyclical and sometimes hierarchical nature of reflective processes, the associated processes of writing and thinking, and the increasing use of online technologies for the implementation of professional development programs in universities.

Affordances of Online Education

The expansion of and demand for online courses on a global scale has influenced the theoretical stance of individual university educators and their tertiary institutions alike, especially in relation to the acceptance and demand for online courses
This expansion has been primarily due to the perceived affordances that the online environment offers online learners and teachers. This section of the literature review particularly focuses upon these affordances that are relevant to professional development and reflective practice.

Through the use of online teaching and learning technologies, university teachers face opportunities to review and revise their traditional methods of teaching and designing courses (Birch & Bennett, 2009; A. Davis, 2001; O’Reilly, 2000). Meyer (2010) suggests that such a ‘disruption’ can lead to innovation as teachers engage in deep reflection and revision of their teaching practices. Traditional teaching practices can be ‘re-invigorated’ (O’Reilly, 2000) through the use of purposeful, pedagogically driven technology. Matzen and Edmunds (2007) explain how the use of technology can be a catalyst for change, especially towards a more constructivist way of thinking about teaching and enacting teaching practices. For example, an increased market demand for flexibly delivered courses (L. Johnson et al., 2014) has led to greater access to online courses, which in turn has the potential to catalyse institutions and educators to create technology-rich courses. Whether the disciplinary context of the online educator is as influential as once thought has recently been questioned by Anderson and Barham (2010), who found ‘Notable differences had less to do with discipline-specific pedagogy than personal teaching philosophy and preferences regarding course design and particular communication tools’ (p. 1) in the online teaching practices of academic staff across disciplines. In turn, the use of online learning and teaching technologies presents the possibility of engaging students in online collaborative practices (Garraway, 2010; Koole, 2010) and engaging staff in more interactive forms of online professional development (Thorpe & Gordon, 2012, p. 1267).

The recent changes experienced in the tertiary education sector have the potential to transform practice and instigate paradigmatic change in pedagogies. In this way, the increase in online technologies in higher education has the potential to influence the way in which the pedagogy of teaching and course design is implemented across institutions, if not just to highlight the role of theoretical influences in teaching. In light of the new affordances offered by online technologies for revised and improved educational practice in universities, Prensky (2009) encourages learners and teachers across generations to consider both the benefits and dangers associated with the digital world:
I believe it is time for the emerging digitally wise among us, youth and adults alike, to embrace digital enhancement and to encourage others to do so. With our eyes wide open to enhancement’s potential harm as well as its benefits, let us bring our colleagues, students, teachers, parents, and peers to the digital wisdom of the twenty-first century.

(p. 27)

Despite the perceived demand for more online educational opportunities by current cohorts of university students and lecturers, Reeves and Herrington (2010) express concern that there is a serious problem with the overall quality of learning in higher education:

In the absence of compelling evidence that higher education does yield effective learning through its primary pedagogical methods of lecturing, textbook reading, and multiple-choice testing, we conclude that pedagogical change is needed.

(p. 213)

Their observations are particularly critical of the lack of authentic tasks and processes that are typically incorporated into university courses. Similarly, Price and Kirkwood (2014) found that ‘The use of technology for teaching and learning is now widespread, but its education and effectiveness is still open to question’ (p. 549). Despite the hype associated with the growth of online courses over the last couple of decades, it appears that some of the promises of online learning contexts have not been realised in the higher education sector. Although many of the affordances of online technologies may not have reached the courses enrolled in by many university students, there is some evidence that professional development opportunities have harnessed some positive learning design principles within online learning contexts.

The shift in focus that has characterised many professional development programs and activities in recent years has seen the incorporation of more innovative, student-focused approaches to teaching in universities (Biggs, 2003; Brookfield, 1995; R. Collins, 2008; Ginns et al., 2008; Kandlbinder, 2011; Krause et al., 2012; Trigwell, 2001). The way in which professional development is now offered to university teaching staff has been transformed to an extent by incorporating a greater use of online and technology-rich resources (Bell & Morris, 2009; Matzen & Edmunds, 2007; Skelton, 2002; Thorpe & Gordon, 2012). As the teaching workforce in the higher education sector becomes more diverse and transient, so too the mechanisms used to meet the ever-changing needs of this pool of staff require increased diversity and flexibility:

Technology-enhanced learning can be used to connect practitioners from different workplaces, to support disciplinary learning at employment locations,
and to enable reflection on representations of work-related roles and issues included within multimedia course materials. (Thorpe & Gordon, 2012, p. 1267)

Although online learning does not represent a pedagogical theory in its own right, the advance and extent of online learning within university contexts has affected the quality and context of university teaching and courseware, as well as the practices and expectations of university students, and vice versa. While students across the world are taking advantage of the growing opportunities to engage in online learning contexts (L. Johnson et al., 2009), university teachers are meeting the challenges set before them to design and facilitate the courses that are needed to meet student demand. The changing educational landscape of higher education presents prospects for both students and teachers, and further represents an arena in which one’s concepts of teaching can be reconsidered, revised and changed.

The extended acceptance and utilisation of online teaching and learning technologies has also influenced the shifting context of professional development programs. No longer does the professional development of academic teaching staff only occur in on-campus seminar rooms. Instead, professional development activities and resources are increasingly being offered through online portals featuring both individual and collaborative learning practices. However, it is the authenticity of the purposes, activities and resources (Amiel & Herrington, 2012; Herrington & Oliver, 2000; Herrington, Oliver, & Herrington, 2007; Herrington, Oliver, & Reeves, 2003; Reeves & Herrington, 2010) of such professional development programs that are likely to be their hallmarks of success, especially if the participants can clearly see the relevance of the online activities to their everyday teaching duties.

**Summary of Major Theoretical Influences**

The major theoretical influences that guided the design and development of this study have been taken into account throughout this literature review to establish the landscape and scope of this research, and to inform the theoretical framework upon which the research is based. Firstly, cognitive apprenticeships were considered, with roots in a traditional framework of modelling, coaching and scaffolding, as well as articulation, reflection and exploration, especially because of the way in which these cognitive apprenticeship processes serve to make an expert’s tacit knowledge explicit to neophytes. These processes were considered relevant to neophyte teachers because they enable cognitive focus, improved knowledge uptake and the development of complex understandings. The theories underpinnings cognitive apprenticeship models were also
deemed particularly relevant to the development of COTs by early university teachers, as the career progression experienced by lecturers in tertiary education typically follows the stages underlying cognitive apprenticeships.

Secondly, conceptual change theories, models and processes were examined alongside ideas of conceptual conflict and explanations of the change in thinking associated with a paradigm shift. These theoretical ideas were taken from the literature specifically to inform the design of a program that aimed to assist neophytes in their development of COTs.

Thirdly, reflective thinking and practice processes, and their relationship to conceptual change, were examined at a holistic level to supplement the earlier mentions of reflective practice in this literature review, in association with professional development and effective teaching practices. This component of the literature review found that, while models of reflective practice are described in terms of thinking and/or writing processes by many, other models are more descriptive of practice and action. However, most theories of reflective practice follow stages characterised by recognition, acknowledgement and analytical processing, ending in action. Some reflective practice models note the value of collaborative practices that incorporate dialogues of reflection among colleagues. Useful lessons can be learned from these varied types of reflective practice and can have uses in a neophyte professional development program such as that discussed methodologically in the next chapter. Finally, this review of the major theoretical influences in the literature provided an account of online education as a major focus in today’s universities. Increasingly, research studies are published outlining how the affordances of online tools can facilitate teachers’ reflective practices.

This section of the literature review, which considered the theories of cognitive apprenticeship, conceptual change, reflective thinking and practices and online education, has functioned to refine the focus of this study and to define its purpose:

The challenge now for research around university teaching development is to determine more precisely the part that COTs play in the process of teaching improvement and, ultimately, in ensuring the quality of student learning. (Devlin, 2006, p. 118)

By taking into account the dominant themes of recent literature on effective university teaching and the major theoretical influences associated with university teaching, the theoretical framework of the study was developed.
Theoretical Framework of the Study

The theoretical framework of the study emerged from the process of reviewing the literature associated with issues relevant to neophyte teachers and their COTs. The process of conducting the literature review has enabled the framework of the study to be built upon research-informed ideas and practices of effective university teaching, as well as the central tenets of the theories of cognitive apprenticeship, reflective practice, conceptual change and some aspects of professional learning in online contexts. The context of tertiary educational institutions, and especially Australian universities, has been provided as the backdrop of this study, while also taking into account the global issues influencing the current landscape of higher education in general.

The theoretical framework of this study reflects the needs of neophyte tertiary teachers as they work their way through reflective practice processes to become reflective practitioners, continually evaluating their COTs and learning throughout their professional journey. This framework also situates this study’s activities within the literature. Figure 8 illustrates the theoretical framework of this study, acknowledging the major theoretical principles and guiding practices of the study in diagrammatic form.

Conclusion

By reviewing findings from previous research about the concepts, contexts and processes associated with teaching in universities by new tertiary teachers, known as neophytes, this chapter has provided a synthesised foundation of evidence that has informed the overall approach, both theoretical and methodological, adopted to design and conduct this research. Within this landscape, a consideration of the shortfalls, trends, connections and controversies throughout the literature on effective university teaching and neophyte teachers in particular has informed the conceptual and methodological design of this study.

The following chapter, Chapter 3: Methodology, presents an account of how this study was designed by taking into account the synthesised findings of this literature review in conjunction with the research questions that have driven all stages of this research. The following chapter also provides an account of how the educational theories analysed and synthesised in this chapter have been utilised to construct the interventional program of reflective practice, incorporating the RPW at its centre, which formed the basis and context of much of the neophytes’ reflective processes throughout this study.
Figure 8. Theoretical framework of the study that emerged from the review of the literature.
CHAPTER THREE
METHODOLOGY

Introduction
This study investigated five neophyte teachers at an Australian metropolitan university by utilising mainly interpretivistic methods of analysis to explore changes that occurred in their COTs during their involvement in an interventional program of reflective practice. The four research questions that the study has addressed are:
1.1 What COTs are held by each neophyte before the intervention?
1.2 What COTs are held by each neophyte after the intervention?
1.3 How did each neophyte change his or her COTs?
2.1 How did the interventional program of reflective practice influence the neophytes’ COTs?

This chapter outlines the reasons for selecting a mixed method, case study approach for this research study, in the context of the above research questions. Reasoning has also been provided for the selection of participants, data collection and analysis methods, and the evaluation criteria. Much of the direction for this chapter was drawn from the outcomes of the literature review, described in the previous chapter.

Overall Theoretical Position of the Methodology
Since the study has focused primarily on five in-depth case studies, the methodological decisions associated with the design and implementation of the study reflect the principles of social constructivism (Dewey, 1933; Vygotsky, Carton, & Rieber, 1987) which are consistent with the use of parallel case studies (Baxter & Jack, 2008; Stake, 1995; Yin, 2009) and a mixed methods approach (Patton, 2002; Yin, 2009). By drawing on the principles of social constructivism, the methods adopted in this study enable each participant's construction of reality and knowledge to be valued within their own educational setting. Furthermore, the use of the mixed methods approach ensures that the varied data gathered can contribute to a rich picture of each participant's conceptions of teaching.

Research Design: Mixed Methods Research
This research adopted a mixed methods design (R. B. Johnson & Onwuegubuzie, 2004; Tashakkori & Teddlie, 2003) informed by the theoretical and methodological principles of qualitative case study research, action research, reflective practice and
emergent design. These theoretical and methodological principles are further outlined in the following sections of this chapter. Mixed methods studies incorporate the ‘explicit use of both quantitative and qualitative methods in a single study’ (Maxwell & Loomis, 2003, p. 241), which enables varied types of data (for example, data from interviews, questionnaires and journals in this study) to be gathered about the topic and about the participants being researched. Although more qualitative data than quantitative data were gathered, both forms of data were analysed to construct a triangulated set of findings. The quantitative data gathered in this study via the administration of the Teaching Perspectives Inventory (TPI) (Pratt et al., 2001) provided additional evidence to compliment the qualitative data gathered via interviews with participants and their personal journals. By incorporating both qualitative and quantitative data, a full understanding of a complex phenomenon was achieved (Creswell & Plano Clark, 2011; Morse, 2003).

The mixed methods approach to research provided a more open foundation for recognising varied points of views than could research methods from narrower paradigms (Greene & Caracelli, 2003, p. 98). The use of eclectic methods (R. B. Johnson & Onwuegbuzie, 2004) enabled a more comprehensive set of findings than would have been possible with mono-strategy research. Further, studies designed using a mixed methods approach are flexible and interactive, catering for both the researcher and the researched as the study progresses (Maxwell & Loomis, 2003, p. 245) and facilitating maximum involvement of the participants (Ospina, Dodge, Foldy, & Hofmann-Pinilla, 2008, p. 422). These features of mixed methods research suited the dynamic nature of the research study outlined in this thesis.

The data gathering, data analysis, data reporting and evaluation methods employed throughout this study were further informed by the methodological theories of case study research and action research, as well as the theoretical principles of reflective practice. In addition to the rationales provided below for each of the theories that informed the overall mixed methods methodological design of this study, the involvement of the researcher and the participants in the online and face-to-face stages of this study was facilitated through the process of emergent design (Cavallo, 2000). This responsive approach to the mixed methods design of the study ensured that the changing conditions of a qualitative research project could be modified to ensure that as much information-rich data as possible could be collected about the research setting, the participants involved and the topic under research (Creswell, 2009; Drew, Hardman, & Hosp, 2008).
Case Study Research

The overall mixed methods design of this study was further informed by case study research methods that enable the in-depth study of an individual’s beliefs ‘while taking the individual’s context into consideration’ (Robson, 2011, p. 135). In this research study, there were five neophyte teacher cases (used as units of analysis) bounded by sampling techniques suited to qualitative research (Miles & Huberman, 1994, p. 25). The organisational structure of case study research was especially useful for analysing the data and reporting the findings of this study within an institutional context since case study design typically incorporates multiple methods such as interviews, document analysis and even surveys (Gobo, 2011, p. 16; C. Marshall & Rossman, 2006, p. 56).

Stake (2005, p. 443) suggests that the case study is the ideal method to pursue understandings, usually by answering a set of scholarly research questions. The ‘cases’ in this research are the individual neophyte teachers, and the goal of the study is to gain an in-depth understanding of each case (Ary, Cheser Jacobs, & Razavieh, 2002, p. 27). Unlike in ethnographic research, where the case is the setting (Gobo, 2011, p. 30), the case studies in this research were focused on individuals.

The qualitative case study methodology, particularly the multiple-case study, provided specific direction for working with each of the participants in this study in a way that enabled depth and variety of analysis. Baxter and Jack (2008) describe the qualitative case study as ‘an approach to research that facilitates exploration of a phenomenon within its context using a variety of data sources’ (p. 544). To investigate deeply the COTs held by the five neophyte teachers within their own complex teaching settings using multiple sets of data, the case study methodology was considered most appropriate. The case study approach also suited the topic under research and provided an organisational set of principles (Baxter & Jack, 2008). When asking ‘how’ and ‘why’ questions of participants, the case study methodology provided an ideal premise for exploring the participants’ thoughts, values and beliefs.

The selection of the context of the study was also informed by some case study research principles. The boundaries of the cases selected for inclusion in this study were set according to the guidelines of case study research, which suggest that cases be ‘bounded in space and time and embedded in a particular physical and sociocultural context’ (Gobo, 2011, p. 16). Participants were selected on the basis that they had not been teaching for more than five years and that they were willing to engage in the research study. The context of the cases was taken into account since it was the
researcher’s intention to investigate each case within a ‘real life context using multiple sources of evidence’ (Robson, 2011, p. 136). In this way, the ‘site’ (Miles & Huberman, 1994, p. 27) or the study’s ‘natural setting’ (Creswell, 2009) were acknowledged across all stages of the data gathering, data analysis and data reporting during the study.

The case studies were set up by considering the following set of potential propositions, gleaned from previous research conducted in the areas of conceptual change, reflective practice, COTs and cognitive apprenticeship. The following theoretical propositions (Yin, 2009) or a set of assumptions, provided a starting point for how the data gathered in this study were analysed:

- teaching conceptions influence a teacher’s practices;
- neophyte teachers typically undergo development of their COTs;
- reflective practice provides a mechanism by which teachers can systematically consider their views in conjunction with the views of others; and
- conceptual change may be evident in the way in which a teacher’s beliefs, intentions and practices change.

As these initial propositions are entwined into later stages of the study, they are revisited in the **Data Analysis Processes** section of this chapter.

The case study provides the researcher with the means to investigate and understand in-depth the present status of each case, and to determine how changes occur in each case (Ary et al., 2002, p. 441). This approach was especially helpful in enabling the researcher to answer the research question: ‘How did each neophyte change his or her COTs?’ As well as providing a structure through which to study each individual neophyte teacher, the case study approach facilitated identification of the neophytes’ reflections about how they changed as a result of participating in this study (Stake, 2005).

Finally, the manner in which case studies are typically reported informed the way in which this thesis was organised and presented (Stake, 2005). Specifically, a multi-chapter approach was used to present the results. C. Marshall and Rossman’s (2006) advice was also heeded: ‘Case studies take the reader into the setting with a vividness and detail not typically present in more analytic reporting frameworks’ (p. 164). Thus, the setting of the research study has been described in detail in this thesis.

As well as taking into account mixed methods and case study research to inform the overall research design of the study, selected methods usually associated with, but
not exclusive to, action research and reflective practice shaped the design of the methodology of this study.

**Action Research and Reflective Practice**

The central processes associated with this research engaged the participants in multiple opportunities to reflect on their teaching practice. The central focus of action research is the interaction between researchers and participants as they experience change in their educational practice (Robson, 2011, p. 188). This aligns well with the reflective practice cycle in which the individual reflects on his or her experiences, the outcome of which is a new conceptual understanding of the situation (Boud et al., 1985). Aspects of the action research approach were utilised to guide the participants through procedures intended to improve teaching practice in a spiralling, ‘cascading fashion’ (Abbott & McKinney, 2013, p. 51). Participants were guided through the typical action research processes of planning, acting, observing and reflecting, as shown in Figure 9 (McNiff & Whitehead, 2002, p. 40). Action research methods were used especially because they facilitated opportunities for the participants to engage in ongoing dialogues with materials (Squire, 1999) that focused on reflective practice.

![Figure 9. Sequences of action-reflection cycles.](image)

The action research methods utilised in this study particularly drew upon Schön’s (1983, 1987) view of reflective practice as inquiry, use of action research as an avenue for educators to investigate their own work (McNiff & Whitehead, 2002) and Grundy’s (1995) action research work in professional development. The action research model is especially conducive to reflective practice because it incorporates cyclic patterns of activities and thinking, leading to application to future practice (Bell et al., 2010) such as teaching. These principles were integrated into the reflective practice activities that the participants encountered in this research.

The five participants in this study were involved in a process in which they encountered new ideas, trialled new teaching methods, incorporated newly introduced reflective and evaluative practices in their teaching routines and underwent conceptual
change. Their activities throughout the study were primarily focused on the improvement of their teaching. This was in line with Grundy’s work (1995), which claims that the principal aims of action research are improvement and involvement. This focus on improvement is also related to conceptual change (J. Davis, 2001; Pintrich et al., 1993; Posner et al., 1982), since the participants in this study were guided through a process of reconsidering their views about teaching through reflective practice strategies. Consequently, they typically experienced some form of conceptual change.

As action research typically revolves around a challenging issue in which a researcher works to support a group to find new approaches (Abbott & McKinney, 2013, p. 51), the processes associated with action research typically conclude in some form of change. Together, the researcher and the participants in this study engaged in the cyclical action of the research process, as espoused by Kemmis and Wilkinson’s (1998, pp. 21, 559) principles of participatory action research. These cyclic processes, so characteristic of action research, are also closely aligned to the reflective practices incorporated into the RPW.

Schön (1983, 1987) and Boud’s work (Boud, 2001; Boud et al., 2006; Boud et al., 1985) in reflective practice emphasises the value of drawing lessons from one’s experiences, to then apply the outcomes of these lessons to future practice. Reflection is central to this process. The RPW and the face-to-face meetings with the researcher throughout the study provided multiple opportunities for the participants to engage in what Schön (1983) called reflecting on action, after the experience had occurred, and reflecting in action, while the participant was experiencing the incident. By engaging participants in reflective practice through the facilitation of learning and reflection activities in the RPW, they were compelled to consider both their teaching ideas and practices, and the links between them (Hoyrup & Elkjaer, 2006, p. 36).

However, Grundy (1995, p. 17) warns that reflection needs to be critical and mindful of making judgements based on hidden assumptions and values. She also reminds us that successful action research requires high levels of commitment from participants to do the necessary work. The researcher needs to embrace the principles of equality and freedom to allow all participants to express their opinions, he or she must judge interpretations only based on rational discussion of the evidence, and the privileges that position and power can impart on the process must be eliminated. The RPW, designed and created for this study, encouraged deep engagement by the participants and provided them with a private space in which to express their ideas as they progressed through the activities. Since the researcher was not in a position to
assess the participants in their professional standing, issues associated with power and privilege between the researcher and the participants were reduced. The researcher and the participants were in regular contact from the outset of the study through a combination of online and face-to-face communication channels. This ensured that the researcher was able to guide the participants, where appropriate, through a process of critical inquiry (Miles & Huberman, 1994, p. 9) into their own practice, with the intention of helping them to apply their new realisations to their future practice.

Within the context of this study, the needs of the participants drove the focus and processes: ‘an action research context typically focuses on the needs of practitioners in their own classrooms and is shaped by a cycle of observation, reflection and action’ (Shulha & Wilson, 2003, p. 654). The processes of the action research model were enacted by a collaboration between the researcher as facilitator, the participants as reflective practitioners and the materials provided in the RPW. However, not all of the collaborative aspects of the research design that were planned at the outset of the study came to fruition. Although the researcher maintained contact with the participants throughout the study’s duration, especially in an online capacity and at key face-to-face data gathering points, not all participants in the study engaged extensively in the online opportunities for collaboration offered to them throughout the study in the forums on the RPW. Instead, much of the reflective practice that took place during the project was undertaken by the participants in isolation. This is in keeping with the spirit of reflective practice, which ‘may take place in isolation or in association with others’ (Boud & Walker, 1998, p. 19).

In all but one of the cases presented in this thesis, the participants were able to enact the ‘spiral of self-reflective cycles’ (Kemmis & McTaggart, 2005, p. 563) to plan a change in their teaching, enact and reflect on it and then repeat the process. Although the collaborative aspects of participatory action research were offered during this project in both online and face-to-face modes, most of the participants chose to engage in the reflective practice activities on their own. The participatory aspects of this project were enacted through collaboration and reflection between the participants and the researcher, rather than as a group collaborative process involving all participants in the same space.

**Emergent Design**

As well as being informed by the organisational structure of case study research design and influenced by the methods of action research and reflective practice, the researcher drew upon concepts from emergent design (Cavallo, 2000) in developing this
study. Emergent research design allows designers of methodologies the space to be guided by the needs and contexts of the participants as they occur, rather than being corralled by preordained methods. Being open to the changing conditions of the natural setting of the research and the dynamic requirements of the research participants, the research methods employed throughout the study were modified to ensure as much information as possible was gathered about the cases being researched (Creswell, 2009), while still remaining true to answering the study’s overall research questions (Drew et al., 2008). As suggested by Mason, it is difficult in qualitative research to select a methodological strategy ‘off the peg’ (2006, p. 32). Rather, Mason advocates the adoption of ‘dynamic, active and reflexive’ processes to inform a methodological approach that successfully answers a specific set of research questions. Following this recommendation, the research questions drove all aspects of this study.

As the study progressed, each stage of the data gathering process needed to be flexible enough to allow for changes in the design of the research to align more closely with the intention of the research questions. For example, one of the participants, Mary, did not have enough time to administer the mid-semester review questionnaire (see Appendix 5) to her students to collect feedback about her teaching. This issue was mitigated by gaining access to the qualitative feedback comments on the student evaluation questionnaires collected for her unit at her university. This serves as an example of how the emergent research design approach ensured that the divergent personalities, varied skill levels and teaching contexts of each research participant could be accommodated.

As well as considering the research question, the research purpose, the participants, the conceptual framework of the research, the methods and validity, Maxwell and Loomis (2003, p. 247) suggest that each research project is under the influence of a multitude of contextual factors (see Figure 10), including the role of the researcher. This diagram of contextual factors has been developed to show all of the processes, resources and contextual factors that influenced how the study was conducted.
Figure 10. Contextual factors influencing a research design.

The dynamic interaction of the contextual factors, as outlined in Figure 10, necessitated the flexibility afforded by the emergent design approach to research because ‘naturalistic inquiry designs cannot usually be completely specified in advance of fieldwork’ (Patton, 2002, p. 44). For this reason, some aspects of this study’s research design emerged as the research processes were undertaken, especially in response to the participants’ needs, interests and requests. For example, although the researcher only required five participants to be involved in this study, all six participants who volunteered at the beginning of the study were accepted, to insure against the risk of participant attrition. In this example, as in other examples explained later, contingencies were planned for that did not prevent the progress of the study. When one participant withdrew early in the study, five participants remained, allowing for the intended five in-depth case studies.

As the research project documented in this thesis involved the five different and dynamic teaching contexts of each of the participants, as well as the institutional environment of the University, the setting of the research was viewed as being integral rather than external to the study’s design and methods (Maxwell & Loomis, 2003). As Patton (2002) reminds us, when ‘dealing with real people in the real world, all kinds of complications can arise’ (p. 407). Therefore, changes in the natural research setting for this qualitative study required modifications to the research design (Lichtman, 2010).
For example, the data gathering contexts were not firmly determined before the study began. Instead, the researcher negotiated with the participants at each data gathering point to select the most appropriate location to undertake the interviews and questionnaires. Further, in two cases, participants were overloaded with high assignment marking responsibilities, affecting when they completed their personal journals. The flexibility of the research design of this study ensured that the participants’ variable workloads did not interrupt the flow of the study.

The flexibility offered by the emergent design approach extended from the data gathering methods to the data analysis processes. Emergent design is often used in the coding of qualitative data, whereby the researcher allows the codes to emerge from the data. Since this project aimed to investigate the changes in neophyte tertiary teachers’ COTs, the method of allocating codes to data was informed by the participants’ comments, gathered from the interviews and their personal journals. During the process of coding the data, the researcher used a set of organising themes that emerged from the COT literature (Robson, 2011, p. 332) and a collection of sub-themes that emerged from the participants’ own voices (C. Marshall & Rossman, 2006, p. 160). In this way, the participants provided their own personal perspectives on the issues introduced by the researcher (Creswell, 2002, p. 361). In addition to the benefits brought to the overall quality of the research design in this study by the flexibility of emergent design, a number of evaluation criteria were put in practice to guarantee further the quality of the research approach and processes used throughout this study.

**Evaluation Criteria for Mixed Methods Research**

The quality of the theoretical principles and practical methods integrated throughout this study was evaluated using a set of criteria suitable for a mixed methods research design with a qualitative focus (Golafshani, 2003). The evaluative criteria that are employed to judge the quality of the research are also known as standards for the quality of conclusions (Miles & Huberman, 2013) or canons of quality (C. Marshall & Rossman, 2006, p. 200). They are used to determine the value of the research conducted (Lincoln & Guba, 1985, p. 290). In mixed methods research incorporating both qualitative and quantitative research processes, the viability of evidence can be judged on a range of criteria beyond the ‘holy trinity’ of reliability, validity and objectivity so often used in quantitative research (L. Spencer, Ritchie, Lewis, & Dillon, 2003, p. 59). The standards of quality applied to quantitative or positivist research methods cannot be applied to qualitative or naturalistic studies (Shenton, 2004).
The evaluation criteria used as the standards of quality in this research project address issues including research design, data gathering and data analysis methods (see Table 9). These standards have been selected based on their appropriateness to the topic under study and the methodology adopted to pursue answers to the study’s four research questions.

### Table 9

**Evaluation Criteria Used to Ensure the Quality of this Study**

<table>
<thead>
<tr>
<th>Element of this study</th>
<th>Evaluation criteria and processes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research design</strong></td>
<td>• Audit trail (Shenton, 2004) and explicitly detailing design and methods (C. Marshall &amp; Rossman, 2006)</td>
</tr>
<tr>
<td></td>
<td>• Authenticity (Grundy, 1995; Lincoln &amp; Guba, 2000)</td>
</tr>
<tr>
<td></td>
<td>• Set within a scholarly context (C. Marshall &amp; Rossman, 2006)</td>
</tr>
<tr>
<td></td>
<td>• Validity of data gathering instruments (R. B. Burns, 2000; Patton, 2002)</td>
</tr>
<tr>
<td></td>
<td>• Defensibility of research design (L. Spencer et al., 2003)</td>
</tr>
<tr>
<td><strong>Data gathering methods</strong></td>
<td>• Audit trail (Shenton, 2004) and explicitly detailing design and methods (C. Marshall &amp; Rossman, 2006)</td>
</tr>
<tr>
<td></td>
<td>• Authenticity and rigour of data gathering methods (Lincoln &amp; Guba, 2000)</td>
</tr>
<tr>
<td></td>
<td>• Reliability of questionnaire (Pratt et al., 2001)</td>
</tr>
<tr>
<td></td>
<td>• Validity of questionnaire (R. B. Burns, 2000)</td>
</tr>
<tr>
<td><strong>Data analysis methods</strong></td>
<td>• Truth value (Lincoln &amp; Guba, 1985)</td>
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<tr>
<td></td>
<td>• Confirmability (Lincoln &amp; Guba, 1985)</td>
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<tr>
<td></td>
<td>• Triangulation (Patton, 2002; Stake, 2005)</td>
</tr>
<tr>
<td></td>
<td>• Credibility of the findings (C. Marshall &amp; Rossman, 2006)</td>
</tr>
<tr>
<td></td>
<td>• Validity of findings (Patton, 2002)</td>
</tr>
<tr>
<td></td>
<td>• Transferability of findings (Shenton, 2004)</td>
</tr>
</tbody>
</table>

**Defensibility**

The design of the study is defensible in that it adopted multiple research processes that enabled the research questions to be addressed systematically (L. Spencer et al., 2003). This chapter provides evidence of how data were gathered and analysed to answer each of the research questions. The goodness of fit between the study’s focus and processes is also documented throughout this chapter. To ensure the defensible nature of the research, the auditability of the study’s processes has been achieved through the documentation of the research methods in both the thesis and its appendices; thus ensuring that the research methods can be tracked and studied.
Credibility

To ensure the credibility of a research project, Lincoln and Guba (1985) suggest that the methods should firstly be appropriately aligned to the research topic to establish that the research was conducted in a credible manner. In this study, the credibility of the match between methods and research topic is outlined in the sections of this chapter titled Data Gathering Instruments and Processes and Data Analysis Processes. In each case, the methods and instruments used align with the four overall research questions of the study. To ensure the credibility of the findings of the study, the researcher adopted systematic processes of data gathering and data analysis, which were later triangulated. This rigorous approach (Patton, 2002) ensured that the findings are believable and true-to-fit in relation to the research questions (Mason, 2006).

Lastly, the credibility of the study was further established through processes of external auditing and triangulation (Cohen & Crabtree, 2008). The findings were re-interpreted by two co-researchers and a supervisor to ensure the credibility of the findings, and the data sources and analyses of these were triangulated to establish strong themes and trends across the data. Although the participants were provided with opportunities for member checking the data transcriptions and analyses, they did not take advantage of these offers.

Authenticity

The authenticity of a study can be described in terms of its design quality and its interpretive rigour (Lincoln & Guba, 2000). To establish the authenticity of the study, evidence collected must be an authentic account of what occurred. A lack of authenticity may be connected to inappropriateness, in particular to how evidence is provided and sourced (Grundy, 1995 p. 22-23). During this study, the authenticity of the research design was instituted through establishing and re-establishing a close alignment between the research methods and the research questions; we adhered to sampling methods that were true to mixed methods and case study research (Kemper, Stringfield, & Teddlie, 2003; Mason, 2006; Robson, 2011; Teddlie & Yu, 2007). The interpretive rigour of the study was achieved by sharing the findings of data analyses with two co-researchers and a supervisor, to enhance the authenticity of the researcher’s interpretations.

Validity

The validity of a mixed methods study is achieved through establishing the trustworthiness of evidence and by using appropriate methods to interpret this evidence. The validity of this study can be traced back to the data gathering and data analysis
methods used to answer the research questions (Mason, 2006, p. 39). The evidence presented in this thesis has been substantiated through crosschecking interpretations and meanings across multiple sets of data (triangulation). These processes are described in detail with examples in this chapter.

As well as considering the overall validity of the study’s design, the items, questions and frameworks within the data gathering instruments were checked for face validity to determine whether the elements of each instrument appeared to measure what they claimed to measure (R. B. Burns, 2000). The outcomes of the pilot study—in which the research instruments were trialled and subsequently improved—enabled the researcher to refine the processes used to administer these instruments. For example, any interview questions that were deemed misleading or ambiguous were modified for clarification or removed.

Throughout the study, participants had full access to their personal journal data, which they could change at any time. The responses for both administrations of the TPI questionnaires and participants’ subsequent scores and a sheet of interpretive notes (Pratt & Collins, 2001c) were sent to each of the respective participants. Although the participants were offered access to their interview transcripts, the offer was not taken up.

To validate the findings of the study, two third parties reviewed the data and interpretations of the analyses to determine whether their interpretations were similar to those of the researcher (Grundy, 1995). This collaboration between researchers ensured that any discrepancies in interpretations were identified and, if required, resolved.

**Transferability**

As purposive sampling (Mason, 2006; Patton, 2002; Robson, 2011; Teddlie & Yu, 2007) was used to select the participants in this study, the generalisability of the findings of the study will be left to the reader to determine, and will depend, to a large extent, on the richness of description offered by the researcher. Although the researcher does not claim the findings of this research to be applicable to all cases of neophyte teachers, readers of this thesis may recognise similarities in the cases described with cases in their own educational contexts. Sufficient detail will have been provided about the context and the participants in the study for the reader to determine whether the results of this study could be applied to another similar setting (Shenton, 2004). More generally, as Stake (2005) suggests, the particular findings of this study can contribute to the global body of knowledge about COTs in neophyte teachers and reflective practice.
Reliability and Validity of the Teaching Perspectives Inventory

The TPI created by Pratt, Collins and Selinger (2001), which grew from their earlier work (1992; 1998), is ‘a self-reporting, self-scoring inventory that promotes a pluralistic understanding of teaching and equips respondents with a more explicit vocabulary for reflecting on their own teaching’ (Pratt & Collins, 2011, p. 358). The TPI attempts this by scaling respondents on five perspectives of teaching. During the last few years, Pratt and Collins (2011) have revisited the reliability and validity of the TPI after 10 years of use with over 100,000 respondents. By taking into account its multiple uses, the reliability measures of this instrument, based on the Cronbach’s Alpha calculation for reliability for its inter-item reliability, are considered good at between .70 (for the developmental scale) and .83 (for the social reform scale), with an average of .76 across the five scales. As their 2011 article notes, all reliability coefficients ‘meet or exceed Nunnally and Bernstein’s (1994) $\alpha = .70$ benchmark’ (Pratt & Collins, 2011, p. 366).

Further, in terms of the instrument’s test-test reliability, results suggest an average reliability coefficient of .67, ranging from .62 for the developmental scale, to .71 for the social reform scale (Pratt & Collins, 2011, p. 366). The reliability associated with second or third administrations of the instrument indicate that reliability levels were even higher (.73) (p. 368). The instrument was also tested for its face validity, internal validity and consequential validity with positive results, indicating that the instrument measured what it intended to measure.

In Pratt and Collins’ (2011, p. 373) recent article, they reiterate that the TPI is an effective tool both for facilitating processes for teachers to reflect on their perspectives of teaching and for stimulating discussion. This claim is reinforced by other researchers who regularly use the instrument (Clarke & Jarvis-Selinger, 2005; Lu, 2006; Panko, 2004; Srinivasan et al., 2007).

Participants

The participants in this study were all neophyte teachers who were employed by a large Australian metropolitan university. They were in the early stages of their university teaching careers, with between one and four semesters of teaching experience. Four of the five participants were sessional (casual) academic staff members, and one of the participants held an ongoing faculty position. The participants ranged in age from their late 20s to their late 30s. Four of the participants were female and one was male. Most participants had engaged intermittently in some form of on-
campus professional development program offered by their university, but had not yet achieved any formal teaching qualifications.

All participants were engaged in teaching undergraduate students across a range of stages in their degree courses (including first-, second- and third-year students). The students taught by the participants in this study were enrolled in communications degrees. Although the participants were not employed by a university faculty that included a School of Education, the faculty in which they were employed was characterised by a number of staff members who had formal teaching qualifications. Further details are provided about each case in Chapters 4–8.

### Participant Selection and Recruitment

The selection of participants for inclusion in this research study was largely guided by Kemper et al.’s (2003) advice about selecting a sampling strategy and devising a sampling plan for mixed methods studies, and Teddlie and Yu’s (2007) taxonomy of sampling strategies in the social and behavioural sciences.

The selection of participants for this study was largely purposive (Mason, 2006, p. 138; Robson, 2011, p. 275) or purposeful (Patton, 2002, p. 45), to match the topic under investigation and the propositions of the case study approach employed in this research. The secondary aspect of sampling employed in this study to select participants was convenience sampling, in that the participants who were selected for possible involvement in the study were drawn from neophyte teachers who were available to volunteer during the semester chosen for data gathering. In this sense, the selection of participants for the study could be described as following opportunistic or convenience sampling procedures (Patton, 2002, p. 445). Within these conditions, purposive sampling enabled individual cases to be selected for the specific purpose of answering the study’s research questions (Teddlie & Yu, 2007, p. 77). As suggested by Patton (2002), ‘there are no rules for sample size in qualitative inquiry’ (p. 444). However, the depth of evidence required to answer the research questions that drove this study necessitated in-depth, information-rich sources of data from a small number of cases, thus requiring purposeful sampling (Patton, 2002, p. 245).

The twin sampling methods of purposive and convenience sampling were applied in practice through negotiation with academic staff who worked with the neophyte teachers. The recruitment of participants was informed by approaching supervisors of neophyte teachers for suggestions of likely participants. This enabled both the identification of a number of participant-cases who were experiencing a similar
phenomenon within a real-life context (Yin, 2009, p. 136) and access to research participants who met the criteria of being neophyte teachers.

**Participant Involvement**

The processes and time commitment required for participation in the project were made transparent to the participants from the outset of the project. As the participants were required to give input into a time-consuming set of activities over a semester of involvement, they were invited to a presentation about the project that outlined the project’s ideals and the degree of participation they would be asked to contribute. This presentation was conducted to help to minimise attrition due to unexpected levels of commitment. After the presentation, a call for those who might be interested was issued and the names and contact details of those people who volunteered were collected. In the following days, a letter was sent to six teachers who showed interest, formally inviting them to participate in the study. This number of neophytes was selected to participate in the study to provide some insurance against the risk of possible attrition of participants as the research progressed.

At the beginning of the project, all six neophytes who had expressed interest signed up to participate in the project. They were provided with information statements about the purpose and methods used in the project (see Appendix 1: Information Statements) and signed consent forms (see Appendix 2: Informed Consent Form). The researcher explained to each participant that the information they contributed to the project would remain confidential and that they would be de-identified before publication of the thesis and research findings. They were also free to withdraw from the project at any stage of the research process. By the end of the initial interviews, one participant had decided to leave the project due to increased personal time commitments. She felt that she was not able to fully commit (Robson, 2011, p. 188) to contributing data through the systems established in the initial stages of the research. The remaining five participants continued their involvement until the end of the project.
Data Gathering Instruments and Processes

During this study, the researcher gathered data from multiple sources and at multiple points prior to, during and after the participants engaged in the interventional program of reflective practice, including the RPW activities, across a semester period. Several data gathering instruments were employed to gather varied types of data, which ensured data triangulation (Basit, 2010; Patton, 2002). This approach enabled the experiences of the neophyte teachers to be investigated in multi-faceted ways using semi-structured interviews, a questionnaire and personal journals. The RPW served as the data gathering point for the participants’ personal journals and provided a central discussion reference for conversations with participants during the semi-structured interviews and when the TPIs were administered. Each of these data gathering tools was selected specifically to collect data that would provide answers to the four research questions (Stake, 2005; Tashakkori & Teddlie, 2003).

Although varied data gathering points and tools were utilised throughout the study, the primary tool used was the semi-structured interview. The data gathered during the interviews with the participants were supplemented and methodologically triangulated (Denzin, 1970, p. 301) with data gathered from the TPI questionnaire and the participants’ personal journals. Table 10 outlines how the data gathering instruments were used to gather data that were then analysed to answer the four key research questions of the study.

Table 10

<table>
<thead>
<tr>
<th>Stage of study</th>
<th>Data gathering process, context and tools</th>
<th>Research question(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-intervention</td>
<td><em>Teaching Perspectives Inventory (TPI)</em> (Pratt et al., 2001)—Participants completed the TPI questionnaire, taking approximately 15 minutes to complete as a paper-based form. The results were collated and sent to the relevant participants.</td>
<td>RQ1.1: What COTs are held by each neophyte before the intervention?</td>
</tr>
<tr>
<td></td>
<td><em>Interviews</em>—One-to-one semi-structured interviews were conducted with each participant, taking approximately one hour in a face-to-face meeting. The interviews were recorded and transcribed verbatim by the researcher.</td>
<td></td>
</tr>
<tr>
<td>Stage of study</td>
<td>Data gathering process, context and tools</td>
<td>Research question(s)</td>
</tr>
<tr>
<td>----------------</td>
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</tr>
<tr>
<td>During intervention</td>
<td><em>Active exploration</em>—Four activities were driven and supported by the RPW.  <em>Personal journals</em>—Online blog and/or materials were contributed to by each participant.</td>
<td>RQ1.3: How did each neophyte change his or her COTs?</td>
</tr>
<tr>
<td>Post-intervention</td>
<td><em>Interviews</em>—One-to-one semi-structured interviews were conducted with each participant of approximately one-hour duration in a face-to-face meeting. The interviews were recorded and transcribed verbatim by the researcher.  <em>Teaching Perspectives Inventory (TPI)</em> (Pratt et al., 2001)—Participants were invited to complete the TPI questionnaire for a second time in a face-to-face meeting, taking approximately 15 minutes to complete as a paper-based form. The results were independently collated and sent to the relevant participant.</td>
<td>RQ1.2: What COTs are held by each neophyte after the intervention? RQ1.3: How did each neophyte change his or her COTs? RQ2.1: How did the interventional program of reflective practice influence the neophytes’ COTs?</td>
</tr>
</tbody>
</table>

Each of the data gathering instruments and their associated processes are described below, followed by an explanation of how the data gathered from each of these processes were analysed for the purposes of answering the research questions.

**Semi-structured Interviews**

The prime research instrument used in this study to gather answers to the research questions was the semi-structured interview, as this was considered an ideal method to ‘enter into the other person’s perspective’ (Patton, 2002, p. 341). Since the emic (Denzin & Lincoln, 2005, p. 12) viewpoint of the participants was sought in this study, the semi-structured interview was selected as a data gathering process that could be implemented at various points throughout the research.

A semi-structured interview technique allows each interviewee to be asked the same core set of questions (see **Appendix 3: Interview Protocols and Interview Questions**). Unlike a structured interview, the semi-structured interview allows room for diversion and the inclusion of the participant’s own story. The nature of a semi-structured interview allows the interviewer to direct the conversation along a partially predetermined path that covers the areas of interest to the researcher (that is, the
research questions) but also permits further discussion with the participant based on their own interests and perceptions of the topic under study. The conversational nature of the semi-structured interview facilitates an easy-going atmosphere that allows the participant to introduce topics that may not have formed part of the researcher’s initial interview schedule (Abbott & McKinney, 2013, p. 310). In the semi-structured interview environment, the participant is encouraged to answer in an open-ended and in-depth manner, facilitating the emergence of a qualitative social text (Mason, 2006).

As the researcher was attempting to understand changes occurring in an individual’s thinking, the use of a less-formal semi-structured interview method expanded opportunities for revealing the participants’ interpretations of their behaviours and their understanding of teaching and learning. Further, as Fontana and Frey (2003) posit, a semi-structured interview approach does not impose a rigid set of prior categorisations that would otherwise limit the research investigation. At the same time, the loose structure of the semi-structured interview ensured that the pre- and post-intervention interviews covered similar territory and generated comparable data. This approach helped the researcher to depict change in the participants’ perceptions of teaching, to identify if and where it occurred through analysis of the data from the interviews at these two time points.

In line with the principles of emergent research design (Cavallo, 2000; Drew et al., 2008; Mason, 2006), the semi-structured interview was chosen instead of other interview techniques because of the flexibility in the questions schedule that it allowed for both the researcher and the participants (Lidico, Spaulding, & Voegtle, 2010). The interview schedule for the semi-structured interviews comprised a set of pre-determined interview questions, with latitude to modify the sequence of the questions and to add questions where relevant for the interviewee (Freebody, 2003, p. 133). The questions devised for the semi-structured interview included provision for the capture of entrenched and espoused beliefs and any barriers (J. Davis, 2001) influencing the process of conceptual change experienced by the participants. Further, the choice of questions incorporated into the semi-structured interviews took guidance from Hall and Hord’s (2001) 12 principles of change. These principles assisted both the researcher’s and participants’ understanding of the complexity of, and differing amounts of time required by, the change process.

The interview questions were designed to elicit the participants’ thoughts about teaching and learning, particularly in relation to:
• community environment (used in initial and final interviews);
• ability to get along with people (used in initial and final interviews);
• teaching/learning process (used in initial and final interviews);
• education and experience (used in initial and final interviews);
• the institutional system (used in initial and final interviews); and
• change in ideas (used only in final interviews).

Some examples of the questions asked of the participants include:

• What characteristics separate the above-average teacher from the average teacher?
• What is/are your strongest trait(s) in teaching?
• In your opinion, what are the ingredients of an effective learning program?
• What skills or understandings will you take with you after this project has ended?

The use of these questions throughout the interviews elicited rich conversations about the participants' conceptions of learning and related topics. However, due to the extent of the data gathered, only the data that were directed related to the study's research questions were analysed within the limits of this study. For a full account of the questions used in the semi-structured interviews, see Appendix 3: Interview Protocols and Interview Questions.

To ensure each interview was conducted in a systematic manner, a set of interview protocols was developed for use by the researcher (Patton, 2002, p. 407). These protocols were written in straightforward language and included directions for:

• instructions given to interviewees;
• instructions for the interviewer; and
• how to conclude the interview.

The use of these interview protocols ensured that interview data were systematically gathered, treated and recorded (L. Spencer et al., 2003). For a full copy of these interview protocols see Appendix 3: Interview Protocols and Interview Questions.

The interviews were recorded using a digital audio-recording device to ensure that the participants’ voices were recorded verbatim. Digitally recording the interviews also enabled the researcher to provide full attention to the participant while the interview was in progress, instead of having to divert his attention to making written or typed notes (Basit, 2010). The locations of the interviews were agreed upon in
negotiation between the researcher and the participants. For example, the interviews typically took place in locations selected by and convenient to the participants (O’Toole & Beckett, 2010), such as on-campus sites, the participants’ homes or public cafes. For further details about when the semi-structured interviews were undertaken throughout this project, see the section later in this chapter titled: Data-gathering Schedule.

Teaching Perspectives Inventory

The use of questionnaires to gather self-reported data is a widespread practice in quantitative and mixed methods research projects (O’Leary & Miller, 2003). Data gathered through valid and reliable questionnaires can provide the researcher with information ‘about actual patterns of people’s thinking and behaving’ (Abbott & McKinney, 2013, p. 36), rather than observations of how the researcher believes the situation to be. Questionnaire-type surveys also have the advantage of being quick to complete (Creswell, 2002, p. 421) and they can be administered in standardised formats (C. Marshall & Rossman, 2006, p. 125). However, because questionnaires are not always effective in gathering data about issues that are not represented in the items on the scale itself, other complementary data gathering techniques were used.

Since the research questions were focused on the COTs held by teachers of adult learners in a tertiary educational context, the TPI (Pratt et al., 2001) was deemed an appropriate instrument, as it represented a close fit with the research focus (Robson, 2011, p. 253) and could be administered at two points during the study to determine changes in conceptions.

The TPI (Pratt et al., 2001) was purposely designed as a quantitative research instrument to measure the COTs held by teachers in higher education contexts. The inventory was developed in response to an increased interest in teaching adults in tertiary education environments and a corresponding push that began in the late 1990s for teachers to be critically reflective about their teaching (Pratt et al., 2001, p. 8). The inventory includes a number of items that reflect broad views about the attributes of teaching conceptions. The inventory has been available online for over a decade (it is currently accessible at: http://www.teachingperspectives.com/drupal) and its widespread use ensures that it is valid and reliable.

The TPI consists of 45 items aimed at determining a respondent’s orientation to teaching according to the five dimensions of transmission, apprenticeship, developmental, nurturance and social reform. These dimensions are defined as follows:

- A teacher with a transmission orientation to teaching is primarily focused on content and, consequently, concentrates on the presentation of the
subject matter. They help students to navigate their way through the content.

- A teacher with an *apprenticeship* orientation to teaching believes that students require socialising into behaving in new ways. Such teachers are viewed as skilled practitioners and experts. They guide students according to their stage of learning, and order tasks from simple to complex.

- A teacher with a *developmental* orientation to teaching focuses on the learner’s point of view. They assist students to develop increasingly complex knowledge in a systematic and ordered way.

- A teacher with a *nurturance* orientation to teaching encourages students to believe in themselves as learners. They communicate the idea that learner success is derived from the learner’s efforts and abilities, and they provide students with clear goals and expectations.

- A teacher with a *social reform* orientation to teaching aims to change society through their teaching and their students’ achievements. Students are encouraged to question the source of knowledge and to take critical stances on issues.

As the authors point out, these are teaching perspectives, not personality-based styles or technical methods (Pratt & Associates, 1998). Further, the authors of the TPI caution that: ‘All teachers hold all perspectives to varying degrees’ but that ‘no one can operate from all five simultaneously’ (Pratt & Collins, 2001b, para. 2). For a full summary of each of the five teaching perspectives, see Appendix 4: *Summary of Five Perspectives on 'Good Teaching* (Pratt & Collins, 2001a).

Before participants completed the inventory, they were required to read an introductory paragraph that explained what mind-set should be adopted while responding to the items in the instrument and a set of instructions about how to complete the TPI. The TPI questionnaire is separated into three sections focusing on teaching beliefs, intentions and actions, respectively. Respondents are also requested to answer a few brief demographic questions. The authors of the TPI prefer that the entire questionnaire not be replicated in this thesis; however, samples questions from each of the three parts of the TPI can be seen in Table 11.
Table 11

Sample Questions from the TPI

First section—Beliefs:

Using a 5-point scale (SD, D, N, A, SA [strongly disagree, disagree, neutral, agree, strongly agree])

- To be an effective teacher, one must be an effective practitioner.
- In my teaching, building self-confidence in learners is a priority.
- Teaching should build upon what people already know.

Second section—Intentions:

Using a 5-point scale (N, R, S, O, A [never, rarely, sometimes, often, always])

- My intent is to prepare people for examinations.
- I expect people to know how to apply the subject matter in real settings.
- I want people to see how complex and interrelated things really are.

Third section—Actions:

Using a 5-point scale (N, R, S, O, A [never, rarely, sometimes, often, always])

- I ask a lot of questions while teaching.
- I challenge familiar ways of understanding the subject matter.
- I see to it that novices learn from more experienced people.

(Pratt & Collins, 2001b)

The breakdown of each perspective score into component sub-scores of three dimensions (beliefs, intentions and actions) within each of the five perspectives in the TPI enables the researcher to determine further detail about the participants’ responses. These dimensions represent ‘indicators of commitment’ (Pratt & Associates, 1998, p. 15) of participants’ perspectives of teaching. Analysis of participants’ responses to the TPI provides insight into the strength with which these three dimensions are reflected in the TPI profiles of each case. For each of the five perspectives outlined above, each dimension indicates how a person believes they should teach, how a person intends they will teach and how a person actually teaches.

The administration of the TPI was guided by previous literature by the instrument’s authors about its use, as well as by direct email communications with Dr John Collins, one of the creators of this instrument (personal communication, 28 July 2005). Using these guidelines, the TPI was administered in a paper-based format with the following instructions to each of the participants:

Please complete this questionnaire with one teaching context in mind.

Please note that none of the dimensions included in this inventory are better than another dimension.

Once the TPI questionnaires were completed, participants were sent their TPI profile scores, an information sheet about each of the five teaching perspectives and
instructions about how to interpret their scores. For the participants, receiving their TPI profiles helped them to gather their thoughts on teaching and offered ‘direction to the process of critical reflection by providing a baseline of information’ (Pratt et al., 2001, p. 8) in beginning the activities on the RPW.

**Personal Journals**

The data recorded in the participants’ personal journals provided the researcher with another emic perspective (Denzin & Lincoln, 2005, p. 12) into their experiences of teaching tertiary students. The teachers’ responses to the activities housed in the RPW indicated their concerns or doubts about their ongoing interactions with their students. These journals were used as a ‘proxy for observation’ (Robson, 2011, p. 267) of the participants’ regular teaching experiences. The participants’ use of personal journals also provided them with opportunities to record their experiences within a private space in their natural setting (Abbott & McKinney, 2013, p. 42) and then to reflect on their experiences.

Participants were invited to keep a journal throughout the study, and this was then collected at the end of the program. The journals were used to capture each participant’s individual thoughts, ideas and changing perspectives as they developed over the course of their participation in the interventional program of reflective practice, including through their engagement in the RPW activities. A blogging tool was made available online through the RPW for access by participants to archive their thoughts as text or graphical elements (such as pictures). To increase the likelihood of participants engaging with the journal task, they were also given the option of using a paper-based journal or a mixture of online and paper-based formats.

Each of the four activities in the RPW incorporated a selection of resources that provided information and examples of the topics under consideration, a number of sub-activities and reflection prompts, and links to the participants’ personal online journals and the online collaborative seminar. Figure 11 provides an overview of the activities in the RPW. The RPW can also be viewed online at: http://jsphd.amberwell.net.
Participants were provided with instructions about how to use their online journal blog. The help page on the RPW provided participants with the following information (see this information in context in Figure 12):

- a definition of a blog (online blogging tool used as a personal journal);
- step-by-step instructions on how to log in and access their journal blog;
- information about the confidentiality and privacy of the journal blog; and
- information about how to access the online seminar room (a space in which participants could collaborate and communicate).

The online posts that were made by the participants using the online journaling/blogging tool were typically in response to the questions and activities included in the RPW. They contributed their responses after they had engaged in activities such as reading articles or analysing feedback from students about their teaching. The purpose of Activity 1 was to introduce the activity of reflection and some different ways of thinking about the components of teaching, learning and observing. In this activity, the participants were also guided through the process of reflecting on themselves and their experiences (as a student and teacher). Participants were asked to consider the student–
teacher relationship, to think about their own thinking and to reflect on the characteristics of a good teacher. For example, in Activity 1 on the website, participants were asked to respond to the following questions, prompts and instructions:

- Consider some questions about reflective processes in your own practice.
- When I think back on my own experiences of learning…
- What are the bodies of teaching and learning knowledge that you use to make sense of your professional (teaching) observations?

An extract from Activity 1 from the RPW is shown in Figure 13. It incorporates a link directly to the participants’ online journal.

![Figure 13. Extract from Activity 1 on the RPW.](image)

All five participants regularly recorded their responses to the activities and questions. Each participant made approximately 12 entries in their personal journals during the semester. Journal entries often contained responses to several separate parts of an activity combined by the participants to create a single journal entry. Each journal typically amounted to between 3000 and 4000 words.

When the participants had questions about any of the activities or resources on the website, they were able to contact the researcher, who provided them with some prompts about how to continue their contributions to their personal online journals using the blogging tool. Of the five participants that engaged in the study from the beginning to the end, four of these opted to use the online journaling tool, while one participant chose to record his journal in a paper-based format that was later transcribed to electronic format by the researcher. Each individual’s journal was private and not accessible by other participants. Figure 14 provides an example of a typical participant journal entry.
In addition to the personal journal tool that was made available on the RPW, the participants were able to make posts into the public areas of this blogging system (known as the ‘seminar room’), if they chose to do so. However, the participants did not use this collaborative aspect of the RPW on a regular basis, despite encouragement from the researcher. At one point in the early stage of the project, one participant posted some thoughts about teaching in this collaborative area of the website; however, no other participants responded to this post. From that point in the project, it became clear that the participants would not use the collaborative ‘seminar room’ tool on the RPW, possibly because of the large commitment in time and energy (Robson, 2011) already being invested to make regular and in-depth contributions to their online journals.

Data-gathering Schedule

In this study, participants were invited to take part in semi-structured interviews to reveal their COTs before and after the active interventional reflective practice component of the project. Also at the beginning and end of the study, participants were asked to complete a TPI to complement and support the data collected during the interviews. After the initial interviews and quantitative data collection, the participants were given access to a website, the RPW, containing a set of activities involving theoretical information about teaching, readings and opportunities to contribute to a personal journal to record their experiences.

The data gathering processes employed during this study were selected based on their capacity to provide data to answer the study’s research questions. While the distinction between qualitative and quantitative data has been described respectively as textual and numerical (Maxwell & Loomis, 2003, p. 248), the mixed research methods used in this study were selected to enable a comprehensive comparison of these two types of data through varied analysis processes, described in the Data Analysis.
Processes section later in this chapter. In selecting a mixed set of data gathering methods, the researcher was as cautious as possible to account for the various weaknesses and benefits of each method, and to gather sufficient ‘convergent and divergent evidence about the phenomenon being studied’ (B. Johnson & Turner, 2003, p. 299). By using an assortment of data gathering tools and processes in this study, the data gathered could be analysed from varied perspectives using multiple methods to ensure that the findings could be well substantiated. Table 10, earlier in this chapter, outlined when and how each instrument was administered at the various points in the data-gathering schedule, before, during and after the participants engaged in the interventional program of reflective practice.

As well as ensuring that the data-gathering tools and processes were aligned with the intentions and theories underlying the research, the data-gathering schedule was designed such that the methods selected were practical for both the researcher and the participants, met the constraints of ethical conditions of the research and fitted well with the context and focus of the study (Robson, 2011, pp. 232-233). The data-gathering schedule covered the entire research project and arranged data collection alongside the participants’ use of the RPW. Altogether, the various events comprising the data-gathering schedule and the participants’ responses to the RPW activities constitute the interventional program of reflective practice. The design of this program is outlined below.

Reflective Practice Website

The content of the Reflective Practice Website (RPW) also became a central repository of the participants’ personal journal entries. As well as providing a catalyst for the interviews and the personal journaling points of data collection in the study, the RPW provided the participants with key information about how to contact the researcher throughout the study and how to access key teaching and learning resources within the institution. Figures 15, 16 and 17 provide extracts from the RPW, including the homepage, the project details page and a typical extract from one of the website’s activities about reflective practice.
Figure 15. Homepage of the RPW.

Figure 16. Project details of the RPW.
**Figure 17.** Excerpt from a reflective practice activity (Activity 1, Part 6) of the RPW.

For further examples of the content and activities in the RPW, see Appendix 6: Screen Captures of the Reflective Practice Website or go online to view the entire website at: http://jsphd.amberwell.net/

**Design Foundations of the Interventional Program of Reflective Practice**

The interventional program of reflective practice was intentionally designed to provide participants’ with multiple opportunities to learn about teaching and to reflect on their own teaching. These opportunities included articulating their ideas about teaching during two interviews; responding to the TPI items; responding to, recording and articulating their responses to activities in the RPW; and making entries in their journals. The components comprising the interventional program of reflective practice are outlined in Figures 18 and 19. The design of this program of reflective practice was informed by the theoretical framework of the study, outlined in Figure 8, located at the conclusion of Chapter 2: Review of the Literature on page 70.
The theoretical framework that informed the design and selection of the components of the interventional program of reflective practice incorporates three influential areas of cognitive development: cognitive apprenticeship (Brown et al., 1989; A. Collins et al., 1991), reflective practice (Bell et al., 2010; Moon, 2001; Oldland, 2011; Yanes & Curts, 2002) and conceptual change theories (Kuhn, 1970; Posner et al., 1982; Zirbel, 2004). The aim of the intervention was to foster an atmosphere of reflective teaching practice and professional development, in which neophytes could develop their COTs and use the outcomes of their reflections in planning future improvement in their teaching practice.

The design of the RPW was further informed by the principles of online instructional design, reflective practice and professional development. Before the World Wide Web became a ubiquitous tool, convenient for everyone to use as a method of disseminating information and supporting learning tasks, Banerji (1995) defined a software tool known as an Electronic Performance Support System. Banerji’s idea was that this system could be ‘a sophisticated interactive computer-based environment to provide on-the-job support to facilitate task performance within a particular target application or domain’ (p. iii). Since Banerji’s ideas in the mid-1990s, online technology has been utilised to facilitate a raft of educational processes such as learning, teaching and professional development.

Like the work of Ho et al. (2001), this study was designed to incorporate opportunities for conceptual change into an innovative, online staff development program, aimed at enabling teachers to reflect on and modify their COTs. A selection of online tools, activities and resources was created to achieve this aim, and these were presented using an online website, known throughout this thesis as the RPW (available at http://jsphd.amberwell.net). This website was used to support a group of neophyte
teachers during a semester-long intervention of exposure to teaching theories and professional reflective practice methods. This form of online professional development has been recognised as ‘of significant benefit to accelerate the personal and professional growth of new academic staff in their teaching practice’ (Oldland, 2011, p. 779).

The underlying design of the RPW encompasses elements from the principles of reflective practice (Dewey, 1933; Grundy, 1995; Schön, 1983), cognitive apprenticeship theory (A. Collins et al., 1989) and conceptual change theory (Posner et al., 1982). However, the website, as indicated by its name, is primarily focused on reflective practice, as this has been reported as one of the most powerful methods of professional development, having been used effectively in a diverse range of industries and proved especially beneficial for those endeavours that require higher-level cognitive applications, such as teaching in higher education. During the last few decades, reflective practice techniques have also become increasingly integrated into professional development contexts as active research tools (Biggs, 2003; S. Burns & Bulman, 2000; Palmer, Burns, & Bulman, 1994; Yanes & Curts, 2002), and reflective practice processes have been utilised by many practising teachers striving to improve their teaching (Brockbank & McGill, 1998; Clegg, Tan, & Saeidi, 2002; Loughran, 1996; Norlander-Case, Reagan, & Case, 1999).

The RPW begins with an introductory overview including the purpose, the tools, the activities, advice on how to approach reflection and the contact details of the researcher for any questions that participants may have during the semester. The main thrust of the RPW was to foster reflective practice skills in the study’s participants and, through a set of incorporated activities, to encourage and support them in the adoption of those skills. A calendar was included, suggesting a schedule for the participants to work through the program.

The website also housed content, such as scholarly readings, which provided participants with various theories of teaching and learning and techniques through which to consider teaching and teaching practices, alongside a set of activities designed to support the neophyte teachers to contemplate and reflect on their own teaching. As Ryan and Ryan (2013) suggest, reflection processes do not just happen; they require an organised approach:
Despite the rhetoric around the importance of reflection for ongoing learning, there is scant literature on any systematic, developmental approach to teaching reflective learning across higher education programs/courses. Given that professional or academic reflection is not intuitive, and requires specific pedagogic intervention to do well, a program/course-wide approach is essential. (p. 2)

The RPW provided a systematic, developmental approach as recommended by Ryan and Ryan (2013) by facilitating the engagement of neophyte teachers with pedagogical readings, activities and ideas. In this way, the theoretical components of the website were integrated with practical activities, as recommended by Devlin (2006).

Another aspect of the website’s content was periodic prompts that asked participants about the materials, with participants expected to respond by recording their ideas in journals. Online journaling tools were offered to the participants using both blogging and forum systems, allowing participants to record their ideas and responses to the questions as they worked though the activities. The forum tool was also used to facilitate communication between the researcher and the participants, and between the participants themselves.

The sustained nature of the reflection processes facilitated through the participants’ use of the RPW was purposefully integrated into the design of this online resource to counteract problems reported in other studies (for example, Hubball et al., 2005) such as a lack of time as a barrier for the facilitation of effective reflection about teaching. Consequently, the RPW incorporated adequate time and clearly identified strategies to facilitate regular and sustained reflection activities across a semester-long period. This sustained approach allowed the participants a great deal of flexibility in terms of when they accessed the website, how often they accessed it and for how long they accessed it.

Figure 19 provides a diagrammatic representation of the components of the interventional program of reflection practice, including the RPW, alongside the theoretical underpinnings that influenced the design of the program. The key to the theoretical codes used in Figure 19 are listed in Table 12. For a detailed explanation of each of the components of the RPW, see Appendix 16: Activities and Theoretical Components of the Reflective Practice Website.
Figure 19. Overview of components of the interventional program of reflective practice.
Table 12

*Key to the Theoretical Components used in Figure 19 and Appendix 16*

<table>
<thead>
<tr>
<th>Theories</th>
<th>Code</th>
<th>Theoretical components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflective practice (RP)</td>
<td>RP1</td>
<td>Planning</td>
</tr>
<tr>
<td></td>
<td>RP2</td>
<td>Doing</td>
</tr>
<tr>
<td></td>
<td>RP3</td>
<td>Reviewing</td>
</tr>
<tr>
<td></td>
<td>RP4</td>
<td>Improving</td>
</tr>
<tr>
<td>Cognitive apprenticeship (CA)</td>
<td>CA1</td>
<td>Modelling</td>
</tr>
<tr>
<td></td>
<td>CA2</td>
<td>Coaching</td>
</tr>
<tr>
<td></td>
<td>CA3</td>
<td>Scaffolding</td>
</tr>
<tr>
<td></td>
<td>CA4</td>
<td>Articulation</td>
</tr>
<tr>
<td></td>
<td>CA5</td>
<td>Reflection</td>
</tr>
<tr>
<td>Conceptual change (CC)</td>
<td>CC1</td>
<td>Revealing existing COTs</td>
</tr>
<tr>
<td></td>
<td>CC2</td>
<td>Discussing and evaluating preconceptions</td>
</tr>
<tr>
<td></td>
<td>CC3</td>
<td>Creating conceptual conflict</td>
</tr>
<tr>
<td></td>
<td>CC4</td>
<td>Encouraging and guiding conceptual restructuring</td>
</tr>
</tbody>
</table>

**Pilot Study**

Before any of the data collection for this study commenced with the selected participants, a pilot study was conducted to trial the interview protocols and questions and the TPI questionnaire. The RPW was also tested and evaluated for appropriate content and usability.

**Interview Protocols and Questions**

The pilot study to test the interview protocols and questions was conducted in a similar environment to that intended for the actual project. As well as providing an opportunity to trial the researcher’s explanation of the interview protocols to the interviewee, the pilot process examined the wording of the interview questions to ensure they communicated the intended meanings and that the language used was appropriate for the audience. Beyond simply asking the questions to the pilot study participant, the pilot participant was also asked to comment on the questions and the interview processes themselves. The pilot interview was audio recorded to ensure that feedback received during the evaluative session was not lost, and because this was the procedure that would occur during the actual interviews in the study.

As the pilot session progressed, the need to clarify some questions arose; however, it was determined that the wording of these questions was not intrinsically
problematic, but that the participant needed time to think before answering. Moreover, after further scrutiny of the questions, it was concluded that rewording the questions was likely to create a fruitless evaluation loop. To allay the issue, advice was added to the interview protocols to make it clear to participants that they should take time to consider each question and that they should feel free to inquire about the question if they felt it would help, or to ask for the question to be repeated.

The interview session ran smoothly, taking approximately one hour for the initial interview questions and the extra questions that were added for the final interviews. During the pilot interview, there was also some conversation about the interviewing process itself, which added an additional 15 minutes to the time taken.

**TPI Questionnaire**

The TPI questionnaire is most often self-conducted through the TPI website; however, it can also be run as a paper-based questionnaire. As it had been decided to use the paper-based form for this study, it was also utilised in this way for the pilot study. The paper-based questionnaire was given to the participant and the data were collected just prior to conducting the pilot interview. The participants’ responses to the items on the TPI were later entered into the website (Pratt & Collins, 2001b) by the researcher. The online form was double-checked for accurate transcription of the answers and then submitted for calculation and profiling. The scores were returned automatically by email to the researcher, who in turn sent the results to the relevant participants. Using the TPI website engine to manage the scoring helped to ensure consistency with the authors’ methods. This process worked well and the results were copied to a spreadsheet for further analysis. The spreadsheet analyses became the template for the study’s actual TPI administrations at the beginning and end of the semester. This approach ensured that this treatment of the TPI data would remain systematic across all administrations and for all participants.

**RPW Activities**

The website activities in which the participants would be asked to engage were too lengthy to complete as part of a pilot study. However, the intended online processes were examined for soundness of process and purpose by several colleagues from the School of Education at the institution at which the study took place, and by colleagues in a university centre for teaching and learning. Role-playing methods from the cognitive walkthrough technique (R. Spencer, 2000) were used. Using this technique, the evaluators performed like a typical user, to act out the scenarios of the activities that the participants’ would perform, without having to complete them.
Colleagues from the multimedia school in the university where this study took place evaluated the RPW for navigation and general usability using a think-aloud protocol (Hom, 1996; Lewis, 1982) in which the tester speaks aloud their thoughts, opinions and feelings while they follow the actions likely to be performed by a participant in the actual study. During the test session, the researcher took notes and recorded the tester’s responses to the website (Ericsson & Simon, 1980). The feedback received included simple editorial changes and ideas for improvements to navigation and the flow of the activities. Suggestions were made for pedagogical-type readings to improve the theoretical content of some activities and some prompts for participants to make journal entries were added. The suggestions from these evaluation sessions were carefully considered and those that were thought would improve the website and its activities were implemented to produce the final iteration of the RPW.

**Summary of Pilot Study**

Based on the findings from this pilot study, adjustments were made to the data-gathering instruments and conditions to ensure that all instruments and processes were ethical, aligned to the study’s research questions and practical.

**Data Analysis Processes**

As the intention of the study was primarily exploratory rather than confirmatory (Robson, 2011, p. 419), case-oriented analysis and construction (Onwuegbuzie & Teddlie, 2003, p. 363) was the major focus of the data analysis processes. To investigate what each case revealed in relation to the research questions, the multiple sets of data for each case, or each ‘unit of analysis’ (Abbott & McKinney, 2013, p. 79), were analysed using a range of procedures (Ary et al., 2002, p. 440; Freebody, 2003, p. 83). This multi-pronged analysis approach ensured that each case was considered in singularity using an in-depth investigative approach (Freebody, 2003, p. 83). Although themes and trends were noticed across the five cases, the focus of the study was to investigate five individual cases. For this reason, the focus of the data analysis was on the individual case level rather than the collective group of cases: ‘Qualitative researchers ... are committed to an emic, idiographic, case-based position that directs attention to the specifics of a particular case’ (Denzin & Lincoln, 2005, p. 12).

The four-stage case study plan offered by Robson (2011) to guide the management and analysis of the case study data was adopted to ensure that the case study data analysis processes were aligned with the research questions. His case study plan involves, firstly, providing an overview of the information about the project and its issues. This information has been provided in this chapter and the following chapters.
Next, Robson (as does Walcott, 2001, p. 91) suggests that the case study researcher outline in detail the procedures, resources and timeframes of the study, as has been done in this chapter. Questions are then revisited with associated evidence (see Chapters 4–8), leading to the final stage of the case study method, reporting (Robson, 2011, p. 141), in Chapters 9 and 10.

As the case study data comprised both qualitative and quantitative data, the relationship between these two types of data required attention before beginning the data analysis processes. As Onwuegbuzie and Teddlie (2003, p. 365) suggest, the mixed methods researcher is required to make a decision about the dominance of the qualitative and quantitative data, based on the research purpose. Since a case-oriented analysis (Onwuegbuzie & Teddlie, 2003) rather than a variable-oriented analysis was the focus of this study, and because answering the research questions necessitated the exploration of qualitative data over and above quantitative data, the analysis of the qualitative data dominated that of the quantitative data. As the purpose of gathering both sets of data, qualitative and quantitative, was data triangulation, the parallel mixed analysis method was used (Onwuegbuzie & Teddlie, 2003, p. 365) to analyse and then integrate the two separate sets of data (Ary et al., 2002, p. 440; Robson, 2011, p. 476).

Along with the study’s research questions, the following theoretical propositions (Yin, 2009) provided a starting point for analysing the data gathered in this study:

- teaching conceptions influence a teacher’s practices;
- neophyte teachers typically undergo development of their COTs;
- reflective practice provides a mechanism by which teachers can systematically consider their views in conjunction with the views of others; and
- conceptual change is evident in a teacher’s beliefs, intentions and practices.

These theoretical propositions ensured that the data analysis methods were closely aligned to the research focus and research questions. Table 13 outlines how each set of gathered data were analysed in relation to the overall research questions of the study. This table extends the focus of Table 10 (p. 87) by incorporating the data analysis processes employed, in conjunction with the research questions and data collection processes.
Table 13
Alignment of Data Analysis and Collection Methods with Research Questions

<table>
<thead>
<tr>
<th>Research question</th>
<th>Data gathering method</th>
<th>Data were analysed by</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1 What COTs are held by each neophyte before the</strong></td>
<td>Semi-structured interviews with five participants at the beginning of the semester, before the intervention.</td>
<td>Collating, transcribing and organising data from initial interviews. Coding and thematic analysis of data from initial interviews.</td>
</tr>
<tr>
<td><strong>intervention?</strong></td>
<td>Administration of TPI questionnaire to five participants at the beginning of the semester, before the intervention.</td>
<td>Collating, organising and analysing data for each case from first administration of TPI to determine demographic detail, comparison of descriptive statistics and participants’ dominant, recessive and backup teaching perspectives at the beginning of the semester.</td>
</tr>
<tr>
<td></td>
<td>Extracts of personal journals from five participants throughout the semester, during the study.</td>
<td>Collating, organising and analysing data from personal journals.</td>
</tr>
<tr>
<td><strong>1.2 What COTs are held by each neophyte after the</strong></td>
<td>Semi-structured interviews with five participants at the end of the semester, after the intervention.</td>
<td>Collating, transcribing and organising data from initial interviews. Coding and thematic analysis of data from final interviews.</td>
</tr>
<tr>
<td><strong>intervention?</strong></td>
<td>Administration of TPI questionnaire at the end of the semester, after the intervention.</td>
<td>Collating, organising and analysing data for each case from second administration of TPI to determine demographic detail, comparison of descriptive statistics and participants’ dominant, recessive and backup teaching perspectives at the end of the semester.</td>
</tr>
<tr>
<td></td>
<td>Extracts of personal journals from five participants throughout the semester, during the study.</td>
<td>Collating, organising and analysing data from personal journals.</td>
</tr>
<tr>
<td>Research question</td>
<td>Data gathering method</td>
<td>Data were analysed by</td>
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<tr>
<td>-------------------</td>
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</tr>
<tr>
<td><strong>1.3 How did each neophyte change his or her COTs?</strong></td>
<td>Semi-structured interviews with five participants at the beginning of the semester, before the intervention, and at the end of the semester, after the intervention. Administration of TPI questionnaire at the beginning of the semester, before the intervention, and at the end of the semester, after the intervention. Extracts of personal journals from five participants throughout the semester, especially at the end of the study. Collated data (interviews, TPI, journals).</td>
<td>Cross analysis and comparison of codes and thematic structures from initial and final interviews. Cross analysis and comparison of analyses from the first and second administration of the TPI using descriptive statistics, to determine changes in participants’ dominant, recessive and backup teaching perspectives. Analysis of personal journal data. Collated data (interviews, TPI, journals). Triangulation of data analyses from interviews, personal journals and TPI responses.</td>
</tr>
<tr>
<td><strong>2.1 How did the interventional program of reflective practice influence the neophytes’ COTs?</strong></td>
<td>Semi-structured interviews with five participants at the end of the semester, after the intervention. Administration of TPI questionnaire at the end of the semester, after the intervention. Extracts of personal journals from five participants throughout the semester, especially at the end of the study. Collated data (interviews, TPI, journals).</td>
<td>Focus on change illustrated from cross analysis and comparison of codes and thematic structures from initial and final interviews. Focus on change illustrated from cross analysis and comparison of analyses from the first and second administration of the TPI, using descriptive statistics. Analysis of personal journal data to identify change. Triangulation of data analyses from interviews, personal journals and TPI responses.</td>
</tr>
</tbody>
</table>
The overall approach to data analysis during this study was systematic and rigorous (Wolcott, 2001, p. 33). The data analysis process recognised the singularity of each set of data (Ary et al., 2002, p. 440), while integrating these sets according to the following data management procedures:

- collation, transcription and organisation of data for each case;
- coding of qualitative data for each case;
- statistical analysis of quantitative data for each case;
- collation of case-by-case data analyses; and
- triangulation of data and data analyses for each case.

Each of these stages of the data analysis processes is now explained in detail.

**Collation, Transcription and Organisation of Data for Each Case**

Before the data analysis processes began in-depth, the researcher became familiar with the data by collating each set of data gathered from the interviews with the participants, their responses to the TPI questionnaire and the comments recorded in their personal journals. The researcher became immersed in the data (C. Marshall & Rossman, 2006, p. 158). Where required, these data were transcribed, organised and stored according to each of the five cases.

The management of the data gathered during this study was undertaken with three main criteria in mind (Miles & Huberman, 1994, p. 45):

1. storage mechanisms should ensure the accessibility of the data during the study;
2. documentation should be created to record what analyses had been undertaken; and
3. retention strategies should be planned for future access to data after the study was completed.

Since most of the data were electronically gathered, their storage and backup were organised within digitised folders, categorised by case and data type. Computerised methods were used to ensure that the data were systematically stored and collated, to facilitate easy retrieval and categorisation according to each of the five cases (Bazely, 2003). Electronic files were labelled using a consistent case-based approach, using the case number, the pseudonym of each case and the type of data collected (for example, Case_1_Anita_Initial_interview.doc). These organisational systems to transcribe, collate and store data were applied systematically across each of the five cases (Mason, 2006, p. 147) to ensure that, in answering the research questions, each case was
considered with similar lenses throughout the study (Mason, 2006, p. 165). This method also facilitated the cross analysis of data for each case that was required when the data were triangulated.

The interview data were recorded in audio format using a digital recorder. These audio data were then transcribed and stored in word-processed electronic documents. The data gathered from the participants’ journals were extracted from the RPW and stored in electronic word-processed documents in folders according to each of the five individual case studies. These journal extracts were summarised by the researcher, before key quotations and comments from each journal were noted for use to lend illustration to each case’s thinking during the reflective practice activities.

Demographic information collected from the TPI (items 1–45) provided background data about the participants’ work routines, primary employment roles, institution, location, first language, qualifications, experience in teaching, employment background, specialisation and gender. These data were used to compile summaries of each of the participants, which are given in Chapters 4–8 along with the results for each of the cases.

The data collation and analysis processes were undertaken with the intention to reduce (Robson, 2011, p. 357) and condense (Patton, 2002, p. 158) the raw data to draw out its essence (Rapley, 2011, p. 283). Since the findings of this study are not intended to be generalised across the population of all neophyte tertiary teachers, each of the cases in this research was analysed comprehensively in singularity. As suggested by Stake (2005): ‘the purpose of a case report is not to represent the world, but to represent the case’ (p. 460). In this way, enough detail has been provided about each case in this thesis for readers to compare the cases researched in this study with cases encountered in their own contexts.

**Coding of Qualitative Data for Each Case**

As the most important data gathered during this study were the qualitative data, especially those from the interviews, these data were analysed first, where possible. The analysis of these data enabled the researcher to investigate each of the participants’ ‘actions and the purposes and intentions that inform those actions’ (McNiff & Whitehead, 2002, p. 33). The analysis of the qualitative data gathered during the in-depth, semi-structured interviews allowed the researcher to gain insight into the ‘actor’s perspective through detailed interviewing’ (Denzin & Lincoln, 2005, p. 12). Later in the study, the analyses of the interview data were compared with the analyses of the TPI data, as well as the data gathered from the participants’ personal journals.
The data for each case were thus collated, managed, packaged, aggregated and analysed, summarised, compared and triangulated to provide explanatory frameworks of the COTs held by each participant at two key data-collection points, the changes in their conceptions and the influence on COT change of the interventional program of reflective practice (Miles & Huberman, 1994, p. 92). Accordingly, the outcomes of these analyses provide answers to the research questions.

Analysis of interview data.

The interview data were analysed in a way that allowed the participants’ voices to be maintained through to the final stages of analysis, enabling the researcher to extract the essence of the participants’ meaning as communicated through these interviews (Freebody, 2003, p. 155). A mixture of deductive and inductive coding processes (Abbott & McKinney, 2013; Creswell, 2009; Patton, 2002; Robson, 2011; Tashakkori & Teddlie, 2003) were used to analyse the data gathered from the participant interviews. The interview data were analysed initially at two levels, using:

1. a top-level thematic structure that had emerged from a review of the literature about COTs held by tertiary educators; and
2. a secondary-level thematic structure that emerged from the process of coding each of the participant’s comments, offered during semi-structured interviews at two data-gathering points during the study.

The top-level thematic structure used to code the interview data initially (see Table 14) consisted of 11 COTs drawn from a review of the research studies that had previously identified sets of teaching conceptions held by teachers in the tertiary education sector. This includes:

- Chickering and Gamson’s (1987) seven attributes of good teaching;
- Entwistle and Tait’s (1990) nine aspects of good teaching;
- Samuelowicz and Bain’s (1992) COTs held by academic teachers; and
- the COTs identified by Martin and Balla (1991), Dall’Alba (1991), Pratt (1992) and Marton, Dall’Alba, and Beaty (1993).

For a more comprehensive account of the COTs identified in the previous literature, see Table 2: Categorisations of COTs, on page 29 in Chapter 2: Review of the Literature.
Table 14

*Top-level Thematic Structure of COTs used in Coding Interview Data*

<table>
<thead>
<tr>
<th>COT</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>COT 1</td>
<td>Awareness of COTs</td>
</tr>
<tr>
<td>COT 2</td>
<td>Sees teaching as a social process</td>
</tr>
<tr>
<td>COT 3</td>
<td>Facilitating and organising learning</td>
</tr>
<tr>
<td>COT 4</td>
<td>Behaviour management</td>
</tr>
<tr>
<td>COT 5</td>
<td>Developing minds</td>
</tr>
<tr>
<td>COT 6</td>
<td>Assessments</td>
</tr>
<tr>
<td>COT 7</td>
<td>Fostering understanding</td>
</tr>
<tr>
<td>COT 8</td>
<td>Evaluates teaching practices</td>
</tr>
<tr>
<td>COT 9</td>
<td>Engaging students</td>
</tr>
<tr>
<td>COT 10</td>
<td>Practitioner of teaching</td>
</tr>
<tr>
<td>COT 11</td>
<td>Preparation and materials</td>
</tr>
</tbody>
</table>

These 11 predetermined themes were used as the first point of analysis of the data gathered during the interviews with each participant. These literature-based themes were used as a set of codes that enabled the researcher to identify themes in the participants’ comments that resonated with themes that emerged from previous literature. However, to ensure that new themes evident in the participants’ interviews were not overlooked, an emergent coding process was also used to identify any evident sub-themes.

The interview data were then analysed at a secondary level by case, which allowed the researcher to identify and label the underlying sub-themes that represented the views held by the individual participants. Consideration was taken of Charmaz’s (2006, p. 55) on the use of *in vivo* codes to preserve the meaning of participants’ perspectives. Where possible, *in vivo* codes (Creswell, 2009, p. 186; Strauss, 1987; Strauss & Corbin, 1998) were used to retain the original voices of the participants. These emic codes (Denzin & Lincoln, 2005, p. 12; Schultz, 2008, p. 360) ensured that the insider views of the participants remained at the forefront throughout coding and that they were retained in the thematic tree structure that emerged from the coding process. The sub-themes that emerged from this analysis represented the actual COTs of each participant, while the 11 themes drawn from previous literature served as a top-level categorisation (see Appendix 15: Thematic structure of interview coding). By using a combination of codes that were evident in the data and codes that emerged from
the data, the framework used to guide the coding process was not too ‘tight’ or too ‘loose’ (C. Marshall & Rossman, 2006, p. 208).

Robson’s (2011, p. 476) phases of thematic coding analysis were used to guide the process of applying both the predetermined codes (deductive analysis) and the emerging codes (inductive analysis) to each segment of interview data. These phases were also informed by advice provided by other qualitative researchers including Miles and Huberman (Miles & Huberman), Yin (2009), Creswell (2002), Patton (2002), Denzin and Lincoln (2005), Freebody (2003) and C. Marshall and Rossman (2006). The phases that guided the thematic coding analysis are outlined in Table 15.

Table 15

<table>
<thead>
<tr>
<th>Phase</th>
<th>Phase description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Familiarisation with the data</td>
<td>During this stage, I transcribed the data verbatim, stored the data according to each case, read and re-read the data, made memos about initial observations of the data and noted questions that occurred as I immersed myself in the data. At this stage of the research, the theoretical propositions (Yin, 2009) provided a starting place for how to interpret the data gathered in this study. These theoretical propositions were outlined in the Data Analysis Processes section in this chapter.</td>
</tr>
<tr>
<td>2: Generation of initial codes</td>
<td>A predetermined framework comprised of top-level themes from previous literature was used to label corresponding pieces of interview data from each participant. Inductive codes were also identified through further interaction with the data. Each extract from each interview with each participant was allocated codes from the predetermined literature-derived framework or according to codes that emerged through the analysis process.</td>
</tr>
<tr>
<td>3: Identification of themes</td>
<td>The 11 themes from the literature on COTs were maintained to establish a common structure across all of the five participants’ sets of data. However, the codes that emerged from each individual participants’ interview data were renamed, collapsed, combined or divided to form categories to ensure that the participants’ voices were accurately presented in the final thematic network. Initial codes were revised and checked against the meaning of each piece of data. Irrelevant or insignificant codes were identified by comparing their relevancy to the research questions, and these were removed from the data set during this phase.</td>
</tr>
<tr>
<td>Phase</td>
<td>Phase description</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------</td>
</tr>
<tr>
<td>4: Construction of thematic networks</td>
<td>Connections between codes were established, following reorganisation of codes into relational groups. The relationships between and across codes were used to create these thematic networks. These were represented in holistic tables that represented a thematic map of each participant’s COTs at the beginning and end of the semester in which the study was undertaken. Thematic maps comparing the initial and final COTs for each participant were considered by case, to answer the research questions of the study.</td>
</tr>
<tr>
<td>5: Integration and interpretation</td>
<td>The conclusive step in coding the interview data enabled the researcher to make comparisons between the data sets gathered for each participant and, consequently, to demonstrate the quality of the analysis and the findings of the study. Data analyses were integrated and interpreted to answer the research questions and to present the detailed findings about each case in Chapters 4–8 of this thesis.</td>
</tr>
</tbody>
</table>

Transcripts of the interviews were entered into a computer software package (Hyper Research 2.6) and coded for qualitative analysis. By undertaking much of the data analysis procedures using computer software, this enabled comprehensive and methodical coding of the qualitative data. Further, this process ensured that the analysis of the data was as streamlined as possible and that each piece of data was treated in a systematic and rigorous manner (Bazely, 2003). As the coding for each case was conducted, the use of increasingly refined or higher-level summaries (Miles & Huberman, 1994, p. 11; Onwuegbuzie & Teddlie, 2003, p. 373) were used as a data reduction method to condense the meanings gleaned from each stage of analysis of the qualitative interview data.

**Personal journals.**

The personal journal entries of each participant represented additional data. However, each participant’s journal data were not analysed using the same methods employed to analyse the qualitative interview data. The reasons for this decision lie in the purpose, use and final format of the personal journals throughout this study.

As the journals were used primarily as an open-ended tool for participants to work through the activities on the RPW rather than as a gauge of their conceptual status before, after or during the intervention, they were not interpreted as a definitive chronological representation of the progressive development of the participants’
teaching conceptions. Moreover, as the online journals were administered as a blog, the participants were able to return to edit their journal entries at any time. Although this functionality meant that the journals represented a strong open-ended space for participants to record their reflections (Abbott & McKinney, 2013, p. 42), it also meant that the timestamp on journal postings reflected the participant’s most recent edit of that post, rather than being an accurate chronological representation of the progression of the participant’s thoughts. As such, the journal data were used to supplement the findings that emerged from a combined analysis of the interview data and the TPI questionnaire data.

Statistical Analysis of Quantitative Data for Each Case

Many researchers who have used the TPI (Hubball et al., 2005; Wang, 2012; Wiesenberg & Stacey, 2006) have compared the responses to TPI items from a large group of participants on a number of administrations of the instrument. This study, however, was not designed to make comparisons across a group, but rather to explore the experiences of five individual neophyte tertiary teachers (Baxter & Jack, 2008, p. 544). Likewise, the research questions in this study were not focused on comparison across groups of many cases, but on comparison within individual cases. Therefore, the data gathered through the two administrations of the TPI were compared for each case, rather than across all cases.

TPI Questionnaires

The raw data that resulted from the participants completing the TPI questionnaire were analysed to determine the scores of each participant at two points in the study (the beginning and the end of the semester) according to the five teaching perspectives held by each participant:

- transmission;
- apprenticeship;
- developmental;
- nurturance; and
- social reform.

The results of each case from the TPI were interpreted according to the author’s guidelines (Pratt et al., 2001). The analyses of each of the five participants’ TPI responses provided information about their dominant (main), backup (supporting) and recessive (background) teaching perspectives at each of the two data-gathering points.
For each set of data, the individual participants’ scores were considered by case, rather than across cases.

An example is now provided of how the participants’ TPI profile data were used. Analysis was according to the five perspectives of teaching incorporated into the TPI and these perspective’s sub-scores on beliefs, intentions and actions. Actual data from Case 5: Mary is used for the following examples. Here, the purpose is to explain the analysis method; the full analytical narratives are included in the results chapters (Chapters 4–8).

To increase the penetrability of the TPI profile scores, and to present deeper comparisons more clearly, the results for each case were transferred into a spreadsheet. This allowed particular aspects of the profiles to be examined more easily. Table 16 shows how the perspective scores for the two TPI iterations for Case 5: Mary were presented. The difference in the perspective scores between the two time points is clear. Table 16

<table>
<thead>
<tr>
<th>TEACHING PERSPECTIVES</th>
<th>Transmission</th>
<th>Apprenticeship</th>
<th>Developmental</th>
<th>Nurturance</th>
<th>Social Reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>INITIAL</td>
<td>35</td>
<td>29</td>
<td>33</td>
<td>36</td>
<td>29</td>
</tr>
<tr>
<td>FINAL</td>
<td>35</td>
<td>33</td>
<td>33</td>
<td>41</td>
<td>29</td>
</tr>
<tr>
<td>Difference</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

Further classification of each of the teaching perspectives in the TPI allocated three component dimensions to provide sub-scores on beliefs, intentions and actions. The sub-scores of a perspective combine to form the total score for that perspective. The dimension sub-scores show how a respondent’s perspective scores are constituted, expanding the depth of analysis possible for each respondent’s profile (see Table 17).

The authors of the TPI, Pratt and Collins, explain the sub-scores as follows:

The sub-scores scores further help to identify [the participants] philosophy of teaching by highlighting whether their views within a perspective are grounded (differentially or equally) in what they believe, what they intend to accomplish, or what educational actions they undertake in their teaching settings. (2001a, para. 2)
Table 17

*TPI Perspective Sub-scores for Case 5—Pre and Post Study*

<table>
<thead>
<tr>
<th>PERSPECTIVE</th>
<th>INITIAL</th>
<th>FINAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beliefs</td>
<td>Intentions</td>
</tr>
<tr>
<td>Transmission</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Apprenticeship</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Developmental</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>Nurturance</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>Social Reform</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

The scores of each of the five perspectives are ranked relative to the personal mean and standard deviation of the total of all five perspectives (see Table 18), and correspondingly are classified as dominant (main), backup (supporting) or recessive (background) perspectives. Across the resulting rankings, a person usually holds one or two dominant perspectives, which are supported by one or two backup perspectives, while the remaining perspectives are deemed recessive. An example of the outcomes of the criteria given in Table 18 can be seen in Table 19.

Table 18

*Ranking Criteria for Teaching Perspectives*

<table>
<thead>
<tr>
<th>Perspective rank</th>
<th>Ranking criterion</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominant (main)</td>
<td>=&gt; The mean of all perspective totals + 1x standard deviation. (a)</td>
<td>Commonly people have one and sometimes two dominant perspectives.</td>
</tr>
<tr>
<td>Backup (supporting)</td>
<td>Between the mean of all perspective totals + 1x standard deviation and the mean of all perspective totals—1x standard deviation. (a,b)</td>
<td>Backup perspectives support the dominant perspective(s).</td>
</tr>
<tr>
<td>Recessive (background)</td>
<td>&lt;= The mean of all perspective totals—1x standard deviation. (b)</td>
<td>Commonly people have one recessive perspective.</td>
</tr>
</tbody>
</table>
Table 19

*TPI Perspectives Scores Showing Dominant, Backup and Recessive Rankings for Case 5*

<table>
<thead>
<tr>
<th>Rank</th>
<th>TEACHING PERSPECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transmission</td>
</tr>
<tr>
<td>INITIAL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dom</td>
</tr>
<tr>
<td>FINAL</td>
<td>35</td>
</tr>
<tr>
<td>CHANGE</td>
<td>0</td>
</tr>
</tbody>
</table>

The quantitative data from the participants’ responses to the TPI questionnaire at the beginning of the semester and at the end of the semester were reported using descriptive statistics. To discover whether any significant change had occurred between these two data-gathering points, t-tests were conducted with a significance level of 0.05. The scores for the five perspectives were classified as having dominant, backup or recessive strength in the neophytes’ thinking. In accordance with the usual way of scoring the TPI, the boundaries for dominant and recessive perspectives were calculated as +/-1 standard deviation around the mean for the five perspective scores of a participant, rounded to the nearest whole number. The perspectives lying between these demarcations became backup perspectives. Findings from these analyses were especially useful for answering questions 1.3 and 2.1 of the study.

**Collation of Data Analyses by Case**

The case study approach adopted to gather the data about each neophyte in this research meant that the analyses from each of the cases needed to be collated by case to gain a deep understanding of that individual case (Silverman, 2013, p. 125). The process of collating the data analyses by case required the researcher to correlate, consolidate, compare and integrate the data (Onwuegbuzie & Teddlie, 2003, pp. 376-377) to establish the study’s findings.

Once the interview data for each case had been analysed and the findings identified, the findings from the complementary analysis of the TPI data for each case were attached to those from the interview data analysis. Summaries were made each time a major set of data were analysed (for example, after analysing the interview data from Case 1), further contributing to the process of interpreting the findings from the data analyses (Miles & Huberman, 1994, p. 92). Some of these summaries have been
included in Chapters 4–8. Lastly, the findings from the analysis of the data from each participant’s personal journal were used to supplement the interview and TPI data findings. This interpretation of multiple data analyses for each case allowed the researcher to ‘step back and form some larger meaning about the phenomenon’ (Creswell, 2002, p. 277). These interpretations were used to construct the answers to the research questions for each case. Figure 20 illustrates this process of collating data analyses by case.

Figure 20. The collation of data analyses.

**Triangulation of Data and Data Analyses for Each Case**

Through the systematic gathering of data and rigorous methods of data analysis, the case-based findings of this study were strengthened by the ‘analytical rigour’ of triangulation (McNiff & Whitehead, 2002, p. 32). The process of triangulating the data and the data analyses conducted for each case enabled the researcher to support the findings of this study further:

Mixed methods data analyses offer a more comprehensive means of legitimating findings than do either qualitative or quantitative data analyses alone by allowing analysts to assess information from both data types. (Onwuegbuzie & Teddlie, 2003, p. 363)

For this study, the type of triangulation used was methodological (Denzin, 1970), which involves ‘a complex process of playing each method off against the other so as to maximize the validity of field efforts’ (p. 310). Methodological triangulation was achieved by utilising a quantitative tool (the TPI) to collect a secondary data source (Pratt & Collins, 2001d) to complement the gathered qualitative data (from the interviews and journals).
The resulting summaries of the qualitative and quantitative analyses were compared to reveal the similarities and differences between each set of data for each participant. The similarities identified by comparing the summaries of change in the participants’ TPI profiles were used to verify the trends of change in participants’ COTs identified by analysing the interviews for each participant. Finally, a summary of changes in conceptions was presented for each case. Triangulating the findings in this way helps to establish the validity of the study’s results and to clarify their meaning (Stake, 2005, p. 454) in relation to both the study’s overall results and other researcher’s findings (see Chapter 10: Discussion). The use of triangulation to strengthen the quality of the findings also ensured that the ethical stance of the researcher and the ethical use of research methods, as outlined in the following section, were upheld.

Ethics

The research study documented in this thesis followed Edith Cowan University’s ethics guidelines for research and was approved by the Edith Cowan University Human Research Ethics Committee. Before the study began, ethics clearance forms were completed and submitted to the Edith Cowan University Human Research Ethics Committee, including an information statement to participants and consent forms. The University’s Guidelines for Information Letter and Guidelines for Consent Form were used to assemble the information statement (see Appendix 1: Information Statements) and an informed consent form (see Appendix 2: Informed Consent Form). The ethics submission for this project addressed issues relating to participant selection and anonymity, participant–researcher interaction, data gathering and analysis procedures, data storage and confidentiality of records. Apart from the effort and personal confrontation that sometimes occurs during self-reflection, no obvious risks to participants in the study were identified. During the study, the Committee renewed and re-approved the ethics permission provided for this project to ensure that the project would be covered until its completion.

Rigorous attention was paid to all aspects of the project during the conduct of the research. Participation in the study was on a voluntary basis and all participants were given the option to withdraw from the project at any time. Regular contact was maintained with all of the participants throughout the study, and the researcher was available for support during the conduct of the program. The RPW, which participants accessed to contribute their data, was password-protected, and all face-to-face interviews were conducted in locations convenient to the participants. Pseudonyms are
used throughout this thesis, and all identifying details of the participants were changed before any reporting occurred, to ensure participants’ anonymity.

Timeline

The project was undertaken across four phases comprising multiple stages within each phase (see Table 20). The stages within each phase were not necessarily achieved in a linear manner, as the iterative nature of the research design required that some phases and stages were cyclical and flexible.

Table 20

*Project Timeline with Phases and Stages*

<table>
<thead>
<tr>
<th>Project phase</th>
<th>Stages</th>
</tr>
</thead>
</table>
| Phase 1: Preparation     | • Research question construction  
• Literature review  
• Methodology development  
• Ethics application  
• Design and development of the interventional program of reflection practice, including the RPW  
• Instrument design, selection and trial  
These stages were achieved during November 2005 and March 2006. |
| Phase 2: Data gathering  | • Enlistment and organisation of participants  
• Participants’ engagement in the interventional program of reflection practice, including the RPW during one semester and slightly beyond the semester, to enable reflective practice regarding end of semester issues  
• Interviews with participants at the beginning and end of the semester  
• Some transcription of interviews  
• Initial memoing and some coding of qualitative data  
• Regular revision of study’s research design, based on emergent design principles  
These stages were achieved during April and December 2006. |
| Phase 3: Data analysis   | • Data collation, de-identification and transcription of interview data and personal journal data  
• Collation and de-identification of questionnaire (TPI) data  
• Categorisation of data  
• Statistical coding and analysis of quantitative data  
• Coding and analysis of qualitative data  
• Triangulation of all sets of data  
These stages were achieved during January 2007 and April 2007. |
| Phase 4: Data reporting  | • Writing up of thesis  
• Review of thesis  
• Attention to examiners’ comments  
• Final review and thesis completion.  
These stages were achieved during June 2007 and June 2014. |
Presentation of Results in Chapters 4–9

The following chapters, Chapters 4–9, present the results of the analyses of the data gathered during this study to answer the four research questions. Chapters 4–8 present the separate case study results for the five participants, each concluding with answers to the first three research questions (1.1, 1.2, 1.3) as they pertain to those cases.

For each case, the structure of the chapter is as follows. First, a brief introduction to the participant is given to ground the reader in that participant’s particular context. Findings are then drawn from an analysis of the semi-structured interviews. Trends of change across the interviews are identified. For the first case chapter (Chapter 4; Case 1, Hilary) full details for each theme analysed within the interview data are given. However, for the sake of expediency, the detailed version of each theme analysed within the interview data for the remaining four case studies (Cases 2, 3, 4 and 5) are located within Appendices 7, 9, 11 and 13, respectively. A summary of the trends of change (at the thematic level) from before the interventional phase to its end are then given, along with possible reasons for the changes.

Following analysis of the interviews, an analysis of the participant’s responses to the TPI (Pratt et al., 2001) is presented. Next, the interview and TPI data are triangulated to help to corroborate the changing COTs and the emerging trends revealed by analysis of the participant’s data. Lastly, the findings from an analysis of the participant’s personal journals are presented. As with the analysis of the data from the interviews, while the detailed version of the analysis is given in the body of the thesis for Case 1: Hilary, the analyses of the journals for the remaining four case studies (Cases 2, 3, 4 and 5) are located within Appendices 8, 10, 12 and 14, respectively. Each of the Chapters 4–8 concludes with a summary of findings that identifies the changes in the neophyte’s COTs from the beginning to the end of the study.

Chapter 9 answers the final research question (2.1): How did the interventional program of reflective practice influence the neophytes’ COTs? This chapter considers all five cases together. Finally, a discussion of these results in conjunction with previous research is presented in Chapter 10: Discussion.

Conclusion to Chapter Three

The overall methodological approach and specific research methods outlined in this chapter were informed by findings from an analysis of previous research into beginning university teachers’ COTs. Information on the methodologies used, and not used, to conduct these previous studies was used to refine the methodological choices of the researcher before the study began and during the time that the study was undertaken.
By adopting emergent design processes (Cavallo, 2000; Drew et al., 2008; Mason, 2006), the participants’ needs and backgrounds could be considered when developing and refining the methodological processes implemented throughout the study. This flexible design approach (Patton, 2002, p. 44) ensured that the participants’ varied interests and requirements could be integrated into the study as they emerged. Overall, the driving force of the methods selected for use in this study was the intention to answer the four research questions that initiated the study.

Chapters 4–8 provide answers to the first three research questions in relation to each of the five cases: Hilary (Chapter 4), Laura (Chapter 5), Ben (Chapter 6), Anita (Chapter 7) and Mary (Chapter 8). The answer to the fourth research question is provided in Chapter 9.
CHAPTER FOUR
CASE 1, HILARY

This chapter provides an account of the results of this study that specifically answer the first three research questions about Case 1, Hilary:

1.1 What COTs are held by Hilary before the intervention?
1.2 What COTs are held by Hilary after the intervention?
1.3 How did Hilary change her COTs?

The answers to these questions are drawn from an analysis of Hilary’s interview data, followed by an analysis of her responses to the TPI. These two sets of analyses are then triangulated to confirm the findings. The data from her personal journals have also been used to supplement these findings. The chapter closes with a summary of findings about Hilary, along with answers to the above three research questions. This structure is depicted in Figure 21.

Background: Case 1, Hilary

Hilary is a sessional teacher who has been teaching undergraduate students for four years. She holds an honours degree in marketing and at the beginning of this study was a second-year PhD candidate. Hilary has no formal teaching qualifications, but feels confident in carrying out her teaching duties. She is hoping to be a committed career academic, but is also preparing to take another direction if she finds it difficult to secure a position after graduating with her doctorate. Hilary currently teaches in the undergraduate program of communications in the major of advertising and marketing.

Findings from an Analysis of Interview Data: Case 1, Hilary

Interviews were conducted with Hilary to uncover the COTs that she held at the beginning and end of this study. Eleven main themes were employed to categorise the COTs that emerged during those interviews. The emergent nuances and traits of Hilary’s thoughts, which I call the actual COTs that Hilary held, were designated as sub-themes during the coding process and appropriately grouped under the relevant main themes. Hilary’s responses touched on issues that traversed sub-themes ranging across all of the 11 main themes used in the analysis. Some of these themes and sub-themes were evident in the initial interviews, but more were evident in the final interviews. A summary of the main themes and pertinent sub-themes traversing the COTs revealed during the analysis, with indications of their presence in the initial and final interviews, are outlined in Table 21.
Figure 21. Progressive structure used for this case chapter.
<table>
<thead>
<tr>
<th>COTs</th>
<th>Initial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COT 1 Awareness of COTs</strong></td>
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<td>Different teaching styles for different learning styles</td>
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<td>Changing students</td>
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<tr>
<td>Challenging conceptions</td>
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<td>Conceptions changed</td>
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<td><strong>COT 2 Sees teaching as a social process</strong></td>
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<td>Develops cooperation among students</td>
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<td>Fellow learners</td>
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<td>Friendly with students</td>
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<td>Rapport</td>
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<td>Accentuate the positive</td>
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<td>Good communications</td>
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<td><strong>COT 3 Developing minds</strong></td>
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<td>Empathy towards student</td>
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<td>Reshape students visions of the world</td>
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<td>Student-centredness</td>
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<td>Equal treatment</td>
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<td>Mentoring</td>
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<td><strong>COT 4 Fostering understanding</strong></td>
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<td>Imparting knowledge</td>
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<td>Deep understandings</td>
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<tr>
<td>Connections between various opinions and ideas</td>
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<td><strong>COT 5 Preparation and materials</strong></td>
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<td>Preparation</td>
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<td>Organisation of learning</td>
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<td>Examples and explanations</td>
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<td>Content control</td>
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<td>Up-to-date material</td>
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<td><strong>COT 6 Engaging students</strong></td>
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<td>Involving students quickly</td>
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<td>Discussion</td>
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<td>Engagement</td>
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<td>Expects student effort</td>
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<td>Motivation</td>
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<td><strong>COT 7 Facilitating and organising learning</strong></td>
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<td>Facilitator</td>
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<td>Responsibility for learning</td>
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<td>Advance organising</td>
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<td>Bridging the gap between theory and practice</td>
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<td>Responsibility shared</td>
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Following are the detailed outcomes of an analysis of Hilary’s interviews. These outcomes are presented with the most pertinent quotations that reveal her COTs and how her COTs changed, with clarification and suggestions to aid in understanding her thinking.

The quotations and associated interpretive comments below cover each of the 11 themes used to analyse Hilary’s interview data. Representative examples are provided for most of the sub-themes that emerged from this analysis, but not for all of the sub-themes that were evident as outlined in Table 21 above.
Theme 1: Awareness of COTs

Different teaching styles for different learning styles.

During the semester, Hilary became more aware of different learning styles; in the final interview, she displayed an appreciation for the individual learning perspectives of students. Hilary’s ability to observe a student attribute that aided identification of a student’s learning style demonstrated her growing capacity for student-centred awareness:

Yeah, and often it will be something linked to his learning style, and that’s why he’s a surface learner.
(Final interview with Hilary, Case 1, theme 1)

Further, Hilary used her recently acquired understanding of different learning styles to recognise the learning proclivities of her students, which assisted her in identifying and implementing appropriate changes to her teaching and learning environments and practices:

I’ve been able to take those theories of the different learning styles, and I am then applying that, and I suppose that’s the same thing as reflective practice. I look for needs in my students and see how I can tweak things to them really.
(Final interview with Hilary, Case 1, theme 1)

Changing students.

Hilary did not mention changing students’ views of the world in her initial interview; however, during the final meeting, she noted how her students’ changing viewpoints were changing them. She also noted students’ appreciative exclamations of perceiving ‘a whole new world’ and acknowledged their learning advances:

I noticed that by the end of the semester they had changed their minds completely, and that they feel, ‘Oh, this is a whole new world’, and ‘wow, we’ve learned this’. And they are completely different by the end of the unit.
(Final interview with Hilary, Case 1, theme 1)

Hilary also spoke of changing students’ views as a valuable opportunity for her to shape graduates, to improve the ethical and philosophical approaches of her students towards the industry they were headed for:

I feel good about it. I don’t know, I suppose, I feel like I’m adding something. I’m doing something that’s positive and worthwhile ... I can shape them to some degree. I can shape the graduates that come out, particularly if they are marketers. To do it better and help them see how the kinds of things that they do effect everything. So, I feel almost like there is an opportunity to change things.
(Final interview with Hilary, Case 1, theme 1)
Challenging conceptions.

Later in her final interview, when considering the most important contributions she can make to her students, Hilary described an attempt to deepen the understanding of her students’ learning by challenging the conceptions they held and encouraging them to consider deeper aspects of the subject that they were studying. For instance, in a marketing unit, she presented a broader conception of advertising as the ‘selling of ideas and objectives’, rather than simply ‘selling’:

They come away with another idea, when they hadn’t thought that marketing could be about trying to get people to quit smoking. That kind of thing. They all thought it was just about selling.
(Final interview with Hilary, Case 1, theme 1)

Conceptions changed.

In the final interview with Hilary, she revealed some of her changing conceptions concerning the objectives she sets for her students. Hilary confessed that she can ‘lose sight’ of the unit’s goals, but that her involvement in this study had broadened her thoughts and consideration of how her intentions of practice might be better achieved in her actual teaching:

For me … I’ve got to remind myself that I don’t always have to be friends [with the students]. I don’t always have to be liked. That’s probably something I’ve realised doing this, doing your project. To realise that, you know, objectives that I’m looking at and making sure that they get what they have to get out of the unit, to go on. Sometimes I can lose sight of that.
(Final interview with Hilary, Case 1, theme 1)

Hilary tells how her participation in this study has ‘forced’ her to reflect, and how through her involvement she has realised that reflection is a process that can be practised intentionally:

I do [reflect], but only because I have been forced to [during this study]. I wouldn’t have even thought that it existed as a practice, unless I was doing this [study]. So, you naturally reflect, don’t you? You naturally reflect on how something has been.
(Final interview with Hilary, Case 1, theme 1)

When questioned further on the benefits of reflection for her teaching, Hilary spoke about her new understanding of different learning approaches and how it changed her appreciation of the different impetuses students have for participating in her unit. She linked a student’s intrinsic motivation to their overall degree structure, perceiving that those students who enrol in her unit as an elective will possess a lower intrinsic motivation than those for whom the unit is a core course component:
I think that again, it relates to what I’ve learned on the website, that I think it enables me to see different students, and that I’m not necessarily bundling them all into one idea of what I want them to be. That they’re different, because they’re motivated by these things, where somebody else is motivated by something different. So it’s helped me to see that there are different reasons that those students are sitting on those seats, and that they can’t necessarily change. In the same way, they have to work with what they’ve got [speaking in the name of the students]. And I (as a teacher) have to accept that that student doesn’t want to be here, he just wants to be an accountant. So, if I can inspire them to see that even if they’re an accountant they can use marketing, but I’m not necessarily going to get him as involved as somebody I know that actually knows what they want to do.

(Final interview with Hilary, Case 1, theme 1)

In the final interview with Hilary, she stated that her involvement in the study had forced her engagement with certain teaching theories. She expressed surprise at the greater understanding this had generated for her:

I was forced to learn something about teaching theory and at the end of it, I thought, ‘Oh wow, I can see that’. Particularly in those different styles of learning and levels ... I can’t quite remember the names but I know what they are.

(Final interview with Hilary, Case 1, theme 1)

When Hilary was asked whether she felt that her conceptions had changed over the semester, she replied affirmatively, adding that whereas previously she had experienced difficulty in analysing teaching events, she now felt more capable of recognising the real issues and understanding them with some basis in theoretical knowledge. She felt that her better perception, enabled by newfound theoretical understanding, would allow her to improve her teaching strategies in the future:

The answer would be yes, I do. It’s because of that understanding. Whereas before I might have been looking to try and explain why something was happening, but now I can pretty much pinpoint an answer ... like, that’s his style coming out, yeah. I think it’s important ... you can’t necessarily do that in one hit. You need to kind of develop that over time, so to recognise it and instantly have a strategy. Something I didn’t have right then and there, but it’s made me think about that for the future. So if I ever get to coordinate a unit, that I might have some better strategies.

(Final interview with Hilary, Case 1, theme 1)

**Theme 2: Sees Teaching As a Social Process**

**Develops cooperation among students.**

During Hilary’s initial interview, she espoused beliefs that a good teacher engages students and encourages them to interact with each other:
What makes an above-average teacher is someone that can engage with the students. Get them to interact.
(Initial interview with Hilary, Case 1, theme 2)

She also told of her desire to encourage students to share and collaborate among themselves, instead of simply interacting with the teacher as a sage:

And then normally the way it works is that they share their ideas with each other. I try to encourage the ‘each other’, rather than share it with me.
(Initial interview with Hilary, Case 1, theme 2)

**Fellow learners.**

In the initial interview, Hilary relayed her ideas about making students aware that they were fellow learners. She spoke of the detrimental effects of the hierarchy between teachers and students and focused on improving and lubricating the sociable ambience of the learning environment:

I always encourage them at that level. That we are all here to learn, including me. That’s something that I often say, ‘that I can learn from their perceptions of things just as much’. So I suppose that’s the way that I encourage them to communicate with me and, being completely honest, to get them on side. You know so that I’m not this high authority on everything.
(Initial interview with Hilary, Case 1, theme 2)

**Friendly with students.**

In the initial interview, Hilary ruminated that boundaries were sometimes necessary; however, she also displayed insecurity about her stance as a teacher:

I have to draw the line between friend and lecturer sometimes, maybe.
(Initial interview with Hilary, Case 1, theme 2)

However, in her final interview, Hilary reflected that being friendly with students is not critically important:

...but I think, as I’ve gone on. I’ve realised, it’s not all about being friends.
(Final interview with Hilary, Case 1, theme 2)

When questioned about improvements she could make to her teaching, Hilary strengthened her newly developed views about her friendliness with students, by explaining that popularity is not a prerequisite to good teaching:

If you are asking me about improvements, it would be recognising that there are more important things than being friends with the students. That’s the thing that I’ve learned most from all of this. That it is not a big popularity contest, which sometimes I have to admit I’m guilty of.
(Final interview with Hilary, Case 1, theme 2)
Between the initial and final interviews, Hilary seems to have externalised the popularity issues to the point that she could reflect on them professionally as a teacher.

**Rapport.**

In the initial interview, Hilary conferred that her recent experience as a student gave her the ability to speak to her own students with empathy. Her ability to empathise with students’ experience enhanced her ability to establish rapport with them:

I think my ability to speak to students like they are people and my understanding of what it means to be a student, because it’s not that long ago that I was an undergraduate.

(Initial interview with Hilary, Case 1, theme 2)

Initially, Hilary felt that if she established a good rapport with the students, it would increase the likelihood of students communicating any difficulties they were having and, in turn, help her to identify areas to revisit:

It’s not until you build a rapport that they feel comfortable saying, ‘I have no idea what that means’. Okay, great thanks for telling me, we will just go back over this.

(Initial interview with Hilary, Case 1, theme 2)

In the final interview, Hilary noted the importance of establishing rapport early in the semester with students to foster trust and continued learner participation:

I think it’s extremely important. I really do. I think there has to be that rapport and trustworthy process established in the first few weeks, otherwise you’ve lost them, in my mind.

(Final interview with Hilary, Case 1, theme 2)

Further, in the final interview she spoke of the importance of well-constructed social interactions between the teacher and students in making learning amenable:

And I learn as well, while I’m teaching. It really is a back and forth social thing. If constructed properly it really pushes [the student]. And it becomes more like a social gathering.

(Final interview with Hilary, Case 1, theme 2)

In both the initial and final interviews Hilary emphasised the importance of establishing rapport with students; however, in the final interview, her deeper understanding was reflected when she mentioned in more detail the processes that were required to establish an effective initiation of rapport.

**Accentuate the positive.**

In the initial interview, Hilary professed to promote a positive environment by reminding students ‘we are all here to learn’:
I always encourage them at that level. That we are all here to learn, including me.
(Initial interview with Hilary, Case 1, theme 2)

In the final interview, Hilary displayed a higher conceptual understanding of how to accentuate the positive aspects of learning by giving honest feedback. She gave a practical example of how she could add a positive dimension to the feedback she offered students and was able to facilitate learning progress in the process:

So this one [assignment] wasn’t so good but in this next one [assignment] you’ve got the chance to put all of those things into practice now and I’m sure that next time it will be fine.
(Final interview with Hilary, Case 1, theme 2)

**Good communications.**

In the initial interview, Hilary said that she communicated with students in a manner that reflected her own understanding of being an undergraduate student:

I think my ability to speak to students like they are people and my understanding of what it means to be a student, because it’s not that long ago that I was an undergraduate.
(Initial interview with Hilary, Case 1, theme 2)

At this stage, Hilary seemed to rely more on her experience of studentship than on an understanding of teaching theory and practice. She was teaching how she would like to be taught. Her own learning experiences also helped her as she began establishing rapport with her students.

**Theme 3: Developing Minds**

**Empathy towards student.**

Initially, Hilary felt that her empathy for her students revolved around her understanding of being a student herself in the recent past:

I think my ability to speak to students like they are people and my understanding of what it means to be a student, because it’s not that long ago that I was an undergraduate.
(Initial interview with Hilary, Case 1, theme 3)

In the final interview, Hilary mentioned empathy as one of the best traits of her teaching:

My understanding, my empathy and realism and I think I can deliver a pretty sound lecture.
(Final interview with Hilary, Case 1, theme 3)
Shelve egos.

In Hilary’s initial interview, she spoke about teachers’ egos and offered an example of her own experience as a student. She felt that it was important to treat students’ ideas as worthwhile contributions to avoid dampening their confidence to later ask questions and contribute in class:

...treating them like they have something worthwhile to say and to contribute. I mean, I have been in so many classroom environments, where there is no way I would have said anything, because ... you know ... the damn lecturer was so far up himself. You know. That I wouldn’t have dared.
(Initial interview with Hilary, Case 1, theme 3)

Caters for individual needs.

In the initial interview, Hilary spoke of catering for the individual needs of students in a very simple way:

I think being willing to provide further help for those that need it.
(Final interview with Hilary, Case 1, theme 3)

In the final interview, Hilary discussed her thoughts on the individual needs of students with a more complex understanding. She described part of the process she uses to check whether individual students are in fact coping:

On the fourth week, they would have a mini-assignment to do. Just two pages, which gives me an opportunity to look at their writing and what they need to improve. Then in week six I’ll address those and say, ‘This is what I have discovered about everything. Here’s how we can improve’.
(Final interview with Hilary, Case 1, theme 3)

Student-centredness.

In the final interview, Hilary mentioned legitimising the perspectives of students by helping them to realise that they all have some understanding of the subject arising from their own previous experiences. She felt that students were likely to participate more actively if they could see that their learning was enabling them to extend a subject on which they already had some knowledge:

One of the things that I always start by saying is that they are all the experts in their own right, because they are all consumers. They have been consuming since they were this high (knee-high to a grasshopper), so they have an understanding of consumption and that’s what Marketing 101 is really all about. How we have different consumption experiences.
(Final interview with Hilary, Case 1, theme 3)
Ethical development.

Hilary did not mention her students’ ethical development in the initial interview; however, in the final interview, she related an incident that outlined her perceived responsibility in this area:

We were talking about what marketing can do. What strategy we could come up with to promote a particular service or product, and he [a student] used the words, ‘and we could trick them’. And I nearly fainted at that point, obviously, because you know, and I made a little joke about covering ethics in week 12. Please don’t do that. But it is that way of thinking that they have even before they get to me. It’s my responsibility to say, ‘That’s not what it’s about, and perhaps if you think about it this way’.
(Final interview with Hilary, Case 1, theme 3)

Theme 4: Fostering Understanding

Deep understanding.

When considering deep understanding in the first interview, Hilary felt that many lecturers simply present content without further explanation, whereas she considered it important to explain content and to check for student understanding:

There are so many examples of lecturers just flicking through slides and they don’t really explain, or ask them [students], do you understand how this fits in.
(Initial interview with Hilary, Case 1, theme 4)

In the final interview, Hilary espoused that big-picture deeper learning can be achieved when the focus is taken off simply teaching students to pass a unit in favour of greater emphasis on learning holistically:

I think that there is too much focus on just getting them through, rather than introducing them to the full big-picture of the marketing world.
(Final interview with Hilary, Case 1, theme 4)

Connections between various opinions and ideas.

During the initial interview, Hilary conveyed her COTs as fostering understanding. She explained that she likes to set aside time at the beginning of a teaching session to revisit previous learning and combine understandings that might otherwise be isolated:

Yeah, and making sure that I have a five-minute start where I make sure that everybody is comfortable with where they are at. Because in Marketing 100, which is the unit I teach, all the other lectures are important to the next lecture. So they are not isolated topics, they all build on one another. So if something is not understood previously, then this one won’t be either. So I always spend that time recapping and looking forward.
(Initial interview with Hilary, Case 1, theme 4)
In the final interview, Hilary also mentioned how complex ideas could be linked by describing her practice of discussing the complexity of a matter, with the aim of revealing how it may be affected by other issues:

I’ll just say let’s stop there from minute, and just talk about this particular issue. And it’s almost when they can break and exercise something that we’ve been talking about, and see how complex and issue really is and all these other things that affect it. That works.
(Final interview with Hilary, Case 1, theme 4)

As with her thoughts on students’ abilities to combine understandings, in the final interview, Hilary outlined her view that students should reach a level of understanding at which they can consider and connect different opinions and ideas. She wanted students to be able to recognise underlying concepts, even though various models of that concept may be presented in different ways by different practitioners or, in the example that she provides below, in different textbooks. She provided this example to illustrate how she encouraged students to think about differences of opinion by promoting the connections between varying models of a concept:

Yeah. I’d be happy for my students to use any foundation marketing textbook, because they contained the same principles. I don’t want them to learn this framework, you know 1234 steps, when he talks about a six step model ... it doesn’t matter whether it is a four or a six stepped model. That was one of the confusing points ... someone had an old textbook, and they said, ‘Yours is a four stepped model, and his is a six step model, which one is right?’ Well, you need to be able to look at it and see that there is one step that has been combined and that that is the only difference between them. So you need to start thinking in that way.
(Final interview with Hilary, Case 1, theme 4)

**Theme 5: Preparation and Materials**

**Preparation.**

During the initial interview, Hilary offered her ideas on preparation for teaching. She felt that she had mastered the material, but there was always a need for preparation to ensure she was up-to-date with current happenings in the relevant industry:

The material is there. I know the material like the back of my hand. It’s just having to get those ... you know, making sure you’re up-to-date with the latest whatever is happening in marketing. It is the prep side of that really.
(Initial interview with Hilary, Case 1, theme 5)

In the final interview, Hilary said she was organised and had consciously prepared herself to a stage at which she felt she could present the material in a well-connected narrative:
My lectures are pretty well organised, in that I know which slide is coming next and so I know how to tie things together nicely. Maybe that’s just because I’ve done the units so many times, but I make a conscious effort of doing that when I’m preparing the lecture. So I almost know what I’m going to say.

(Final interview with Hilary, Case 1, theme 5)

Hilary’s final comment on preparation indicates the pressure she feels to be prepared for every eventuality during her teaching.

Like not knowing what to do, scares the life out of me.

(Final interview with Hilary, Case 1, theme 5)

**Examples and explanations.**

In the final interview, Hilary spoke of using practical examples in her teaching to help to foster better understanding:

So that’s normally the way the tutorial is run, and I’ll have some kind of practical exercise or example to pick up on.

(Final interview with Hilary, Case 1, theme 5)

**Content control.**

Hilary did not mention control of content initially, but in the final interview, she told of her desire to manage the content of her units. Hilary explained how she would prefer to implement her own methods and considered their success through what appeared to be a cyclical evaluation process:

I think it’s about how much control you’re given, and I don’t have any at this stage. So … in the future I hope that I will be able to look at some of these things and implement the way I’ve understood them to work, try them out and if they don’t work to look at other things, so … yeah. Hopefully.

(Final interview with Hilary, Case 1, theme 5)

**Up-to-date material.**

In the initial interview with Hilary, she considered the importance of materials being current:

I know the material like the back of my hand. It’s just having to get those … you know, making sure you’re up-to-date with the latest whatever is happening in marketing.

(Initial interview with Hilary, Case 1, theme 5)

In the final interview, Hilary related that the underlying theoretical knowledge taught in her unit does not really alter, but that the examples used to illustrate them do change and require regular revision:
Nothing changes much, but it gets outdated because there are new examples of this thing all the time, but the theory doesn’t change.
(Final interview with Hilary, Case 1, theme 5)

**Theme 6: Engaging Students**

**Involving students quickly.**

In the course of the initial interview, Hilary characterised her conceptions about the worth of involving students quickly. She felt that engagement was encouraged by treating their contributions as worthwhile:

...just treating them like they have something worthwhile to say and to contribute.
(Initial interview with Hilary, Case 1, theme 6)

In the final interview, Hilary espoused a broader understanding of the value of involving students, including the need for establishing student rapport and trust as catalysts for their engagement:

I think there has to be that rapport and trustworthy process established in the first few weeks. Get them involved otherwise you’ve lost them, in my mind.
(Final interview with Hilary, Case 1, theme 6)

**Discussion.**

In the initial interview with Hilary, she expressed her thoughts on the use of discussion with students in the learning environment. She gave the opinion that the subject she taught intrinsically encouraged students to be open-minded through using discussion strategies. However, she also felt it to be of paramount importance that she teach the students, so that they might achieve a certain passing standard, and that this need might override the benefits discussion can bring to learning:

I think that marketing is more open than other subjects. If we could say that ... you know, more open-minded as it encourages discussion and new ideas more than other subjects. But at the end of the day, I still see my job as having to get them up to this standard.
(Initial interview with Hilary, Case 1, theme 6)

In the final interview, when asked to describe a typical learning session (tutorial), Hilary included discussion as a fundamental part of her teaching practice:

And I then, we do, the tutorial exercise, where more than likely I’ll give them something to work on and to start with I make sure that they understand what the task is, and perhaps we read it together or throw around some ideas before they have to do something, and then generally they work in little groups, where they are discussing ideas to mix it up.
(Final interview with Hilary, Case 1, theme 6)
Moreover, as Hilary brought small discussion groups back to being a whole class, she utilised discussion further by suggesting they discuss as a group what they had talked about in their smaller groups:

- They do it in groups, maybe in pairs to begin with. Then I say, ‘Okay, let’s talk about what you have discussed in pairs’.
  
  (Final interview with Hilary, Case 1, theme 6)

**Engagement.**

When it came to considering engagement of students in their learning, Hilary was adamant that her classes were engaging, recalling her own experiences when she was a student of drifting away and losing concentration in classes. She attempted to combat this phenomenon in the classes she taught by presenting material in an interactive way that she felt encouraged the students to engage in the learning activities:

- I think because I’ve been through it as an undergraduate, and I remember the nodding off constantly, and maybe that’s why I am ... I mean, I’m not over the top. I don’t dance around the classroom or anything, but I think my students have always said to me at the end of the day, that it’s engaging, and that is one of the most important things for me. So my classroom is interactive. I would always describe it as interactive, more than anything.
  
  (Initial interview with Hilary, Case 1, theme 6)

Also in the initial interview, Hilary inferred that effective student engagement could be achieved by sharing her real-world experiences and that this made her more credible as a teacher:

- I was working solidly for about four years doing international marketing so, I was flying in and fly out ... to all sorts of different countries, and that always engages them, because I tell them stories about Dubai and going into Kuwait, and being confronted with the headdress... those kind of things. I think it makes them sit back and go, ‘Ah, maybe you do know what you’re talking about’.
  
  (Initial interview with Hilary, Case 1, theme 6)

Further, when asked about the attributes of an above-average teacher, Hilary suggested that engagement and interaction were of high importance:

- what makes an above-average teacher is someone that can engage with the students. Get them to interact.
  
  (Initial interview with Hilary, Case 1, theme 6)

In the final interview, Hilary again raised engagement as important, this time coupling it with the teaching strategy of questioning students to obtain feedback, rather than the more teacher-centred concern of presentation style she had discussed during her initial interview:
But in terms of techniques, I find the best thing that works for me is in the lecture to engage [the students] and to ask questions and to get them to give me feedback.
(Final interview with Hilary, Case 1, theme 6)

**Expects student effort.**

In the initial interview, Hilary said she held little expectation of her students in general, concentrating her comments on the less-motivated students:

I expect that they put their accounting brains and leave them at home and put on their marketing hats. That doesn’t always, you know ... and I know in the back of my mind that that is not going to always happen. That I am always going to get just those rote learners, who sit there and, no matter how many times you say ... they just sit there.
(Initial interview with Hilary, Case 1, theme 6)

In the final interview, Hilary was in the process of altering her conceptual stance. She suggested that she could base her judgements of what students could achieve on her expectations of a good student:

Exactly, so maybe I should work on a high-level student and base this question on what I expect from a good student.
(Final interview with Hilary, Case 1, theme 6)

**Motivation.**

When asked to consider student motivation in the initial interview, Hilary replied that, although it was important, she believed not all students want to be or could be motivated:

Yes, yeah, it’s important, but then again, I believe you can only motivate the ones that want [to be] … that are able to be.
(Initial interview with Hilary, Case 1, theme 6)

By the final interview with Hilary, she had tempered her conclusions about student motivation by changing from a conception that students either have or do not have an attribute or ability to be motivated, to the conception that she could try to motivate them, but that learning was ultimately up to them. This suggests she had come to believe that student dispositions are critical to successful motivation:

I can try and engage them and try and motivate them to learn, but I can’t make them learn.
(Final interview with Hilary, Case 1, theme 6)
Theme 7: Facilitating and Organising Learning

Facilitator.

Hilary did not mention teaching in a facilitator role in her initial interview; however, in the final interview she explained how she communicated her role in her students’ learning:

It’s a bit monotonous after a while, so I say this is the part where it’s your turn, and even though I am here to facilitate I want you to talk to each other. So that’s the part that I really stress in the tutorial, is that they get ideas and bounce things off each other.

(Final interview with Hilary, Case 1, theme 7)

Responsibility for learning.

In the initial interview, Hilary said she expected students to take responsibility for their own learning.

I expect them to take responsibility for their learning.

(Initial interview with Hilary, Case 1, theme 7)

By the final interview, Hilary’s stance on the responsibility for student learning was ultimately unchanged, although her expectations of students taking responsibility for their own learning had become mixed with the semester’s experience. Her comments showed a higher awareness of the separation of responsibilities between her responsibility to teach and students’ responsibilities to participate in their own learning:

Teaching is a responsibility and I suppose learning is a responsibility as well. I can’t make my students learn. I can try and engage them and try and motivate them to learn, but I can’t make them learn. So what’s the difference between teaching and learning? Nothing [said jokingly, but with frustration]. Well, teaching is my responsibility and that’s something I know I have to do. I try to get that response from them, but ultimately it’s their responsibility, whether they are going to take that on or not.

(Final interview with Hilary, Case 1, theme 7)

Advance organising.

In the initial interview, Hilary mentioned her conception of advance organising:

Well I suppose, I always start with recapping and what I call housekeeping. I suppose a lot of other people call it that as well. The recapping of what we’ve done and what we are looking forward to.

(Initial interview with Hilary, Case 1, theme 7)

At the other end of the semester, Hilary had maintained her view of advance organising, but she now extended her interpretation to include both her expectations and student understanding:
We recap where we’re up to and what we did last week, then what we’re looking at today and bringing them up-to-date with their calendars and whatnot. More than likely, I’ll give them the tutorial exercise and to start with I make sure that they understand what the task is overall ... perhaps we read it together or throw around some ideas before they have to do something.

(Final interview with Hilary, Case 1, theme 7)

**Bridging the gap between theory and practice.**

In the initial interview, Hilary considered her conception of bridging the gap between theory and practice. She explained that it is difficult to find case studies that adequately exemplify the connections between the theoretical and practical aspects of her course:

> There is so much theory in marketing, but it’s fun theory. It [the problem] is how to provide them with a case study that is blending practice and theory; that is quite difficult in Marketing 100. It’s something that they [the students] have commented on.

(Initial interview with Hilary, Case 1, theme 7)

In the final interview, Hilary responded that her students expected her to construct links between the theory and practice, but that in the end the important thing for her was to turn out graduates who could ‘do’ rather than ‘know’. Hilary was struggling with the juxtaposition that exists within good teaching and learning, between the need to ‘know’ factual content or concepts and the need to achieve higher-order thinking that is elemental to good learning and critical for ‘doing’ when confronting new situations:

> I think they expect that there should be a really strong link between theory and practice, but ultimately, we are meant to be producing students that can do, rather than necessarily students that know.

(Final interview with Hilary, Case 1, theme 7)

**Responsibility shared.**

Hilary did not mention shared responsibility between learners and the teacher in the initial interview, although in the final interview she acknowledged that both carry their own responsibilities. Hilary felt she could attempt to engage and motivate students, but that the students have the responsibility to participate:

> Teaching is a responsibility and I suppose learning is a responsibility, as well. I can’t make my students learn. I can try and engage them and try and motivate them to learn, but I can’t make them learn, they have to.

(Final interview with Hilary, Case 1, theme 7)

**Contactable out of class.**

In the initial interview, Hilary expressed the importance of being contactable out of class as her willingness to help students in need:
I think being willing to provide further help for those that need it.
(Initial interview with Hilary, Case 1, theme 7)

Then, in the final interview, Hilary conveyed her opinion about being contactable out of class as a responsibility that encouraged good learning by letting students check understandings:

They feel that they can talk to you after the class, which is a big part of understanding learning in my experience. Especially the ones who are a little bit shy. If they know there is that rapport, and they’re not going to get stomped on if they always ask after class.
(Final interview with Hilary, Case 1, theme 7)

Theme 8: Behaviour Management

Boundary setting.

During the initial interview, Hilary gave her views on setting boundaries and rules for behaviour with her students. She explained that she runs classes with an informal atmosphere and that she has not experienced any problems:

Just a very open, informal atmosphere. Friendly and approachable. I haven’t ever really had a problem to be honest, that I’ve had to deal with.
(Initial interview with Hilary, Case 1, theme 8)

In the final interview, Hilary spoke about the setting of boundaries with much more vigour. During the semester of this study, and as represented in the next several quotations, she became more forceful and even found herself raising her voice to students whom she felt were out of line. Hilary also became aware that her ability to manage her classes held ramifications for her reputation as a good teacher; she felt that students would expect her to control disruptive students. Hilary did not share the task of boundary setting with her students, but instead took a leadership role, revealing her standards only when issues arose:

Also having to be forceful. I did actually find myself having to raise my voice, and I scared myself [laughs], because I had this group of typical year-12 boys [first year out of high school]. Boys will be boys, and they were just a way out of line and being immature and so on. I had to say, ‘Look, you need to be quiet while I’m speaking because it disrupts everybody else’. I never say because it pisses me off, but because it disrupts everybody else, you know.
(Final interview with Hilary, Case 1, theme 8)

I think there is a responsibility as well. Students look to you and say, ‘are you going to do something about these idiots or what?’ So it makes you look stupid as well, when you’re seen not to be controlling the class. I would never say I’ve got to that point, except that one occasion with those three boys [the immature boys are referred to earlier]. I could see them all looking at each other, saying,
‘these boys should shut up for crying out loud’. So yeah.
(Final interview with Hilary, Case 1, theme 8)

She also raised issues relating to student tardiness, explaining how she was beginning to feel more comfortable with the enforcement of boundaries. Hilary was becoming more sophisticated in her behaviour management tactics by showing that there was both a social and logistical aspect to being on time, although she was still only revealing her standards when students broke them:

...last week, when people were late in my class ... and I had to begin, it was 20 past nine and there were two people missing. I’ve only got six students. It’s really important that they are on time when there is so few of them (you have to have a group), and as they walked in, whereas normally I wouldn’t say anything, but this time I was like, ‘I did say quarter past, could we all make sure that that happens. Otherwise, we will all be here till 20 past, and we don’t have that time. I’ve got other things to do’. So, I wouldn’t normally be like that, but I think as I’ve gone on, I’ve realised it’s not all about being friends. They’ve also got to understand that there are boundaries. I hate having to enforce them, but I feel more comfortable doing that now.
(Final interview with Hilary, Case 1, theme 8)

Flexible deadlines.
During the initial interview, Hilary’s touched on her ideas about equal treatment of students and the administration of deadlines, admitting she took a soft approach even though she realised it was unfair to other students:

I’m too easily ... you know, I give in pretty easily. You know, I say, ‘Oh all right’ when I quite strictly said, ‘10% deduction if you don’t get it in on time’. Yeah, I’m quite easy ... to bend. You know, if you get it to me before five o’clock and then I won’t deduct any marks. Even though that’s completely unfair to the rest of the class.
(Initial interview with Hilary, Case 1, theme 8)

Knowing institutional policies and procedures.
When considering institutional requirements in the initial interview with Hilary, she perceived that, due to the large number of students in her unit, the content was fixed out of necessity. Her reasoning for keeping content fixed hints at a lack of ability to adapt a curriculum to the students in front of her:

We had a thousand students to manage in Marketing I, so in terms of the content it just needs to be that way.
(Initial interview with Hilary, Case 1, theme 8)

In the final interview, Hilary’s view appeared to have changed when she alluded to the idea that, as she was in control of the unit, she could change the content, although she
still felt the fixed content was beneficial for the students. Adapting content to different circumstances was still outside Hilary’s conceptions:

I am in control of my own subject, so if I wanted to switch it around I could, but I don’t for the benefit of the students.
(Final interview with Hilary, Case 1, theme 8)

**Structured and formal.**
In the final interview, Hilary spoke of the need for a structured and formal learning environment, particularly for first-year students, so that students that are new to tertiary study can be enculturated into it and guided towards dealing with intellectual freedom within the social bounds of the classroom:

And I think, especially depending on what level that they are at, I could see that they would be ... with first years let’s say. There needs to be some kind of framework/structure in the class, because they haven’t yet learned how to learn at uni. In fact, I’m glad I’ve got the first years, because by third year they really let rip. They become really cocky and they know everything, but maybe at first-year level you can try and encourage that freedom, but control it still.
(Final interview with Hilary, Case 1, theme 8)

**Theme 9: Assessments**

**Achieving certain levels.**
During the initial interview, Hilary revealed her thoughts about students achieving certain levels, describing it as her responsibility that her students reached a ‘standard’ to enhance their employability:

But at the end of the day, I still see my job as having to get them up to this standard, so that they can get on in marketing or whatever other fields that they want.
(Initial interview with Hilary, Case 1, theme 9)

In the final interview, Hilary mentioned similar ideas to those in her initial interview, although she demonstrated having broadened her thinking by considering her planned objectives. She further made a note that she could sometimes lose sight of the link between her objectives and the actual outcomes for students:

That’s probably something I’ve realised doing your project. To realise the objectives that I’m looking at and making sure that they get what they have to get out of the unit, to go on. Sometimes I can lose sight of that.
(Final interview with Hilary, Case 1, theme 9)

**Achieving milestones.**
In the final interview, Hilary spoke of students achieving milestones, relating that the onus of a single semester-length assessment places too much pressure on
students. She expressed a preference for offering smaller less onerous tasks that mark achievement throughout the semester period:

I think milestones, where they really have to achieve something along the way. I’ve had units where it’s just one big end of the semester project. That puts too much on them to achieve in that one thing. So, I think it has to be paced.

(Final interview with Hilary, Case 1, theme 9)

**Giving prompt feedback.**

In the final interview with Hilary, she considered the timeliness of her feedback to her students, feeling it should be given throughout the semester and not just at the closing stages:

How do we expect them to really improve if we are not showing them along the way?

(Final interview with Hilary, Case 1, theme 9)

**Checking understandings.**

In Hilary’s initial interview, she considered her feelings concerning the effective use of time. She described how she asked her students to give feedback on their understanding and asked them whether they felt they were ready to move on. Moreover, Hilary was illustrating her need to gain some confirmation from her students that they had understood what she had taught them and that they felt that she had sufficiently covered a concept:

I think explanation is important. Like I actually apologise to my students because I’ve been rambling on and ... if you really get it, tell me to move on to the next slide, will you. I don’t want to waste your time, and I don’t want you to waste my time. Sometimes it’s hard to know what they actually understand and what they don’t.

(Initial interview with Hilary, Case 1, theme 9)

**Exams not effective.**

In the final interview, Hilary told how she felt that exams were not always effective at assessing students’ good understanding. She believed that unit coordinators often seem overly concerned with examining minor parts of the course instead of eliciting a comprehensive representation of the students’ learning of core concepts:

It’s almost as if they [the coordinator] don’t know the subject matter and so they pick little things to examine rather than give me the big-picture view of what you’ve learned in Marketing 101.

(Final interview with Hilary, Case 1, theme 9)
Teaching to pass exams.

In Hilary’s initial interview, she mentioned the importance of students reaching a particular level of learning to ‘get through the unit’:

...but often, I mean, I try to get them through the unit ... I think one of the most important things is that level [a pass level].
(Initial interview with Hilary, Case 1, theme 9)

Theme 10: Evaluating Teaching Practices

Evaluate one’s own teaching.

During the initial interview, Hilary expressed her conceptions about evaluating her own teaching practices. She explained how she expected to gather feedback to evaluate her own teaching by having students complete drawings of their experiences of the unit:

I haven’t tried it yet [Laughs]. Oh, I suppose I have. I get the students to do an informal feedback. You know how the university does that anyway. [She’s talking about the Unit and Teaching Evaluation Instrument (UTEI)]. I get them to draw a picture. It’s a strange method, I know ... To draw a picture of how they feel about the unit. I do that in about week three or four. Sometimes I get people drawing themselves on a cliff ready to jump [Hilary is laughing all this time]. So I suppose that helps me a little bit, to think about how my students are.
(Initial interview with Hilary, Case 1, theme 10)

By the final interview, Hilary spoke of evaluation of her teaching with more confidence and awareness, and conceived of evaluation as a cyclical process during which she could identify gaps in her teaching for the purposes of improvement:

I think I can identify my gaps and perhaps go about closing those gaps.
(Final interview with Hilary, Case 1, theme 10)

Reflecting.

In the initial interview, Hilary said she had reflected on the problems in the unit she teaches, but that she was hampered from implementing her ideas because she was not the coordinator of the unit:

Yes, I have thought a lot. I have not actually been able to implement a lot of the things that I want to. I suppose as the unit is controlled, you know, by the unit coordinator.
(Initial interview with Hilary, Case 1, theme 10)

In the final interview, Hilary acknowledged she had not been attending to problems with her teaching effectively, but that she was now more aware of the need to engage with problems and reflective practices:
I think before I was just letting that go a little bit too much. Now I see the reflective stuff.
(Final interview with Hilary, Case 1, theme 10)

In the final interview, Hilary admitted that she was engaging in reflective practices only due to her involvement in this study. However, she made an additional comment about how it was natural to reflect on past events, but that what made the difference were her newfound skills as a reflective practitioner who engaged in the whole cycle of reflection:

I do, but only because I have been forced to. I wouldn’t have even thought that it existed as a practice, unless I was doing this [participating in this study]. So, you naturally reflect, don’t you. You naturally reflect on how something has been.
(Final interview with Hilary, Case 1, theme 10)

By the end of the study, rather than just noting or exposing students’ feelings about their learning and their feedback about her teaching, she showed greater appreciation of how observations on her teaching and students’ learning experiences could influence her practical teaching:

I’ve been able to take those theories of the different learning styles, and I am then applying that, and I suppose that’s the same thing as reflective practice. I look for needs in my students and see how I can tweak things to them really.
(Final interview with Hilary, Case 1, theme 10)

**Theme 11: Practitioner of Teaching**

**Confidence.**

During the initial interview, Hilary spoke of her COTs in light of her experience as a teaching practitioner. Her initial response concerning confidence in her teaching was positive, although she felt her confidence greatly diminished if other teachers were observing her performance:

Yes, without other eyes, very. I’m quite confident in the classroom. As soon as someone says they’re going to come in and sit in on your lecture ... I just fall apart.
(Initial interview with Hilary, Case 1, theme 11)

In the final interview, Hilary spoke more about confidence in one’s teaching in the third person, relaying her perceptions that it was important to feel confident in yourself and to appear confident in the students’ eyes:

I think it’s pretty important. Yeah. Confidence in yourself or confidence that students can see? Looking confident.
(Final interview with Hilary, Case 1, theme 11)
Enthusiasm, loves to teach.

In the final interview, Hilary spoke about her desire to teach, reminiscing about the moment when, as an exchange student, she decided she wanted to be a teacher:

Why do I want to teach, umm, I enjoy it! That’s probably the ... I actually remember being an undergraduate. I was in the UK at the time on an exchange program, and I remember sitting in a classroom thinking, ‘I want to do that’, and that’s the pathway that I took. I actually remember thinking, ‘I want to do that. I want to do what he is’.

(Initial interview with Hilary, Case 1, theme 11)

Teaching from own perspective.

Hilary did not mention teaching from her own perspective in the initial interview; however, in the final session at the end of the semester, she referred to having difficulties with teaching from materials prepared by others. Hilary’s remarks highlight a widespread dilemma for sessional teachers: a feeling of disconnectedness from their unit’s content and the importance of communication between the unit coordinator, who may also be the original designer/s of the unit, and the sessional teachers who deliver the content. In Hilary’s case, she alleviated this feeling by adapting materials to her own style. In the process, she gained a feeling of confidence because she knew her materials well and thus felt there were no hidden surprises upon which she might stumble:

Nobody consulted me or whatever, so I adapt his lecture notes to suit my own style. Sometimes when I read something on his PowerPoint slides, I think, what on earth does that mean, and there is no elaboration. If you’re writing it, then you know what you mean, you know why you said this particular example, but if it comes from somebody else, you think, what are they thinking when they wrote that?

(Final interview with Hilary, Case 1, theme 11)

Hilary also stated in the final interview that she thought there should be a stronger partnership between unit coordinators and teachers, allowing more input into the unit’s design from those who actually teach it:

I think there needs to be more collaboration between the teachers to change the way the unit runs. I would change the assessments, I would change a whole lot of things really. So I’d change it.

(Final interview with Hilary, Case 1, theme 11)

Practitioner industry.

In the final interview, Hilary relayed her thoughts about how her previous experiences as an industry practitioner enriched her teaching. She explained how her ability to draw on examples from her real life provided her with a greater sense of credibility in the eyes of her students:
My previous job is something that seems really to help in my teaching, because when I’m talking to marketing students, I can use, not necessarily marketing examples, but examples of where I’ve been. So say, Dubai, where I am not allowed into a particular area, because am not accompanied by my husband. When you’re talking about culture that really applies. And it’s kind of like, ‘Well, what did you do in the Dubai?’ (say, the students). They like that, internationalism. They will see that as being really credible. So I think that travelling experience helped.

(Final interview with Hilary, Case 1, theme 11)

**Sessional feeling non-academic.**

In the final interview, Hilary considered how her ideas of teaching matched those preferred by her university. Although the question proved difficult for her to answer, she mentioned that she was at odds with her current supervisor’s approach. Moreover, Hilary felt that, as a sessional staff member, she was somewhat isolated from her colleagues and left out of the collegial environment. By this stage of the study, Hilary was showing a greater ability to distinguish between different teaching approaches by comparing her teaching approach to the teaching approach she assumed her unit coordinator would enact:

That’s very hard to me to answer because I have no ... I really have nothing to do with ... because I’m sessional. I think it makes a big difference there. I go in and leave. I don’t really talk to anybody there, but I don’t think my ideas of teaching match those of my new coordinator. That’s for sure. I think we are poles apart in terms of how he would teach, and I can see that purely by looking at the lecture notes and slides.

(Final interview with Hilary, Case 1, theme 11)

Also in the final interview, when considering how she might change the unit if she were the unit coordinator, Hilary mentioned a preference for team meetings. She went on to point out that her current coordinator did not have meetings, and that in any case, she, as a sessional teacher, would be reticent to participate in such meetings without payment:

If I was the coordinator, I would do it completely differently. I would have little team meetings, and that sort of thing, but they don’t so … I’m not going to give up my time, they don’t pay me for it.

(Final interview with Hilary, Case 1, theme 11)

**Trends of Change across Interview Data: Case 1, Hilary**

An analysis of the transcripts of the interviews with Hilary produced findings that represented Hilary’s COTs and how they had changed over the course of the study. Representative quotations that offer insights into her conceptions, feelings and thoughts on teaching, as well as the processes she was trying to absorb and implement, were included throughout the themes described in the previous section.
Across the analysis of Hilary’s COTs, some trends emerged that illustrate her conceptual development about teaching and learning during this study. The COTs she held at the beginning and the end of the study have been identified, as have the changes in her COTs that occurred over the course of the study. The following sections outline the change trends that were identified through analysis of her interview transcripts in relation to each of the 11 themes.

**Theme 1: Awareness of COTs**

Over the semester in which this study took place, Hilary’s ideas about how she could translate her teaching intentions into her teaching actions or practices broadened. She moved from seeing students as being all the same type of learner towards recognising different types of learners who each require different teaching strategies. At the beginning of this study, Hilary had little understanding of teaching theories; however, over the semester, her conceptual growth gave her a greater appreciation and awareness of better practice. Her capability to analyse teaching events improved from her initial declaration that she had difficulty in analysing her teaching events and practices. Hilary’s COTs moved from one of simply teaching students to a pass level or standard, towards teaching methods that aimed at broadening students’ overall learning outcomes. She also gained an awareness of the importance of students’ changing views of the world and their relevance in conceptualisation for learners. One of the most influential trends uncovered in Hilary’s conceptual thinking was an increased awareness of reflective practice and its vital role with regard to the continual improvement of her teaching practice.

**Theme 2: Sees Teaching As a Social Process**

In a social context, Hilary’s contemplation of rapport as aiding students’ communications with her as the teacher broadened to incorporate an understanding of the value of practical methods to initiate rapport with students. She also came to an understanding about how rapport could foster trust in the teacher–student relationship. In line with this broadening of thinking, there was some change in her conception that her popularity with students was a prerequisite of good teaching, in that she eventually saw this of lesser importance. Further, the importance that Hilary placed on her need to be friends with her students diminished to allow her more capacity to manage her teaching situations.

In conceptualising her teaching approaches, Hilary moved from a heavy reliance on her own experience of being a student, towards a more complex theoretical understanding of student experiences. She came to the realisation that this would help
her to construct better social interactions in her teaching and learning environments. Hilary progressed from simply reminding students that they were there to learn, towards facilitating learning by encouragement and the use of positive feedback.

**Theme 3: Developing Minds**

With the growth of Hilary’s awareness and appreciation for different learner types, she improved her ability to empathise with her students by using the background of her own experiences to understand her students’ learning journeys. Hilary developed an increased understanding of the individual needs of her students and, consequently, she engaged in more active analysis of students’ progress and coping levels. This led her to a position in which she was able, as part of her assessment process, to include feedback to students about how they could improve their learning. Hilary appeared to have gained a deepened appreciation and recognition of the role played by students’ experiences as displayed in the ideas they brought to class.

**Theme 4: Fostering Understanding**

Hilary moved from a teacher-centred approach of knowledge transfer aimed at students being able to name the parts of a model, to a more learner-centric approach that placed greater importance on students gaining holistic understanding and transferable skills. Hilary’s predilection to focus on her students achieving learning outcomes as a way of simply passing the unit deepened towards using learning outcomes to imbibe broader student ownership of what they learned. Hilary moved towards a greater appreciation of the role of feedback in student learning and the role it can perform in enabling students to gauge their progression in a timely manner.

**Theme 5: Preparation and Materials**

Hilary began moving towards a more complex view of the process of preparing for her teaching and the objective that it served by realising that, rather than needing to be ready with a definitive answer for any question that may be posed by her students, she could rely on her good domain knowledge to discuss issues with learners. Her confidence to change teaching and learning materials also increased, but she still refrained from making content changes as the exam requirements were set by the unit coordinator.

**Theme 6: Engaging Students**

Hilary moved from seeing a discussion as being an only somewhat useful teaching strategy, towards the conception that discussion is a fundamental component of teaching and learning. Hilary’s expectations of student achievement also changed.
Initially, her expectations centred on the *less* able students; however, this shifted towards higher expectations based on her *more* able students.

At the beginning of this study, Hilary demonstrated cognitive dissonance with regard to her responsibility to motivate students. She was unsure how to describe the motivation process, variously referring to students who *wanted* to be motivated and those who were *able* to be motivated. By the end of the semester, she considered that she could motivate students provided they had an outlook receptive to being motivated.

At the end of the study, Hilary’s conception of motivating students showed a middle ground that placed shared responsibility for motivation on teacher encouragement and learner disposition.

**Theme 7: Facilitating and Organising Learning**

Hilary’s expectations of students taking responsibility for their own learning widened to encapsulate links to her own responsibilities as a teacher, such as a responsibility to teach well and to engage and motivate students. She moved from conceiving advance organising as simply recapping previous teaching, towards a more complex view of advance organising that incorporated an understanding of the need to sow the seeds of learning for students, to enable them to complete more complex, upcoming tasks.

Hilary initially found it difficult to exemplify connections between theory and practice; however, she shifted towards a position in which she recognised the importance of developing students who ‘can do’ rather than who simply ‘know’. Hilary broadened how she connected various attributes of good teaching with the attributes of sociability of her teaching practice. For instance, where she initially saw being contactable out of class simply as a willingness to help students, she came to appreciate how being contactable out of class could assist in building rapport with her students. Hilary’s conception of the use and value of discussion in learning also broadened to embrace the construction of shared meanings between herself and her students. She began to value the views and opinions of students.

**Theme 8: Behaviour Management**

Hilary moved from not enforcing rules and boundaries in an open and informal class structure, towards a greater awareness of the responsibility to manage the structure of learning environments in her classes. In turn, she became more comfortable and confident with implementing boundaries fairly. As Hilary reconceptualised her responsibility for managing rules and boundaries, along with her rising expectations for
her students, she gained a greater appreciation of the need for first-year students to be enculturated into tertiary learning environments.

**Theme 9: Assessments**

Along with an increased awareness of the links between teaching objectives and learner outcomes, there was movement in Hilary’s COTs away from a teacher-centred perspective of teaching for completing exams, towards a more learner-centred-based desire to divide major assessments into less onerous tasks to be scheduled more evenly across the unit.

**Theme 10: Evaluating Teaching Practices**

Hilary moved from an intention to gather feedback to gauge students’ experience to actually enacting a cyclical evaluation process that attempted to identify gaps and improve her teaching. Further, she improved her understanding of how to implement an effective evaluation process.

Initially, Hilary did not see reflection as an active practice for professionals. However, during the semester, she came to recognise its professional application and her stance on reflection evolved towards greater awareness of its helpfulness in evaluating her teaching. This was reinforced by her growth in appreciation for how feedback from students and her own reflection on different learning styles influenced her teaching practices. Further, Hilary showed developing cognisance of how knowledge and understanding of teaching theories can positively affect her teaching practices. She consistently made links between the teaching theories she had come to understand and her everyday teaching practices.

**Theme 11: Practitioner of Teaching**

Hilary began the semester by viewing her own teaching with confidence; however, she expressed concern about how her teaching would be seen by others. Although she saw herself as an effective practitioner of teaching, she was not sure that others would see her in this way. Her confidence improved over the semester, but a need for validation remained.

**Summary of Trends of Change across Interview Data: Case 1, Hilary**

Many changes occurred in Hilary’s COTs. Her exposure to learning and teaching theories alerted her to a philosophical depth she had not appreciated before. For example, she became cognisant of different types of learners and she came to realise that she could use different teaching strategies to improve her teaching approaches. Further, Hilary reached a point at which she could base her teaching approaches on theory rather than her own experience as a learner. She broadened her COTs from being
largely content-focused with expectations guided by a simple ‘teach-to-pass’ goal, towards higher expectations of improving students’ overall learning outcomes.

Hilary changed some of her social stances, choosing to focus on rapport building to foster trust, rather than being overly concerned about her popularity as a teacher. She reduced her desire to be friends with students in favour of strengthening the management of her teaching environments. Following from this, Hilary chose to give more structure to her learning environments and felt confident to implement boundaries. She also developed to see being available to students as a social responsibility rather than as merely showing a willingness to help.

Hilary’s journey with teaching theories and reflection infused her thoughts with deeper constructs, which led her to heightened intentions for improving her teaching practices. A number of influential ideas revealed themselves in her interviews, including the construction of shared meanings, valuing others’ views, student transition to tertiary environments, seeing discussion as a fundamental component of learning, and teaching transferable skills rather than simply transferring knowledge.

Hilary’s realisation of the usefulness of discussion as a teaching strategy and its fundamental role in good learning changed Hilary’s COTs. She spoke with broader understanding of teacher–student–teacher feedback processes and the benefits they bring to good learning and teaching. Other attributes of teaching on which Hilary showed greater complexity of understanding included shared responsibilities for both learners and teachers, engagement and motivation, advance organising and valuing students ‘doing’ rather than simply ‘knowing’. Perhaps most importantly for Hilary’s ongoing development as a teacher, she developed a new explicit understanding of reflection that extended her capability to analyse her teaching practice with formalised methods for ongoing improvement.

**Analysis of TPI data: Case 1, Hilary**

In addition to her interview transcripts, Hilary’s perspectives about teaching were identified from her responses to the TPI at the beginning and end of the study. The changes in her perspectives about teaching were determined by an analysis that compared the differences between her initial and final responses to the TPI. Her beliefs, intentions and actions were further analysed by investigating the sub-scores within each of the five perspectives of teaching reflected in the structure of the TPI. For a full description of the TPI, see the Data Gathering Instruments and Processes section in Chapter 3: Methodology, and see Appendix 4 for a full description of each of the five.
perspectives of teaching (transmission, apprenticeship, developmental, nurturance and social reform) measured by the TPI.

Initial Perspectives

Hilary’s scores from her initial TPI questionnaire (see Table 22 and Table 23, below) revealed that she held the dual dominant perspectives of developmental (38) and nurturance (39). She also held two backup perspectives: transmission (35) and social reform (35). The perspective that Hilary was holding as recessive was shown to be apprenticeship (31).

Final Perspectives

On taking the TPI questionnaire at the end of the study (see Table 22 and Table 23), Hilary held only one dominant perspective: nurturance (39). The score Hilary received for the perspective of developmental (34), which had been shown as dual dominant with nurturance in her initial TPI, receded by 4 points by the end of the study, to become categorised as a backup perspective alongside her other backups of transmission (33) and social reform (35).

The lessening of importance Hilary placed on the developmental perspective meant that she held one clearly dominant perspective of nurturance by the end of the study, despite recording the same score for nurturance in both the initial and final iterations of the TPI. Hilary’s remaining perspectives maintained their rankings between the TPI instances, with the exception of slight score reductions in the final run for her backup perspectives of transmission (35 to 33, -2) and social reform (35 to 32, -3). Hilary’s score for her single recessive perspective of apprenticeship (31) was unchanged.

Table 22

TPI Perspective Scores for Case 1, Hilary—Pre and Post Study Results

<table>
<thead>
<tr>
<th>Usages</th>
<th>Transmission</th>
<th>Apprenticeship</th>
<th>Developmental</th>
<th>Nurturance</th>
<th>Social Reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>INITIAL</td>
<td>35</td>
<td>31</td>
<td>38</td>
<td>39</td>
<td>35</td>
</tr>
<tr>
<td>FINAL</td>
<td>33</td>
<td>31</td>
<td>34</td>
<td>39</td>
<td>32</td>
</tr>
<tr>
<td>Change</td>
<td>-2</td>
<td>0</td>
<td>-4</td>
<td>0</td>
<td>-3</td>
</tr>
</tbody>
</table>
Table 23

TPI Perspectives Scores Showing Dominant, Backup and Recessive Rankings for Case 1

<table>
<thead>
<tr>
<th>Rank</th>
<th>Transmission</th>
<th>Apprenticeship</th>
<th>Developmental</th>
<th>Nurturance</th>
<th>Social Reform</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dom</td>
<td>Bk</td>
<td>Rec</td>
<td>Dom</td>
<td>Bk</td>
</tr>
<tr>
<td>INITIAL</td>
<td>35</td>
<td>31</td>
<td></td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>FINAL</td>
<td>33</td>
<td>31</td>
<td></td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>CHANGE</td>
<td>-2</td>
<td>0</td>
<td>-4</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Changes in Teaching Perspectives

Hilary’s TPI results exposed some changes in her perspectives of teaching held between the beginning and the end of this study. Whereas she initially held two dominant perspectives of developmental (38) and nurturance (39), by the end of the semester, only the nurturance perspective remained dominant. Hilary’s developmental perspective was re-ranked as a backup perspective. Hilary’s TPI scores show that her single dominant perspective (nurturance; 39 in both instances) evident at the end of the semester had emerged from a reduction in her other dominant perspective (developmental; 38 to 34, -4), rather than from an increase in her nurturance perspective. Likewise, where there was movement in her scores, they were only reductions. None of these reductions caused any other changes in the resulting rankings of her perspectives.

Perspective Sub-scores

An overview of Hilary’s sub-scores of her TPI results across the dimensions of her beliefs, intentions and actions, in relation to her perspectives, can be seen in Table 24. Most notable among these changes are the downward trends driving the changes at her perspectives level. The most evident of these dimensional decreases was in her beliefs on the importance of a developmental perspective. The following sections delve deeper into Hilary’s sub-scores to uncover further the changes she registered in her teaching perspectives throughout the study.
Table 24

TPI Perspective Sub-scores for Case 1, Hilary—Pre and Post Study

<table>
<thead>
<tr>
<th>PERSPECTIVE</th>
<th>Beliefs</th>
<th>Intentions</th>
<th>Actions</th>
<th>Total</th>
<th>Beliefs</th>
<th>Intentions</th>
<th>Actions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission</td>
<td>11</td>
<td>12</td>
<td>12</td>
<td>35</td>
<td>8</td>
<td>13</td>
<td>12</td>
<td>33</td>
</tr>
<tr>
<td>Apprenticeship</td>
<td>8</td>
<td>11</td>
<td>12</td>
<td>31</td>
<td>8</td>
<td>11</td>
<td>12</td>
<td>31</td>
</tr>
<tr>
<td>Developmental</td>
<td>12</td>
<td>13</td>
<td>13</td>
<td>38</td>
<td>8</td>
<td>12</td>
<td>14</td>
<td>34</td>
</tr>
<tr>
<td>Nurturance</td>
<td>12</td>
<td>14</td>
<td>13</td>
<td>39</td>
<td>12</td>
<td>14</td>
<td>13</td>
<td>39</td>
</tr>
<tr>
<td>Social Reform</td>
<td>10</td>
<td>13</td>
<td>12</td>
<td>35</td>
<td>9</td>
<td>13</td>
<td>10</td>
<td>32</td>
</tr>
</tbody>
</table>

Beliefs sub-scores

The sub-scores for beliefs across Hilary’s two administrations of the TPI questionnaire (see Table 25) revealed either a decrease in or maintenance of her scores from the beginning of the semester for all of the perspectives. Three perspectives recorded decreases in importance: transmission, from 11 to 8 (or -27%), developmental from 12 to 8 (or -33%) and social reform from 10 to 9 (or -10%). Her other two perspectives, apprenticeship and nurturance, showed the same scores in both iterations of the inventory: 8 and 12, respectively.

Table 25

Beliefs Sub-scores Showing Percentage of Change, Case 1, Hilary

<table>
<thead>
<tr>
<th>BELIEFS</th>
<th>Initial</th>
<th>Final</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission total: (Tr)</td>
<td>11</td>
<td>8</td>
<td>-27%</td>
</tr>
<tr>
<td>Apprenticeship total: (Ap)</td>
<td>8</td>
<td>8</td>
<td>0%</td>
</tr>
<tr>
<td>Developmental total: (Dv)</td>
<td>12</td>
<td>8</td>
<td>-33%</td>
</tr>
<tr>
<td>Nurturance total: (Nu)</td>
<td>12</td>
<td>12</td>
<td>0%</td>
</tr>
<tr>
<td>Social Reform total: (SR)</td>
<td>10</td>
<td>9</td>
<td>-10%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>53</td>
<td>45</td>
<td>-15%</td>
</tr>
</tbody>
</table>
**Intentions sub-scores**

The only increase shown for Hilary in her sub-scores of intentions across her perspectives (see Table 26) was in her score for *transmission*, which increased from 12 to 13 (or 8%). Hilary’s sub-score of intentions for her *developmental* perspective decreased from 13 to 12 (or -8%). The remaining perspectives remained static: *apprenticeship* (11), *nurturance* (14) and *social reform* (13).

**Table 26**

*Intentions Sub-scores Showing Percentage of Change, Case 1, Hilary*

<table>
<thead>
<tr>
<th>INTENTIONS</th>
<th>Initial</th>
<th>Final</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission total: (Tr)</td>
<td>12</td>
<td>13</td>
<td>8%</td>
</tr>
<tr>
<td>Apprenticeship total: (Ap)</td>
<td>11</td>
<td>11</td>
<td>0%</td>
</tr>
<tr>
<td>Developmental total: (Dv)</td>
<td>13</td>
<td>12</td>
<td>-8%</td>
</tr>
<tr>
<td>Nurturance total: (Nu)</td>
<td>14</td>
<td>14</td>
<td>0%</td>
</tr>
<tr>
<td>Social Reform total: (SR)</td>
<td>13</td>
<td>13</td>
<td>0%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>63</td>
<td>63</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Actions sub-scores**

In terms of Hilary’s sub-scores with respect to the *actions* dimension of her perspectives (see Table 27), two changes were recorded. Her *developmental* score rose from 13 to 14 (or 8%) and *social reform* fell from 12 to 10 (or -17%). Hilary’s scores for the other perspectives remained the same, with *transmission* and *apprenticeship* both recording 12 and *nurturance* at 13.
Table 27

**Actions Sub-scores Showing Percentage of Change, Case 1, Hilary**

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>Initial</th>
<th>Final</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission total: (Tr)</td>
<td>12</td>
<td>12</td>
<td>0%</td>
</tr>
<tr>
<td>Apprenticeship total: (Ap)</td>
<td>12</td>
<td>12</td>
<td>0%</td>
</tr>
<tr>
<td>Developmental total: (Dv)</td>
<td>13</td>
<td>14</td>
<td>8%</td>
</tr>
<tr>
<td>Nurturance total: (Nu)</td>
<td>13</td>
<td>13</td>
<td>0%</td>
</tr>
<tr>
<td>Social Reform total: (SR)</td>
<td>12</td>
<td>10</td>
<td>-17%</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>62</td>
<td>61</td>
<td>-2%</td>
</tr>
</tbody>
</table>

**Summary of Changes in TPI Scores and Sub-scores: Case 1, Hilary**

The main change for Hilary, as exposed by her TPI results, was that, while she initially held dual dominant perspectives of *developmental* and *nurturance*, this shifted to a single dominant perspective of *nurturance*. Her scores for *nurturance* remained the same for both iterations, with the changes manifesting as recessions over the other four perspectives and their dimensions, which were the effective forces in her new balance. Within Hilary’s *beliefs*, she viewed *transmission* and *developmental* to be of less importance at the end of the intervention as compared to the beginning, making room for the shift of the *nurturance* perspective to be her singular dominant ranking. Her notion of the importance of *social reform* also retreated within both her *beliefs* and *actions*, although not in her *intentions*.

![Relative Percentage Changes from Initial to Final in TPI Perspectives & Sub-scores - Case 4 - Hilary](image)

*Figure 22. Case 1 TPI changes between initial and final scores within sub-scores.*
Overall, regarding her perspectives of teaching, Hilary maintained her stance of dominance for nurturance and recessive for apprenticeship; it was her other ways of seeing teaching that appeared to be in flux.

**Triangulation between Interview and TPI Data: Case 1, Hilary**

Hilary’s results from the TPI can be seen to support the results from Hilary’s interviews. We can see that her TPI results showed that her final single dominant nurturance perspective emerged not from increasing scores, but from a reduction in her initially dual dominant developmental perspective. The recession of scores was also noted in her social reform and transmission perspectives. Likewise, in her final interviews, Hilary showed a tendency to draw back from her initial stances, particularly across the social aspects of her teaching, although her answers often reflected a deeper or broader understanding of a particular trait. For instance, towards the end of the study, when she reported that she now placed less emphasis on being friends with students, she alluded to social aspects, such as rapport, in a manner more concerned with managing and creating an effective learning environment.

The enthusiasm with which Hilary relayed her encounters with theories of different types of learners and different approaches in teaching in her interviews can be seen as one aspect of her nurturing perspective. Hilary’s attitudinal change from ‘teaching students to pass’ to ‘teaching to improve overall learning outcomes’ is further evidence of triangulation between the interviews and the TPI results, showing definite movement away from teaching as transmission of knowledge and a transmission perspective.

**Supplementary Findings from an Analysis of Personal Journals: Case 1, Hilary**

Hilary began her journal with some of her thoughts about the first few weeks of her teaching semester. She referred to issues of confidence and mentioned some self-doubt and that she felt a need to prove herself, particularly when confronted with mature-aged students. These feelings were exacerbated by her perceptions of her own youth compared with other lecturers. These comments all pointed towards her conceiving of teaching as a transfer of knowledge, causing her to feel that it was necessary to prove her level of knowledge, to show herself to be a viable teacher:

I find the first class particularly daunting … not knowing what to expect and mainly having to prove I know my stuff—because I’m fairly young by lecturing standards!! I hate having to talk about myself and sometimes feel like I’m either gloating or trying too hard to convince them I’m good enough. Each semester I say … I’m not going to do that … I’m just going to walk in there and give brief background and then begin. But of course, I don’t … I spot the mature age
students and think ‘oh oh … I have to prove this to them … so they respect me’.

(Journal, Hilary, Case 1): Prelude to Activities, Published 17/08/05

To start the semester, Hilary tried a strategy of ice breaking to get the class started. However, she felt this was not something the students liked to do and wondered what alternatives were available. As this was the first time Hilary had used this tactic, she was not practised with it and had not yet discovered, firstly, whether ice breaking was a useful strategy, or secondly, that students sometimes need to be taken outside their comfort zone to progress:

I tried something new this semester—a getting to know you type exercise …
You never can tell but I think the students thought this was a bit naff. However, I do remember what it was like to be a student during these break the ice type sessions and I hated it … so maybe that’s just it they hate it generally. How else do you get the class moving though?

(Journal, Hilary, Case 1): Prelude to Activities, Published 17/08/05

Commenting on the first couple of weeks, Hilary mentioned the growth of trust between herself and her students. She also noted that the thrust of her teaching style was informal and interactive. This informal stance led her to have trouble in establishing the boundaries of acceptable class behaviours:

First two weeks are always a bit weird … they don’t quite trust me and I don’t quite trust them. Sometimes … I ask questions and they just sit there. You can’t really get agro, but then if I move on without getting an answer it looks a bit silly. By week 3 though … it’s all calmed down a bit and students get the idea … my class is very informal and the idea is interaction. Sometimes … I have a bit of trouble knowing how to handle students that are being disruptive.

(Journal, Hilary, Case 1): Prelude to Activities, Published 17/08/05

Hilary then relayed a situation she encountered with some students fresh from high school and the method she used to bring order to the class. With exposure to some best practices and theory during the study’s activities, Hilary tried to move from traditional authoritative ways of managing her students towards methods of shared understanding in an attempt to negotiate social rules with a couple of disruptive students. In the end, she had to revert to more traditional authoritative means of behaviour management:

I had a group of boys … they were definitely straight from high-school … talking and laughing up the back … I asked them if they would please quieten down and that a break was coming soon … but I was kind of apologetic. I hate to appear like I’m telling people off because it’s not high school, But what do you do when they keep going. I had read some. I explained that it’s disruptive for the class—but they kept going. I actually had to say in a louder voice … ‘guys please … It’s not high-school … I shouldn’t have to ask you to shut up’!!! I felt
like a bit of an idiot after—cause they looked at me in this ‘I’ve just been told off kind of way’.

(Journal, Hilary, Case 1): Prelude to Activities, Published 17/08/05

In the following quotation from her journal, it can be seen that Hilary was considering what had happened over those first few weeks of the semester. As Hilary was reflecting on some praise she received from her students, she noted how this much-needed encouragement provided a crucial boost to her confidence:

In the first few weeks I have had quite a few students say how they enjoy my lectures and that it’s very interesting. I also had a comment from a mature age student, which is particularly encouraging for me [because she feels a lack of confidence and credibility with students older than herself], say how she liked that my examples which were current and applicable. My international students have also commented on how they can understand me easily!!

(Journal, Hilary, Case 1): Prelude to Activities, Published 17/08/05

Hilary then began Activity 1 on the RPW, an introduction to reflection on teaching and learning, and wrote about the bodies of knowledge that informed her teaching. She was frank in explaining that, although she had been teaching for five years, she had been doing so with little more than her experiences as a learner to draw upon for ideas. She mentioned she had the opportunity to change the unit in between semesters, showing she was aware of continual change, even if it was not formalised into a process:

I really don’t know any formal leaning or teaching theories. I suppose I have ‘learned’ what tends to work for me during my past five years as a lecturer. Mind you, this has mainly been for the same unit ... so I’ve been able to tweak each semester. So ... body of knowledge springs from what I know from experience.

(Journal, Hilary, Case 1): Activity 1, Published 17/08/05

Although Hilary was engaging in some reflective activities, she continued to perceive good teaching as being an entertainer, to gain attention, muster enthusiasm and motivate her students:

So, I believe that part of my role as teacher is also entertainer in the sense that if I can get their attention ... then perhaps they’ll be inspired and want to take this further.

(Journal, Hilary, Case 1): Activity 1, Published 17/08/05

She brought up learning by rote as a feeble method of learning. In the following quotation, it is clear that Hilary has some awareness of shallow and deeper learning styles, although she may lack the educational language to discuss them:
I also know that students who learn verbatim don’t actually learn.
(Journal, Hilary, Case 1): Activity 1, Published 17/08/05

Hilary’s journal comments revealed that she had little awareness of teaching theory but was keen to understand more to help her development. She spoke of ‘basic models’, which attests to sessional teachers often being time poor; many want to learn to teach better, but are worried about the complexity of such a commitment:

I don’t draw on any actual theories in my teaching—but would be interested in some basic models.
(Journal, Hilary, Case 1): Activity 1, Published 17/08/05

When asked to think back on her own learning experiences, Hilary reflected on how she was either inspired or bored and how this affected her commitment to her studies. This stance echoed the importance she placed on teachers being entertainers earlier in her journal. Further to this however, Hilary was committed to a career as an academic, which would likely explain the high level of self-motivation she described:

I remember being either inspired or bored. If I was bored, I didn’t bother going to lectures and instead studied books myself. I always managed to get high marks this way anyway. If I was inspired, I attended all classes and participated in everything ... also making ‘outside’ contact with the lecturer for networking purposes. That is, I might visit their office to ask for current themes or find out about conferences I could go to as a student. I was a very self-motivated learner and would naturally go the extra mile.
(Journal, Hilary, Case 1): Activity 1, Published 17/08/05

When Hilary was asked to comment on what teachers must do about student self-esteem, she recorded a comment about how she believed teachers should encourage self-confidence and a relaxed atmosphere to value and hence develop students’ voices. Feedback was also important to Hilary’s conception of good teaching. Her writing reflected ideas of constructivism when she mentioned, ‘developing ideas they already have’:

I think it is a teacher’s responsibility to encourage positive self-confidence collectively in a classroom. In other words ... encouraging feedback, establishing a laid-back and comfortable environment for student feedback. Showing them you are open to discussion even criticism is worthwhile. Students won’t feel confident to speak if they perceive a power struggle ... Mostly students need to be reassured that they are ‘on the right’ track and that all they need to do is develop the ideas they already have.
(Journal, Hilary, Case 1): Activity 1, Published 30/08/05

When asked to consider, ‘What is a student?’, Hilary wrote again about absorbing information as a transfer of knowledge. She described people’s reasons for
being students and explained how these reasons can drive learners’ dispositions or approaches to learning:

They absorb information that is both mandatory [to learn] and voluntary (that might interest them for example.) My experience is that students are either ‘interested’ because they desire the knowledge being passed on for career development or they are ‘uninterested’ because they have to simply pass the unit to get to where they are going … My unit is part of a compulsory level 1 unit … therefore not all students desire to be in my class but they are required to be in my class.
(Journal, Hilary, Case 1): Activity 1, Published 30/08/05

Hilary described students as being part of a community of learners. She recognised that, by being part of that community, they often encountered opportunities to teach as they learned. Again, she pointed to teaching in constructive and socially involved ways:

Students are experienced in some form … as consumers, as mothers, fathers, workers etc. … So, they are ‘involved’ learners—they learn and in some ways they offer instruction or at least perspective.
(Journal, Hilary, Case 1): Activity 1, Published 30/08/05

As Hilary moved through Activity 2 on the RPW, theories of teaching and learning, she was asked to describe her theory of teaching. At first, she had difficulty with the question:

I can’t really describe my theory of teaching.
(Journal, Hilary, Case 1): Activity 1, Published 30/08/05

However, upon reconsidering the material from Activity 1, she was able to explain that she used both teacher-centred and student-centred methods for different environments. Hilary applied the traditional teacher-centred stance to lecturing. She did not yet conceive of how lecturing could be approached in a student-centred manner. Hilary needed more exposure to student-centred methods of lecturing to understand better why and how to develop effective lecturing styles:

I would describe my teaching as student and teacher centred. During a lecture there is a certain amount of information I have to get through … I set the scene for this … I say what, where, when etc. But during the tutorial part of my teaching … I switch to student-centred—where I encourage students to take charge and help me recognise what is going to be most helpful for them.
(Journal, Hilary, Case 1): Activity 1, Published 30/08/05

When Hilary was asked how good university teachers teach, she referred to engagement, being well organised, giving the big picture and audience interaction:
…in a way that engages the audience … it is well orchestrated and mapped-out. Students know where they are going and they paint a bigger picture of the content. They must also involve the audience and get them to interact. (Journal, Hilary, Case 1): Activity 1, Published 30/08/05

There were signs that Hilary had complex thoughts about her teaching ideals and, although she was still lacking an educational nomenclature, she alluded to concepts such as advance organising, depth of content and, most interestingly, student interactions. As Hilary learns more about these methods, she becomes more likely to develop her teaching towards effective practice than if she were simply relying on her own learning experiences.

Hilary believed in the importance of presentation skills to garner interest. This illustrated her concern with students being an audience to which content is delivered. She showed a desire to be democratic and allow all students to feel included:

Above-average teachers are interesting to listen to. (Journal, Hilary, Case 1): Activity 1, Published 30/08/05

They are relevant and they treat students like they have something to offer. (Journal, Hilary, Case 1): Activity 1, Published 30/08/05

When asked about how she could improve her teaching, Hilary again raised the issue of ‘being liked’. She knew she needed to worry less about her popularity and to concentrate on her teaching, but she still held onto old conceptions by finding arguments for remaining with those ideas:

Worry more about teaching more than being liked … but then often students learn better when you get them on side! (Journal, Hilary, Case 1): Activity 1, Published 30/08/05

Still responding to how she could improve her teaching, Hilary felt pressure to be a fount of knowledge. She found being unable to answer students’ questions threatening and did not want to admit that she did not know all the answers:

Improve my general knowledge … sometimes I feel stupid when older students say something that I know nothing about. Like who won the America’s Cup in 19__. It’s almost like lecturers are supposed to know everything and my general knowledge is not so good. Politics for example, I know nothing about … I think you lose a bit of credibility when you don’t know who the Minister of whatever is!! (Journal, Hilary, Case 1): Activity 1, Published 30/08/05

As will be seen from the following chapters, many neophytes appear to find it difficult when confronted with questions for which they do not have the answers. They need strategies to deal with such situations.
When invited to comment on the support she might need to bring about improvements in her teaching, Hilary found it difficult to answer. Firstly, she cited her youth as a barrier and explained that experience would provide the solution. Hilary was not yet conceiving how increased understanding of learning and teaching theories and methods could help to expedite her development:

I’m not sure if there is any [strategy to help her improve her teaching] … I think this will come with experience. I’m trying to overcome my biggest barrier age … maybe as I get older I won’t worry so much about students liking me.
(Journal, Hilary, Case 1): Activity 1, Published 30/08/05

Hilary was exposed to the ideas of different learning approaches and tried to explain them in her journal. Firstly, she mentioned that she saw new students using an ‘achieving’ approach to their learning that she believed was a result of transitional issues, such as students interpreting the new expectations of tertiary level learning:

I most often ‘see’ the ‘achieving’ approach to learning in my first year unit. This is because it is a first-year unit and I think most students are still trying to get their heads around what is expected at university.
(Journal, Hilary, Case 1): Activity 2, Published 30/09/05

Hilary continued by saying that she encouraged a deep learning approach in her students. She conceived a deep approach as the ideal:

I would like to think I encourage the ‘deep’ approach to learning by empowering my students and teaching them that my classroom is interactive and that I value their input. Marketing is very suited to this deep approach because there are so many layers to which students can apply and relate what they learn.
(Journal, Hilary, Case 1): Activity 2, Published 30/09/05

It is interesting to note that this neophyte teacher saw her subject as particularly suited to a deep approach. It is not surprising that a teacher would think that a deep approach to learning is desirable; however, in the case of neophyte teachers, such a belief may indicate that they have not contemplated different approaches to learning before, such that when they are exposed to the different theories, they have a moment of conceptual enlightenment. Hilary remarked in her journal that exposure to theory had given her a way to understand what she had previously only felt to be true. This is further evidence that exposure to theory can lead to deeper understanding and enable teachers to take their practice forward:

As I was reading through the theories … it occurred to me that the structure of marketing (which is largely beyond my control) is more than likely fostering a ‘surface’ approach. I think I always knew this … I didn’t know that there was a
Using the example of a multiple-choice exam, Hilary continued to comment on a ‘surface’ approach. She revealed that she thought multiple-choice testing was not a good assessment method, as it promoted surface or ‘rote’ learning, while what she really wanted was for higher-order learning to occur:

The mid-semester exam and part of the final exam is a multiple-choice format. I have always believed that the type of questions in the multi-choice encourage rote learning. First year students should have a broad understanding of … [my unit’s subject] … they shouldn’t have to remember what a certain type of … strategy is called—who cares what it is called—I only care about if they can explain and apply it … If I had my way … I would eliminate the multi-choice.

Hilary then moved on to Activities 3 and 4 in the RPW, the action research part of the project, and administered a mid-semester review questionnaire (see Appendix 5) to her students so that she could obtain some feedback about her teaching. The aim was to provide her with a data set to reflect on and use to develop and implement an improvement cycle (plan, perform, reflect, improve) for her teaching. Hilary then wrote about her experience and her considered response to the feedback she received. She identified that the timing of the questionnaire administration was important to how the responses were couched. More importantly, she identified one of the common threads of feedback concerning the expected standard of work for assignments. What was particularly interesting was that Hilary went on to explain a solution that closely aligned with the concept of rubrics. Although Hilary used the term ‘map’ instead of ‘rubric’, she had independently alighted on an idea of how she could better formalise her standards and communicate to her students what was expected in their assessment tasks. Without the formalised collection of feedback data used here, Hilary may have continued teaching unaware of the problems students were experiencing and unable to improve:

I gave one of my classes the questionnaire immediately after I gave them feedback on their first written assignment. In hindsight this probably was not a wise thing to do. The majority of assignments were poorly written and I spent considerable time discussing some of the problems with their writing. The assignments I had returned were completely covered in red pen! I tried to explain that they shouldn’t be upset by this but rather to use it as a guiding light for the major/final assignment. Part of the reason we do this first mini-assignment is so we can identify problems and offer feedback (well, at least it is for me … it may not be for the unit coordinator). I certainly did identify problems and I explained where they were going wrong. After the class I had a few students speak to me about their assignments. Although they did eventually agree with what I was saying … they made a point of saying that every lecturer...
expects something different. When I glanced through the questionnaire responses, I noticed that quite … a few of them indicated that they ‘disagreed’ with the statement: ‘The lecturer makes clear the standard of work expected’. Although at first I thought this was unreasonable, I have now prepared a map of what I expect for the major assignment. Although … just to get my own back … I’ve entitled this map: ‘What is expected—Not what I expect’. I realise most first year students simply can’t write. Sad but true!

(Journal, Hilary, Case 1): Activity 3, Published 30/09/05

Summary of Personal Journal: Case 1, Hilary

Shortly after her introduction to the RPW and beginning Activity 1, Hilary began her personal journal with some feelings of a lack of confidence and self-doubts, which she explained were due to her younger age. Her comments at this time were showing COTs that were aligned with teaching as a transfer of knowledge and a need to prove her knowledge level as proof of her viability as a teacher. At this point, Hilary tried to create an informal and interactive environment for her classes, which sometimes led to disruptiveness. In an early reflective moment, she was boosted by praise from mature age and international students. Hilary felt it was important to be popular with students.

In the first activity, Hilary noted that she had been teaching for five years and had been relying almost entirely on her experiences as a learner rather than on any theoretical understandings of teaching and learning. She began showing interest in teaching models. In this earlier part of her journal, Hilary considered a good teacher to be an entertainer able to encourage students’ enthusiasm and motivation. She focused on the importance of teachers acting as inspiration for learners and on the importance of developing students’ voices. Hilary’s ideas of teaching were beginning to reflect constructivist ideals, but she lacked the understanding to put them into practice purposefully. Sometime later, she mentioned students learning within a broader community.

In a later part of Activity 1, Hilary found it difficult to describe her philosophy of teaching, but she had gained some insights from the first activity readings and felt she used teacher-centred methods in lecturing and more student-centred methods in tutorials. When asked about her ideas on good teaching, she mentioned the value of engaging students, being well organised, giving the big picture and facilitating audience interaction. Hilary still found it important to be liked, but she was beginning to overcome her cognitive dissonance by understanding the need to be more concerned with her teaching practices. She still felt a need to be a fount of knowledge.
In the second activity, Hilary was exposed to the ideas of different learning styles and teaching approaches. She began to identify these in her students and felt a deep approach would be best. She further identified the teaching approach for her unit that was likely to foster a surface approach and noted that exposure to applicable theories had enhanced her understanding. At this point, she understood rote learning to be lower-order learning, but her understanding of assessment inclined her to repudiate certain types (for example, multi-choice questioning) altogether rather than to seek ways to improve the validity of such assessment methods.

During the third and fourth activities, Hilary began to reflect on the data she had gathered from her students using a questionnaire and develop approaches to better communicate her expectations for assessment tasks to her students using what she termed a ‘map’ of expectations. Utilising formalised feedback methods, Hilary had effectively begun to use reflective practice to identify problems and plan strategies to improve her teaching.

**Summary of Findings: Case 1, Hilary**

By analysing the data gathered during interviews with Hilary and the data gathered from her responses to the TPI questionnaire, Hilary’s COTs at the beginning and end of the semester were identified and compared to determine change. Triangulation of these analyses was conducted to substantiate the findings from these analyses. The impact on Hilary of her participation in the intervention was also considered throughout these analyses. Hilary’s journal comments were analysed to further supplement and corroborate the findings from the analyses of the interviews and TPI responses. Hilary came to understand that teacher–student rapport is important for establishing a positive learning environment, but that this does not require teachers to be friends with students. Her ideas of teaching that informed her practice at the beginning of the study expanded beyond her undergraduate student experience to incorporate her understanding of various teaching theories presented in the RPW.

By the end of the study, Hilary was considering her students’ needs in a more complex way and implementing strategies that enabled her to manage her classes equitably. She developed a broader and deeper awareness of how her role facilitated the achievement of learning outcomes by students, and this knowledge was being translated into the way she structured her classes and sequenced her learning activities. Over the course of the study, Hilary became more comfortable in her role as a teacher and actively took on greater responsibilities, especially in terms of setting boundaries and communicating her expectations to her students. Not only was she more aware of her
role as a teacher, she was also more cognisant of her place within the institution in which she taught. Her abilities to reflect on her teaching expanded from thinking about what others thought of her, to the point at which she was able to reflect critically on her teaching and her students’ learning. She had developed into a teacher practitioner.

Answers to Research Questions: Case 1, Hilary

RQ 1.1: What COTs are Held by Hilary Before the Intervention?

At the start of the study, Hilary’s COTs revealed that she was very concerned with rapport—a concept that included being friends with her students and being seen as popular. Her views on managing behaviour were often *ad hoc* and she lacked confidence and structure in her approach. Hilary relied heavily on her own experience as a student when constructing her teaching practices. Her empathy for her students was drawn from her own student experience. She professed that students were here to learn and that they should take responsibility for their own learning. Hilary conceived discussion as an important part of good teaching, but had little practical or theoretical understanding of how to use discussion strategies to support her conception. Hilary based her expectations of her students on her less able students. The ideas Hilary held about assessment were predominantly concerned with students passing exams and getting them to the next level in their studies. She started the semester with a teacher-centred approach, expecting students to be able to name, identify and restate what they had learned.

RQ 1.2: What COTs are Held by Hilary After the Intervention?

At the end of the study, Hilary viewed building rapport with students in the more social sense, related to teaching and learning, rather than to her popularity. She valued her students’ diverse views and perspectives and encouraged them to take ownership of and responsibility for their learning. She saw herself as having the role to motivate students to learn and to facilitate their learning. Subsequently, she not only focused on providing her students with content but also used interactive teaching strategies to promote student learning.

By the end of the study, Hilary’s thinking about behaviour management was more structured and definite. She was concerned with the interaction of students in her class and with the fair treatment of her students. Although she was aware of the need to cater for students’ varied backgrounds and different levels of prior knowledge, there were some theoretical conceptions of Hilary’s teaching that she had not reconciled in practice. She struggled with how to deal with diverse student needs and motivation levels. Her views about teaching showed signs of being informed by pedagogical
theories as well as her own experiences as a student. Overall, she was concerned about the quality of learners’ experiences and held a less teacher-centric COT.

**RQ 1.3: How Did Hilary Change Her COTs?**

Hilary’s COTs changed over the course of this study. Overall, Hilary’s thoughts about her teaching increased in complexity. She became less concerned about being popular with her students and more concerned with how her teaching was affecting the students’ learning. The reflection she engaged in was effective in shifting her view of teaching towards a greater focus on her students’ journeys. The shift from Hilary’s conceptions of herself as a leader and presenter of material to a driver and facilitator of learning was pivotal and affected how she viewed her teaching. Interaction with several theories of teaching and learning gave her a deeper base to draw upon in considering her teaching. With newly encountered theoretical knowledge and an increased understanding of how to reflect for improvement, Hilary’s views expanded beyond her own student experiences, to reflect a bigger picture of how her actions affect the learning outcomes of students. While Hilary had been teaching for a number of semesters over several years, it was the reflective process she practised during this study that allowed her to extend her conceptual understanding beyond her concentration on her own teaching actions. As a result, she came to see herself as a practitioner who could distinguish what could work better for her students’ learning and for the institution in which she worked.
CHAPTER FIVE
CASE 2, LAURA

This chapter provides an account of the results of this study that specifically answer the first three research questions about Case 2, Laura:

1.1 What COTs are held by Laura before the intervention?
1.2 What COTs are held by Laura after the intervention?
1.3 How did Laura change her COTs?

The answers to these questions are drawn from an analysis of Laura’s interview data, followed by an analysis of her responses to the TPI. These two sets of analyses are then triangulated to confirm the findings. Next, the data from her personal journals are used to supplement the findings. The chapter closes with a summary of findings about Laura, along with answers to the above three research questions.

The same methods that were used to analyse each set of case data were applied to the treatment and triangulation of Laura’s data. However, for the sake of expediency, the full analyses and interpretations of Laura’s interviews and journals are included in Appendix 7 and Appendix 8, respectively. In this chapter, summaries of these analyses are provided. Figure 23 depicts an overview of the progressive structure used for this and subsequent case chapters.

Background: Case 2, Laura

Laura is in her first year as a PhD candidate and had just commenced work as a new sessional teacher at the beginning of this study. She has completed two undergraduate degrees, the second with honours. She has no formal teaching qualifications and, although she has undergone the institutional briefings that are compulsory for all academic sessional staff at her university, she felt that her COTs were vague. She has been preparing diligently for the commencement of her teaching duties and she mentioned that, if her teaching were to go well, she would like to pursue teaching as part of her career.
Figure 23. Progressive structure of case chapters 5–8.
Findings from an Analysis of Interview Data: Case 2, Laura

Interviews were conducted with Laura to reveal the COTs that she held at the beginning and end of this study. Eleven main themes were employed to categorise the COTs that emerged during these interviews. As with the other case studies in this research, the emergent nuances and traits of Laura’s thoughts, which I call the actual COTs that Laura held, were designated as sub-themes during the coding process and appropriately grouped under the relevant main themes. A summary of the main themes and pertinent sub-themes traversing the COTs revealed during the analysis, with indications of their presence in the initial and final interviews, are outlined in Table 28.

Table 28
Thematic Map for Case 2, Laura’s Initial and Final COTs

<table>
<thead>
<tr>
<th>COTs</th>
<th>Initial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COT 1 Awareness of COTs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conceptual awareness</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Different teaching styles for different learning styles</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Conceptions changing</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Conceptions changed</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>COT 2 Sees teaching as a social process</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constructivist paradigm</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Encourages active learning</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Develops cooperation among students</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Encourages contact of students and faculty</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Friendly with students</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Rapport</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>COT 3 Developing minds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create understandings themselves</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Empathy towards student</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Caters for individual needs</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Student-centredness</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Equal treatment</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Peer motivation</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>COT 4 Fostering understanding</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imparting knowledge</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Deep understanding</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Connections between various opinions and ideas</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Emphasise critical concepts</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>COT 5 Preparation and materials</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Organisation of learning</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Authentic materials and tasks</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Examples and explanations</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Accessible information</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Up-to-date material</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
### COTs

<table>
<thead>
<tr>
<th>COT</th>
<th>Initial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>COT 6 <em>Engaging students</em></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Discussion</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Engagement</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Expects student effort</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Motivation</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Self-motivated students</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Selling the course</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>COT 7 <em>Facilitating and organising learning</em></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Facilitator</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Advance organising</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Approachability</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Responsibility for learning</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>COT 8 <em>Behaviour management</em></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Boundary setting</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Institutional philosophy correlates</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Knowing institutional policies and procedures</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>COT 9 <em>Assessments</em></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Authentic assessment</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Assessment deadlines</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Giving prompt feedback</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>COT 10 <em>Evaluates teaching practices</em></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Experimenting with methods</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Student beliefs of teaching and learning</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Model to draw on</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Evaluate one’s own teaching</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Reflecting</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>COT 11 <em>Practitioner of teaching</em></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>A job</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Expert in subject matter</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Competent to teach</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Confidence</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Enthusiasm, loves to teach</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Teaching experience</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Teaching from own perspective</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Gender male helps</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>One-to-one</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Practitioner academic</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Practitioner teaching community</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Theory informed practice</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Trends of Change across Interview Data: Case 2, Laura**

An analysis of the transcripts of the interviews with Laura produced findings that represent Laura’s COTs and how they changed over the course of the study. Representative quotations that offer insights into her conceptions, feelings and thoughts on teaching, as well as the processes she was trying to absorb and put into practice, are
included under the themes and sub-themes described in Appendix 7. Across the analysis of Laura’s COTs, trends emerged that evidence her conceptual development about teaching and learning. These trends are now presented.

**Theme 1: Awareness of COTs**

Laura appeared to be moving towards a more integrated understanding of constructivist ideals and was displaying a deeper understanding of different learning types. This was reflected in her emergent teaching methods, which included a greater sense of empathy, inclusiveness and encouragement towards deeper learning. Over the semester, Laura grappled with a conceptual conflict, realising the need to replace her old visual conception of ‘good’ teachers as being behaviouristic with her more recent awareness of ‘good’ teachers as being constructivistic.

Laura’s realisation over the semester that teaching and learning were an interdependent series of experiences and interactions emphasised her continuing conceptual maturation. Laura’s growing appreciation of the interdependencies between teaching and learning also broadened her conception of the effects that good rapport with students can have on creating effective learning environments. Likewise, Laura’s initial feeling that it was necessary to be friendly with students matured and became more considered and constructed within formalised institutional boundaries.

Laura’s language of teaching and teaching theory became increasingly complex by the end of the semester, which can be seen by the growing depth of understanding in her comments and explanations, such as when she spoke of connections between cognitive dissonance and confusion. As the study progressed, Laura also displayed increasing awareness of her own COTs as she reflected on the exposure to philosophical ideas about teaching and learning that were promoted by her university’s teacher orientation session. Laura’s confidence to teach was boosted by her awareness of the usefulness of her experiences and links with other disciplines, contributing to her teaching.

**Theme 2: Sees Teaching As a Social Process**

Laura had conceptually moved away from passive learning towards active learning and interaction with students. Her deeper understanding of constructivist principles brought about a desire to redesign the unit she taught to engender improved active learning processes. Her ideas about interactive learning processes acknowledged both her role as the teacher and her students’ roles as active, interactive learners. Towards the end of the study, Laura’s confidence had increased with experience and reflection on her new understandings.
Theme 3: Developing Minds
Laura’s conceptions of empathy shifted from simply wishing for students to do well in badly designed assessments, towards a more sophisticated stance in which she considered the life situation of an individual alongside their learning.

Theme 4: Fostering Understanding
Initially, Laura had an intention to acquire student feedback and utilise it to adjust the unit to improve her teaching and students’ understanding. As she engaged with a mid-semester evaluation process, she realised that students often had differing ideas and opinions on the same matter. Laura initially intended to move her teaching from surface towards deep learning. Over the semester, her conceptions of student understanding became more complex and she began mapping a strategy of active learning to encourage engagement to achieve it. Her comments became increasingly student-focused as the semester progressed. A broadening of Laura’s theoretical understanding and her considered intentions testified to Laura’s conceptions having become more complex, and this complexity was increasingly present in her actions.

Theme 5: Preparation and Materials
The complexity of Laura’s conceptions of teacher-preparation grew as her awareness and understanding of other facets of teaching and learning broadened and connected. Laura felt that her COTs had matured and that this growth had given her a more detailed appreciation of ‘good’ teaching.

Theme 6: Engaging Students
Laura began the semester wanting to inspire and engage her students and make their learning more relevant. By the end of the semester, she had developed a more mature understanding of how to put this into practice. Her reflection culminated in a strategy for how to encourage her students to recognise the relevance of their learning, which she expected would enhance individual students’ inspiration and increase their engagement with their learning.

Laura initially held simple expectations that students would prepare themselves and pass the unit. These expectations became more nuanced and realistic as Laura grappled with her growing awareness of different learning styles as she progressed through the semester. Laura’s simple conception of motivating students as an essential trait of good teachers gained complexity with her experience over the semester, augmenting her appreciation of how difficult it was to effectively plan for and activate student motivation.
Theme 7: Facilitating and Organising Learning

By the end of the study, Laura considered the role of teachers as to be facilitators. This became her conceptual preference, although she was still experiencing conceptual conflict between her old model of teaching and the newer constructivist model that she wished to adopt. Conceptually, her beliefs and intentions had changed, but her actions continued to be influenced by her entrenched transmissive teaching models. With Laura’s emerging conception of teachers as facilitators came a realisation of the real-world need for students to take responsibility for their own learning. Although she still shouldered much of the responsibility for her students’ learning, by the end of the study she showed a keen interest in making a shift to allow students to assume greater accountability.

Theme 8: Behaviour Management

From initially being nervous and unsure about using a socially collaborative process to set boundaries with students, Laura attempted to push students’ expectations about boundaries more towards her own by displaying reserved disapproval when she felt boundaries were breached. While Laura displayed a conceptual awareness of the social benefits that the communal construction of boundaries offered, her practice was still undermined by her old model of the ideal teacher.

Theme 9: Assessments

Laura’s initial position that assessment should include authentic tasks and foster real-world skills expanded to encompass active learning processes. Laura redesigned the assessment tasks in her unit, intending to orientate them towards enhancement of active learning and to incorporate real-world skills. As the study progressed, Laura’s comments illustrated a strong understanding of the link between the quality of assessment tasks and the quality of student learning. Further, with an increasingly holistic understanding, Laura attempted to alleviate students’ lack of adherence to submission deadlines and the logistical problems that this posed for her, by implementing a penalty system to enforce assignment submission.

Theme 10: Evaluating Teaching Practices

As the semester progressed, Laura’s discovery of the importance of evaluation grew to a realisation that the adoption of evaluation processes would tend to bring positive continual improvement if accompanied by reflection. There was very little evidence of her being defensive about the feedback that she gathered throughout the evaluation processes she used. Laura’s initial conception of her need for a contemporary
constructivist model of teaching matured over the semester and, by the study’s end, she had a better understanding of how to create a model of her own.

Initially, Laura held a conception of reflection that was idealistic about the basic process; however, by the end of the semester, she had broadened her definitions and engaged with the reflective process such that she felt more confident about the purposes for employing such processes. Reflection gave her a sense of increased capacity with which to grapple with various teaching and learning issues, and she felt that this led to practical improvements in her teaching and learning environments.

**Theme 11: Practitioner of Teaching**

Initially, Laura lacked confidence in her teaching abilities; however, by the end of the semester, she felt her confidence improving, citing reasons for this as her good collegial contacts and a realisation that she brought experience to her teaching from her experience as a learner. Laura’s COTs became stronger and more defined as she increasingly made links between theory and practice. Whereas earlier she had conceived many aspects of teaching as discrete ideas, much of her thinking had become more holistic.

Laura’s confidence in her teaching practice grew when she was authorised to use lecture content she had developed herself in place of the content predetermined by the unit coordinator. She reflected on how her lack of confidence was a roadblock to the progression of her teaching practices.

**Summary of Trends of Change across Interview Data: Case 2—Laura**

The changes that occurred across the semester for Laura, as indicated by the analysis of her interview data (see Appendix 7), demonstrate a growth in her theoretical understanding of learning and an increased awareness of the complexity of teaching and its practical responsibilities. This change in understanding of the teaching process incorporated an acknowledgement by Laura of the attributes of teaching that are more easily processed in a social constructivist environment, as well as those aspects of teaching that are not so easily achieved without stepping outside of one’s comfort zone. Although Laura was more definite about her ideas of what good teaching and learning involved, including more interrelated concepts, she still had trouble in moving her increasingly metacognitive thinking into the active practice of her own teaching. Hence, her interviews illustrated how she often experienced conflict about what should and should not be done in the name of good teaching and learning.

Despite the conflicts and dilemmas she continued to experience during the teaching process, Laura was developing her skills as a reflective practitioner. By the end
of the semester, she has demonstrated how her theoretical ideas about teaching were noticeably informed by her introduction to educational theories such as constructivism, motivation, active learning and differing learning styles and approaches. This was facilitated through her engagement with the reflection-focused activities structured into the RPW. At the end of the intervention period, she presented as having connected ideas about teaching and learning and an increasingly confident view of herself as an educator. She was beginning to take more responsibility for facilitating her students’ learning instead of driving their learning through her own actions. The somewhat simple perspective of teaching and learning held by Laura at the beginning of the semester was being replaced by a more complex and realistic view as she continued to adapt through reflection.

Overall, the processes of reflection that Laura engaged in during the study, as evidenced by an analysis of data gathered during her interviews, acted as both the catalyst for her changing views about teaching and the method by which she recorded these changes.

**Analysis of TPI data: Case 2, Laura**

To supplement the findings that emerged from the analysis of her interview data, Laura’s responses to the TPI questionnaire at the beginning and end of the study were analysed in the same way as was done for Hilary in Case 1 and will be done for the other cases presented in this thesis.

**Initial Perspectives**

Laura’s scores from her initial use of the TPI questionnaire (see Table 29), revealed that, although her scores for developmental (36) and nurturing (36) were clearly and equally her highest-scoring perspectives, they were not described as dominant (see Table 30), as they did not equal or surpass the level determined as dominant (38) for her results. Therefore, Laura was shown to have quadruple backup perspectives: developmental (36), nurturing (36), apprenticeship (34) and transmission (32). Laura’s recessive perspective was determined to be social reform (19).

**Final Perspectives**

On taking the TPI questionnaire at the end of this study (see Table 29), Laura was holding one clear and dominant perspective (see Table 30), which was shown to be nurturance (42), at above the minimum dominant level of 38 set for her results (40). The score Laura received for the perspective of transmission (36) rose from the initial administration, but it was still seen as a backup perspective. Laura’s developmental perspective also rose (38), but it too was still deemed a backup. Laura’s final scores
revealed the double recessive perspectives of social reform (32) and apprenticeship (31). It is noteworthy that, although Laura’s perspective for social reform had risen considerably from 19 initially to 32 in the final administration, it was still seen as a relatively recessive perspective.

Table 29

*TPI Perspective Scores for Case 2, Laura—Pre and Post Study Results*

<table>
<thead>
<tr>
<th>Usages</th>
<th>Transmission</th>
<th>Apprenticeship</th>
<th>Developmental</th>
<th>Nurturance</th>
<th>Social Reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>INITIAL</td>
<td>32</td>
<td>34</td>
<td>36</td>
<td>36</td>
<td>19</td>
</tr>
<tr>
<td>FINAL</td>
<td>36</td>
<td>31</td>
<td>38</td>
<td>42</td>
<td>32</td>
</tr>
<tr>
<td>Change</td>
<td>4</td>
<td>-3</td>
<td>2</td>
<td>6</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 30

*TPI Perspectives Scores Showing Dominant, Backup and Recessive Rankings for Case 2*

<table>
<thead>
<tr>
<th>Rank</th>
<th>Transmission</th>
<th>Apprenticeship</th>
<th>Developmental</th>
<th>Nurturance</th>
<th>Social Reform</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dom Bk Rec</td>
<td>Dom Bk Rec</td>
<td>Dom Bk Rec</td>
<td>Dom Bk Rec</td>
<td>Dom Bk Rec</td>
</tr>
<tr>
<td>INITIAL</td>
<td>32</td>
<td>34</td>
<td>36</td>
<td>36</td>
<td>19</td>
</tr>
<tr>
<td>FINAL</td>
<td>36</td>
<td>31</td>
<td>38</td>
<td>42</td>
<td>32</td>
</tr>
<tr>
<td>CHANGE</td>
<td>4</td>
<td>-3</td>
<td>2</td>
<td>6</td>
<td>13</td>
</tr>
</tbody>
</table>

Changes in Teaching Perspectives

Some changes were revealed in the comparison of the perspectives of teaching that Laura held between the beginning and end of the study (see Table 30). Whereas she initially held no clearly dominant perspective/s, by the end of the semester the nurturance perspective had emerged as dominant. Laura’s biggest change in scores was in the perspective of social reform; however, as already noted, the change was not sufficient to move it beyond its recessive ranking.

Perspective Sub-scores

Further details of the changes in Laura’s perspectives of teaching across this study can be observed in Table 31, which details her sub-scores for both iterations of the TRI. These findings show the movements that occurred in the dimensions of her beliefs,
intentions and actions across each of the five perspectives measured. The main changes to emerge were that apprenticeship receded in importance to become recessive, while nurturance rose to become clearly dominant. In the following sections, the details of each of these three sub-scores are considered separately.

Table 31

**TPI Perspective Sub-scores Case 2, Laura—Pre and Post Study**

<table>
<thead>
<tr>
<th>PERSPECTIVE</th>
<th>INITIAL</th>
<th>FINAL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beliefs</td>
<td>Intentions</td>
<td>Actions</td>
<td>Total</td>
</tr>
<tr>
<td>Transmission</td>
<td>9</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>Apprenticeship</td>
<td>7</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Developmental</td>
<td>11</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Nurturance</td>
<td>11</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Social Reform</td>
<td>7</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

Beliefs sub-scores

Increases across the board in the sub-scores for beliefs were indicated by an analysis of Laura’s responses across the two administrations of the TPI questionnaire (see Table 32). Social reform and apprenticeship equally gained most, with 43% increases; however, it was the increase in her beliefs regarding nurturing that, in part, led to the raising of her nurturing ranking from a backup to a dominant perspective.

Table 32

**Beliefs Sub-scores Showing Percentage of Change, Case 2—Laura**

<table>
<thead>
<tr>
<th>BELIEFS</th>
<th>Initial</th>
<th>Final</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission total: (Tr)</td>
<td>9</td>
<td>10</td>
<td>11%</td>
</tr>
<tr>
<td>Apprenticeship total: (Ap)</td>
<td>7</td>
<td>10</td>
<td>43%</td>
</tr>
<tr>
<td>Developmental total: (Dv)</td>
<td>11</td>
<td>12</td>
<td>9%</td>
</tr>
<tr>
<td>Nurturance total: (Nu)</td>
<td>11</td>
<td>13</td>
<td>18%</td>
</tr>
<tr>
<td>Social Reform total: (SR)</td>
<td>7</td>
<td>10</td>
<td>43%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>45</td>
<td>55</td>
<td>22%</td>
</tr>
</tbody>
</table>
**Intentions sub-scores**

Laura’s sub-scores for *intentions* across her perspectives (see Table 33) exhibited changes, most notably in the *social reform* perspective. Although the change did not alter the ranking, it was the greatest change of any individual sub-score across Laura’s TPI results.

Table 33

*Intentions Sub-scores Showing Percentage of Change, Case 2, Laura*

<table>
<thead>
<tr>
<th>INTENTIONS</th>
<th>Initial</th>
<th>Final</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission total: (Tr)</td>
<td>9</td>
<td>12</td>
<td>33%</td>
</tr>
<tr>
<td>Apprenticeship total: (Ap)</td>
<td>13</td>
<td>12</td>
<td>-8%</td>
</tr>
<tr>
<td>Developmental total: (Dv)</td>
<td>13</td>
<td>13</td>
<td>0%</td>
</tr>
<tr>
<td>Nurturance total: (Nu)</td>
<td>13</td>
<td>15</td>
<td>15%</td>
</tr>
<tr>
<td>Social Reform total: (SR)</td>
<td>5</td>
<td>13</td>
<td>160%</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>53</td>
<td>65</td>
<td>23%</td>
</tr>
</tbody>
</table>

**Actions sub-scores**

With respect to Laura’s sub-scores for *actions* across her perspectives (see Table 34), there were increases in three out of five perspectives: her *social reform* score increased from 7 to 9 (or 29%), her *nurturance* score rose from 12 to 14 (or 17%) and for *developmental* Laura’s increase was from 12 to 13 (or 8%). Laura’s *action* sub-scores for the perspectives of *transmission* remained the same, while for *apprenticeship* they fell from 14 to 9 (or -36%).
Table 34

Actions Sub-scores Showing Percentage of Change, Case 2, Laura

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>Initial</th>
<th>Final</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission total: (Tr)</td>
<td>14</td>
<td>14</td>
<td>0%</td>
</tr>
<tr>
<td>Apprenticeship total: (Ap)</td>
<td>14</td>
<td>9</td>
<td>-36%</td>
</tr>
<tr>
<td>Developmental total: (Dv)</td>
<td>12</td>
<td>13</td>
<td>8%</td>
</tr>
<tr>
<td>Nurturance total: (Nu)</td>
<td>12</td>
<td>14</td>
<td>17%</td>
</tr>
<tr>
<td>Social Reform total: (SR)</td>
<td>7</td>
<td>9</td>
<td>29%</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>59</strong></td>
<td><strong>59</strong></td>
<td><strong>0%</strong></td>
</tr>
</tbody>
</table>

Summary of Changes in TPI Scores and Sub-scores: Case 2, Laura

Analysing Laura’s responses to the TPI at either end of this study revealed that the most pronounced increases in Laura’s perspectives of teaching between the initial and the final scores (see Figure 24) were found within the perspectives of social reform and nurturing. Both of these perspectives recorded rises in all of their sub-scores. Social reform presented the largest numerical changes; however, these changes were not sufficient to increase the perspective’s relative rank above recessive. Therefore, although notable, this increase was not significant to the outcomes of her thinking about teaching.

Conversely, the consistent change in nurturance as a perspective across all sub-scores of beliefs, intentions and actions led to an elevation of it ranking to a dominant perspective. The movement in ranking of nurturance from backup to dominant appears to be an important change, as the emergence of nurturance as a definite dominant perspective gives a much clearer result as compared to Laura’s initial exhibiting of no dominant perspective. Laura’s developmental perspective also rose slightly, but this appeared to have little significance in the broad picture revealed by an analysis of her TPI responses.

Laura’s apprenticeship perspective total reduced most of all. Within the apprenticeship sub-scores, there was a marked increase in beliefs, countered by a similar sized reduction in her actions and a slight reduction in her intentions. The cumulative result was that the apprenticeship perspective lost its backup ranking and became recessive.
Overall, there were marked changes in Laura’s perspectives of teaching. Although Laura showed no clear preference for any perspective at the start of the study, by the end of the study she was clearly aligned with a nurturing perspective and her apprenticeship perspective had receded. By the end of the semester, her ideas of teaching had become much more defined and focused.

**Figure 24.** Case 2 TPI changes between initial and final scores within sub-scores.

**Triangulation between Interview and TPI Data: Case 2, Laura**

The conceptual conflicts based on the theoretical tensions between behaviourism and constructivism that Laura experienced during the semester and which emerged through the analysis of her interviews were confirmed by her reporting of quadruple backup perspectives on the TPI. Her entrenched ideas of teaching as transmission and the tension this caused when these views came into conflict with her newfound constructivist views were evident in both her interviews and her TPI scores. However, one clear dominant perspective, of nurturance, emerged from the TPI data for the end of semester, and this is reflective of the concern she expressed during the interviews for her students’ welfare. Her TPI score for the perspective of social reform also rose by the end of the semester, with this change also able to be traced to the findings revealed in an analysis of her interview data. Laura’s comments throughout her interviews were characterised by her need to prepare students for the type of societal issues they would face in the future.

Laura’s interviews illustrate how her theoretical ideas about teaching and learning strengthened and became more complex as the semester progressed. This
transformation was also reflected in her TPI results, indicated by the increase in her beliefs sub-scores from the beginning to the end of the semester. These score increases were particularly noticeable in her beliefs about nurturing, which was finally classified as being her dominant perspective. Again, this increase was reflected in her interviews, during which she clearly became more definite about and committed to her views of herself as a teacher-facilitator with the role of assisting students to grow and develop in cognitive and emotional ways. She also displayed a more sophisticated sense of empathy, becoming more cognisant of her students’ life situations and, consequently, taking into account their individual needs.

The TPI results show how Laura’s action sub-scores for the perspective of apprenticeship fell by the end of the semester. This score reduction is commensurate with the decreased emphasis she placed during the interviews on herself as a content expert. Instead, her interview comments during the latter stage of the semester show that she had developed constructivist teaching views and practices, resulting in her advocating for her students to take more responsibility for their learning as she became less of a ‘master’.

**Supplementary Findings from an Analysis of Personal Journals: Case 2, Laura**

Laura’s personal journal data were treated according to the same process used for Hilary’s personal journal data in Case 1, and for the other cases presented in this thesis. For the sake of expediency, a summary of the results from this data treatment is included in this chapter. Appendix 8 presents the detailed interpretation of Laura’s personal journal data, supported by representative quotations.

**Summary of Personal Journal: Case 2, Laura**

Shortly after Laura engaged with Activity 1, she began using her personal journal to note what she felt were valuable personal experiences as a student. She realised she could learn outside an educational setting. As she moved forward in the first activity, she responded to some of the material she encountered. She mentioned relying on three bodies of knowledge to make sense of her teaching: a sketchy understanding of teaching approaches, the initial professional development sessions run by her university and her first few teaching experiences. Laura noted that the professional development sessions had given her some awareness of a student-centred teaching approach. This newfound awareness had not overturned her existing traditional models of teaching, but had given her a basis to begin to change, which she felt was essential. She was surprised to find that her initial teaching experiences were the most useful knowledge on which to draw.
In Activity 2, Laura continued to espouse the constructivist and student-centred approaches to teaching that she had encountered in the first activity. She agreed with the new ideas and it appeared that the new constructivist model she had encountered was beginning to replace her traditional teacher-centred models. Nevertheless, she still exhibited cognitive dissonance when trying to document her own theory of teaching, and she noted feeling confused, and even shocked that she was confused. Her thoughts about above-average teachers yielded a long list of attributes:

Heaps. Knowledge of subject, communication skills, listening skills, energy, motivation, caring, charisma too—which often means rapport with those around them, boundaries, openness, willingness to own up if they don’t know something, AWARENESS [sic], knowing what they are doing, not boring, dull or static, understands students’ realities.

(Journal, Laura, Case 2): Activity 2

Further into Activity 2, Laura made a journal entry about how she might improve her teaching. She felt a lack of confidence and under-preparedness. She desired feedback from her students and did not know what she might be doing wrong. The need for feedback was also a strong theme that emerged from an analysis of Laura’s interview data. She felt there were so many areas for improvement that it was overwhelming. As Laura began to reflect on her teaching, she craved a better understanding of teaching and learning. She also sought an explicit recognition of her status as a beginner teacher (neophyte) and showed interest in entering into an apprenticeship period with formal mentoring.

Laura’s theoretical understandings and pedagogical language expanded as she encountered the readings in Activity 2. Her confidence was boosted as she accepted that she did have some teaching skills. She revelled in the idea of deep learning and considered how to encourage it using appropriate teaching approaches. In the final part of Activity 2, Laura wrote about how the formal reflective process had helped to relax her about being a perfect teacher from the outset:

I think this whole project plus the entire learning curve over the semester, has helped me, kind of relax a bit [and feel] that I’m doing ok.

(Journal, Laura, Case 2): Activity 2 Part B

In Activity 3, Laura obtained feedback data from her students about her own teaching. As she began to reflect on the feedback, she re-read a reading about being a reflective practitioner and reviewed the RPW, which she felt strengthened her understanding of the reflective processes:
I so get the point of doing this. I really just needed to say all that … I think I’ll just sit here for a while.
(Journal, Laura, Case 2): Activity 3

During Activity 4, Laura carried out some of the suggested interrogation of her feedback data, noticing patterns of repetitive responses and ineffective communications about expectations. She noticed that students were given many examples of bad work but that few good examples were offered. This was an example of Laura’s reflective process exposing a problem for which she could attempt improvements. Further, Laura found that although she expected negative feedback to lower her enthusiasm, her engagement with reflective practice and a continuous improvement cycle reinvigorated her:

I think that I’ll get enthused all over again, if I evaluate, review and improve.
(Journal, Laura, Case 2): Activity 4, Part A

Laura’s appreciation of the effectiveness of feedback data in reflective practice saw her contemplating ways she might enrich the data she collected, by customising feedback questionnaires for individual units.

In the beginning, Laura was advised to read from provided lecture notes; however, by the time she engaged in the final activity, Laura had begun expounding her own theory of teaching and was feeling more confident to teach from the perspective of her own understanding. She felt her teaching belonged to her:

I clicked [realised], that it’s actually about teaching someone else’s lecture. I totally didn’t feel that when I gave my own lecture.
(Journal, Laura, Case 2): Activity 4, Part A

Finally, in Part B of Activity 4, Laura attended to the last phase in the reflective process and directly considered ways to improve. Although not part of this project’s activities, Laura took steps to learn applicable skills by enrolling in a ‘Good Lecturing’ workshop. After that workshop, she noted having been enlightened by it. She had come to realise that she was doing some good teaching, which increased her confidence to continue; however, just as importantly, she came to a better understanding of how teaching approaches can be matched to learning needs. She felt she had become more adept at adjusting spontaneously to what was working and what was not.

Laura’s last comment in her journal was concerned with the integration of teaching styles in a quest to find her own style. Laura was impatient to be a full-time teacher and was looking forward to taking full control of all aspects of her teaching:
Bring on fulltime-employment! … I think it’s really important to note that I had to find my own style.

(Journal, Laura, Case 2): Activity 4, Part B

**Summary of Findings: Case 2—Laura**

Overall, these analyses found that Laura developed from having very indistinct COTs to holding a set of more definite COTs characterised by a nurturing approach. The main difference between her initial and final COTs was the level of complexity in her ideas and her increased knowledge following the intervention regarding how to apply these ideas in practice. The effect of the interventional program of reflective practice on Laura’s COTs is evident in the way she incorporated reflective processes in her teaching practices. Her expanding understanding of educational theories made her more aware and enabled her to extend her focus, not just on the details of her own teaching practice, but on student learning as well.

**Answers to Research Questions: Case 2—Laura**

**RQ 1.1: What COTs are Held by Laura Before the Intervention?**

Laura began this study with a mental model of a good teacher as a traditional behaviourist; however, along with that model, she demonstrated nascent ideas about constructivism and active learning, which had been introduced to her via her university’s professional development sessions. She was already trying to discover how she could replace passive learning with active learning and incorporate deeper learning outcomes for her students. She conceived of rapport and social aspects of teaching as limited to getting along with students. Laura’s idea of empathy was simple and was explained in general terms rather than in learner-centred language. Laura thought assessment should incorporate authentic tasks and foster the development of real-world skills. Laura’s initial idea of the reflection process was that she would simply recall teaching episodes and think about what she had done. She expected that students would prepare themselves for each of her classes and pass her unit. Her conception of student motivation started simply as an essential trait of good teaching. Her initial impression of discussion was that it was an important part of teaching; however, as with her other COTs, she could not offer any elaboration as to why.

**RQ 1.2: What COTs are Held by Laura After the Intervention?**

Laura’s COT became more complex as her ideas merged and combined to produce more sophisticated ways of viewing what she was being asked to teach by her coordinators. As her ideas and understandings increasingly came together, so did her capacity to evaluate her own teaching. As Laura began practising and reflecting, she
quickly realised that the process of reflective practice was an essential part of becoming a good teacher. By the end of the semester, she had come to understand that collecting data to evaluate her own teaching, coupled with reflection, would help her to continue improving in her teaching.

She became more aware of the interdependencies between teaching and learning, and the empathy she felt for her students shifted from something general to being specifically related to their learning experiences. Laura expanded her ideas on assessment to encompass active learning processes, and she came to recognise that the quality of assessment tasks was closely linked with the quality of student learning. Laura’s conceptions of assessment became increasingly holistic when, later in the semester, Laura reinstated a penalty system for late assignment submissions, realising that such a system was fair to all students and logistically important for the management of her unit. Laura saw interactivity between students as a good attribute of teaching; however, after engaging with student feedback, she realised that students often had diverse ideas on the same issue. Laura started to map a strategy of active learning to encourage engagement to achieve deeper learning and again exhibited an increasingly holistic approach to her teaching. Reflection on new understandings and experience improved Laura’s confidence. She referred to facilitating learning as a major part of her role as a teacher. Laura’s growth in her awareness of different learners tempered her expectations of how students would prepare for their learning. Reflection on her experience over the semester widened her appreciation for how difficult it could be to motivate learners. Her concept of discussion as a teaching tool broadened and she now saw that it was an effective way to involve students in their learning and to encourage cooperation between them.

RQ 1.3: How Did Laura Change Her COTs?

Laura’s COTs grew in intensity and complexity throughout the teaching semester and began to add depth to the way she approached improvements in her teaching. Her increased ability to connect concepts between the theory and practice of teaching and learning influenced the evolution of her conceptions. She became more aware of the usefulness of her experiences, using them to extend her conception of how to be empathetic towards students in a way that was appropriate to a university teacher. Instead of considering empathy in a general way, she became more concerned with her students’ specific learning experiences.

Laura commenced teaching with a general idea of what reflection was, but as she read about the reflective process with respect to improving as a teaching
practitioner, she saw it in a new light. Moreover, she realised that enforcing deadlines was not only fair, but also logistically important for her unit’s smooth management. Both her increasing understanding of issues connected to assessment and her focused and holistic reflective process meant that she arrived at solutions to equity issues as well as practical administrative problems. The honing of Laura’s conceptions of reflective practice had led to practical improvements in her teaching.

During the semester, Laura’s confidence was boosted when her coordinator allowed her to construct some lecture content by herself. By the end of the semester, Laura’s confidence had grown still further because she had a better understanding of how to create a teaching model of her own and recognised the value of her own previous experience as a student. She was still reflecting after the end of the semester, and realised that, following a difficult first semester of teaching, the act of preparing for the next semester’s teaching was renewing her enthusiasm for teaching. Reflecting in this way, Laura had metacognitively come to a point at which she was able to notice how to revitalise herself for future teaching.
CHAPTER SIX
CASE 3, BEN

This chapter provides an account of the results of this study that specifically answer the first three research questions about Case 3, Ben:

1.1 What COTs are held by Ben before the intervention?
1.2 What COTs are held by Ben after the intervention?
1.3 How did Ben change his COTs?

The answers to these questions are drawn from an analysis of Ben’s interview data, followed by an analysis of his responses to the TPI. These two sets of analyses are then triangulated to confirm the findings. Next, the data from his personal journals are used to supplement the findings. The chapter closes with a summary of findings about Ben, along with answers to the above three research questions.

The same methods that were used to analyse each set of case data were applied to the treatment and triangulation of Ben’s data. For the sake of expediency, the full analyses and interpretations of Ben’s interviews and journals are included in Appendix 9 and Appendix 10, respectively. Summaries of these analyses are provided in this chapter. The progressive structure used for this case chapter is illustrated in the previous chapter in Figure 23.

Background: Case 3, Ben

Ben is a Masters of Mass Communications student; at the beginning of this study, he had been teaching undergraduate students of media for four years. He has no formal teaching qualifications, although he had undergone the introductory teaching seminars that are compulsory for academic sessional staff teaching at his university. With his four years of experience, Ben reported feeling confident about his teaching, although he freely recognised that there was room for improvement in his teaching practices.

Findings from an Analysis of Interview Data: Case 3, Ben

Interviews were conducted with Ben to reveal the COTs that he held at the beginning and end of this study. Eleven main themes were employed to categorise the COTs that emerged during these interviews. As with the other case studies in this research, the emergent nuances and traits of Ben’s thoughts, which I call the actual COTs that Ben held, were designated as sub-themes during the coding process and appropriately grouped under the relevant main themes. A summary of the main themes
and pertinent sub-themes traversing the COTs revealed during the analysis, with indications of their presence in the initial and final interviews, are outlined in Table 35.

Table 35

<table>
<thead>
<tr>
<th>COTs</th>
<th>Initial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COT 1 Awareness of COTs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Different ways of learning</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Different teaching styles for different learning styles</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Changing students</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Conceptions changed</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>COT 2 Sees teaching as a social process</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encourages active learning</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Fellow learners</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Friendly with students</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Rapport</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>A decent person</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good communications</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Social expectations</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Delineating responses that are acceptable</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>COT 3 Developing minds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caring, nurturing and developing minds</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Empathy towards students</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Caters for individual needs</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Metacognitive skills</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Reshape students visions of the world</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Shelve egos</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Student-centredness</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>COT 4 Fostering understanding</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imparting knowledge</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Recognise concepts</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Deep understanding</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Using wisdom</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>New knowledge integrated with old knowledge</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Connections between various opinions and ideas</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Emphasise critical concepts</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>COT 5 Preparation and materials</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Examples and explanations</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Appropriate readings</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Up-to-date material</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>COT 6 Engaging students</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Expects student effort</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Motivation</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>COT 7 Facilitating and organising Learning</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitator</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>COTs</td>
<td>Initial</td>
<td>Final</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>Responsibility for learning</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Making a difference</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>Contactable out of class</td>
<td></td>
<td>☑️</td>
</tr>
<tr>
<td>Visual aids to explain abstract concepts</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td><strong>COT 8 Behaviour management</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boundary setting</td>
<td></td>
<td>☑️</td>
</tr>
<tr>
<td>Culturally sensitive</td>
<td></td>
<td>☑️</td>
</tr>
<tr>
<td>Flexible deadlines</td>
<td></td>
<td>☑️</td>
</tr>
<tr>
<td>Knowing institutional policies and procedures</td>
<td></td>
<td>☑️</td>
</tr>
<tr>
<td><strong>COT 9 Assessments</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setting objectives</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>Checking understandings</td>
<td></td>
<td>☑️</td>
</tr>
<tr>
<td>Targeted properly</td>
<td></td>
<td>☑️</td>
</tr>
<tr>
<td>Exams not effective</td>
<td></td>
<td>☑️</td>
</tr>
<tr>
<td><strong>COT 10 Evaluates teaching practices</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimenting with methods</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>Evaluate one’s own teaching</td>
<td></td>
<td>☑️</td>
</tr>
<tr>
<td>Reflecting</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td><strong>COT 11 Practitioner of teaching</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A job</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Competent to teach</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Confidence</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Enthusiasm, loves to teach</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Expert in subject matter</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>Gender male helps</td>
<td></td>
<td>☑️</td>
</tr>
<tr>
<td>Humour use</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>In my day</td>
<td></td>
<td>☑️</td>
</tr>
<tr>
<td>Practitioner teaching community</td>
<td></td>
<td>☑️</td>
</tr>
</tbody>
</table>

**Trends of Change across Interview Data: Case 3, Ben**

As with other cases, Ben participated in two interviews about his teaching. The data from these interviews were analysed to reveal Ben’s COTs at the beginning and at the end of the semester over which the study was run. Across the analysis of Ben’s COTs, some trends of change emerged that showed his conceptual development in teaching and learning. The trends that were identified as his interview transcripts were analysed are outlined below.

Change in Ben’s thinking was more difficult to detect than for other cases examined in this study. At first glance, Ben seemed to be persisting with the conceptions he had held at the beginning of the semester; however, his explanations often offered extended reasoning and highlighted an increasing sophistication in his thinking. For example, Ben’s attitude to rapport with his students began as seeing
through his students’ eyes, diluting hierarchies and talking to students in the way that they wanted to be talked to. However, his views developed into more learning-centred notions of better communications, based on ideas of promoting a comfortable learning environment and better identifying individual students’ needs. Ben’s idea of ‘what’ rapport achieved in an immediate sense was replaced with a broader understandings of the ‘how’ and ‘why’ of what could be achieved with good student rapport.

Ben’s final interview revealed a somewhat regressed position, as he regularly blaming the students for not engaging sufficiently with their learning. His reflection processes did not manifest the full reflection cycle and he did not reach the point at which he could analyse what he, the teacher, could improve upon or plan to change to improve his practice. This may reflect his use of some aspects of his growing awareness of teaching theory to negate his responsibility for various attributes of good teaching. For example, he declared that he was not responsible for student motivation or engagement beyond having the prowess to perform in front of the class. He supported this position by his encouragement of students assuming responsibility for their learning with terms like ‘you only get out what you put in’.

The beginnings of Ben’s comments often reflect his ability to ‘speak the speak’; however, this is often followed by a change in rigour, as his comments become conceptually contradictory. Comments that begin to suggest a deepening of Ben’s conceptual complexity are not always supported by the explanation he offers when he describes his practice. From his comments, it appeared that Ben’s changing conceptual beliefs were not being translated successfully into actions.

**Theme 1: Awareness of COTs**

At the end of the semester, Ben remarked that slight changes had occurred in his conceptual thinking. Ben’s attributes of good teaching had become broader and more focused on learning as he acknowledged a more holistic theoretical understanding of teaching. His increasing theoretical knowledge challenged some of his existing ways of teaching and, complemented by his participation in reflective activities, this was pushing him to consider some self-reflective evaluation of his teaching. Ben was still struggling to bring his broader awareness and reasoning about teaching and learning into his practices.

**Theme 2: Sees Teaching As a Social Process**

The complexity of Ben’s awareness and understanding of social issues in teaching increased. He became better equipped to recognise the social attributes of teaching practice, which manifested in his wider appreciation of the social dependencies
of students. Ben’s conceptions of his ‘friendliness’ with students had somewhat expanded, increasing his appreciation of the difficulties that out-of-class and close socialising with students can bring. Ben had deepened his understanding of student dispositions and the effects they have in learning environments.

Ben identified rapport as a crucial social enabler in teaching and learning. Although he was already talking about the importance of teacher–student rapport in the initial interview, he was able to give a richer account of the process in the final interview. At first, he saw rapport mainly as an issue of social ease; however, later he included more intricacy in his comments about social interaction with students, explaining how it drives good communication, which enables better learning. Further, Ben now mentioned that humour assisted in the rapport-building process. He explained how his rapport with students improved his capacity to choose better examples.

Ben’s level of awareness of empathy and ways to employ it also rose; he linked the idea of requiring good communications with knowing where a person is coming from, thereby enhancing his appreciation of students’ learning problems.

**Theme 3: Developing Minds**

Ben widened his appreciation of empathy and its value for bolstering his effectiveness as a teacher by making him more accessible to his students. Ben’s conceptions of developing minds moved from simply encouraging wider experiences, towards him being able to reshape students’ vision of the world. He saw how he could assist students to change their conceptions and, as a result, he recognised the power of conceptions to change people. His appreciation for the quality of learning outcomes broadened and deepened.

**Theme 4: Fostering Understanding**

Ben’s conception of fostering deep understanding shifted from knowing what is known, to the ability to apply what is learned. Ben moved from simply identifying his students’ recognition of concepts to engaging them in discussions that probed their understanding of concepts. Ben also appeared to have increased the complexity with which he examined the language of theoretical concepts as opposed to simpler everyday life usage. Ben’s increased awareness of different learning styles and abilities broadened the conceptual complexity of his expectations of his students.

**Theme 5: Preparation and Materials**

Ben did not exhibit any dramatic change in his conceptions of the importance of teacher preparation, although at the end of the semester he was able to offer a more succinct reason for his view that sufficient preparation is important. It appeared that Ben
was somewhat less engaged with the project than were other participants. He spent substantially less time on the activities than did the other participants. Ben chose not to utilise the online journal application to record his impressions, instead preferring to record his responses in a paper-based form. His journal describing his thoughts and journey was substantially less detailed than were those of the other participants, and his submissions appeared to have been written in haste. However, Ben did use the online resource, the RPW, to obtain instructions about how to participate, and to find out about the activities. He also used the RPW to access the theoretical readings and the mid-semester review tool.

**Theme 6: Engaging Students**

Ben moved from simply eliciting students’ reactions by playing devil’s advocate on conceptual issues, towards encouraging them to recognise concepts and communicate their reasoning to others in class discussions.

**Theme 7: Facilitating and Organising Learning**

While Ben’s COTs as a social process were widening, his conceptions of facilitation appeared to change little. At the outset, Ben said there was a need to be competent with the subject matter and to know all sides well. He mentioned independent learning with the guidance of lecturers and tutors as being ‘the best way’. Further, he noted that active involvement helped learning. Ben often tried to explain sound teaching concepts, despite often lacking the language to do so.

At the end of the semester, he focused more greatly on his frustration with students that did not make an effort to take responsibility for their learning, showing the importance he placed on learner disposition, their approach to learning and learner responsibility. Ben had improved his interactions with ill-prepared students (such as those that had not done the assigned readings) by using structured tasks aimed at actively engaging students in topics-based group activities and discussion, rather than ignoring them as he had done previously.

**Theme 8: Behaviour Management**

Ben’s realisation that practical impediments could eventuate from close social interaction with students caused him to reconceptualise how he engaged with his students socially. Having initially held quite a free and informal attitude towards how he managed social contact with his students outside class, by the end of the study, he had developed a more thoughtful and perhaps formal approach that appreciated the benefits fostered by greater distance between teacher and students. Ben was starting to see that a
freer approach to social interaction with his students might have implications for the management of behaviour in his classes.

**Theme 9: Assessments**

The analysis of Ben’s interviews did not offer evidence for change in how Ben thought about assessment, as he only expressed his views on this aspect during the final interviews. However, he did speak in the initial interview about his feelings on the materials for his units being out-of-date, and he noted that the units he was teaching had not been reflected on or updated for some time. He exhibited an increasing frustration with the aging content and examples that were being provided to him by his unit coordinator. Ben also told of how important he thought keeping up-to-date was, particularly in his field (media). By the end of the semester, he was speaking on these issues in much stronger language, but his conceptual stance remained unchanged.

**Theme 10: Evaluating Teaching Practices**

Ben’s conception of evaluation initially concentrated on the negative and missing components of his teaching events; however, over the semester, evaluation became a more conscious process for Ben and he began reviewing the positive as well as the negative aspects of his teaching. Ben’s awareness of different learning styles also grew over the semester, altering how he viewed the variations in learning approaches adopted by his students.

Ben saw reflection as a metacognitive process, but he still did not embrace the complete cyclical nature of reflection to include plans for improvement. He tended to remain reliant on his understanding of reflection as a student, rather than the standpoint of a teaching practitioner reacting to his students’ feedback and their learning needs.

**Theme 11: Practitioner of Teaching**

Ben’s view of teaching as a profession shifted from simply enjoying teaching, to including appreciation for the community respect and status he perceived to be attached to teaching at university. Confidence and competence were interwoven for Ben. He felt that his confidence and competence had increased over the semester due to teaching units outside his usual speciality. As he realised that his teaching skills were somewhat transferable, his confidence in his teaching rose. Likewise, his increased feelings of competence had an upward effect on his confidence. Similarly, he felt that a teacher’s self-confidence affected how students perceived that teacher’s competence. In the end of semester interview, Ben suggested that evaluation in collaboration with his colleagues was a valuable process, as it enabled him to improve continually.
Summary of Trends of Change across Interview Data: Case 3, Ben

Overall, Ben persistently portrayed a cool and casual demeanour when talking about his teaching, although in fact his interview data revealed someone who was cautious and desirous of his students to fit certain moulds. He made comments that suggested that if students did not do or act in a certain way, there was no reason for them being in the course. Towards the end of the study, Ben felt that he had experienced some conceptual changes and that he had emerged from the semester more focused on his teaching. For instance, Ben’s theoretical understandings had become more holistic and he was better able to reflect on and evaluate his teaching. Ben had developed an enhanced appreciation of students’ social needs, along with changed conceptions of managing social boundaries between teachers and students. By the end of the semester, Ben held a more complex view of rapport; for example, he perceived that rapport was more than a social lubricant, that it was also a driver of good communication. By the end of the study, Ben was also attempting to engage ill-prepared students actively, rather than continuing to dismiss them outright.

Across Ben’s interview data, there was evidence that he increased his sophistication of conceptual ideas about teaching and was able to connect some of these ideas; for instance, he spoke about students’ independence, in conjunction with the need for good guidance and active involvement. Ben’s ideas of reshaping students’ visions of the world moved on from simple encouragement, to encompass changing conceptions and linking these to an improvement in learning outcomes. He added more structure to class discussion, using it as a tool to guide and stimulate students’ concept recognition and to initiate their communication of their ideas to others. Ben also shifted his conception of learners’ understanding, from simply ‘knowing about something’ to having ‘an ability to apply knowledge’ in new ways.

Across the gamut of Ben’s detectable changes was an apparent move towards student-centred ideas, away from teacher-centred constructs. As an example, his thoughts on confidence were initially concentrated on his own success; however, these evolved to be concerned with his competence to teach. Similar to other cases in this study, Ben found that an understanding of different learning styles and different teaching approaches helped him to conceive of his students more as individuals.

Analysis of TPI data: Case 3, Ben

Initial Perspectives

Ben’s scores from his initial use of the TPI questionnaire (see Table 36 and
Table 37 revealed that he held the dominant perspective of nurturance (35). He was initially shown to have three backup perspectives: transmission (32), apprenticeship (30) and developmental (33). The perspective that Ben held initially as recessive was social reform (28).

**Final Perspectives**

On completing the TPI questionnaire again (see Table 36 and Table 37), Ben’s dominantly held perspective was developmental (38). Ben’s final scores showed that he had the dual backup perspectives of nurturance (35; previously his dominant perspective) and social reform (34; previously only recessive). Ben’s final scores for transmission (31) and apprenticeship (31) meant that these both receded from being classed as backups to being only recessive perspectives.

Table 36

*TPI Perspective Scores for Case 3, Ben—Pre and Post Study Results*

<table>
<thead>
<tr>
<th>TEACHING PERSPECTIVES</th>
<th>Usages</th>
<th>Transmission</th>
<th>Apprenticeship</th>
<th>Developmental</th>
<th>Nurturance</th>
<th>Social Reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>INITIAL</td>
<td></td>
<td>32</td>
<td>30</td>
<td>33</td>
<td>35</td>
<td>28</td>
</tr>
<tr>
<td>FINAL</td>
<td></td>
<td>31</td>
<td>31</td>
<td>38</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td>Change</td>
<td></td>
<td>-1</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 37

*TPI Perspectives Scores Showing Dominant, Backup and Recessive Rankings for Case 3*

<table>
<thead>
<tr>
<th>TEACHING PERSPECTIVES</th>
<th>Rank</th>
<th>Transmission</th>
<th>Apprenticeship</th>
<th>Developmental</th>
<th>Nurturance</th>
<th>Social Reform</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dom</td>
<td>Bk</td>
<td>Rec</td>
<td>Dom</td>
<td>Bk</td>
<td>Rec</td>
</tr>
<tr>
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<td>32</td>
<td>30</td>
<td>33</td>
<td>35</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>FINAL</td>
<td>31</td>
<td>31</td>
<td>38</td>
<td>35</td>
<td></td>
<td>34</td>
</tr>
<tr>
<td>CHANGE</td>
<td>-1</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

**Changes in Teaching Perspectives**

There were some notable changes in Ben’s perspectives between the initial and final iterations of the TPI (see Table 37 and Table 38). Among these changes were the shift in the dominance of nurturance which, although the score remained the same (35),
moved from dominant to backup. The increase in the rank of Ben's developmental perspective to dominant along with the changes in his scores in other perspectives have relegated his nurturance perspective to the rank of backup. In the final administration of the TPI, Ben’s dominant perspective (developmental) was weighted higher than was his initial dominant perspective (nurturance). With only one dominant perspective showing at either end of the intervention, this would seem to expose a clear change in Ben’s views.

Looking at the scores for his backup perspectives, both of Ben’s initial backups of transmission (31) and apprenticeship (31) decreased by a relatively small and similar amount, to reach the status of recessive. Ben’s scores also revealed that, whereas initially he held the recessive perspective of social reform, this perspective became one of his two backup perspectives along with nurturance by the end of the study. The change in Ben’s initial to final scores for social reform was the largest movement in his scores, and it suggests a considerable change in his thinking in this area.

**Perspective Sub-scores**

An overview of Ben’s sub-scores across the dimensions of his beliefs, intentions and actions, in relation to his perspectives, can be seen in Table 38. These findings show the movements that occurred in the dimensions of his beliefs, intentions and actions across each of the five perspectives. The most notable of these changes is the upward movement in his developmental and social reform perspectives. The following sections delve deeper into Ben’s sub-scores in these areas to uncover the changes at play.

Table 38

*TPI Perspective Sub-scores for Case 3, Ben—Pre and Post Study*

<table>
<thead>
<tr>
<th>PERSPECTIVE</th>
<th>INITIAL</th>
<th>FINAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beliefs</td>
<td>Intentions</td>
</tr>
<tr>
<td>Transmission</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Apprenticeship</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Developmental</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Nurturance</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Social Reform</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>
Beliefs Sub-scores

There were increases within Ben’s beliefs sub-scores (see Table 39), with two changes emerging over the period of the intervention. His beliefs of a developmental perspective increased from 10 to 13 (or 30%) and his beliefs of a social reform perspective increased from 9 to 11 (or 22%). Both of these increases contributed to the overall change in the hierarchical position of Ben’s developmental and social reform perspectives.

Table 39

<table>
<thead>
<tr>
<th>BELIEFS</th>
<th>Initial</th>
<th>Final</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission total: (Tr)</td>
<td>11</td>
<td>11</td>
<td>0%</td>
</tr>
<tr>
<td>Apprenticeship total: (Ap)</td>
<td>11</td>
<td>11</td>
<td>0%</td>
</tr>
<tr>
<td>Developmental total: (Dv)</td>
<td>10</td>
<td>13</td>
<td>30%</td>
</tr>
<tr>
<td>Nurturance total: (Nu)</td>
<td>11</td>
<td>11</td>
<td>0%</td>
</tr>
<tr>
<td>Social Reform total: (SR)</td>
<td>9</td>
<td>11</td>
<td>22%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>52</td>
<td>57</td>
<td>10%</td>
</tr>
</tbody>
</table>

Intentions Sub-scores

Ben’s sub-scores for intentions across his perspectives (see Table 40) showed that the score for apprenticeship increased slightly from 9 to 10 (or 11%), while his score for social reform increased from 10 to 13 (or 30%). Interestingly, his sub-scores of his intentions for developmental remained the same (12). Thus, this did not contribute to the overall rise of his developmental perspective. Likewise, the sub-scores for intentions of transmission (10) and nurturance (12) remained the same.
Table 40

Intentions Sub-scores Showing Percentage of Change for Case 3, Ben.

<table>
<thead>
<tr>
<th>INTENTIONS</th>
<th>Initial</th>
<th>Final</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission total: (Tr)</td>
<td>10</td>
<td>10</td>
<td>0%</td>
</tr>
<tr>
<td>Apprenticeship total: (Ap)</td>
<td>9</td>
<td>10</td>
<td>11%</td>
</tr>
<tr>
<td>Developmental total: (Dv)</td>
<td>12</td>
<td>12</td>
<td>0%</td>
</tr>
<tr>
<td>Nurturance total: (Nu)</td>
<td>12</td>
<td>12</td>
<td>0%</td>
</tr>
<tr>
<td>Social Reform total: (SR)</td>
<td>10</td>
<td>13</td>
<td>30%</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>53</strong></td>
<td><strong>57</strong></td>
<td><strong>8%</strong></td>
</tr>
</tbody>
</table>

Actions Sub-scores

Ben’s sub-scores for *actions* (see Table 41) saw three points of movement. First, *transmission* reduced by 1 point from 11 to 10 (or -9%). While this is a seemingly small shift, it indicates that Ben was starting to replace transmissive methods of teaching with newer, more constructivist approaches. The remaining two movements in the *actions* sub-scores were in *developmental* 11 to 13 (or 18%) and *social reform* 9 to 10 (or 11%).

Along a continuum of pivotal progression (Pajares, 1992) from *beliefs* to *intentions* to *actions*, these two changes align with the changes that occurred in Ben’s *beliefs* sub-scores, although his *intentions* in this sub-score remained the same.

Table 41

Actions Sub-scores Showing Percentage of Change for Case 3, Ben.

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>Initial</th>
<th>Final</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission total: (Tr)</td>
<td>11</td>
<td>10</td>
<td>-9%</td>
</tr>
<tr>
<td>Apprenticeship total: (Ap)</td>
<td>10</td>
<td>10</td>
<td>0%</td>
</tr>
<tr>
<td>Developmental total: (Dv)</td>
<td>11</td>
<td>13</td>
<td>18%</td>
</tr>
<tr>
<td>Nurturance total: (Nu)</td>
<td>12</td>
<td>12</td>
<td>0%</td>
</tr>
<tr>
<td>Social Reform total: (SR)</td>
<td>9</td>
<td>10</td>
<td>11%</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>53</strong></td>
<td><strong>55</strong></td>
<td><strong>4%</strong></td>
</tr>
</tbody>
</table>
Summary of Changes in TPI Scores and Sub-scores: Case 3, Ben

The TPI analysis revealed that the most pronounced differences in Ben’s perspectives of teaching, as evidenced in the comparison between the initial and the final scores (see Figure 25), were found within the perspectives of developmental and social reform. The overall scores returned for his developmental perspective rose from 33 to 38 (or 15%), causing it to be reclassified from a backup to a dominant perspective. The movement that caused the reclassification of his developmental perspective occurred within the sub-scores of his developmental beliefs 10 to 13 (or 30%) and developmental actions 11 to 13 (or 18%).

![Figure 25. Case 3 TPI changes between initial and final scores within sub-scores.](image)

The authors of the TPI (Pratt & Associates, 1998) view beliefs as of pivotal influence in COTs, as they underpin values and represent the most stable aspect of a person’s perspective on teaching. In turn, beliefs often arbitrate a person’s teaching intentions and the actions he or she performs while teaching. Therefore, the shift in Ben’s beliefs sub-scores of his developmental perspective exposes the major conceptual transformation experienced by Ben during this study. The sub-scores of his social reform perspective also changed, with all three sub-scores showing upward movement, with beliefs, intentions and actions recording increases of 22%, 30% and 11%, respectively. These changes are consistent with Pajares’ (1992) and Pratt and Associates’ (1998) theories of pivotal influence in which there is an interdependency between beliefs to intentions to actions. In Ben's case, the perspectives changed from
being a recessive to a backup perspective, indicating the change was not as influential to Ben’s COTs.

**Triangulation between Interview and TPI Data: Case 3, Ben**

It is helpful to triangulate the findings from the analyses of the qualitative (interviews) and quantitative (TPI) data, to strengthen these respective findings. Together, the results bear a good relation to the conceptual transformation that was uncovered by Ben’s responses and consequently noted in the summary of Ben’s trends. For example, the primary goal of the developmental perspective is to ‘help learners develop increasingly complex and sophisticated cognitive structures for comprehending the content’ (Pratt & Collins, 2001b, para 6), which can often be seen as expressed by Ben in the data emerging from his interviews. Indeed, many attributes of a developmental perspective were identified during his interviews. In the final interview, Ben emphasised the ‘further questioning’ of students to develop important concepts and the ‘bridging of knowledge’. Subsequently, it is not surprising that a developmental perspective emerged as dominant for Ben in his final TPI responses.

The trends identified in Ben’s interviews are also supported by the rise of his developmental perspective to dominant position based on his final TPI scores. This is exposed by some of the more commonly coded sub-themes from his interviews, including:

- giving responsibility for one’s own learning;
- teaching as discussion;
- emphasising critical concepts;
- reflecting on the problems; and
- fostering deep understandings.

At a deeper level, the changes seen in Ben’s beliefs sub-score of his (now dominant) developmental perspective was a leading change in Ben’s conceptions. The change in his social reform sub-score was similarly noted and, despite not being as marked, it caused his social reform perspective to move from recessive to backup. It emerged from Ben’s interviews that he wanted to engage his students in discussions delving into their perceptions of concepts. Ben’s interests in how concepts are perceived are in line with his increased weight in a social reform perspective. It could be because of these sorts of interests that Ben’s final TPI results showed more social reformist thinking.
By the end of the study, Ben had improved his interactions with ill-prepared students and he was using more structured tasks to engage them actively, instead of ignoring them. This change in practice is supported by rises in his developmental perspective in the TPI. Part of the balance for this developmental rise may be seen in the drop recorded for his transmission perspective scores in the TPI. A further change detected in both Ben’s interviews and his TPI results related to his efforts to develop the minds of his students, by drawing more on the complexity of his own experiences. He also mentioned that ‘a developing mind changes how one sees the world’. Ben had moved towards further questioning of learners instead of simply assisting them with problems. These traits can also be seen in his TPI results, which recorded his move from a nurturing towards a developmental perspective.

Ben espoused the belief during his interviews that he was experiencing changes and that there were changes he intended for his teaching. However, his beliefs had not yet affected his actual teaching. The TPI likewise revealed movement in his beliefs, but the effects were more noticeable in his sub-scores for actions than in his intentions.

Supplementary Findings from an Analysis of Personal Journals: Case 3, Ben

Ben’s personal journal data were treated by applying the same process used to interpret the personal journal data for Case 1: Hilary. For expediency, a summary of the results of this data treatment is included in this chapter, while the more detailed analysis and interpretation of Ben’s personal journal data is presented in Appendix 10.

Ben submitted his journal at the end of his participation in the project. The journal was handwritten on two foolscap pages. Ben did use the RPW to access and read the activities, but chose not to make use of the online journaling system. Ben’s handwritten submission contains no dates, so there is no evidence as to when the entries were made. It appears that Ben’s entries were largely composed at the end of the study, and thus they may not represent a continuum of development over his semester-long involvement in the study.

Summary of Personal Journal: Case 3, Ben

As Ben began to use his personal journal in Activity 1, he wrote about his own student learning experiences and his feeling about the importance of being self-directed. He mentioned that his best teachers were those who encouraged his own research and discovery. Ben noted that reflection for learners allows learning to take place away from the classroom. For Ben, the teacher’s role was to stimulate students’ minds, and he believed that this process should be driven by the ‘development of the mechanism by which the individual comes to acquire the knowledge’. Later in Activity 1, Ben began to
reflect on his own teaching. He wrote about the importance of youth, as it allows the teacher to relate more closely to the student experience, create comfortable learning environments and break down power hierarchies. Ben found the majority of his students to be lazy, uninspired, goal-oriented and conservative. Concerning what teachers should do about students’ self-esteem, Ben explained that feedback is crucial to fostering students’ confidence and enthusiasm for the next assignment.

In Activity 2, Ben described his teaching method as ‘largely Socratic’. He saw his role as guiding learning, to help students to look at the world critically. He believed that good teachers teach learning skills as well as information. When questioned about what makes teachers above average, Ben responded by describing how good teachers make materials both accessible and relevant to each individual student. Further, he noted the importance of teachers’ availability to students outside class. Ben’s last response in Activity 2 concerned the question of how he could improve his teaching and what support he would need. His reply mainly concerned his own levels of knowledge and their improvement. Ben felt self-doubt and had less confidence when he was not in possession of all the facts. Overall, Ben’s responses to these activities indicated that he had not yet developed a multi-dimensional COT that extended beyond providing facts and answering questions.

With respect to Activities 3 and 4, although Ben provided some quantitative feedback data from his students, he did not offer any analysis or reflective response to these data in his journal; thus, any insights or improvements he might have uncovered were not revealed. This practice is commensurate with his ability to reflect, as demonstrated throughout the study; that is, instead of engaging in the full reflective cycle, Ben focused mainly on the early stages of reflection, and could not yet bring his reflections to a point at which they could be put into practice in a way that aligned with his beliefs. The incomplete nature of Ben’s journal prevented the opportunity to evaluate fully his ability to engage in reflective practice. Likewise, the manner in which he presented his journal makes it difficult to gain a greater sense of how his COTs developed as he moved through the project activities.

**Summary of Findings: Case 3, Ben**

Overall, Ben moved from holding a predominantly nurturing COT towards a developmental COT. Although he claimed to value the role of student interaction and discussion, Ben’s comments about teaching and learning predominantly reflected teacher-centred views of teaching such as transmitting knowledge and learning as receiving knowledge. He tended to reflect the first three stages of Biggs and Collis’s
Structure of Observed Learning Outcome (SOLO) taxonomy: pre-structural, uni-structural and multi-structural (Biggs & Collis, 1982). This taxonomy has proved to be useful in classifying levels of thinking and learning. The comparison of Ben's teaching perspectives with the first three stages of the SOLO taxonomy illustrates how Ben’s thinking about teaching reflected less developed perspectives of teaching.

Throughout this study, Ben placed a high value on creating a rapport with students and making them feel comfortable in the learning environment. However, by the end of the study, Ben began to understand more fully the implication of his professionalism when he became too friendly with his students. He also came to understand that learning interactions could actually assist student understanding, not just increase their feelings of social ease. As his ideas about learning and teaching became more complex, his use of metaphors in his language became more frequent. He appeared to relate some of his more complex views of teaching and learning to his own life and his own view of himself as a teacher. However, many of his views of teaching, teachers and knowledge remained teacher-centred and did not necessarily transfer into his practice or views of student learning.

As well as increasing the complexity of some of his views, he began to consider himself in a wider context by recognising his place within the institution and acknowledging the role of his colleagues in relation to his own teaching. By the end of the study, his COTs were expressed in ways that did not present a view of him as an isolated practitioner. Increasingly, he reflected on how he was seen by his students, the institution and the community around him.

The main discrepancy in the findings that emerged from an analysis of the data gathered about Ben in this study was the contradictory manner in which he expressed his views about transmission teaching. Although his espoused beliefs about teaching were more extensive than simply providing knowledge, many of his descriptions of how he taught in practice suggested that he enacted a form of teaching that emphasised knowledge acquisition. Although Ben’s beliefs had changed, as had some of his intentions, these beliefs were yet to be enacted in his teaching practices. Some of the discrepancies that presented through analysis of Ben’s interview transcripts and TPI responses may be due to the lack of alignment between his beliefs and actions.

Overall, an analysis of the data gathered from Ben during the study indicated that the main changes in his COTs related to himself as a teacher. Nevertheless, he has become more aware of the differences in students’ needs and learning styles, and was
coming to terms with how to incorporate this newfound knowledge into his teaching practice.

**Answers to Research Questions: Case 3, Ben**

**RQ 1.1: What COTs are Held by Ben Before the Intervention?**

At the beginning of the study, Ben’s COTs were largely concerned with breaking down the hierarchies between students and teacher. He saw traditional positions of power as detrimental to the learning environment and placed almost paramount importance on being seen as an equal by his students. Ben was often concerned with how he was perceived by his students. He wanted to appear benevolent, but he saw himself as the holder of knowledge. Ben emphasised small group discussions that would encompass the whole class. He would ignore students that did not do assigned readings. Ben thought of class discussion as being important, but had no plans of what to discuss. Ben was focused on being relaxed, to engender a comfortable environment for learning. Ben thought that good learning was independent, active and required the guidance of teachers. Ben bemoaned out-of-date learning materials. Ben’s idea of deep understanding was concerned with knowing more information. He had a good picture of himself as a teacher and enjoyed his work. He considered himself an effective teacher.

**RQ 1.2: What COTs are Held by Ben After the Intervention?**

Ben still felt that he needed to be perceived as an equal to foster an effective rapport with students, and he thought that good learning could be done at the pub just as well as, or perhaps better than, in the classroom. In parallel to this, Ben felt it would be better not to be such close friends with students. This juxtaposition demonstrated that Ben was still experiencing some cognitive dissonance in the way he thought about personal relationships with his students. His conception of rapport evolved to see it as an important driver of good communications, and he engaged with ill-prepared students by adopting a more active approach to reengaging them, rather than continuing to simply ignore them. Ben thought that well-structured discussion could stimulate students’ conceptual understanding and enable the sharing of different ideas. He put less importance on being relaxed himself as he tried to create a comfortable learning environment. Ben thought that, to teach effectively, learners needed to have a disposition to want to learn, a good approach to learning and responsibility for their own learning. He still thought that effective learning materials needed to be up-to-date, but his ideas about deep understanding were shifting from knowledge-based to the wider
application of knowledge. Ben’s idea of his own teaching was good, supported by a confidence that led him to believe that he was a competent teacher.

**RQ 1.3: How Did Ben Change His COTs?**

Ben’s ideas about having close social relationships with students had become more reserved by the end of the semester, as he had come to realise that he would need to achieve some immunity from student backlash caused by behaviour management methods and the veracity of his assessment decisions. Discussions in his classes became more directed and purposeful as he began to appreciate that a greater range of outcomes could be encouraged if he had a learning goal in mind. Ben realised that to create effectiveness in a relaxed learning space could mean high degrees of planning and teacher awareness of how learning proceeds. As Ben broadened his understanding of how learning works, his appreciation of how teaching approaches can affect learning outcomes deepened. As Ben’s educational language increased with augmented exposure to teaching and learning theories, he found it easier to explain what he was thinking about his teaching. In turn, some aspects of his teaching became clearer to him. Ben’s ideas of his own teaching remained relatively consistent. He revealed that he felt good about his teaching abilities and confident about his teaching practices. Ben’s confidence and competence were connected to the point that his confidence appeared to dominate his understanding of teaching competence. Ben reflected on his teaching practice, but mostly saw reflection as looking back and confirming what he had already observed. Ben did not complete the full process of reflection, often skipping those steps that involved analysis, which were aimed at guiding his planning for future change and improvement in his practice.
CHAPTER SEVEN

CASE 4, ANITA

This chapter provides an account of the results of this study that specifically answer the first three research questions about Case 4, Anita:

1.1 What COTs are held by Anita before the intervention?
1.2 What COTs are held by Anita after the intervention?
1.3 How did Anita change her COTs?

The answers to these questions are drawn from an analysis of Anita’s interview data, followed by an analysis of her responses to the TPI. These two sets of analyses are then triangulated to confirm the findings. Next, the data from her personal journals are used to supplement the findings. The chapter closes with a summary of findings about Anita, along with answers to the above three research questions.

The same methods that were used to analyse each set of case data were applied to the treatment and triangulation of Anita’s data. As for all cases except Case 1, for the sake of expediency, the full analyses and interpretations of Anita’s interviews and journals are given in Appendix 11 and Appendix 12, respectively. This chapter provides the summaries of these analyses. Figure 23 in Chapter 5: Case 3, Laura depicts an overview of the progressive structure used for this case chapter.

Background: Case 4, Anita

Anita has recently immigrated to Australia and, after completing an undergraduate degree, she has progressed to postgraduate studies. She has been engaged as a sessional teacher for two years; she is now entering her fourth semester of teaching. Although Anita has no formal teaching background or educational qualifications, she had completed the teaching initiation sessions that are compulsory for all sessional academic staff at her university. Anita completed a Professional Master’s degree (coursework only) in the preceding year and was keen to pursue a university teaching career. However, she was finding it difficult to come to terms with the vagaries of sessional teaching and the commitment to studying for the full doctorate that she saw as necessary to pave her career path.

Findings from an Analysis of Interview Data: Case 4, Anita

Interviews were conducted with Anita to reveal the COTs that she held at the beginning and end of this study. Eleven main themes were employed to categorise the COTs that emerged during those interviews. As with the other case studies in this
research, the emergent nuances and traits of Anita’s thoughts, which I call the actual COTs that Anita held, were designated as sub-themes during the coding process and appropriately grouped under the relevant main themes. A summary of the main themes and pertinent sub-themes traversing the COTs revealed during the analysis, with indications of their presence in the initial and final interviews, are outlined in Table 42.

Table 42
Thematic Map for Case 4, Anita’s Initial and Final COTs

<table>
<thead>
<tr>
<th>COTs</th>
<th>Initial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COT 1 Awareness of COTs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aware of gaps in teaching practice</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Different teaching styles for different learning styles ✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conceptions changed</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>COT 2 Sees teaching as a social process</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encourages active learning</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Develops cooperation among students</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Friendly with students</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Rapport</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Social expectations</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Mediated and controlled</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>COT 3 Developing minds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caring, nurturing and developing minds ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generic skill development</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Caters for individual needs</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Never giving up on a student</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Student-centredness</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>COT 4 Fostering understanding</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imparting knowledge</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Deep understanding</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td>In-class activities to reinforce new material ✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connections between various opinions and ideas ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>COT 5 Preparation and material</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td>Organisation of learning</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td>Authentic materials and tasks</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td>Resources available online</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>COT 6 Engaging students</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expects student effort</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td>Motivation</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td><strong>COT 7 Facilitating and organising learning</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coaches</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Facilitator</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Making a difference</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td>Responsibility for learning</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Keeping students on track</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Contactable out of class</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td>COTs</td>
<td>Initial</td>
<td>Final</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td><strong>COT 8 Behaviour management</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boundary setting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culturally sensitive</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Knowing institutional policies and procedures</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>COT 9 Assessments</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieving certain levels</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Achieving</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Targeted properly</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Teacher as judge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching to pass exams</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>COT 10 Evaluates teaching practices</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Experimenting with methods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluate one’s own teaching</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Reflecting</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>COT 11 Practitioner of teaching</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Competent to teach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confidence</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Enthusiasm, loves to teach</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Teaching experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expert in subject matter</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>One-to-one</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Practitioner academic</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Practitioner teaching community</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sessional feeling non-academic</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Teaching as performing</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Trends of Change across Interview Data: Case 4, Anita**

An analysis of the transcripts of the interviews with Anita produced findings that represent Anita’s COTs and how they changed over the course of the study. The following sections outline the trends that were identified as her interview transcripts were analysed. The summaries of the trends have been grouped within each of the 11 themes along with suggested reasons for the changes.

It is important to note that the data from Anita’s interviews yielded fewer quotations of consequence about her COTs when compared to other participants in the study. Therefore, her story appears to have brevity in this respect. This is one way of seeing the reality of Anita’s ideas. Another view is that she is actually just as deep as other cases, but some differences in Anita’s circumstances may have affected the way she responded during her interviews. Interestingly, Anita’s atypical background and aspirations also became apparent in the analysis of her TPI questionnaire responses. These circumstances are discussed further in the sections Changes in Teaching Perspectives (p. 225) and Differentiation, Internal Consistency and Discrepancies—
A Special Case (p. 226). The reader may wish to read these sections in conjunction with the following trend summaries.

Theme 1: Awareness of COTs
Anita’s increasing awareness of teaching theories catalysed a deeper interest and desire to improve her understanding and integration of theory with practice. The process of Anita’s increasing awareness involved an increased degree of reflection and evaluation as the study progressed. As she reflected on the results of evaluations, Anita was searching for ways to incorporate improvements, and this affected her development and the integration of her teaching conceptions.

Theme 2: Sees Teaching As a Social Process
Anita initially wanted more collaboration and participation from students, and this facet of her conceptual thinking about teaching and students’ learning became linked to the evaluation process that drove her changes in practice and her continuing development. The increase in complexity of Anita’s understanding of teaching theories, evaluation methods and social teaching practices indicated that Anita was broadening her conceptions about the social sphere of teaching. Her thinking coalesced to include the linking of student attributes and different teaching styles with her desire to encourage student engagement and greater student understanding.

Theme 3: Developing Minds
Anita’s conceptions of developing minds shifted from a straightforward overarching attitude of caring for students to a more complex view of awareness of ‘nurturing’ as a teaching approach that encompassed encouragement of individuality as well as the aim of developing minds. Anita’s tendency to use sophisticated educational language when explaining her ideas highlights her deepening conceptual understanding of the intricacies of teaching. For example, her contextualisation of generic skills with graduate attributes demonstrated an increasing grasp of the nexus between the theory and practice of teaching. In the final interview, her enhanced use of appropriate and contextual educational terms indicated her extended understanding of why some teaching intentions are desirable. As an illustration, Anita’s connection between teaching generic skills and the institutional goal of students gaining graduate attributes is evidence of her realisation that part of what she teaches (generic skills) leads towards satisfying the institutional requirement of graduate attributes. Anita was moving from a teacher-centred approach to a more student-centred one that fostered encouragement, enjoyment of learning and learning environments that acknowledged differences in student perspectives.
Theme 4: Fostering Understanding

As with many of her other COTs, Anita’s conceptions of fostering student understanding emerged as having moved from a teacher-centred approach that pivoted on the incidental feedback from her students and earned her a modicum of personal satisfaction, towards an appreciation that was more student-centred and encouraged students to use their understanding in active ways. Anita’s initial COTs and learning approaches were refocused from a student passive learning mode towards an active learning approach. It also appeared that Anita’s engagement with planned evaluation processes had catalysed her participation in reflective processes about her teaching practice, which provided her a stronger base from which to develop further her conceptions and practices.

Theme 5: Preparation and Materials

Anita’s initial conceptions of preparation for teaching were simply to ensure her subject knowledge readiness. At the end of the intervention, she had added ideas that good preparation included the availability of all materials at a unit’s commencement, rather than readying them week-by-week.

Theme 6: Engaging Students

Anita’s conceptions of expectations for her students shifted from her initial standpoint of their being conditional upon students’ known abilities and study efforts. By the end of the semester, she had moved towards a view where her overall expectations of students were higher and more focused on their professionalism. In relation to the use of humour, Anita moved from conceiving humour as a way of catalysing reactions from students, towards humour as being a crucial factor in motivating student involvement.

Theme 7: Facilitating and Organising Learning

Coaching of students and a leaning towards a necessity to engage in one-on-one tuition with individual students gave way to concerns of facilitating materials and encouraging students to take responsibility for their own learning. Anita’s initial teacher-centred approach evolved into a more student-centred stance that was more organised and better resourced. She focused her new ideas on facilitating students to become more independent in their learning. Further, she developed beyond her view of a teacher as a performer, ‘the content expert’, to recognise that students’ ideas are important intellectual assets in a learning environment.
Theme 8: Behaviour Management

Anita’s conceptions of behaviour management were illustrated by a movement from simple awareness of cultural sensitivity and a teacher-centred outlook, towards a more student-centred perspective that acknowledged and validated cultural differences. This was demonstrated in her desire to enculturate international students in institutional rules, while acknowledging different points of view. Further, a responsibility to lead learning well became more conceptually prominent in her comments, driving Anita to increase her depth of understanding and interpretation of institutional ways. The movement of Anita’s conceptions from simple adherence to institutional rules towards a more holistic understanding increased her confidence to act decisively. In particular, she became more decisive when setting up boundaries with her students, thus developing a clearer sense of herself as a teacher.

Theme 9: Assessments

Anita’s conceptions of assessment and learning materials appeared to shift from an initial position of a teacher-centred approach that consisted of idealistic hopes of student success, towards a more progressive student-centred approach that included the timely availability of appropriate materials rather than providing them altogether at one time. Moreover, Anita appeared to have shifted from holding loosely formed, open-ended goals towards a desire for more authentic, task-oriented learning environments.

Theme 10: Evaluating Teaching Practices

Evaluation emerged as a major driving force behind the changes in Anita’s COTs and her impetus to improve. Evaluation processes led her to investigate further the effect of broadening her understanding and linking her beliefs with her actions. The evaluation process involved Anita in reflection with the goal of adjusting her teaching methods for improvement purposes. In turn, the reflective process triggered Anita to connect her current understandings of teaching and learning together, to generate conceptually robust strategies for improvement.

Evaluation of her teaching and her students’ learning became increasingly important for Anita. Her methodologies and goals of evaluations became more focused upon improvement and change, serving to fuel continual development. Anita’s increased involvement with evaluation gradually enabled her to develop her openness to change in her thinking and practice.

Anita’s conceptions of feedback appear to have refocused from a teacher-centred stance that was mainly concerned with students’ responses to learning materials, towards a broader conceptual perspective of feedback that operates under a more
student-centred approach that seeks evaluation to improve the unit. Anita’s appreciation of reflective practice moved from reflection as being merely helpful but time costly, to reflection as another powerful link in the evaluative process to identify not just what to improve but also how to instigate improvement in her practice. Anita’s deepening understanding of evaluation and reflection processes coalesced to the point that she embraced continual development and an outlook favouring a student-centred approach.

**Theme 11: Practitioner of Teaching**

Anita’s conceptions of being a good teaching practitioner moved from her initial ideas of presentation skills being critical to successful teaching and difficult to accomplish, towards a realisation in which she no longer saw teaching as delivery but rather as student engagement and involvement with knowledge. Anita’s strategy for improvement included collecting an accessible ‘grab-bag’ of appropriate good teaching skills. Anita originally felt isolated in her teaching role and, although this opinion remained, she honed in on the feeling that as a sessional staff member she was seen as secondary to full-time teaching staff.

**Summary of Trends of Change Across Interview Data: Case 4, Anita**

In Anita’s case, her COTs were affected by her new awareness of the teaching theories to which she was exposed over the course of this study’s intervention. Her burgeoning awareness catalysed her desires to understand how she might improve her teaching practice. Anita began to conceive evaluation of her teaching as a powerful means to uncover ways in which she could actually improve. Anita’s interaction with theoretical readings of different learning styles and different teaching approaches caused her to reflect deeply on the social aspects of her teaching and engagement strategies. This offered insight into the suggestion that exposure to theory, coupled with reflection of practice and self-evaluation, could bring deeper ways of thinking about her teaching.

Anita was stimulated by reading and talking about student-centred teaching. She had moved past a tendency to control students’ learning with one-to-one tuition and was trying to give students more responsibility for their own learning. She redefined herself as a facilitator of learning rather than just a content expert. Anita was aware of constructivism at the beginning of the semester, but started to show a greater understanding of what this meant in practice towards the end of the study. She saw a wider picture of cultural difference and institutional requirements and developed more confidence in her teaching. The sophistication of Anita’s definitions of the scholarly side of teaching enabled her to reflect and evaluate on teaching in a more complex way, which developed her capacity to look at her own teaching with improvement in mind.
Analysis of TPI data: Case 4, Anita

Initial Perspectives

Anita’s scores from her initial use of the TPI questionnaire (see Table 43 and Table 44) revealed that she held no dominant perspective. Rather, her results for transmission (36), apprenticeship (38), developmental (38) and nurturance (39) fell within the margin of 30–40, defining them as her backup perspectives. The only perspective outside this backup margin was social reform (23), which was consequently categorised as her recessive perspective. It is an unusual result not to have at least one perspective identified as dominant. This suggests that Anita was experiencing some internal struggle in reconciling her COTs and the perspectives she held at the beginning of this study. It is also possible that she held no strong views of teaching and learning or that she had given the topic little consideration prior to her involvement in the study. However, this is unlikely, as she was regularly involved with other teachers and mentors who often conversed with her about teaching.

Final Perspectives

When taking the TPI questionnaire at the end of this study (see Table 43 and Table 44), Anita still held only backup perspectives and one recessive perspective. The backup perspective remained as social reform (19), although the decrease in weight from 23 revealing that she was holding this perspective with even less importance than during the initial administration of the TPI. Regarding her four backup perspectives, only minor changes were observed in their scores and ordering of importance. Transmission (37) moved up 1 point, but remained the lower ranked of the four. Apprenticeship at 40 gained 2 points and replaced nurturance (39) as Anita’s most important perspective. The perspectives of developmental and nurturance now both held an equal importance to Anita, scoring 39, with only the developmental perspective diminishing, and then only by 1 point.

Table 43

TPI Perspective Scores for Case 4, Anita—Pre and Post Study Results

<table>
<thead>
<tr>
<th>Usages</th>
<th>Transmission</th>
<th>Apprenticeship</th>
<th>Developmental</th>
<th>Nurturance</th>
<th>Social Reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>INITIAL</td>
<td>36</td>
<td>38</td>
<td>38</td>
<td>39</td>
<td>23</td>
</tr>
<tr>
<td>FINAL</td>
<td>37</td>
<td>40</td>
<td>39</td>
<td>39</td>
<td>19</td>
</tr>
<tr>
<td>Change</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>-4</td>
</tr>
</tbody>
</table>
Table 44

TPI Perspectives Scores Showing Dominant, Backup and Recessive Rankings for Case 4

<table>
<thead>
<tr>
<th>TEACHING PERSPECTIVES</th>
<th>Transmission</th>
<th>Apprenticeship</th>
<th>Developmental</th>
<th>Nurturance</th>
<th>Social Reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank</td>
<td>Dom Bk Rec</td>
<td>Dom Bk Rec</td>
<td>Dom Bk Rec</td>
<td>Dom Bk Rec</td>
<td>Dom Bk Rec</td>
</tr>
<tr>
<td>INITIAL</td>
<td>36</td>
<td>38</td>
<td>38</td>
<td>39</td>
<td>23</td>
</tr>
<tr>
<td>FINAL</td>
<td>37</td>
<td>40</td>
<td>39</td>
<td>39</td>
<td>19</td>
</tr>
<tr>
<td>CHANGE</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>-4</td>
</tr>
</tbody>
</table>

Changes in Teaching Perspectives

The changes revealed by the TPI in the perspectives of teaching that Anita held between the beginning and the end of this study’s intervention were slight, with the only noticeable change being the exchange in importance between her apprenticeship and nurturing perspectives as the perspective of highest rank in Anita’s conceptual thinking. At first glance, Anita’s TPI scores appeared to be showing little of consequence. However, several points within her scores are actually worth considering.

Her highest ranked score at the end of the study shifted from nurturance to apprenticeship. Within Anita’s four backup perspectives, transmission remained the lowest scoring perspective. Her scores were relatively flat across the dominant and backup perspectives.

Anita’s results present several issues for consideration. Firstly, in the instructions on how to approach the TPI, the authors of the TPI (Pratt & Collins, 2001d) explain that participants should ‘keep a specific educational context in mind while answering’. Secondly, in their notes to aid with interpretation of the TPI’s results, they state a seemingly obvious but important point: ‘to agree with some items means that you must logically disagree with others, therefore you cannot agree with everything’ (Pratt & Collins, 2001c, para 4.).

It is possible that Anita did not keep a specific educational context in mind when responding to the TPI items, but instead answered from the point of view of several contexts, thus confounding the usual differentiation in results that would clearly delineate her dominant, backup and recessive perspectives. Further, if Anita took this approach during her initial participation in the TPI, it is likely that she adopted a similar
approach in the administration of the TPI at the end of the study, accounting for the similar results for the two iterations.

My position of administrator of both the TPI and the interviews that Anita participated in for this study, and my perceptions of her performance during those interactions, allowed me a reasonable standpoint from which to postulate reasons for Anita’s TPI scores being fairly flat and not revealing a dominant perspective. Anita had recently immigrated to this country. She had no background in teaching but hoped to grow a new career from the tutoring opportunities that she had been offered at the beginning of her postgraduate degree. Anita was driven by a strong desire to show a good understanding of teaching at the university level, despite not having taught before. This may have caused her to ‘hedge her bets’ in an effort to give answers that would be seen as correct. Without passing judgement on her actual teaching capabilities, there is a likelihood that her motives for answering could have been tainted by her career objectives and a fear of being seen as giving the ‘wrong answers’. If this is the case, it may be difficult to triangulate her TPI scores and the analysis of her qualitative interview data.

**Differentiation, Internal Consistency and Discrepancies—A Special Case**

The developers of the inventory suggest a number of crosschecks that may help to elucidate results in cases that are difficult to reconcile. In light of the flat and undefined spread found across Anita’s TPI scores, some deeper analysis is required. In such cases that the interpretation of TPI scores appears inconclusive, Pratt and Collins (2001c) recommend considering the differentiation and internal consistency of sub-scores (on the dimensions of beliefs, intentions and actions) within the TPI results (para, 4-7). Moreover, if discrepancies are found, they may lend assistance towards explaining what has occurred.

With respect to the internal consistency of the TPI results, it is suggested to examine the participants’ sub-scores, which are indicators of agreement between someone’s beliefs, intentions and actions (see Table 46, Table 47 and Table 48). It is considered that differences in sub-scores within 1–2 points are corroborative, whereas those showing more than 2 points difference are contradictory. In Anita’s case, some inconsistencies can be seen.

**Internal Discrepancies in Case 4**

Some nominal inconsistencies can be noted across the sub-scores of Anita’s TPI results. Discrepancies of 3–5 points can be found in the perspectives sub-scores of apprenticeship, developmental and nurturance for the initial administration. Similarly in
the final TPI administration, discrepancies of 3–4 points existed across the sub-scores of Anita’s *transmission*, *development* and *nurturance* perspectives. The authors of the TPI further advise checking for consistency across the perspectives thus:

Examine the Intentions sub-score for all five perspectives. Does the highest Intention sub-score occur within your dominant perspective? If not, where does it occur and what might that indicate? (Pratt & Collins, 2001b)

The inventory’s authors also advise critically examining the sub-scores across each of the three *dimensions* in such cases.

In Anita’s case, it can be observed that across the *beliefs* and *intentions* sub-scores, there are some minor inconsistencies, where the highest sub-score does not occur within the highest ranked perspective. Within the *action* sub-scores, the inconsistencies are more obvious, with the highest scores for *transmission*, despite this being the backup perspective Anita has given lowest importance overall. Table 45

*TPI Perspective Sub-scores for Case 4, Anita—Pre and Post Study*

<table>
<thead>
<tr>
<th>PERSPECTIVE</th>
<th>INITIAL</th>
<th>FINAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beliefs</td>
<td>Intentions</td>
</tr>
<tr>
<td>Transmission</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Apprenticeship</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Developmental</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Nurturance</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Social Reform</td>
<td>8</td>
<td>7</td>
</tr>
</tbody>
</table>

**Beliefs Sub-scores**

There were only minor increases and decreases in the sub-scores for the dimension of *beliefs* across Anita’s two administrations of the TPI questionnaire (see Table 46). The following points emerged as changes across the study. Anita’s beliefs of *transmission* (11) and *nurturance* (15) remained the same. There were minor increases of 1 point in Anita’s perspectives of *apprenticeship* (12 to 13) and *developmental* (13 to 14). Anita’s beliefs of *social reform* became more recessive, falling 2 points from 8 to 6.
Table 46
Beliefs Sub-scores Showing Percentage of Change for Case 4, Anita

<table>
<thead>
<tr>
<th>BELIEFS</th>
<th>Initial</th>
<th>Final</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission total: (Tr)</td>
<td>11</td>
<td>11</td>
<td>0%</td>
</tr>
<tr>
<td>Apprenticeship total: (Ap)</td>
<td>12</td>
<td>13</td>
<td>8%</td>
</tr>
<tr>
<td>Developmental total: (Dv)</td>
<td>13</td>
<td>14</td>
<td>8%</td>
</tr>
<tr>
<td>Nurturance total: (Nu)</td>
<td>14</td>
<td>14</td>
<td>0%</td>
</tr>
<tr>
<td>Social Reform total: (SR)</td>
<td>8</td>
<td>6</td>
<td>-25%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>58</td>
<td>58</td>
<td>0%</td>
</tr>
</tbody>
</table>

Intentions Sub-scores

Anita’s sub-scores for intentions across her perspectives (see Table 47) all dropped slightly, with one exception for the nurturance perspective, which remained the same at 14. Her intention sub-scores for transmission (12 to 11), apprenticeship (15 to 14), developmental (15 to 14) and social reform (7 to 6) each fell by 1 point.

Table 47
Intentions Sub-scores Showing Percentage of Change for Case 4, Anita

<table>
<thead>
<tr>
<th>INTENTIONS</th>
<th>Initial</th>
<th>Final</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission total: (Tr)</td>
<td>12</td>
<td>11</td>
<td>-8%</td>
</tr>
<tr>
<td>Apprenticeship total: (Ap)</td>
<td>15</td>
<td>14</td>
<td>-7%</td>
</tr>
<tr>
<td>Developmental total: (Dv)</td>
<td>15</td>
<td>14</td>
<td>-7%</td>
</tr>
<tr>
<td>Nurturance total: (Nu)</td>
<td>14</td>
<td>14</td>
<td>0%</td>
</tr>
<tr>
<td>Social Reform total: (SR)</td>
<td>7</td>
<td>6</td>
<td>-14%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>63</td>
<td>59</td>
<td>-6%</td>
</tr>
</tbody>
</table>

Actions Sub-scores

With respect to Anita’s sub-scores for actions across her perspectives (see Table 48), there were increases in her action sub-scores in the perspectives of transmission (13 to 15) and apprenticeship (11 to 13) of 2 points and for developmental (10 to 11) of 1
point. The sub-score for actions in *nurturance* stayed the same at 11, while the actions sub-score receded by 1 point for *social reform* (8 to 7).

Table 48

*Actions Sub-scores Showing Percentage of Change for Case 4, Anita*

<table>
<thead>
<tr>
<th>BELIEFS</th>
<th>Initial</th>
<th>Final</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission total: (Tr)</td>
<td>13</td>
<td>15</td>
<td>15%</td>
</tr>
<tr>
<td>Apprenticeship total: (Ap)</td>
<td>11</td>
<td>13</td>
<td>18%</td>
</tr>
<tr>
<td>Developmental total: (Dv)</td>
<td>10</td>
<td>11</td>
<td>10%</td>
</tr>
<tr>
<td>Nurturance total: (Nu)</td>
<td>11</td>
<td>11</td>
<td>0%</td>
</tr>
<tr>
<td>Social Reform total: (SR)</td>
<td>8</td>
<td>7</td>
<td>-13%</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>53</strong></td>
<td><strong>57</strong></td>
<td><strong>8%</strong></td>
</tr>
</tbody>
</table>

**Summary of Changes in TPI Scores and Sub-scores: Case 4, Anita**

The results from Anita’s participation in the TPI at either end of this study revealed few changes over the period in the way she was holding beliefs, intentions and actions across the five perspectives of teaching. The overall changes in Anita’s scores between the two TPI administrations can be summed up in only one or two points. Firstly, there was little change between each end of the study period and, secondly, no clear dominant perspective was identified at either end of the intervention. The minimal changes implied that there were only minor changes in her thinking about teaching. Although, there were some inconsistencies found in the sub-scores, the question remains as to why she displayed no clear dominant perspective.

When considering reasons for the flattened scores in Anita’s results and the lack of a clear identification of a dominant perspective, both of these issues can point to *internal inconsistencies* of responses, which in turn can lead to an appearance of contradictory perspectives. However, it may be plausible in Anita’s case that, with the broadly informed community that her workplace (school) provides and her working circumstances, she has taken deeply to heart the idea that there are multiple and legitimate views on what constitutes ‘good teaching’. For Anita, the sophistication of the teaching and learning research environment that exists in her school, which was still new to Anita, was taxing the assimilation of her own views. It may be that for Anita, more time is needed to come to a stable personalised set of views on teaching.
Therefore, her TPI results may not be indicating static or stunted process, but rather a more considered and philosophised position still in the process of formulation.

**Figure 26.** Case 4 TPI changes between initial and final scores within sub-scores.

**Triangulation between Interview and TPI Data: Case 4, Anita**

The quantitative results obtained from an analysis of the TPI data may also be helpful in strengthening the findings from an analysis of the qualitative data obtained during the interviews with Anita. Together, the results bear a good relation to the conceptual transformation that was suggested by her responses and consequently noted in the summary of trends.

Although the analysis of Anita’s interviews did expose some changes in her COTs, an analysis of her responses to the TPI indicated a more static view over time, with the majority of the changes noted in her sub-scores for actions. The exception in her TPI scores was for the social reform scores, which lessened across the board for beliefs, intentions and actions. However, this finding is minor considering the error constraints associated with the use of this tool.

Anita’s COTs were seen to broaden and mature between the initial and final interviews. The incorporation of reflective practice and her heightened awareness and attempts to use reflective practices to improve her teaching appear to be reflected in the majority of her changes in the TPI occurring in the actions sub-scores.
Further practically focused changes were noticed during the interviews, including her ideas on:

- social interactions;
- different teaching approaches linking and complementing different learning styles;
- moving from one-to-one tuition towards facilitating materials for one-to-many;
- giving students responsibility for their own learning;
- better understanding of institutional needs and;
- engagement with evaluation methods as a guide to understanding students’ needs and improving teaching practice.

The prominence of changes like these can be further evidenced with Anita’s TPI results, which showed small but positive changes in her actions across most of her perspectives. These changes were not apparent in her beliefs and intentions sub-scores. The lack of movement in the TPI scores across Anita’s beliefs and intentions sub-scores aligns with the conflicts exposed in analysis of her interview data.

It has been speculated that the conflicts presented in Anita’s TPI results may be due to her current career aspirations and exposure to a high level of learning and teaching research in her work environment, which in turn may be causing her high levels of cognitive dissonance and a need for more time to accommodate her changing conceptual beliefs.

**Supplementary Findings from an Analysis of Personal Journals: Case 4, Anita**

Anita’s personal journal data were treated by applying the same process used for all personal journal data in this thesis. For expediency, a summary of the results is included in this chapter, while a detailed interpretation of Anita’s personal journal data is presented in Appendix 12.

**Summary of Personal Journal: Case 4, Anita**

As Anita began using her journal in Activity 1, she noted ideas about her own learning experiences as a student and cited the importance and influence of mentors. There was evidence of stimulus from the readings in Activity 1 as she also wrote about different learning styles and considered how to tailor teaching to accommodate them. She remarked on the different levels of student ability and dedication found in a class of students and considered ways to cater practically for such variation in her teaching. This included offering different levels of materials, giving some students individual attention.
and then concentrating on those at the lowest level. Anita taught at first- and third-year levels of a degree course and felt there was a distinct difference between these cohorts.

Anita attempted reflection early in Activity 1, writing about student needs and her responses as well as the actual process of her reflections. Her references to issues concerning students’ learning and her teaching, in conjunction with a reflective process, exhibit a willingness to participate in reflection and develop her reflective skills.

In Activity 2, when asked about her theory of teaching, Anita responded:

I now try to base my teaching on a student-centred approach, where I act as facilitator rather than ‘teacher’.

(Journal, Anita, Case 4): Activity 2

Anita went on to reveal that her conception of constructivism was still not well rounded, although she labelled it as appropriate for use in tertiary teaching. She explained that teachers should encourage students to construct their own learning, noted the importance of providing good resources and commented on the difficulties the approach holds for students who have not yet developed responsibility for their own learning. Although Anita came to a realisation that she should talk more to students about taking responsibility for their own learning, she did not connect the need for students to take responsibility with a teacher’s responsibility to foster skills that facilitate students’ capacity to do so.

Further on in Activity 2, Anita responded to questions about good university teaching, saying that university teachers should adopt a student-centred approach and provide students with authentic work environments. She explained that teachers should constantly reflect and improve, care for students and their learning outcomes, be experts and keep up with changes in their field. Anita also wrote:

Brilliant teachers are passionate about what they do. This drives them … to improve … average teachers continue on in the same vein semester after semester …

(Journal, Anita, Case 4): Activity 2

At the end of Activity 2, in response to questions about improvements she could make and the corresponding supports she might need, Anita explained that she wanted to tailor learning to individual students’ needs and improve conflict resolution in teamwork. To support these ideas, she mentioned coordinator assistance to develop a framework to delineate different levels of materials to support students at different levels and the identification of more effective ways to address conflict resolution in teamwork.
Although Anita carried out Activity 3 (administering a mid-semester review questionnaire to her students), she did not record anything in her journal about the process; however, she did record her responses to Activity 4, which asked her to reflect on the results of the mid-semester feedback she received. She identified that many students were in favour of teamwork and they thought they benefited from relevant real-world application of knowledge. She connected the favourable comments concerning teamwork with a constructivist teaching approach. Although her reasoning was less forthcoming about the connection between teamwork and constructivism, her understanding of constructivism did appear to be broadening when she wrote about her desire to improve her lecturing techniques:

*Create a more participative approach to lectures*—maybe every 4 to 5 slides there should be open discussion and encourage students to look at other viewpoints etc. It must be clearly understood by the students at the outset that this will be the format for the lectures and what is required of them. This will hopefully improve engagement, give them a more active role and improve satisfaction in this area. I have actually noticed them become a lot more livelier as we move from lecture mode to tutorial mode when we have discussed review questions. Perhaps these two areas could be combined?

(Journal, Anita, Case 4): Activity 4

As was seen in other parts of her journal, Anita conceived a need for advance organising in her reference to needing to inform students about *how* to engage with the new lecturing approach.

Anita was very concerned by conflict resolution in student teamwork, as evidenced by her repeated referencing of her desire to improve this aspect of her teaching environment. Her solution was to formalise her procedures further. Her *modus operandi* to solving many of the difficulties she perceived was to develop a procedural response. Anita’s efforts during the activities to obtain feedback from her students and then to reflect upon it offered her a formalised method to consider her teaching and how she might improve.

**Summary of Findings: Case 4, Anita**

Overall, Anita exhibited some changes in her COTs across the duration of this study. This finding was established through an analysis of all data gathered across the study about Anita from interviews, responses to the TPI questionnaire and journal entries. A comparison of her COTs from the beginning to the end of the study, according to her TPI data, could be described as being almost flat. However, more change was evident in her interview and TPI data. Although Anita showed that she was
respectful of varied points of view held by others, her results indicate that she was yet to establish her own firm views about teaching.

Interestingly, the greatest evident change (albeit slight) by analysing the data gathered from Anita was in relation to her teaching practice. However, because the study’s findings indicated that she experienced only minimal change in her beliefs and intentions, the changes in her practices did not appear to be informed by her COTs. Her flat results may be due to the inconsistencies evident in the findings that emerged from the analysis of her data: some of her views do not align with each other and sometimes appear to cancel each other out.

Although very little change was established for Anita’s COTs through an analysis of her responses to the TPI questionnaire items (with the exception of minor changes in her practices), her interview and journal entry data indicated a growing complexity in her views of teaching and learning. The interview and journal data indicated that Anita’s, initially relatively indecisive views on teaching, became more definite.

At the end of the study, Anita’s caring approach for students, which was evident at the beginning of the study, had developed into more of a nurturing view, wherein she shared responsibility between herself as the teacher and the students as learners. She was developing into a teacher who was less concerned with control and more concerned with students’ ownership of their learning.

As the study progressed, there was increasing evidence that Anita was incorporating some of the educational language encountered during the activities on the RPW into her own lexicon. This was particularly evident when she spoke of how she reflected on her teaching and how she planned to use the evaluation feedback from her students to improve her future teaching. She became more able to identify specific learning goals for her students and understood the importance of active learning practices.

Throughout the study, Anita presented as a teacher who was keen to be a reflective practitioner. She appeared to understand how teachers use the feedback received about their teaching to improve and refine their practices. By reflecting on how she could improve her own teaching and she recognised the value of her students’ feedback as well as the institutional setting in which she worked and the possible usefulness of having a mentor to guide her career development.

Overall, an analysis of the data gathered from Anita during the study indicated that the main changes in her COTs related to her abilities as a reflective practitioner.
Although, at the beginning of the study, she expressed that she was aware of the value of reflection, by the end of the study Anita demonstrated that she could incorporate her observations from her own reflection with the feedback offered by her students. Further, she used newfound knowledge about teaching theories and practices that she encountered through the RPW to boost the depth of her reflective process. As Anita continues to reflect on her teaching and her students’ learning, her COTs will emerge as more complex and clearly defined.

**Answers to Research Questions: Case 4, Anita**

**RQ 1.1: What COTs are Held by Anita Before the Intervention?**

Anita’s ideas about being a facilitator of learning were undeveloped; she knew of the concept, but found it hard to express a clear understanding of the facilitation of learning. Her ideas of nurturing the development of students’ minds were simply focused on caring for them in an empathetic way. She saw teaching as associated with the role of a *content expert*. Her notions of assessments were unfocused and open-ended and she found it difficult to gauge students’ interim successes because she had not yet come to understand formative assessment. Anita’s saw learning as the acquisition of knowledge. She had a good grasp on the purpose of reflection as an improvement process; however, despite considering reflection to have value, she had never found time to practice it. Her expectations of students were tied to behaviour and the effort they put into their work.

**RQ 1.2: What COTs are Held by Anita after the Intervention?**

By the end of the study, Anita’s understanding of facilitation incorporated her views about how teachers give learners good guidance and help them to learn for themselves. Her view of teaching had become more about being an *expert teacher* that leads learning rather than a *content expert*. As she reflected on what she did for students, Anita became conscious of nurturing the ongoing development of students’ minds. She believed it was important that students of different ages and from different cultures and religions were respected. Anita was more student-centred and her conception of deep learning was more complex, linking constructs of knowledge acquisition with the assimilation of old and new knowledge to a point where a student can use their knowledge actively, with corresponding impacts on them as a person. Anita was engaging well with reflection and decided that it was immensely useful and something she should practise regularly after every teaching session. Anita’s expectations of students were still associated with behavioural issues rather than scholastic achievement, although she had become more decisive in her management of
student behaviour. Her ideas on developing generic skills became more cohesive with an understanding of the real-world value they offered students, particularly in relation to working in teams in employment situations.

**RQ 1.3: How Did Anita Change Her COTs?**

With growth in Anita’s educational vocabulary during the period of this study came an increased capacity to place constructs of practice into focus. Her comprehension of teaching and learning became more concise and her ways of looking at what was occurring in her teaching became clearer. Renewed clarity in Anita’s educational understandings seemed to extend her ability to link concepts associated with both teaching and learning. As her ability to link teaching and learning concepts improved, so did her ability to conceive of ways she might change and improve her teaching practice.

Anita’s understanding of what facilitation of learning involves became more definite, promoting a more distinct appreciation of what is required practically. Once she better understood her role as a facilitator, she quickly came to realise that she could relinquish more responsibility for learning to her students. Along with this reconfiguration of her understanding of who was responsible for learning came the realisation that she needed to lead her students’ explorations towards fruitful learning outcomes. Her emergent conception of teaching as facilitation and leadership moved her from being an *expert of content delivery* towards ideas of becoming an *expert teacher*.

Anita’s reflection about behaviour management fostered increased decisiveness and helped her to develop a clearer sense of herself as a teacher. Likewise, her maturation of ideas across a range of teaching issues was furthering her ability to be more decisive in other aspects of teaching and augmenting the overall efficacy of her teaching. If Anita follows through on her stated desire to reflect regularly after each teaching session, she may cultivate a valuable metacognitive process that is likely to challenge her to develop her teaching further.
CHAPTER EIGHT
CASE 5, MARY

This chapter provides an account of the results of this study that specifically answer the first three research questions about Case 5, Mary:

1.1 What COTs are held by Mary before the intervention?
1.2 What COTs are held by Mary after the intervention?
1.3 How did Mary change her COTs?

The answers to these questions are drawn from an analysis of Mary’s interview data, followed by an analysis of her responses to the TPI. These two sets of analyses are then triangulated to confirm the findings. Next, the data from her personal journals are used to supplement the findings. The chapter closes with a summary of findings about Mary, along with answers to the above three research questions.

The same methods that were used to analyse each set of case data were applied to the treatment and triangulation of Mary’s data. For the sake of expediency, the full analyses and interpretations of Mary’s interviews and journals are included in Appendix 13 and Appendix 14, respectively. Summaries of these analyses are provided in this chapter. Figure 23 in Chapter Five: Case 2, Laura depicts an overview of the progressive structure used for this case chapter.

Background: Case 5, Mary

Mary is a sessional teacher who has taught undergraduate students for one semester. At the beginning of this study, Mary had completed an undergraduate degree with honours. Mary is hoping to commence her doctoral studies in the next year. She has no formal teaching qualifications, although she did complete the institutional briefings that are compulsory for all academic sessional staff at her university. Mary hoped to incorporate tertiary teaching into her career.

Findings from an Analysis of Interview Data: Case 5, Mary

Interviews were conducted with Mary to reveal the COTs that she held at the beginning and end of this study. Eleven main themes were employed to categorise the COTs that emerged during the interviews. As with the other case studies in this research, the emergent nuances and traits of Mary’s thoughts, which I call the actual COTs that Mary held, were designated as sub-themes during the coding process and appropriately grouped under the relevant main themes. A summary of the main themes
and pertinent sub-themes traversing the COTs revealed during the analysis, with indications of their presence in the initial and final interviews, are outlined in Table 49.

Table 49

<table>
<thead>
<tr>
<th>Thematic Map for Case 5, Mary’s Initial and Final COTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>COTs</td>
</tr>
<tr>
<td>COT 1 Awareness of COTs</td>
</tr>
<tr>
<td>Conceptual awareness</td>
</tr>
<tr>
<td>Aware of gaps in teaching practice</td>
</tr>
<tr>
<td>Different teaching styles for different learning styles</td>
</tr>
<tr>
<td>Changing students</td>
</tr>
<tr>
<td>Challenging conceptions</td>
</tr>
<tr>
<td>Conceptions changing</td>
</tr>
<tr>
<td>Conceptions changed</td>
</tr>
<tr>
<td>COT 2 Sees teaching as a social process</td>
</tr>
<tr>
<td>Constructivist paradigm</td>
</tr>
<tr>
<td>Develops cooperation among students</td>
</tr>
<tr>
<td>Fellow learners</td>
</tr>
<tr>
<td>Rapport</td>
</tr>
<tr>
<td>A decent person</td>
</tr>
<tr>
<td>Accentuate the positive</td>
</tr>
<tr>
<td>Asking questions</td>
</tr>
<tr>
<td>Culturally effective communication</td>
</tr>
<tr>
<td>Enculturation</td>
</tr>
<tr>
<td>COT 3 Developing minds</td>
</tr>
<tr>
<td>Caring, nurturing and developing minds</td>
</tr>
<tr>
<td>Empathy towards student</td>
</tr>
<tr>
<td>Generic skill development</td>
</tr>
<tr>
<td>Caters for individual needs</td>
</tr>
<tr>
<td>Reshape students visions of the world</td>
</tr>
<tr>
<td>Shelve egos</td>
</tr>
<tr>
<td>Student-centredness</td>
</tr>
<tr>
<td>Building student confidence</td>
</tr>
<tr>
<td>Experienced as a student</td>
</tr>
<tr>
<td>COT 4 Fostering understanding</td>
</tr>
<tr>
<td>Deep understanding</td>
</tr>
<tr>
<td>Using wisdom</td>
</tr>
<tr>
<td>Connections between various opinions and ideas</td>
</tr>
<tr>
<td>COT 5 Preparation and materials</td>
</tr>
<tr>
<td>Preparation</td>
</tr>
<tr>
<td>Accessible information</td>
</tr>
<tr>
<td>Up-to-date material</td>
</tr>
<tr>
<td>COT 6 Engaging students</td>
</tr>
<tr>
<td>Listening</td>
</tr>
<tr>
<td>Discussion</td>
</tr>
<tr>
<td>Expects student effort</td>
</tr>
<tr>
<td>Motivation</td>
</tr>
<tr>
<td>COTs</td>
</tr>
<tr>
<td>-------------------------------------------</td>
</tr>
<tr>
<td><strong>COT 7 Facilitating and organising learning</strong></td>
</tr>
<tr>
<td>Facilitator</td>
</tr>
<tr>
<td>Responsibility for learning</td>
</tr>
<tr>
<td>Building on existing knowledge</td>
</tr>
<tr>
<td><strong>COT 8 Behaviour management</strong></td>
</tr>
<tr>
<td>Boundary setting</td>
</tr>
<tr>
<td>Respecting others</td>
</tr>
<tr>
<td>Institutional philosophy correlates</td>
</tr>
<tr>
<td><strong>COT 9 Assessments</strong></td>
</tr>
<tr>
<td>Setting objectives</td>
</tr>
<tr>
<td>Giving prompt feedback</td>
</tr>
<tr>
<td>Exams not effective</td>
</tr>
<tr>
<td><strong>COT 10 Evaluates teaching practices</strong></td>
</tr>
<tr>
<td>Open to debate</td>
</tr>
<tr>
<td>Experimenting with methods</td>
</tr>
<tr>
<td>Flexible methods</td>
</tr>
<tr>
<td>Evaluate one’s own teaching</td>
</tr>
<tr>
<td>Reflecting</td>
</tr>
<tr>
<td><strong>COT 11 Practitioner of teaching</strong></td>
</tr>
<tr>
<td>Competent to teach</td>
</tr>
<tr>
<td>Confidence</td>
</tr>
<tr>
<td>Enthusiasm, loves to teach</td>
</tr>
<tr>
<td>Expert in subject matter</td>
</tr>
<tr>
<td>Teaching from own perspective</td>
</tr>
</tbody>
</table>

**Trends of Change across Interview Data: Case 5, Mary**

The following sections outline the trends that were identified in the analysis of Mary’s interview transcripts according to the 11 main themes. Suggestions are made regarding the reasons for the changes.

**Theme 1: Awareness of COTs**

By the end of the semester, Mary’s complexity and depth of theoretical understanding of teaching and learning had increased and broadened. She had also moved towards a more practice-based appreciation of a reflective practice cycle, helping to extend her ability to analyse her teaching practices. This reflection on her practice consequently provided her with increased feelings of competency. With the depth gained in her theoretical knowledge, she was better able to conceive nuances that previously were outside her consideration. For instance, Mary was viewing different learning styles in tandem with different teaching approaches, which the SOLO taxonomy would classify as understanding at the *multistructural* level (Biggs & Collis, 1982). Further, Mary’s conceptual thinking had been progressing, as evidenced by an
increased command of educational language, which facilitated her grasp of teaching and learning attributes while strengthening her intentions towards her practices. She also realised that teaching was a dynamic rather than static process, which augmented her practical thinking.

**Theme 2: Sees Teaching As a Social Process**

With respect to teaching as a social activity, Mary continued to identify rapport with learners as a crucial attribute of good teaching. She began to bring constructivist principles into her thoughts of teaching, although she was not specifically labelling them as such. Even though, at the beginning of this study, Mary already exhibited positive social teaching tendencies such as empathy and the importance of establishing rapport, she seemed to move towards a more complex way of thinking about amalgamating her social stance with the need to work within the more standardised position that institutional direction often requires. Empathy played a strong part in Mary’s conceptions from the beginning of this study. As the study progressed, she appeared to be more aware of considerations such as cultural sensitivity and acknowledging the existing experiences of her students.

**Theme 3: Developing Minds**

Mary showed conceptual growth in that she was considering the good, bad, helpful and unhelpful attributes of teaching in her analysis of how to improve her teaching practice. As with other themes, Mary was broadening her ability to explain her teaching philosophy by using more expansive language than at the beginning of the study. For instance, she had intentions to expose different points of view, reshape her students’ views of the world and expand her ability to account for different learners in different learning situations.

**Theme 4: Fostering Understanding**

Mary moved towards a more complex notion of fostering understanding. She began with the idea of students simply taking on different ways of thinking and experiencing different perspectives, but developed to the point where her ideas incorporated the teaching process as deepening students’ wisdom and providing assessments that encouraged a deeper approach to learning.

**Theme 5: Preparation and Materials**

Mary’s thoughts about preparation remained relatively consistent across the period of this study; however, it can be noticed that by the end of the study she was less anxious in relation to her own infallibility and presentation and more concerned with the learning experience that she organised for students.
Theme 6: Engaging Students

Mary gave the impression that she had moved from thinking of discussion as being a mainly teacher-based activity, to favouring small group discussion followed up by discussion with the whole class. This points towards movement from a teacher-centred to a student-centred approach.

Theme 7: Facilitating and Organising Learning

Mary moved away from a teacher-centred conception wherein much of the responsibility for learning was placed with the teacher, towards a perspective that, although remaining concerned with younger students’ responsibility for learning, was more staunchly aimed at a student-centred approach in which the teacher’s role was as a facilitator. As part of this perspective, Mary expected that her students would assume greater responsibility for their learning.

Theme 8: Behaviour Management

With Mary’s background of practice as a teacher’s aide in primary and secondary schools, it is understandable that she began teaching in a tertiary setting with a more closely structured approach to behavioural boundaries. By the end of the study, however, she had come to favour a model that fostered desirable conduct by example and enculturation. This may have come about during her interaction with older students; however, her language suggested that she was implementing concepts from the theoretical literature and ideas to which she was exposed in this study.

Theme 9: Assessments

At the end of the semester, Mary felt that assessments should be linked to learning objectives and outcomes, suggesting that her understanding of the institutional requirements of her university were playing a more important role. Over the semester, Mary developed her observation of improvement in individuals and reacted by wondering how she might offer materials in different ways to allow for different learning approaches and types of learner. Further to this, she considered incorporating materials in different formats, such as video, to inject more interest into the learning environment. She also gave greater importance to the currency of materials.

Theme 10: Evaluating Teaching Practices

In evaluating her teaching practices, Mary advanced in her appreciation of reflective practice and became more confident in trying new ideas. She intended to do less talking when she was taught, which is congruous with her intention to give more responsibility for learning to her students and enact a more student-centred approach.
Theme 11: Practitioner of Teaching

Mary was initially able to offer some attributes of practice that she felt were important components of good teaching. At the end of the study, however, she had begun to delve a little deeper, mentioning issues that she felt were influencing her actual practice and theoretically relating to them. Her broader understanding of reflective practice as a tool positively affected her confidence and ability to improve consciously as a practitioner of teaching.

Summary of Trends of Change across Interview Data: Case 5, Mary

The changes that occurred in Mary’s conceptions were often similar across different aspects of teaching and learning, especially regarding empathy, a social equality stance and fostering mutual respect. What stood out was a newfound appreciation for reflection as a conscious method of analysis and improvement. It was also apparent that Mary’s ideas had become more complex due to her exposure to teaching and learning theories. Above all, it seemed that the extended language she gained from her exploration into educational theory gave her a more comprehensive capacity to explain her thoughts about teaching. Mary’s growth in her ability to think explicitly and with more complexity about her teaching allowed her to engage in deeper analysis of her teaching practices and plans for how to improve them. She found a greater capacity to reason about her COTs and increased her impetus to do so.

Analysis of TPI Data: Case 5, Mary

Initial Perspectives

Mary’s scores from her initial use of the TPI questionnaire (see Table 50 and Table 51) revealed that she held the dual dominant perspectives of transmission (35) and nurturance (36). Mary’s backup perspective was developmental (33). The perspectives that Mary held as recessive were shown to be equally apprenticeship (29) and social reform (29).

Final Perspectives

On taking the TPI questionnaire at the end of this study (see Table 50 and Table 51), Mary held only one dominant perspective, which was shown to be nurturance (41). The score Mary received for the perspective of transmission (35) remained the same. The score she obtained for the perspective of nurturance overshadowed the position of her transmission perspective, which was now ranked as a backup perspective. Mary’s original backup perspective of developmental (33) remained categorised as such. Mary’s perspective on apprenticeship (33) saw its ranking elevate to a backup perspective. Her perspective on social reform at (29) remained recessive.
Table 50

*TPI Perspective Scores for Case 5, Mary—Pre and Post Study Results*

<table>
<thead>
<tr>
<th></th>
<th>TEACHING PERSPECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transmission</td>
</tr>
<tr>
<td>INITIAL</td>
<td>35</td>
</tr>
<tr>
<td>FINAL</td>
<td>35</td>
</tr>
<tr>
<td>Change</td>
<td>0</td>
</tr>
</tbody>
</table>

**Changes in Teaching Perspectives**

Some changes were exposed in the perspectives of teaching that Mary held between the beginning and the end of this study through this instrument. Whereas she initially held two dominant perspectives of *transmission* (35) and *nurturance* (36), by the end of the semester, only the *nurturance* perspective remained dominant. Mary’s *transmission* perspective, which had also been dominant, was re-ranked as a backup perspective. Mary’s *apprenticeship* perspective increased its ranking by 4 points to move from a recessive to a backup position. Mary’s *developmental* perspective remained in a backup position for both instances of the TPI meaning that, after the final instance, she was holding three backup perspectives. There was no change in Mary’s perspective of teaching as *social reform*, which was deemed her recessive perspective in both iterations of the TPI.

Further details of the changes that occurred in the perspectives of teaching that Mary held across this study can be seen in Table 51 and Table 52. Most prominently, Mary had held the dual dominant teaching perspectives of *transmission* and *nurturance* at the beginning of the study; however, by the end of the study, she was holding only one clear dominant perspective of *nurturance*, while her perspective of *transmission* had receded to the position of a backup perspective. Mary’s *apprenticeship* perspective was also raised between the beginning and end of the study, increasing from a recessive position to become ranked as a backup perspective.
Table 51

TPI Perspectives Scores Showing Dominant, Backup and Recessive Rankings for Case 5

<table>
<thead>
<tr>
<th>TEACHING PERSPECTIVES</th>
<th>Transmission</th>
<th>Apprenticeship</th>
<th>Developmental</th>
<th>Nurturance</th>
<th>Social Reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank</td>
<td>Dom</td>
<td>Bk</td>
<td>Rec</td>
<td>Dom</td>
<td>Bk</td>
</tr>
<tr>
<td>INITIAL</td>
<td>35</td>
<td></td>
<td></td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>FINAL</td>
<td>35</td>
<td></td>
<td></td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>CHANGE</td>
<td>0</td>
<td>4</td>
<td></td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Table 52

TPI Perspective Sub-scores for Case 5, Mary—Pre and Post Study

<table>
<thead>
<tr>
<th>TEACHING PERSPECTIVE SUB-SCORES</th>
<th>INITIAL</th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>FINAL</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PERSPECTIVE</td>
<td>Beliefs</td>
<td>Intentions</td>
<td>Actions</td>
<td>Total</td>
<td>Beliefs</td>
<td>Intentions</td>
<td>Actions</td>
<td>Total</td>
<td>Beliefs</td>
<td>Intentions</td>
<td>Actions</td>
<td>Total</td>
<td>Beliefs</td>
<td>Intentions</td>
<td>Actions</td>
</tr>
<tr>
<td>Transmission</td>
<td>12</td>
<td>11</td>
<td>12</td>
<td>35</td>
<td>12</td>
<td>11</td>
<td>12</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Apprenticeship</td>
<td>8</td>
<td>12</td>
<td>9</td>
<td>29</td>
<td>10</td>
<td>12</td>
<td>11</td>
<td>33</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developmental</td>
<td>13</td>
<td>11</td>
<td>9</td>
<td>33</td>
<td>12</td>
<td>12</td>
<td>9</td>
<td>33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurturance</td>
<td>15</td>
<td>11</td>
<td>10</td>
<td>36</td>
<td>15</td>
<td>14</td>
<td>12</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Reform</td>
<td>10</td>
<td>10</td>
<td>9</td>
<td>29</td>
<td>9</td>
<td>10</td>
<td>10</td>
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</tbody>
</table>

**Perspective Sub-scores**

An overview of Mary’s sub-scores across the dimensions of her beliefs, intentions and actions, in relation to her perspectives, can be seen in Table 52. These findings show the movements that occurred in the dimensions of her beliefs, intentions and actions across each of the five perspectives. The main changes to emerge were that her intentions and actions in the nurturance perspective rose and were responsible for the increased dominance of this perspective. In the following sections, the details of each of these three sub-scores are considered separately.

**Beliefs Sub-scores**

There were some increases and some decreases in the sub-scores for beliefs across Mary’s two administrations of the TPI questionnaire (see Table 53). The following points emerged as changes over the duration of this study. Mary’s beliefs of
apprenticeship increased from 8 to 10 (or 25%). Her beliefs of a developmental perspective decreased from 13 to 12 (or -8%). Likewise, a fall was seen in Mary’s beliefs of social reform from 10 to 9 (or -10%). Mary’s beliefs of transmission (12) and nurturance (15) remained the same.

Table 53

Beliefs Sub-scores Showing Percentage of Change for Case 5, Mary

<table>
<thead>
<tr>
<th>BELIEFS</th>
<th>Initial</th>
<th>Final</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission total: (Tr)</td>
<td>12</td>
<td>12</td>
<td>0%</td>
</tr>
<tr>
<td>Apprenticeship total: (Ap)</td>
<td>8</td>
<td>10</td>
<td>25%</td>
</tr>
<tr>
<td>Developmental total: (Dv)</td>
<td>13</td>
<td>12</td>
<td>-8%</td>
</tr>
<tr>
<td>Nurturance total: (Nu)</td>
<td>15</td>
<td>15</td>
<td>0%</td>
</tr>
<tr>
<td>Social Reform total: (SR)</td>
<td>10</td>
<td>9</td>
<td>-10%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>58</td>
<td>58</td>
<td>0%</td>
</tr>
</tbody>
</table>

Intentions Sub-scores

There were some increases for Mary’s sub-scores of intentions across her perspectives (see Table 54), which showed that her scores for developmental and nurturance increased from 11 to 12 (or 9%) and 11 to 14 (or 27%), respectively. Mary’s sub-scores of her intentions for transmission (11), apprenticeship (12) and social reform (10) remained the same.

Table 54

Intentions sub-scores Showing Percentage of Change for Case 5, Mary

<table>
<thead>
<tr>
<th>INTENTIONS</th>
<th>Initial</th>
<th>Final</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission total: (Tr)</td>
<td>11</td>
<td>11</td>
<td>0%</td>
</tr>
<tr>
<td>Apprenticeship total: (Ap)</td>
<td>12</td>
<td>12</td>
<td>0%</td>
</tr>
<tr>
<td>Developmental total: (Dv)</td>
<td>11</td>
<td>12</td>
<td>9%</td>
</tr>
<tr>
<td>Nurturance total: (Nu)</td>
<td>11</td>
<td>14</td>
<td>27%</td>
</tr>
<tr>
<td>Social Reform total: (SR)</td>
<td>10</td>
<td>10</td>
<td>0%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>55</td>
<td>59</td>
<td>7%</td>
</tr>
</tbody>
</table>
Actions Sub-scores

With respect to Mary’s sub-scores of actions across her perspectives (see Table 55), they increased in three out of five perspectives. Mary’s actions in *apprenticeship* rose from 9 to 11 (or 22%), for *nurturance* the rise was 10 to 12 (or 20%) and for *social reform* her score increased from 9 to 10 (or 11%). The sub-scores for the other two perspectives of *transmission* (12) and *developmental* (9) remained constant across the study.

Table 55

*Actions sub-scores Showing Percentage of Change for Case 5, Mary*

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>Initial</th>
<th>Final</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission total: (Tr)</td>
<td>12</td>
<td>12</td>
<td>0%</td>
</tr>
<tr>
<td>Apprenticeship total: (Ap)</td>
<td>9</td>
<td>11</td>
<td>22%</td>
</tr>
<tr>
<td>Developmental total: (Dv)</td>
<td>9</td>
<td>9</td>
<td>0%</td>
</tr>
<tr>
<td>Nurturance total: (Nu)</td>
<td>10</td>
<td>12</td>
<td>20%</td>
</tr>
<tr>
<td>Social Reform total: (SR)</td>
<td>9</td>
<td>10</td>
<td>11%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>49</td>
<td>54</td>
<td>10%</td>
</tr>
</tbody>
</table>

Summary of Changes in TPI Scores and Sub-scores: Case 5, Mary

Utilising the TPI at either end of this study revealed that the most pronounced differences in Mary’s perspectives of teaching between her initial and final scores (see Figure 27) were found within the perspectives of *apprenticeship* and *nurturing*. The overall scores returned for her *apprenticeship* perspective rose from 29 to 33 (or 14%), causing this to be reclassified from a recessive to a background perspective. The movement that caused the reclassification of her *apprenticeship* perspective occurred within the sub-scores of beliefs and actions. The authors of the TPI (Pratt & Associates, 1998) view beliefs to be of pivotal influence in conceptions, as they underpin values and represent the most stable aspect of a person’s perspective on teaching. In turn, beliefs often arbitrate one’s teaching intentions and the actions one performs while teaching. Therefore, this shift in Mary’s beliefs concerning the perspective of *apprenticeship* underscores what may be viewed as the major conceptual transformation that occurred for Mary over the course of this study.
Figure 27. Case 5 TPI changes between initial and final scores within sub-scores.

The other noteworthy change that occurred in Mary’s conceptions was within the nurturing perspective, where her score rose from 36 to 41 (or 14%). Although this perspective was seen as dominant both times that she participated in the inventory, there was a definite increase in its importance. The increase can be attributed to movement in the sub-scores of her intentions and actions. Mary’s belief sub-score for nurturing was initially high and remained so. The changes to Mary’s intentions and actions sub-scores are likely to be due to the reflective processes that Mary undertook during participation in this study. These reflective processes may have helped her to rebalance her intentions and actions to be more in line with her beliefs.

Triangulation between Interview and TPI Data: Case 5, Mary

The findings that emerged from the analysis of the quantitative results obtained from the TPI are helpful in strengthening the findings from the qualitative data obtained from the interviews with Mary. The two sets of findings bear a good relation to the conceptual transformation that was suggested by Mary’s interview responses and consequently noted in the summary of trends. For instance, attributes of a nurturing perspective were common in her dialogue during her interviews. It is not surprising that nurturing emerged as her dominant perspective, given the ubiquity of the interview data that aligned her with this stance.
Some of the themes commonly referred to by Mary across her interviews were:

- having regard for her students’ self-concepts;
- concern for rapport with students;
- fostering a climate of trust and respect; and
- her role as a facilitator.

Likewise, when considering Mary’s stance on the apprenticeship perspective, she favoured a model that fostered desirable conduct by example and enculturation, and she often alluded to the importance of teachers being experts who are well versed in their field. Further, Mary increasingly noted her desire to be well prepared in terms of the content of her teaching, to produce a perception of the teacher as an expert. All of these are attributes of central importance to an apprenticeship perspective.

**Supplementary Findings from an Analysis of Personal Journals: Case 5, Mary**

Mary’s personal journal data were treated by applying the same process used to interpret the personal journal data for the other cases in the study. For expediency, a summary of the results of this data treatment is included in this chapter. Appendix 14 presents a detailed interpretation of Mary’s personal journal data.

**Summary of Personal Journal: Case 5, Mary**

During Activity 1, Mary began her journal by reflecting on her own learning experiences. In high school, she recalled that these experiences were about transferring knowledge. She felt she had been more of a rote learner in the past and that, although she now tried to situate her learning within a broader context using life experiences to make sense of new information, her past learning experiences continued to influence her current learning style. Writing about the bodies of knowledge that she used to make sense of her teaching, Mary felt she had little theory to draw on and relied on contrasting the situation in her classroom with her experience as a university student. After Mary had read Schön’s (1983) work on reflective practice, she demonstrated a willingness to take on the ideas of reflective learning and she began to make links between the ongoing checking practices that occur during the learning process; building upon previous knowledge; checking facts to contextualise them; and arriving at possible solutions or deeper understandings. Mary was also trying to model techniques that she perceived to be useful, drawn from the practices of her own teachers.

Mary often referred to work she had done in a K-12 girls school and used it as a basis for observing different teaching approaches. Mary described a student as having different backgrounds, experiences, life skills, theoretical knowledge, expectations,
desires and attitudes. She added they may come from varied ethnic backgrounds and their ages and gender may affect their approaches to educational situations. Mary alluded to social constructivist conceptions of teaching and learning as she explained that knowledge and understandings are exchanged in a multi-directional process rather than uni-directionally from teacher to students. Moreover, she believed that fostering students’ self-esteem could have a positive effect on educational and social outcomes. She thought that self-esteem could be bolstered by listening to and respecting students’ opinions, by having positive expectations and giving positive feedback and by encouraging an atmosphere of mutual respect. Many of the COTs revealed by Mary during Activity 1 relate to her experience with primary and secondary teachers and it is likely that much of her understanding of teaching and learning originated from this base. This stance, shown in her journal, also aligned with the ideas she recorded in her interviews and the dominance of a nurturing perspective identified in her TPI results.

As Mary moved through the second activity, she recorded what she thought were traits of above-average teachers as being passionate, well organised and prepared. She wanted to create learning environments that were ethical, equitable and fun. She believed she could improve her teaching by being more confident and that this confidence would come from gaining a broader knowledge of the subject she taught. She also considered ‘undertaking extra professional tertiary teacher training’. This was the first time she differentiated her teaching with the label tertiary. The support she felt she needed related to mentoring from her coordinator as well as from a wider community of practice.

Mary’s encounters with the ideas of a constructivist learning environment challenged her previously dominant COLs as transferring knowledge. She had now begun writing in terms of exploration, discussion and individual appeal, and mentioned the importance of students taking an active role in their learning. Further, she wondered how she could encourage students to take a deeper approach to their learning and she was trying to structure her lectures to be more active.

Although Mary did not manage to administer a mid-semester review questionnaire to her classes, she did access the data collected by her university’s end of semester evaluations and attempted to organise and analyse these data. She found a love/hate polarisation in the students’ comments about the tutorial format and was not sure what to make of this. Another reaction was to re-evaluate essay questions to ensure they matched the aims and objectives of the unit. Mary also made use of her past journal work to identify areas for improvement. She wanted an increase in the number of active
learning components in lectures and was thinking of ways she could bring discussion into student presentations. A common thread appearing throughout Mary’s journal was the increasingly high importance she placed on facilitating discussion and interactivity in learning environments.

**Summary of Findings: Case 5, Mary**

Although Mary was concerned with the social side of teaching, especially in relation to developing teacher–student rapport, towards the end of the study she was more aware of the importance of interactivity. Through her engagement with the activities facilitated through the RPW, Mary’s ideas about teaching grew to develop into theories of teaching. Not only did she show an understanding of some theoretical teaching constructs, she was able to make connections between the theories and to connect these theoretical ideas to her own teaching practices.

As illustrated in the findings from an analysis of her TPI responses and her interviews, and in consideration of her journal entries, Mary had grown to be a reflective practitioner throughout this study. Although she was not devoid of knowledge about reflection in educational contexts at the beginning of the study, by the end of the study she understood how reflection on her own teaching could influence the quality of her students’ learning.

Mary became a teacher who viewed her students holistically; she was interested in their cognitive, social and emotional development. She considered a good teacher to be someone who was well rounded. In Mary’s eyes, a good teacher was not only knowledgeable and skilful; he or she was also a decent person. These views of teaching and learning, displayed by Mary throughout the study, reflect her understanding of the role of personal development in the teaching and learning process. It is no surprise to note that Mary’s TPI responses indicate a nurturing approach to teaching.

At the beginning of the study, Mary illustrated her ideas about the role of knowledge building in the learning process in a range of quotations about recognising students’ experiences. By the end of the study, after engaging in the activities presented on the RPW, Mary’s knowledge of educational theories was applied in her language. She clearly articulated her conceptions of how learning occurred through the process of knowledge deconstruction and reconstruction.

Many of Mary’s comments were characterised by extensive reasoning about why she did certain things as a teacher and why her students did certain things as learners. She was a questioning practitioner and her consistent investigation into the pathways of good teachers and good learners often catalysed her regular realisations
about the centrality of the student in the teaching process. Owing to the way she engaged in regular reasoning processes, she came to a strong understanding of teaching as being a student-centred pursuit. Mary’s metacognitive approach to reflecting on the benefits she gained from the RPW illustrated how her approach to participation in this study enabled her to develop theory-based teaching practices.

Answers to Research Questions: Case 5, Mary

RQ 1.1: What COTs are Held by Mary Before the Intervention?

At the start of the study, Mary’s COTs were based heavily on her experiences from working as a teacher’s assistant in a private girls’ school. Mary saw different learning styles as the medium in which information was presented (for example, whether certain students preferred to learn with audio, textual or visual mediums). She saw teaching approaches as catering for these different styles of presentation mediums.

Mary felt that empathy and rapport with students was important, and that teachers should be of a good calibre. She thought it important to be outwardly positive with her students. Mary’s attitudes to managing students’ behaviour were closely structured. Her ideas about fostering understanding focused on exposing students to different ways of thinking and helping them to experience different perspectives. Mary felt it was important for good teachers to be flexible with their teaching methods and to reflect on their teaching. At this point, she considered discussion to be a mainly teacher-driven exercise.

At the early stage of the study, Mary’s ideas of teaching aligned with the transmission of knowledge and information, although she was somewhat aware of a social constructivist paradigm and was keen to develop her understanding of this. She was very concerned with her level of subject knowledge, which made preparation a very open-ended task. She had an underlying desire to nurture her students.

RQ 1.2: What COTs are Held by Mary After the Intervention?

At the end of the study, Mary was considering different teaching approaches in more discerning ways. As her awareness of teacher-centred versus student-centred philosophies had increased, she found constructivist methods of practice more reasonable. Mary now viewed rapport between teacher and students as critical, and offered much stronger reasoning for why it helped to facilitate sociability between the teacher and his or her students. She thought building students’ confidence in their abilities was an effective component to their learning success.

Mary’s tactic for behaviour management was to portray her expected manner of conduct by example and enculturation. She put value on teaching strategies that
encouraged students’ deeper engagement with learning, and she considered that this could enhance their understanding. Mary felt that facilitating discussion was a vital component of a good learning environment, which she felt should be student-focused with minimal teacher input.

By the end of the study, Mary focused her preparation efforts on the organisation of a good learning environment. She continued to think that teachers should nurture students, although this conception had progressed to become more connected with the nurturing of students’ minds as practitioners of their field.

RQ 1.3: How Did Mary Change Her COTs?

Mary’s COTs changed with regard to her approaches to teaching, from a concern with presentation medium choices, towards a more theoretically based viewpoint involving constructivist ideals and student-centred learning. Her need to be outwardly positive became focused more upon fostering students’ confidence to succeed and nurturing their minds, rather than simply helping them to feel good.

The ways Mary thought about empathy and other social aspects of teaching became more sophisticated. Her behaviour management strategies evolved from a mainly rule-based approach to one of example-driven enculturation. Mary’s approach to fostering understanding in her students had begun by exposing students to different ways of thinking to help them to experience different perspectives; however, by the end of the study, this had developed to include techniques that encouraged students to engage with their learning in a deeper manner, which she believed would enhance their understanding. Mary’s ideas of conducting class activities were consistent with a desire to be more student-centred. To achieve this, she intended to change the format of her teaching to incorporate small group discussions.

Mary had advanced her appreciation of reflective practice and was more confidently seeking to evaluate herself and trial new ideas. Another move towards a more student-centred COT was that her preparation concerns had become less focused on her ability to have answers for everything and more focused on facilitation and coordination of a good learning experience for students.

Overall, Mary had moved away from her school-based pedagogical and teacher-driven frameworks, towards a greater awareness of constructivist ideals and the andragogical qualities of tertiary learning environments.
CHAPTER NINE
ANSWER TO THE FINAL RESEARCH QUESTION

Introduction

This chapter answers the fourth research question: How did the interventional program of reflective practice influence the neophytes’ COTs? (see Figure 28, repeated from Chapter 3). The actual changes that the individual participants experienced as they engaged in the interventional program of reflective practice have been presented in the previous chapters. This chapter concentrates on how the interventional program and the structure and content of the RPW influenced the participants’ COTs. This chapter will provide an account of the answer to the final research question. These findings will be discussed in relation to the literature in the following chapter.

Figure 28. Interventional program of reflective practice.

The interventional program of reflective practice was, in a scaffolded and structured manner, designed to influence the neophyte teachers’ ability to reflect, which in turn was expected to influence the development of their COTs. By enhancing their reflective practice skills, the program also encouraged the neophyte teachers’ to plan and apply their learning to their teaching. The process of developing the interventional program of reflective practice, including the RPW, has been described in detail in Chapter 3: Methodology.

How the interventional program influenced the neophytes is shown in the following sections. Theoretically informed practice was shown as influential, as were
training for reflective practice skills and staged progressive reflective activities. These factors led to an increased capacity on the part of neophytes to combine their previous and current COTs with theoretical understanding and to move intentionally towards planning improvements to their teaching.

**Theoretically Informed Practice**

At the beginning of their teaching duties, many neophytes are not aware of how to think professionally about teaching and they often have little theoretical knowledge of teaching. The problem is highlighted in Mary’s journal, when she tried to outline her theory of teaching, and in her initial interview, when she recounted what she knew about reflection:

I don’t know that I really have a ‘theory of teaching’.
(Journal, Mary, Case 5)

Yes [to having heard of reflection], but I have to qualify that by saying I’m not absolutely sure what reflection is.
(Initial interview with Mary, Case 5)

By introducing theoretical knowledge about various aspects of teaching and learning, the RPW gave the neophytes opportunities to engage in activities that facilitated their acquisition of broader and deeper understandings of teaching and learning:

…the readings were useful, because I didn’t have any sort of real teaching/educational theory experience, really.
(Final interview with Mary, Case 5)

By learning about some seminal educational theories, the neophytes were able to reflect on their current teaching practice in ways that helped them to understand why some practices might be more effective compared to others. Further, following from these opportunities, the neophytes drew upon bodies of theoretical knowledge to make sense of their self-observations, which increased the depth of their understanding of their own teaching. The neophytes also used their more theoretically informed ideas to reflect on how their personal styles of teaching were appropriate to their current teaching context. For example, Laura’s reflections, evident in the following sequence of her observations, were typical of some of the other participants in the project. She firstly considered how the theoretical readings affected her current understanding of teaching and her expectations of her own teaching successes and failures:

I started reading the website … information on how to encourage the deep approach, this is what I needed all along. … Reading this was really useful …
guess if I know that I am doing the right things … then I can keep doing them without feeling like they are failing.

(Journal, Laura, Case 2)

Later, Laura moved away from her earlier self-focus, refocusing her reflections on students’ learning:

The teacher also takes advantage of ‘uncertainty’ [I] love that, providing the information necessary for the student to take the next steps themselves.

…constructivist stuff seems to acknowledge the threads that a student brings…

This entire activity has served to reinforce for me that I was naturally … doing the right things for this particular style of teaching.

(Journal, Laura, Case 2)

The results of this study showed that the interventional program of reflective practice enabled most of the participants to engage in reflective processes in which they integrated their prior knowledge about teaching with their broadening theoretical understandings. Their new levels of understanding resulted in some changes in their COTs, which, in turn, influenced the development of their personal teaching styles.

The RPW activities provided guidance for the neophytes to contemplate their COTs, which often existed alongside alternative ideas. While at times the participants experienced cognitive dissonance, they were encouraged to consider the plausibility, fruitfulness and usefulness of competing ideas. As they engaged in scaffolded contemplation, the participants became more sophisticated in how they observed and reflected on their own teaching practices and ideas. An example of this can be seen in cases in which participants encountered theories on the RPW associated with different learning styles and different teaching approaches. One of the participants, Anita, recorded the following comments in her journal as her response to the first activity in which she was introduced to theories associated with student learning styles:

I am a very self-directed learner, but this is not the same for all students and this is something that I am trying to deal with. How do you tailor your teaching to accommodate for both self-directed and those that wish to be lead in their studies?

The difficulty is with … students who have not yet developed … responsibility for their own learning.

(Journal, Anita, Case 4)

After recognising how she could practically apply her understanding of learning styles by identifying the different needs and preferences of her students, she took her learning to a further level, indicating how she applied her ideas and intended to modify
her practical teaching approach. Rather than providing all students with the same materials, she offered students differentiated materials and then followed up by attending to the students who required more assistance:

I am actually having some good ideas on this now … offering materials at different levels, some material for those who are ahead and giving some individual attention and then concentrating on those at the lowest level.
(Journal, Anita, Case 4)

By the time she was engaging with the second activity on the RPW, Anita had developed her COTs such that she was more focused on her students and their learning:

I now try to base my teaching on a student-centred approach, where I act as facilitator rather than ‘teacher’.
(Journal, Anita, Case 4)

Finally, during Activity 4, she was considering how she planned to improve her teaching in the future. Her reflective voice was more authoritative, decisive and self-aware than she had demonstrated in her earlier reflections:

…create a more participative approach to lectures. It must be clearly understood … this will be the format for the lectures and what is required of them.
(Journal, Anita, Case 4)

The strategy of presenting the neophytes with theoretical perspectives to compare with, and relate to, their thinking about their own teaching practices was used repeatedly to help them to make sense of the aspects of their own teaching that they were being asked to describe and reflect on in their personal journals. The realisations that subsequently emerged in the neophytes’ personal journals often led to their expression of future intentions to enhance their practice. Data from their interviews and journals illustrated that they were able to incorporate these realisations into their existing views, to formulate their understandings further and refine their COTs. This was illustrated in the example from Laura’s journal, below:

I also think that I was not as effective in my lecturing. I was asked [by the unit coordinator] to read the lectures straight from the unit outline. I ditched the whole idea. … Now I would never agree to reading them, and have the experience and confidence to argue for something else.

Just rereading this [what she has written previously], I clicked, that it’s actually about teaching someone else’s lecture. I totally didn’t feel that when I gave my own lecture.
(Journal, Laura, Case 2)

Corresponding to the increase in the neophytes’ sophistication of observation as they engaged in activities and their teaching practice, the RPW modelled the use of
appropriate but not overly jargony language in the context of tertiary teaching. Multiple examples revealed that this language of educational ideas was incorporated into the participants’ comments to explain their shifting COTs. For example, Mary’s responses across time showed how she explained her view of teaching as involving both the teacher and the student. Early in her journal, she stated:

I think teaching is a collaborative process between teacher and student … needs to be an evolving process … and takes into account the development of the student.

(Journal, Mary, Case 5)

During Activity 2, Mary wrote more specifically about the students’ role in learning:

Students in a constructivist learning environment need to be active participants in the learning process/classroom. Rather than relying on the teacher to generate questions and direct students, the students themselves need to become more fully involved with the topic.

(Journal, Mary, Case 5)

Mary then further explained her ideas as aligning to constructivist concepts of teaching, with specific comments related to her perceptions about the value of interactive learning activities:

I’m now attempting to structure my tutorial classes along constructivist lines. I try to impress they can explore issues that appeal to them as individuals.

Looking back over my previous journal entries, I note I’ve recognised the need to encourage more discussion among the students, to help them to develop a deeper learning approach. It therefore seems important to incorporate more opportunities for the students to discuss issues with each other. I need to have another look at my lecture materials, and work out where I can streamline the material to be delivered to allow more interactive time.

(Journal, Mary, Case 5)

These examples show how various components of the RPW influenced the participants’ abilities to identify how their growing understanding of educational theories informed their teaching practices. By encouraging the neophytes to incorporate their theoretical knowledge into their current and future teaching practices, the activities throughout the RPW also influenced the participants’ sense of their own learning.

**Reflecting on Previous Learning Experiences**

The interventional program of reflective practice encouraged each of the neophyte teachers to reflect on his or her own learning experiences, practices and preferences. By engaging in reflection about their own learning, the neophytes were firstly encouraged to think about issues that were familiar to them, before being offered
less familiar material. For example, Laura’s comments in her final interview demonstrate how her learning experiences, catalysed by activities she engaged in on the RPW, influenced how she reflected on her own learning as well as the learning of her students:

I had an expectation that they would be deep learners. This is something I got out of reading … about deep learning and surface learning. They have such different expectations of learning than I do. I’ve done two degrees. In the first one I always turned everything in late, I hardly turned up to class. … I thought I was surface [learning] but I was actually a deep learner, because I was thoroughly engaging with what I was doing… I took the theory of what we were doing in the classroom and … I lived and ate all I was learning and I stayed up all night talking about it with friends. So I really clicked when I was reading the stuff about deep and surface learning.

(Final interview with Laura, Case 2)

Similarly, near the end of the project, while reflecting on her own past learning style, Mary illustrated a new realisation that, as a strategic learner, she would have benefited more if she had taken a deeper approach to her learning:

I know with … my own learning style, that there is a certain element that is surface. … I thought what do I have to do to get a good mark … This is what the lecturer wants. Now I realise, after having gone through teaching and having done those activities in the project that I probably short-changed myself.

(Final interview with Mary, Case 5)

When reflecting on their own learning experiences because of activities offered through the RPW, the participants’ COTs were augmented by contrasting the ideas they had about their previous learning with their developing understandings of teaching and learning. The neophytes progressively developed their COTs and began increasingly to reflect on their own roles as people who were learning about teaching. These outcomes were achieved because of the influence of the interventional program of reflective practice.

**Participants’ Ownership of Their Learning**

The COTs held by teachers characteristically incorporate views about learning. The results of this study indicate that the neophytes’ ideas about learning, which formed part of their COTs, were influenced by their involvement in the interventional program of reflective practice.

While stimulating participants to bring their own previous ideas about teaching to the surface, the RPW activities provided the participants opportunities to reflect on how they could harness their newfound ideas about teaching. In this way, the RPW activities did not overlook the participants’ prior knowledge about teaching, but used
this knowledge as a foundation for the further development of the participants’ understanding of the practical and theoretical aspects of teaching. They were encouraged to reflect on their own learning as developing teachers. By integrating their new theoretically informed knowledge with their previous knowledge, their capacity to conceive improvements in their future practice was raised. As the study progressed, the neophytes’ expressions of their COTs increasingly revealed evidence of planning to implement ideas grounded in their learning from the interventional program. This demonstrated an increased level of ownership in their learning about being a reflective practitioner and a practical teacher.

By making plans about how they wanted to improve their teaching, the neophytes demonstrated greater autonomy as they completed the activities offered on the RPW and engaged with the researcher during the various data collection activities. Instead of primarily being led by the resources and activities on the RPW and the results of their TPI, the participants began to use evidence about their own teaching from their own contexts to inform their teaching practice. In this way, the results of the study show that the neophytes’ engagement with the interventional program of reflective practice influenced the way in which they conceived of their own teaching due to their interaction with evidence about their teaching from their current contexts. For example, Hilary used data from her student evaluation questionnaires to create a teaching tool that assisted her to improve the communication of her assessment expectations to her students:

They [her students] made a point of saying that every lecturer expects something different. When I glanced through the [mid-semester feedback] questionnaire responses, I noticed that quite a few of them indicated that they ‘disagreed’ with the statement: ‘The lecturer makes clear the standard of work expected. … I have now prepared a map of what I expect for the major assignment. (Journal, Hilary, Case 1)

Her engagement in the self-reflection activities on the RPW positioned Hilary to acknowledge and act upon the evaluation data offered to her by her students. Although she was not familiar with the term ‘assessment rubric’, her ‘map’ nevertheless provided a rubric to enable her students to understand the assessment expectations. The neophytes’ engagement in the activities offered throughout the interventional program of reflective practice enabled them to make independent decisions, such as the one made here by Hilary, about how they would improve their teaching in the future. In this way, their COTs encompassed an element of understanding about themselves as ongoing professional learners who could make decisions, based on evidence and learning from
others, about how to improve their teaching and their students’ learning. As shown in the following journal extract, Laura’s decision to engage in further professional development activities as an extension of her engagement in the activities on the RPW provides further evidence of how the participants took ownership of their own professional learning:

The big improvement I want to make is in the area of lecturing. I want to take the skills I have in [teaching] one-to-one to [and apply them to] one-to-many. After these evaluations [mid-semester student feedback questionnaire], I enrolled in a ‘Good Lecturing’ workshop.
(Journal, Laura, Case 2)

Opportunities to Reflect on an Individual Basis

The interventional program of reflective practice purposefully guided the participants through varied processes in which they recorded reflective comments in journals, provided responses to items on the TPI and answered questions in interviews. Multiple opportunities were provided to the neophytes to engage in reflective practices, both individually and collaboratively. These processes typically enabled the neophytes to identify and reflect on their COTs and to consider how they could apply their developing theoretical ideas of teaching to their practical teaching contexts. However, although the interventional program of reflective practice in this study, incorporating the RPW, offered opportunities for collaboration and discussion, the reflection experienced by the participants was largely realised on an individual basis. All participants engaged in individual reflection on numerous occasions throughout the study.

A starting point for self-analysis and reflective thought was provided through the provision and analysis of the results of the initial TPI. Following completion of the TPI, the novices were provided with an individual overview and analysis of how their TPI responses reflected their current views of teaching. This functioned as an initial body of data of the COTs, upon which they could begin reflecting. The neophytes also participated in an interview with the researcher at the beginning of the study. The interview experience provided them with an additional point at which to reflect about their COTs.

Following from the neophytes’ initial participation in the TPI and interview, the RPW provided further opportunities for the participants to engage in the skills of reflective practice. The RPW offered a flexible, accessible space in which individuals could reflect on their teaching ideas and practices, with scaffolding by the researcher as necessary. Since the RPW was not discipline-specific, the content that each of the
participants taught in their everyday interactions with their students did not become the focus of their reflective activities. Instead, each participant focused on the ideas and practices associated with the processes and outcomes of good teaching; it was left to them to apply their understanding of these ideas and practices to their own varied contexts.

Within the scope of this study, the results illustrate how the neophytes reflected on their own teaching contexts by identifying examples of how they had developed as teachers from the beginning to the end of their teaching semester. Realisations from their reflections were developed at an individual level and were drawn from what they considered had worked, what had not worked and what they had learned by reflecting on their problems and successes:

For the second half of semester I time-managed the seminars better. By then I had also learned that it was OK to skip things. I was also more adept at adjusting spontaneously to what was working and what wasn’t. (Journal, Laura, Case 2)

Although the participants did not take the opportunity to engage in collaborative reflection practices, their results nevertheless showed evidence that the depth of reflection in which the participants engaged increased throughout the study.

The results of this study have provided multiple examples of how the neophytes reflected on an individual basis. Little evidence was found of how the neophytes learned from each other, although opportunities were provided for this type of collaborative reflection in the interventional program of reflective practice. Reasons as to why the neophytes preferred to reflect individually, rather than collaboratively, are outlined in the following chapter, Chapter 10: Discussion.

Widening Awareness

The results of this study indicated that the neophytes changed their focus in some aspects of their reflections to incorporate a wider awareness of the nature of learning and the institution in which they were teaching. By the end of the study, most of the neophytes had expanded the realm of their reflection to incorporate a greater focus on student-based issues rather than on themselves as teachers. In the following examples from Hilary’s interviews, she initially felt it was of central importance to ensure that her students passed her course; however, after the program, her focus had shifted towards acquainting her students with a more comprehensive knowledge of the subject:
I try to get them through the unit … I think one of the most important things is that level [a pass level].
(Initial interview with Hilary, Case 1)

I think that there is too much focus on just getting them through, rather than introducing them to the full big-picture of the marketing world.
(Final interview with Hilary, Case 1)

As well as understanding the need for shifting the focus away from the teacher and towards the students and learning, the neophytes developed a more expansive awareness of their institution’s preferred ways of practice and the influence of this context on their own COTs. At the beginning of the semester, it was common that neophytes spoke of their need to be liked by students; the extension of friendship was often offered to achieve this need. For instance, Ben wanted to ‘break down hierarchies’, be seen as ‘easy going’ and was particularly ‘chummy’ with students. However, by the end of the program he said:

Just being a bit too flexible, with respect to deadlines and stuff. I think a lot of that can come from being chummy as well. Like a student will say, ‘look, I’ve had a tough week’, and you feel obliged to go, ‘don’t worry about it mate’ just get it done and we will be happy. I just want to see it in … which can be bad because it can undermine the lecturer or undermine other parts of the University, which I really shouldn’t be doing. At the same time, there are those guidelines [university rules]. You’ve got to be aware of them, however flexible I am being.
(Final interview with Ben, Case 3)

Through involvement with the resources and the activities of the interventional program of reflective practice, the neophytes in the study demonstrated a wider awareness of issues impacting on their teaching and their students’ learning than they indicated at the early stage of the program. As well as coming to understand a number of institutional issues to a higher degree, the program also enabled the neophytes to reflect on the emotional aspects of their teaching.

**Emotional Aspects of Teaching**

Some of the participants described their teaching ideas and experiences in emotional terms, with comments that focused on their enjoyment of the teaching process and their enthusiasm for the job of being a teacher. They referred to feeling ‘incredible joy’ and wanting ‘to do as much as I possibly can’. Comments made by the participants in this study about the pleasure they received from their work particularly refer to their roles as teachers:

Like from me, learning is my reason for being and it’s this incredible joy. So it would seem that if you want to be a teacher, it’s because of that, so you can pass
on the joy.
(Laura, Case 2)

Firstly, it’s an enjoyable way to get paid. I think it’s the only job that I had where I’ve actually enjoyed doing it … With teaching, it’s always: I want to do as much as I possibly can, because I enjoy it.
(Ben, Case 3)

As well as expressing feelings about enjoyment of teaching, some of the neophytes expressed enthusiasm about the process of teaching. Being proud of their jobs and feeling ‘privileged’ to teach was a theme that emerged from some of the neophytes’ data:

I don’t say I am a teacher, but I’m quite proud of it. I think it’s a really privileged thing to do. To share that with the students, I think I get a real kick out of it, yeah.
(Final interview with Mary, Case 5, theme 11)

The comments expressed by Laura have been included below as an example of how her engagement in reflective practices appeared to increase her enthusiasm for teaching in general. Evidence was provided in her theoretical musings about her reflection, which caused her to feel ‘enthused all over again’. Her enthusiastic approach had practical implications, which were noted by her students:

I think that I’ll get enthused all over again, if I evaluate, review and improve.
(Journal, Laura, Case 2): Activity 4, Part A

Yes, most questionnaires reported that … they strongly agreed that I was enthusiastic and that I was available for them.
(Journal, Laura, Case 2): Activity 4, Part A, Published 23/12/05

Towards the end of the study, when reflecting about how she intended to put her ideas into practice during the following semester, she again noted how the processes of reflective practice increased her levels of enthusiasm for teaching:

I’ve started preparing the next semester and the contents got me all enthused again.
(Final interview with Laura, Case 2).

The neophytes typically expressed their feelings about enjoyment of and enthusiasm for teaching during the interviews with the researcher. Despite not being asked specifically about whether they enjoyed teaching, the two interview components of the interventional program of reflective practice (see Figure 28 earlier in this chapter) appeared to provide opportunities for the neophytes to express their emotional thoughts
about teaching, while their personal reflective journals tended to elicit cognitively focused comments.

**Progressive Facilitation of Reflective Skills**

During the activities in the RPW, neophytes were encouraged to focus their reflective practice on their past, present and future teaching and learning experiences. In their responses, the neophytes first thought about their experiences, which focused them on their existing COTs. Secondly, they considered their current teaching situations. Thirdly, they tentatively suggested improvements that could be made to their current teaching situation. Finally, at the end of the program, they were asked to suggest ways to improve their future teaching practices. This progression from the beginning to the end of the study illustrates how the neophytes systematically developed their reflective skills.

The outcomes of these activities were illustrated by comments characterised by the neophytes’ acknowledgement of their experiences. In their descriptions about their current teaching, the neophytes tended to incorporate elements recently encountered in the RPW activities. When they expressed their intentions for future improvements to their teaching, they were not only completing a reflective practice cycle, their comments were also often more student-centred. Table 56 provides examples from Hilary’s journal, showing the progression in the comments she made when reflecting on her past, current and future teaching.

By focusing on past, current and future teaching contexts, the RPW activities prompted the neophytes to engage in a cyclical process of reflection that facilitated a focus on meaning-making practices that were relevant to each participants’ individual teaching context. By focusing on past and future teaching practices while reflecting on their current COTs, the participants were able to make smooth links between what they knew, what they were currently learning and how they would apply their learning in the future. All but one of the participants (that is, Ben, Case 3) made this transition. As such, most of the neophytes’ COTs developed progressively as they reflected across multiple timeframes.
Table 56

Progression of Reflection

<table>
<thead>
<tr>
<th>RPW stage</th>
<th>Journal entry</th>
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</thead>
<tbody>
<tr>
<td>Reflections on past</td>
<td>I really don’t know any formal leaning or teaching theories. I suppose I have ‘learned’ what tends to work for me during my past five years as a lecturer. Mind you, this has mainly been for the same unit … so I’ve been able to tweak each semester. So [my] body of knowledge springs from what I know from experience.</td>
</tr>
<tr>
<td>Reflections on current teaching</td>
<td>I would describe my teaching as student and teacher centred. During a lecture there is a certain amount of information I have to get through … I set the scene for this … I say what, where, when etc. … But during the tutorial part of my teaching … I switch to student-centred—where I encourage students to take charge and help me recognise what is going to be most helpful for them.</td>
</tr>
<tr>
<td>Improvements on current teaching</td>
<td>[she wants to] worry more about teaching more than being liked … but then often students learn better when you get them on side! Improve my general knowledge … sometimes I feel stupid when older students say something that I know nothing about. Like who won the America’s Cup in 19___. It’s almost like lecturers are supposed to know everything and my general knowledge is not so good.</td>
</tr>
<tr>
<td>Improvements on future teaching</td>
<td>I think before I was just letting that [considering problems and improvements] go a little bit too much. Now I see the reflective stuff. I’ve been able to take those theories of the different learning styles, and I am then applying that, and I suppose that’s the same thing as reflective practice. I look for needs in my students and see how I can tweak things to them.</td>
</tr>
</tbody>
</table>

Other Influences on the Neophytes’ COTs

The ways in which the interventional program of reflective practice influenced the neophytes’ ability to think about their COTs, as outlined above, have been drawn from results in this study in which the participants have specifically indicated how they were influenced by the program. However, because this study was primarily qualitative in nature and did not espouse to identify and label all factors that may have influenced the participants’ development of their COTs, other issues that were active in the research setting may have influenced how each participant conceived of teaching. Although it is not the researcher’s intention to investigate and account for all of these additional contextual factors, the rich context in which each participant operated during this study needs to be acknowledged.
In addition to the interventional program of reflective practice that was designed specifically to facilitate the neophytes to develop their COTs, the following (non-exhaustive) list of aspects from a typical university setting may also have had some influence on the participants’ COTs:

- teaching experiences over the semester period;
- professional development activities offered institutionally;
- media reports regarding higher education teaching and learning;
- encounters with students about their learning or the participant’s teaching; and
- conversations with colleagues about the nature of learning and teaching.

Conclusions

The interventional program of reflective practice, incorporating the study’s data-gathering techniques, the facilitative role of the researcher and the activities and resources offered within the RPW, did influence some aspects of the neophytes’ COTs. The program positively influenced neophytes’ abilities to link theory and practice, their understanding of learning and ownership of their own learning, the progression of their reflective skills and the scope of their COTs. These outcomes were achieved mostly by the participants engaging in individual reflective processes. There was little evidence that the program influenced the neophytes’ abilities to develop their COTs through collaborative reflective strategies.

This chapter has provided answers to the fourth research question of the study, which focused on the influence of the interventional program of reflective practice on the neophytes’ COTs. Chapters 4–8 have provided answers to the first three research questions of the study, which addressed the individual participants’ COTs and how these changed during the study. The following chapter provides a discussion of the results outlined in Chapters 4–9 in relation to the educational and methodological theories that informed the theoretical framework of this study and the overall research design. Practical recommendations for the professional development of neophyte teachers are also provided in the next chapter, based on an interpretation of the results of this study.
CHAPTER TEN
DISCUSSION

Overview

This chapter provides a discussion of the results outlined in the previous six chapters, Chapters 4–9, and notes the significance of these results to contemporary and previous research, especially in relation to neophyte tertiary teachers. The discussion includes an account of how these findings have contributed to our understanding of the way in which neophyte university teachers develop their COTs, how they engage in reflective practice and professional development, and how these processes can be facilitated through the provision of online activities and resources. Throughout this discussion, the findings from this study that contradict other research or represent unresolved issues are also identified.

Research Results

This study was conducted within a tertiary education context in a large metropolitan university. The COTs held by a group of neophyte teachers were investigated and reported as case studies.

The first three research questions were proposed to expose the COTs held by a group of neophyte teachers and to compare how these COTs changed during participation in an interventional program of reflective practice. These three questions were answered at the end of each individual case chapter. The fourth question investigated how the interventional program of reflective practice influenced the neophytes’ COTs. This was answered in Chapter 9. The research questions and summaries of the findings of the study are provided in Table 57, prior to a discussion of these results. Recommendations for practice that have emerged from these findings and discussion are outlined in the following chapter: see the Recommendations for Teaching and Research Practice section of Chapter 11.
Table 57

Research Questions and Summary of Findings

<table>
<thead>
<tr>
<th>Question</th>
<th>Summary finding</th>
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<tbody>
<tr>
<td>1.1 What COTs are held by each neophyte before the intervention?</td>
<td>Although there was variation between the individual cases, the COTs that were held by the neophytes were found to be towards the teacher-centred end of a teacher-centred/student-centred continuum. Their COTs were mostly built upon their individual previous experiences as learners, which informed what they perceived teaching should be. There was little reliance on educational theory to explain their COTs.</td>
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<tr>
<td>1.2 What COTs are held by each neophyte after the intervention?</td>
<td>The COTs held by the neophytes after the intervention were found to be more at the student-centred end of a teacher-centred/student-centred continuum. Individuals’ COTs showed evidence of interest in the practice of teaching that would facilitate learning, and a central concern for how to improve teaching and learning. The neophytes’ explanations of their COTs exhibited use of educational language. Their descriptions were often related to their theoretical understanding.</td>
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<tr>
<td>1.3 How did each neophyte change his or her COTs?</td>
<td>Changes in the neophytes’ COTs were typified by a broadened theoretical knowledge of teaching and learning and the use of an expanded educational vocabulary. This led to an improved ability to contemplate, identify and explain developments in their COTs. Neophytes gained confidence in their competence to teach and moved towards a student-centred paradigm of teaching that was commonly associated with explanations about how they planned to improve their teaching practice.</td>
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<tr>
<td>2.1 How did the interventional program of reflective practice influence the neophytes’ COTs?</td>
<td>The neophytes’ development of their COTs was first influenced by the RPW’s facilitation of explicit awareness of their existing COTs, followed by a period of theoretical knowledge expansion in conjunction with acquisition of self-observation and reflective practice skills. With an expanded arsenal of reflective practitioner skills with which to process their COTs within their current teaching practice, the neophytes gained the capacity to contemplate their existing COTs alongside alternative COTs. Finally, the program provided a method for neophytes to collect data about their own teaching and prompted them to use these data to evaluate and improve their teaching as they experienced an iteration of the reflective practice cycle to drive continual improvement. The outcome of their involvement in the interventional program of reflective practice was an acquisition of complex cognitive measures to develop themselves as teachers. The RPW provided opportunities that promoted alternative ways of thinking and fostered change in neophytes’ COTs to incorporate appropriate teaching attributes.</td>
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Neophyte Teachers’ COTs

The results provide evidence that contributes to our understanding of how neophyte teachers’ COTs develop in a tertiary teaching context, an under-researched area. Before this study was conducted, a range of researchers had reported on the COTs held by university teachers in a range of contexts including bioscience (Virtanen & Lindblom-Ylänne, 2009), a mixture of disciplines including social sciences, engineering and technology (Ho et al., 2001), engineering, social sciences and paramedical sciences (Kember & Kwan, 2000), accounting (Lucas, 2002) and geography (Chappell, 2007). In each case, the participants were not necessarily selected for inclusion in the respective studies based on their level of tertiary teaching experience. Conversely, this study purposefully focused on neophyte teachers with low levels of experience in tertiary teaching.

Few studies have focused on novice academics in general, and this has been reported as a problem in earlier literature, especially since much university teaching in Australia is currently conducted by casual, neophyte teachers (D. Anderson et al., 2002; Bradley et al., 2008; Kift, 2002; May et al., 2011). Studies that have investigated neophytes’ teaching experiences in university settings have usually investigated their attitudes to and experiences of teaching in relation to other issues. For example, Oldland (2011) and McArthur-Rouse (2008) investigated the transition from clinical practitioner to novice lecturer, Hemmings (2012) explored how new tertiary teachers develop attitudes to research and teaching and Simmons (2011) researched doctoral students’ transitions to new university teaching positions.

The results of this study provide evidence of how one group of neophytes developed their COTs across a six-month one-semester period. An analysis of these results revealed further information about the processes of reflection preferred by neophytes while developing their COTs, the nature of their COTs and the way in which their theoretical understandings integrated with their practical intentions of teaching. In these ways, this project generated some insights into how neophytes develop their COTs.

Hierarchical and Polarised COTs versus Holistic COTs

While some researchers describe conceptions of university teaching using linear continua, others prefer a less-structured approach that is more multi-dimensional. Previous research has identified COTs as being either teacher-focused or student-focused, or as content-focused or learning-focused. More recently, other researchers have counselled caution in polarising COTs, favouring more holistic methods of
describing them. The findings in this study represent both positions; that is, COTs can be both overlapping and distinct. When the results of the study are examined on a continuum of COTs, most of the participants moved from holding a teacher-centred, transmissive COT to a student-centred, facilitative COT. This shift appeared following the neophytes introduction to the notions of student-centred versus teacher-centred teaching. It was then more fully achieved as the participants became increasingly involved in the reflection process through their engagement in the interventional program of reflective practice. In addition to this general shift from teacher-centred to student-centred COTs, evidenced in previous research, their self-recognition of views of teaching were very contextual and, as such, were not as easily categorised as previous literature might suggest. Instead, the neophytes in this study tended to describe their views about teaching in what Devlin (2006), Devlin and Samarawickrema (2010) and Healey (2000) refer to as multi-dimensional and contextual ways; that is, they did not fit neatly into previously presented COT continua, such as the teacher-centred ⇒ student-centred continuum.

Although the participants did shift their COTs towards a more student-centred position by the end of the study, they also illustrated how they were able to move between teacher-centred and student-centred COTs depending on their teaching context. These results indicate that the COTs held by neophyte tertiary teachers may not be as hierarchical in structure or as polarised in nature as has been presented in recent literature on teachers’ COTs (Kember, 1997; Postareff & Lindblom-Ylänne, 2011; Prosser & Trigwell, 1998; Samuelowicz & Bain, 1992; Trigwell et al., 1999). This phenomenon can be seen in Hilary’s journal statement, in which she refers to using whatever mode is appropriate for the context of her teaching:

I would describe my teaching as student and teacher centred. During a lecture there is a certain amount of information I have to get through … I set the scene for this … I say what, where, when etc. But during the tutorial part of my teaching … I switch to student-centred—where I encourage students to take charge and help me recognise what is going to be most helpful for them.

(Journal, Hilary, Case 1): Activity 1, Published 30/08/05

The neophytes in this study repeatedly demonstrated their abilities to modify their COTs theoretically and practically based on their changing teaching contexts. Figure 29 depicts how neophytes’ COTs can exist on multi-dimensions as well as on multiple levels within a dimension. For example, lecturing techniques may be conceived on a practical level towards the teacher-centred end of the continuum, whereas
conceptions relating to learning outcomes might co-exist on a point closer to the student-centred end.

Figure 29. Multi-dimensional model of COTs.

In this way, the study’s results represent further evidence to augment the work of Devlin and Samarakoon (2010), Biggs (2003) and Murray and Macdonald (1997), which has shown previously that context matters to tertiary teachers, although counter-arguments exist to refute such claims.

Alongside the information on how the COTs held by neophytes can be identified and that neophytes can simultaneously hold COTs previously thought to be held exclusively, the findings of this study have contributed to our knowledge of how neophyte teachers’ COTs develop across time. These issues are now discussed.

**Increased Complexity of COTs**

Just as the neophytes in this study demonstrated their ability to move back and forth on the teacher-centred ↔ student-centred continuum according to their teaching context, the process of analysing the data gathered about each neophyte established that they had each developed a more complex set of COTs by the end of the study. The complexity of understanding about teaching, in which the neophytes were beginning to develop their ideas of teaching into a more cohesive whole, is reminiscent of the linking of concepts illustrated in Biggs and Collis’ SOLO taxonomy of learning (Biggs, 2003; Biggs & Collis, 1982), which provides a way to describe and interpret the increasing levels of complexity in a person’s understanding of a subject. When applied to how
neophyte teachers develop their COTs, the *multistructural* level of this taxonomy represents the point at which the neophyte teacher can consider multiple factors and the connections between them, but does not yet necessarily consider them in a holistic manner. Moving up the taxonomy, the *relational* level represents the level at which they can consider multiple factors in an integrated way. While the understandings of teaching held by the neophytes in this study were still largely situated in the *multistructural* or *relational* levels of the SOLO taxonomy by the end of the study, they were working gradually and unevenly towards the *extended abstract* level. At this point, they would attain an empowered position and be able to apply their newfound, integrated knowledge to new situations, based on their firm foundational understanding of teaching gained through their engagement in reflective and evaluative cycles.

The effect of how the neophytes experienced the growing connections (an upward growing vine) in their knowledge about teaching meant that they could gain a broader understanding and move closer to a better appreciation of what was happening in their teaching. In turn, this permitted them to apply their theoretical knowledge of teaching to practical problems occurring in their teaching contexts to devise meaningful solutions. This deepening of the neophytes’ COTs aligns with the research of Hubball et al. (2005), who found that, after being involved in a structured reflective practice driven faculty development program, teachers were able to reflect in a more complex way about their own teaching. Similar to the findings in this study, Hubball et al.’s (2005) research used the TPI to gauge the teachers’ development: ‘Furthermore, a change in faculty members’ TPI scores indicate that participants reflected more comprehensively on their teaching at the end of the program, than they did at the beginning of the program’ (p. 57). A similar shift was noted in the neophytes’ views about teaching, and these changes were also illustrated in their TPI results.

A further indication of the deepening of the neophytes’ COTs throughout this study was the way in which their COTs reflected an awareness of emotional issues related to tertiary teaching. This issue is now discussed.

**Emotional Aspects of COTs**

While there is extensive research about what is effective university teaching, conceptually and methodologically, some aspects of this research need more extensive coverage. The study of effective teaching continues to focus on the intellectual and academic aspects of teaching such as knowledge acquisition and transferral, intellectual growth and the development of expertise and understanding. Even Biggs’ (2003) account in his seminal book, *Teaching for quality learning at university*, defines
teaching and learning primarily in cognitive terms: ‘Effective teaching means setting up the teaching/learning context so that students are encouraged to react with the level of cognitive engagement that our objectives require’ (p. 56). However, almost 20 years ago, Brookfield (1995) appealed for greater recognition of the multiple contexts that influence teaching and learning practices in higher education, including the social, economic and political contexts. Whereas many recent publications about the quality of teaching in higher education have focused on the knowledge and skills of teaching, Åkerlind’s (2004) paper, A new dimension to understanding university teaching, extends our focus to encompass a university teacher’s experience of habitus, instead of just engaging in teaching. This perspective takes our view of teaching beyond a collection of technical skills to encompass the dispositions of the teachers themselves. Further, Åkerlind’s work reveals insight into the benefits of teaching as perceived by the teachers themselves and suggests that enjoyment of teaching may even be related to university teachers’ commitment to their work:

It seems likely that the sense of satisfaction, enjoyment and development in content understanding that forms part of some academics’ experiences of being a teacher would encourage a commitment to teaching that would not be felt by academics who experience little personal benefit from teaching. (p. 374)

Although teaching has been described as an emotional experience, ‘research on this area is scarce in the field of higher education’ and ‘the role of emotions has been almost entirely ignored’ (Postareff & Lindblom-Ylänne, 2011, p. 799). Therefore, awareness of the significance of the personal, interpersonal and emotional aspects of teaching is an under-researched field of interest in the higher education sector. Researchers such as Hagenauer and Volet (2014), in their significantly titled paper, ‘I don’t think I could, you know, just teach without any emotion’: Exploring the nature and origin of university teachers’ emotions, have recently recognised this disparity and call for the gap to be narrowed:

While research on school teachers’ emotions is on the increase, interest in the significance of university teachers’ emotions is still limited. In light of the growing attention given to the quality of university teaching around the world, and evidence of the impact of emotions on school teachers’ well-being and teaching practice, a better understanding of the origin and nature of emotions experienced by university teachers is needed. (p. 240)

Similar to the illuminations offered by Åkerlind (2004), Postareff and Lindblom-Ylänne (2011) and Hagenauer and Volet’s (2014) work, the participants in this study clearly
held a wide variety and often idiosyncratic range of COTs. Further, while often demonstrating a cognitive focus, they also expressed emotionality associated with their views about teaching. This finding has significance, as it may point towards some relationship between a teacher’s enjoyment and dedication to their work, as also intimated by Åkerlind’s (2004) findings, and their ability to learn and grow. The neophytes’ comments about the enjoyment they experienced in teaching were naturally emotive and were sometimes expressed in hyperbolic terms.

This study’s findings thus represent an area of research that has not yet been commonly reported as a strong theme in the literature. In particular, the literature on COTs held by university lecturers appears to be lacking in references as to whether teachers enjoy teaching or learning, despite Ramsden’s (2003) call for the incorporation of concepts such as gladness and enjoyment into both teaching and learning in higher education. His comment from his book, *Learning to teach in higher education*, perhaps best signifies that this is an emerging aspect of our study of teaching conceptions: ‘I hope we shall realise a conception of teaching and learning as an imaginative, arduous, but pleasurable process. There can be no excellent teaching or learning unless teachers and learners delight in what they are doing’ (Ramsden, 2003, p. 253).

Despite the lack of discussion about enjoyment and emotions in connection to COTs in previous research studies, there are some signs, in addition to the findings from this study, that it may be a growing area of research (Hagenauer & Volet, 2014; Postareff & Lindblom-Ylänne, 2011). Certainly, this study evidences that role of emotions in how we develop our COTs is an area worthy of further investigation. Nevertheless, in 2014, the research focus in COTs in university contexts continues to be on the cognitive and skills-based aspects of teaching and learning.

Although this study’s results have revealed that the neophytes’ COTs were comprised of emotional as well as cognitive dimensions, there was less evidence regarding the social reform or community-focused aspects of their COTs. This lack of evidence in the results of the study is now discussed.

**Social COTs**

Unlike as was found for the contextual influence, hierarchical nature and possible emotional dimensions of the COTs held by neophyte tertiary teachers, little evidence was found in this study that any of the neophytes held strong social reforming COTs. In 1992, Pratt identified a social reform perspective of teaching that has since been incorporated into the TPI (Pratt et al., 2001). However, Clarke and Jarvis-Selinger (2005) and Wiesenberg and Stacey (2006), who used the TPI in their research, found
that very few of their participants identified as having a strong or dominant social reform view of teaching. This claim has been further reinforced by other researchers who regularly use the instrument (Lu, 2006; Panko, 2004; Srinivasan et al., 2007). Likewise, the findings of this study aligned with the previous research indicating that few university teachers hold COTs that are characterised by social agendas.

Some researchers have proposed a COT based on communalistic ideas (Cliff, 1998), a citizenship-related conception (Heath, 2000) or a COT based on moral or community duty (J. F. Meyer & Boulton-Lewis, 1999). Mary: Case 5 showed recognition of how teachers were perceived by the community, as seen in her response to a question about what was expected of a good teacher:

> That I know the subject matter. That I am well prepared, and that I am able to convey that to the students, and I think the community also expects teachers to be of a certain mould or calibre.

(Initial interview with Mary, Case 5, theme 2)

However, apart from Mary’s comments, there was little evidence in this study that the participants held communalistic or citizen-related COTs, possibly because the participants were early career university teachers and had not yet considered the wider ramifications of their role as university teachers. The COTs related to community, citizenship and moral duty may be developed in different contexts or in later stages of a teacher’s development; however, further investigations in varied contexts would be required to explore the validity of this possibility.

**The Development of Academic Identities Within an Institutional Context**

While a COT related to the wider community in terms of moral or social obligations was not found in this study, evidence was found that the neophyte teachers developed a view of teaching by the end of the study that reflected a greater recognition of the effect of the institutional context in which they were working on their COTs. This awareness was also integrated into their developing identities as academics, especially in terms of their identities as teachers.

This finding aligns to Billot’s (2010) and Hemmings’ (2012) work on the importance of academics’ identities, and McArthur-Rouse’s (2008) investigation into how an expert practitioner in the field moves to being a novice lecturer. Hemmings (2012) found that as some early career academics developed their identities as researchers, they began to consider other aspects of their work in relation to the wider institutional context. Billot also found that the identities of academic staff were influenced by the changing nature of their universities, especially as regards the
competing pressures to teach well while also producing research publications. In her exploration of how an expert practitioner made the transition to being a novice lecturer, McArthur-Rouse (2008) found that university academics’ identities as teachers and researchers were influenced by their institutional contexts, but that they typically lacked understanding of the way their organisation functioned in the early stages of their work as a novice lecturer.

Similarly, the findings of this study showed that the neophytes became increasingly mindful as the semester progressed of their institution’s values and guiding principles about teaching. Many of the neophyte teachers in this study started the study by thinking of themselves as workers who, although they were employed in the university system, were largely external to the institution. However, they moved from a position of seeing themselves as external staff hired to work in the university to perceiving themselves as making a valuable contribution to the institution as a whole. Further, by the end of the study, they had become more conscious of the values and teaching philosophies represented by the university in which they taught. This transformation in their identity from seeing themselves as external to the university to having a sense of belonging in their university community was reflected in their COTs, which subsequently showed a greater awareness of the institution’s values and expectations of teaching standards.

The manner in which the neophytes described their ideas about teaching reflected an increased propensity to use metacognitive thinking as they increased their awareness of how issues beyond themselves affected their teaching. For example, in the following extract from Laura’s (Case 2) journal, she reflected on how the unit she was teaching had been designed by someone before her time working on the unit. Based on her awareness of this, she was planning to adjust her teaching accordingly, showing an understanding of how her teaching practices were being practised in the context of other institutional influences:

I was also really rushing the content—and it’s impossible to engage with content that someone is rushing. I think this is somewhat due to the course [which she was teaching], being designed for other teaching paradigms … with my techniques requiring too much time … For the second half of semester I time-managed the seminars better. By then I had also learned that it was ok to skip things. I was also more adept at adjusting spontaneously to what was working and what wasn’t.

(Journal, Laura, Case 2)
Although there is some alignment to previous research (Billot, 2010; Hemmings, 2012; Wenger, 1998) in which the identities of academics have been shown to develop in relation to their institutional context, the academic staff who participated in this study only showed evidence that they considered their academic role in terms of teaching, not researching. In the same way, McArthur-Rouse (2008) found that ‘research and scholarship were not identified as concerns for the participants of this study’, possibly because they were ‘very new to HE [higher education] and therefore may not yet have considered this aspect of their work’ (p. 405). Likewise, the neophytes in this study had yet to incorporate their roles as researchers into their academic identities. This may have been because, like the novice academics in McArthur-Rouse’s (2008) study, they were at the very early stages of their careers as academics and had not yet had opportunities to participate in research activities or had not yet come to understand the role of research and scholarship in relation to their teaching.

**Reflective Practice as Professional Development**

This study is an example of how reflective practices within an online professional development program enabled a group of neophyte teachers to develop their teaching ideas and practices. Although the success of reflective practices for professional development purposes has already been reported in much of the literature, this study fills a gap in the research about how neophyte teachers engage in these processes. As such, findings from this study resonate with some aspects of previous literature about how the processes associated with reflective practice have been used in professional development programs and online contexts. However, many professional development practices in higher education contexts that focus on teaching are variable in terms of their success, or even marginalised, as described by Rodaway (2007, p. 1).

The participants in this study engaged in varied reflective practices, mostly encountered via the online resource, the RPW. From these experiences, they were able to develop knowledge and skills associated with being a reflective practitioner (Boud, 2001; Boud et al., 2006; Parsons & Brown, 2002; Schön, 1983, 1987). The findings of this study have reinforced some aspects of our understanding about how reflective practice occurs within a professional development structure. They also pose some questions about reflective practice and professional development, particularly for neophyte teachers, that require further research and exploration in relation to the time required, the role of collaborative and individual practices and the professional development contexts preferred by neophyte teachers.
Collaborative versus Individual Reflection Practices

Much literature on engagement in learning and reflective practice focuses on the importance of collaboration and the value of discussing ideas with others (Kohn, 2000). The importance of collegial conversations and dialogic reflection (Hatton & Smith, 1995) comes into even greater focus when discussed in association with professional development programs embedded with reflective practice processes that have been designed for university teachers (Bell et al., 2010; Ellis & Phelps, 1999; Hubball et al., 2005; Kane et al., 2004; Oldland, 2011; Wiesenber & Stacey, 2006).

With the exception of their regular interactions with the researcher during the study, the neophytes in this research engaged infrequently in the online collaborative activities that were designed to be a component of the RPW. Their reflective episodes, characterised by individual rather than collegial expressions of reflection, were quite different from Light and Cox’s (2001, p. 43) model of the reflective professional as someone who engages in dialogic or relational activities with colleagues. The neophytes’ choice to not interact in a community of practice could, in part, be explained by a lack of systematic activities in the RPW to stimulate successful team building, such as Tuckman’s (1965) staged model of group development that consisted of ‘forming, storming, norming and performing’ (p. 396). The neophytes did, however, resonate with Boud and Walker’s (1998) description of reflective practice: ‘It may take place in isolation or in association with others’ (p. 19).

This reticence of the participants to collaborate with others during their engagement with reflective practices during the study may relate to their early stage of development as university teachers. Perhaps they did not yet feel comfortable to share their views and thoughts about teaching with others, as they were not yet comfortable with articulating their ideas. Reasons for this seeming avoidance of collaboration by the neophytes may mean that they required more time than is normally given in reflective practice contexts to engage in private, individual reflection.

Nyquist and Wulff (1996) suggest that there are three stages of development that graduate assistants, when employed as university tutors, progress through as they become more experienced and comfortable with their teaching abilities. These researchers suggest that in the early stages of development, university tutors are more concerned with survival and more focused on themselves as teachers. They are not yet able to think much beyond how they will operate in a class and how the students will see them as teachers. This finding echoes the tendency of the neophytes in this study who, when asked to talk or write about their COTs, more often than not did so in terms
of their own learning experiences. Even when specifically asked about their teaching, they often circled around to talking about learning from a student’s point of view. Their comments commonly reflected a self-focus, which suggested that they thought of themselves more as learners than as teachers. This suggests that, owing to a lack of familiarity with the theory and language of teaching, their conceptions tended to be based on their previous experience as learners. As Nyquist and Wulf’s (1996) work shows, neophyte teachers gradually move away from this initial stage, towards a greater focus on their teaching skills, resulting in an increase in confidence about their teaching ideas and a corresponding increase in focus on their students’ learning.

The self-to-other progression that is evident in Nyquist and Wulf’s (1996) research may also be relevant in the preferences shown by the neophyte teachers in this study. The neophytes in this study worked independently to construct their own COTs and did not show any inclination towards sharing their ideas with others. This may be because they were in the early stages of their development as university teachers, giving them a preference for less social forms of reflection because they were more focused on themselves and their survival in the classroom. This is distinct from the collaborative types of reflection mentioned by other researchers, such as the dialogic reflection referred to by Hatton and Smith (1995), Hegarty’s (2011) supported reflection, the engagement in dialogic or relational activities with colleagues of Light and Cox (2001) or Boud and Walker’s (1998) suggestion of using reflective practice for group workshops.

In terms of the design of professional development programs in universities for neophyte teachers, this finding suggests that the impact of such programs would be improved if they incorporated greater opportunities for personal reflection before these teachers are expected to share their views about teaching and learning with others. This finding may also indicate that neophyte teachers require more time to engage in private reflective practice about their own teaching before they venture into contexts in which collaborative reflective practice activities are expected. This may be the case particularly in the early stages of their development as university teachers. This is an area of research that has been reported as lacking in literature to date (Hemmings, 2012; Oldland, 2011; Simmons, 2011).

Another reason that the neophytes may have chosen to maintain an individualised approach to reflection is that the role of the ‘instructor’ in the conceptual change process, as explained by J. Davis (2001), may have been substituted by the RPW, or components of the RPW, in this study. This might account for why the
participants did not tend to request assistance from each other or the researcher throughout the study. If the RPW did fulfil the role of a scaffolder to some extent, the use of such online tools may prove useful for other online professional development programs aimed at meeting the needs of neophyte teachers.

When delving into reasons as to why the participants in this study did not engage in collaborative reflective processes, it is also useful to note the work of researchers who have reported on communities of practice (Lave & Wenger, 1991) and situated learning (Brown et al., 1989). In later years, the work of these researchers has been extended into contexts of online learning communities (Koch & Fusco, 2008; Reushle & McDonald, 2012). In these examples, collaborative reflection is emphasised. For example, Wenger (1998) uses the terms ‘mutual engagement’, ‘joint enterprise’ and ‘shared repertoire’ (p. 72), which all reflect a focus on practices that involve collegial conversations and collaboration. Nevertheless, the potential development of a community of practice in this study did not eventuate, possibly because of the lack of some of the key elements of a community of practice, as reported by Wenger (1998) and Lave and Wenger (1991). They suggest that for a community of practice to be successful, it needs a domain, a community and a practice.

Usually a community of practice is represented by a group of people who care deeply about an issue and who have a common purpose. They typically interact with each other to achieve improvements or particular outcomes in association with a particular issue. Whereas this study offered the participants a clear domain (university teaching) and a defined practice (operationalised by the RPW’s location, resources and activities), the community aspect was missing. This may have been the case because there are aspects of teaching that are conducted as an individual enterprise. The areas deficient in terms of a community of practice can be illustrated through the use of the diagrammatic representation (see Figure 30) of a community of practice used by Herbers, Antelo, Ettling and Buck (2011). The two areas of their model lacking in the neophytes’ reflective practices in this study—the points at which reflections within the community of practice and collaborative evaluation and teaching assessment occurred—are shown within the circles in Figure 30.
Whether this failure to evolve into a community was related to the participants’ lack of confidence or fear of sharing is also a concern that has been identified by other researchers. For example, when attempting to develop a learning community approach to doctoral education in the social sciences, Parker (2009) found that there were problems with some learning communities. Although the domain of the group of neophytes in this study was different from that of Parker’s participants, similarities exist between the groups, especially in relation to their neophyte status. While Parker found that there were advantages to community approaches to supervision of postgraduate students, there were also hindrances to the success of such collaborative methods: ‘One of the problems signposted in the literature on learning communities concerns the fears participants might have due to lack of confidence and experience’ (Parker, 2009, p. 50). While the participants in this study were not questioned about this possibility, it represents an area for future investigation regarding neophytes’ inclinations to engage in collaborative reflective practices. Thus, questions remain about the stage of the neophyte’s teaching career and their corresponding capacity to engage in collaborative reflective practice with colleagues.

The phenomenon noted in this study of the neophytes’ apparent need for private reflection in the early stages of their teaching careers may point to the conclusion that neophytes require a reflection incubation period before they feel comfortable to reflect collaboratively with their fellow neophyte teachers and more experienced teaching colleagues.
Reflection Incubation Period Needed by Neophyte Teachers

Despite the fact that a reflection incubation period has yet to emerge as a strong theme in recent university teaching or professional development research, the results of this study represent evidence that one group of neophyte teachers did not opt to engage in collaborative reflective activities, despite being offered opportunities to do so throughout the program. Instead, they appeared to prefer a private and independent space in which to incubate their ideas about teaching and learning.

Reflective practice research has not emphasised the need for an incubation period during reflection; indeed, most researchers who define the act of reflection incorporate some aspect of collaboration in their explanations of how reflective practice takes place. However, some distinction has been alluded to, albeit in a study about the beliefs of school teachers about professional collaboration, between the benefits and limitations of collaboration by Leonard and Leonard (2001), who found that the benefits of collaboration are not always realised in practice:

Although numerous studies have addressed the apparent benefits of professional sharing in terms of organizational improvement, professional development, and student outcomes, there seems to have been limited inquiry into how teachers themselves perceive this evolving phenomenon. … Nonetheless … certain conditions … can act as barriers to authentic collaboration, even when teachers espouse the desire to engage in it.

(pp. 17-18)

Interestingly, most previous research that has reported on the benefits of reflective practice within online contexts for teachers has focused on experienced teachers rather than those at the beginning of their careers. Therefore, this discrepancy between the results of this study and other research about the capacity of online technologies to promote reflective practices for teachers may be because the teachers in this study were not ready to share their ideas about teaching and learning due to still being in the reflection incubation stage. During this stage of reflection incubation, neophyte teachers may also be developing their academic identities (Billot, 2010; Hemmings, 2012; McArthur-Rouse, 2008) and may be experiencing anxiety about their teaching expertise and the expectations placed upon them to produce research publications (Simmons, 2011). The link between a teacher’s identity and professional development has been made before (Skelton, 2004), so it may be important for a neophyte to be provided with enough time and space to develop such an identity early in his or her teaching career.
This perceived phenomenon of the *reflection incubation* period required by neophyte teachers contributes to our knowledge about how neophyte teachers engage in the reflection process. Although they can make use of online technologies to engage in structured reflective practices, they may need time on their own, while they are establishing their academic identities, to build their teaching confidence and develop their skills as reflective practitioners before they are able to engage as collaborative reflective practitioners.

In the program of reflective practice that was implemented during this study, the neophytes’ need for a *reflection incubation* period was catered for by the private, online space provided by the RPW. The specialised needs of neophyte teachers, established partly in this thesis, designate a need for customised approaches to professional development programs for these teachers.

**Bespoke Professional Development for Neophyte Teachers**

Neophyte teachers represent a growing proportion of university teachers, yet their need for professional development in respect to their teaching development remains inadequately met. This deficiency in contemporary university professional development programs has been identified by a number of researchers, including Hemmings (2012), who asks the pertinent question: ‘How do early career academics gain skills in teaching?’ (p. 171). The diversity of teaching populations in universities has been reported in previous literature (Krause et al., 2012; Thorpe & Gordon, 2012), as has the diverse nature of the higher education sector itself and the complexity this brings to the teaching process (Rodaway, 2007). Thorpe and Gordon (2012) suggest that technology-enhanced learning has the potential to meet some of the needs of diverse teaching populations. However, Hubball et al. (2005) express concern that professional development programs, despite being designed to engage teachers effectively in reflective practice, are not necessarily refined enough in their design to meet the needs of the diverse types of staff to be engaged in these types of program. This is especially true since most professional development programs appear to be aimed towards experienced teachers (Skelton, 2002). Nonetheless, there remains a need for professional development programs that incorporate reflective practice strategies, customised to suit neophyte teachers, who are often in a period of transition between their roles as postgraduate students and their roles as academic staff member (Simmons, 2011). This gap is especially serious in light of the call for the professionalisation of teachers in higher education (D. Anderson et al., 2002; Ginns et al., 2008; Kift, 2002; Lueddeke, 2003; Rodaway, 2007).
Provision of professional development programs is particularly important in the early stages of neophytes’ teaching careers, when they are typically focused on their survival (Devlin, 2006; Nyquist & Wulff, 1996) while also being pressured to teach well and publish (MacDonald et al., 2014). Up until now, neophytes’ specific professional development needs have not been widely met in the higher education sector. The program of reflective practice implemented throughout this study was especially designed to suit the needs of neophyte university teachers. In this way, the research study represents a new direction in professional development, as has been called for by previous researchers (Hemmings, 2012). Interestingly, unlike many other graduate certificate-style programs (Chappell, 2007; Ginns et al., 2008; Hubball et al., 2005; Willison, 2007) that have been designed to enhance university teachers’ teaching ideas and practices, successful completion of this program did not require the participants to complete formally evaluated assessment tasks. Instead, the participants were requested to engage in a range of flexibly delivered activities embedded with reflective practices. The informality of this program and the incorporation of personalised choices (Willison, 2007) thus sets it apart from the graduate certificate programs that have been reported to date in the literature.

Instead of marginalising neophytes, as has been reported by researchers such as McAlpine (2002), D. Anderson et al. (2002) and Simmons (2011), this program was driven by the neophytes’ teaching needs and, consequently, met many of them, resulting in no marginalisation. The program represents an example of what Oldland (2011) recommends: a professional development program that focuses on conceptual and practical aspects of reflective practices. Taking a different approach from many of the previously documented programs that have been offered by the higher education sector for professional development purposes, this program was specifically designed for neophyte teachers beginning their journey in developing their skills as teachers and reflective practitioners.

While customised professional development programs are clearly needed for neophyte university teachers, institutional and sector-wide expectations for university teachers may require some consideration in terms of how they are defined for neophyte, experienced and leading university teachers. This may have implications for the expectations placed on neophyte teachers by higher education institutions, compared to their more experienced colleagues. For example, the Australian Institute for Teaching and School Leadership (2012) has recently established the Australian Professional Standards for Teachers in Schools in Australia, based on four levels of achievement:
graduate, proficient, highly accomplished and lead. These teaching standards distinguish between what a newly graduated teacher would be expected to know and do, compared to more experienced or leading schoolteachers. A similarly structured overall framework for tertiary teaching has recently been called for by Krause et al. (2012), and such a framework may be the place to include correspondingly structured standards for tertiary teachers, based on their level of experience and expertise. The career stages of university teachers developed by Steffy, Wolfe, Pasach, and Enz (2000) (that is, novice, apprentice, professional, expert, distinguished and emeritus) may provide a useful nomenclature for identifying university teaching standards. This approach to teaching standards in universities may enable a closer examination of how neophyte teachers are positioned to contribute to teaching in the higher education sector.

The customised design of the interventional program of reflective practice that was implemented in this study is an example of a professional development program that meets the needs of a group that has, to date, been neglected or overlooked (K. Murray & Macdonald, 1997; Prosser et al., 2005). Further, this group, neophyte teachers, comprise a high proportion of the diverse teaching pool of the higher education sector. Questions remain regarding whether providing such tailored professional development programs for neophyte teachers might reduce the teacher attrition rates experienced in the university sector.

Value of the Full Cycle of Reflective Practice

In recent years, a number of studies have been published demonstrating the value of reflective practice for teachers in professional development programs (Bell et al., 2010; Chappell, 2007; Hubball et al., 2005; Light & Cox, 2001; Oldland, 2011; Wiesenberg & Stacey, 2006); however, many of these have focused on the needs of experienced teachers. For example, Oldland’s (2011) work emphasises the value of critical reflection in enhancing the development of new academic staff. Adding to the findings of these studies, the study documented in this thesis provides evidence of a group of teachers who have improved their understanding of teaching by engaging in reflective practice processes. This finding aligns with much previous literature that suggests that, since there is a direct relationship between teaching conceptions and teaching practices, a change in one’s COT would logically result in a change in one’s teaching practices (Ho et al., 2001; Kember, 1997; Kember & Gow, 1994; Virtanen & Lindblom-Ylänne, 2009). Indeed, in four of the five case studies in this research, based on their responses to the TPI (Pratt et al., 2001) and their interview and journal data, the neophytes’ changes in intentions were preceded or accompanied by a change in their
beliefs and actions. For these four cases, there was evidence that each had engaged continuously in the full cycle of reflective practice: planning, performing, reflecting and improving (Biggs, 2003). These comments were typically characterised by their repeated expressions of how they intended to modify their teaching in the future, after moments of reflection about their teaching ideas and practices.

Conversely, the Case 3 participant, Ben, did not engage in all of the stages of the reflective practice cycle, with the result that, while there were still changes in his beliefs (and assumedly his subsequent actions), his intentions did not change. Correspondingly, data gathered from his interviews and personal journals did not reveal his intentions to make plans for his future teaching. This aspect of his data was somewhat silent. As such, it appears doubtful that Ben’s engagement in this research would result in long-term changes in his teaching practices because of his less than optimal engagement in all stages of the reflective practice cycle.

To understand better the processes of reflective practice, Ben may have benefited from a method of instruction that was even more systematic, structured and explicit than the program offered in this study. This resonates with similar calls made by Ryan and Ryan (2013) and S. J. Marshall et al. (2011), who recognise the value of reflective practice for teachers, but express a concern about the lack of a methodical approach to teaching the skills expected of a reflective practitioner. This study goes some way to adding to the ‘scant literature on any systematic, developmental approach to teaching reflective learning across higher education programmes/courses’ (Ryan & Ryan, 2013, p. 244). Providing a more systematic approach to instruction about reflective practice would also theoretically align closely with Hattie’s (2009) recent advice to make learning visible, and A. Collins et al.’s (1991) research, which aimed to make thinking visible within a cognitive apprenticeship.

Further, the fact that one of the participants (Case 3: Ben) did not take up the offer of the full program emphasises the value of the full cycle of reflective practice. Ben can be seen as someone who, as explained by Chappell (2007), remained stuck at a point of the reflection cycle, unable to move forward: ‘Unless lecturers engage in critical reflection and ongoing discovery they stay trapped in unexamined judgements, interpretations, assumptions and expectations’ (p. 257).

This aspect of this study’s results reinforces the work of teams of educators and researchers who emphasise the importance of engagement in the full cycle of reflective practice, the need to engage continuously in the cycle and the need to provide explicit teaching about reflective practice. Although reflective practice is often an ‘implicit goal
for faculty development programs’ (Hubball et al., 2005, p. 57) it cannot be assumed that it will be learned explicitly by academic staff. New academic staff may require more overt teaching methods than experienced staff.

**Value of Enthusiasm in Reflective Practice**

To date in the literature, the teaching attribute of enthusiasm has not been strongly connected with reflective practice techniques, despite the enthusiastic approaches of new teachers often being noted (Bulger, Mohr, & Walls, 2002; Callaghan, 2002). However, the enthusiasm that the neophytes in this study expressed about their teaching may indicate that this is an aspect of reflective practice, and that it requires further investigation, especially in the tertiary sector. The neophytes in this study all expressed some level of enthusiasm about their teaching, even Ben (Case 3), who did not engage in all stages of the reflective practice cycle. While becoming enthusiastic about teaching was evident consistently throughout the study, it has not emerged as a strong theme in the current literature about reflective practice in tertiary education contexts.

The findings of this study about reflective practice and neophytes’ experience of it have been discussed in relation to previous and contemporary research on the topic. The context in which this reflective practice occurred in the study, the online environment, is now discussed, to determine how the findings of this study about online professional development are connected to, overlap with or contest current research in this area, especially in relation to neophyte teachers.

**Online Professional Development**

When comparing the results of this study with findings from previous literature about neophyte teacher education, professional development and COTs, some congruencies were found within the field of online education, especially where online technologies were used for professional development purposes. Having an online learning space was useful for neophyte university teachers to develop their understandings of teaching to a point at which they felt confident enough to apply their theoretical ideas to practical contexts and to make plans to continue doing this in the future. The online area facilitated in this research study via the RPW also appeared to act as a catalyst for self-directed reflection. These results associated with the online context of this study are now discussed.

**Nature of a Private, Online Learning Space for Neophyte Teachers**

The nature of the online space housed by the RPW provided the participants in this study with a private platform through which to record, access and add to their
reflections about their teaching throughout the study period. As a result, developments in their COTs were tracked across the duration of the study. The way in which the neophytes in this study improved their understanding of tertiary teaching aligns closely with previous research; they developed their COTs through their growth as reflective practitioners while engaging in purposely designed online activities.

However, while some studies have shown that online professional development practices that incorporate reflective processes have been successful (Bell & Morris, 2009; Ellis & Phelps, 1999; Thorpe & Gordon, 2012), Coughlin and Kajder (2009) advise that ‘the literature on teacher collaboration in online environments is in its infancy’ (p. 12). In this respect, the outcomes of this study play a qualifying role in developing our knowledge about how teacher collaboration occurs. The findings of this study provide an example of how an online professional development program worked for individual reflection but not for collaborative reflection.

As mentioned above in the section titled Collaborative versus Individual Reflection Practices, the participants did not take up the opportunities presented to reflect collaboratively in an online context. The fact that the neophytes chose not to engage in collaborative reflection represents a point of discord with contemporary research findings that identify the affordances offered by online learning contexts for engaging teachers in the reflective practice process. For example, Ellis and Phelps (1999) reported on the success of an online professional development program that was based on a collaborative action learning model. Similarly, in their report on The impact of online collaborative learning on educators and classroom practices, Coughlin and Kajder (2009) explain that: ‘Over the past decade, expert opinion and design recommendations for teacher professional development have moved steadily away from traditional workshop models and toward models that involve various types of professional collaboration among teachers’ (p. 4). Numerous other studies cite the advantages of online collaborative and cooperative practices, especially for students (L. Johnson et al., 2014; Lombardi, 2007; McLoughlin & Lee, 2009; Treleaven, 2008).

The neophytes’ need for an online personal space that was not community-focused may also be related to the fact that not many neophytes in this study, or in other studies (Clarke & Jarvis-Selinger, 2005; Lu, 2006; Panko, 2004; Srinivasan et al., 2007; Wiesenber & Stacey, 2006), were found to have a community-focused or social reform (Pratt & Associates, 1998) perspective of teaching (see Social in this chapter).

The way in which teachers engage in online collaboration has been identified as an area that requires further investigation: ‘Serious research related to the impact of
these new collaboration environments is also difficult because the exact nature of teacher collaboration within these environments is poorly understood’ (Coughlin & Kajder, 2009, p. 5). The outcomes of the research documented in this thesis have added to our knowledge of how neophyte teachers collaborate, or in the case of this study, do not collaborate, in online professional environments.

**Online Environment Acted As a Catalyst for Independent Self-reflection**

The nature of the online space, discussed above in the subsection titled *Nature of a Private, Online Learning Space for Neophyte Teachers*, is an important aspect of professional development programs for neophyte teachers. Likewise, the actual components of online spaces—that is, the discrete parts of an online space, such as those contained in the RPW—have the potential to guide scaffolded reflective practices and to catalyse greater independent reflective practices.

As well as offering a space for deep, private reflection about their own developing teaching ideas, the online activity spaces offered to the participants within the RPW appeared to act as a catalyst for self-reflection. It was during these independent moments of reflective practice, as they responded to an activity or resource from the RPW, the TPI questionnaire or an interview question, that the neophytes often made the self-directed leaps in which they articulated their intentions to apply their theoretical ideas into practices. They talked about how they had initiated some changes during the program, what they were changing about their teaching in the present and what they intended to change in the future:

They were calling what I did in my unit, innovative. As in the other staff were. I also tried to change from passive to deep learning approaches.
(Final interview with Laura, Case 2)

I think I can identify my gaps and perhaps go about closing those gaps.
(Final interview with Hilary, Case 1)

When I glanced through the questionnaire responses, I noticed that quite… a few of them indicated that they ‘disagreed’ with the statement: ‘The lecturer makes clear the standard of work expected’. Although at first I thought this was unreasonable, I have now prepared a map of what I expect for the major assignment.
(Journal, Hilary, Case 1)

I do too much talking, and it’s something in the future that I will try to mix up more, because of the feedback I’ve got from them, means that they like being able to talk to each other, about what we’ve been going through. So while they’re talking I tend to go around to each group and just sort of listen in and make a comment or ask a question.
(Final interview with Mary, Case 5)
In this way, the online tools, activities and resources of the RPW acted as reflective prompts for the neophyte teachers by promoting reflective thought about their teaching that led to application to practice. These examples resonate with the reflective thinking explained by Dewey (1933), which he saw as having the potential to weave theory and practice together, thereby improving practice. The above examples show that by the end of the study, most of the neophytes were expressing comments about their teaching that indicated that they were moving towards the extended abstract level of complexity as outlined in Biggs and Collis’ (Biggs, 2003; Biggs & Collis, 1982) SOLO taxonomy of learning. This level of understanding was achieved because they had previously engaged, across the semester of the study, in evaluative and reflective cycles of thought.

The findings of this study have provided a number of examples of how the participants made links between teaching theories and practical applications of teaching. Their ability to make this link appears to have been catalysed especially by the open-ended and varied activities and resources with which they interacted during the study, many of which offered some form of choice. For example, when Mary (Case 5) examined ideas associated with the theories of constructivism, cognitivism, behaviourism, learning styles and teaching approaches, she eventually decided to incorporate constructivist methods into her tutorial classes. This was her choice. Her experience was typical of other participants in the study: their transfer of theoretical knowledge to practice was self-initiated rather than directly facilitated by another person. The way in which some of the online activities in the RPW appeared to accelerate the neophytes’ abilities to transfer their theories to practice may have been related to the amount of choice they were offered in these activities.

This phenomenon has been referred to as ‘autonomy applied’ by Willison (2007) in his paper titled Vision and choice, ethical characteristics of academic development programs. He explains how the role of choice in professional or academic development programs can facilitate academics’ movement towards a point they intend to reach in their teaching:

Autonomy requires that participants of ADPs [Academic Development Programs] be as fully informed as possible and therefore able to understand the consequences of the options that they are provided with and of the choices that they make. Within the context of their growing knowledge of teaching and learning, participants need to be given optimal flexibility, appropriate to their level of academic development. This may entail more prescribed learning tasks and directed assessments early in a program, with scaffolding of participants’ learning in a new context, and progressive removal of this scaffolded structure. Most of all, autonomy is promoted by providing participants with the capacity to
see, a vision of where their involvement will take them over the period of a whole program. This is like the vision gained from a vantage point at the start of a journey, looking out over a landscape of possibilities.

(p. 76)

Thus, the structure of the RPW enabled the participants in this study to drive their own learning once they had developed enough knowledge about the theories of higher education learning and teaching to determine how they could be applied. This self-directed aspect of the study has similarities to the relatively new theory of heutagogy, a term coined by Hase and Kenyon (2003). They describe this adult learning theory as follows:

Heutagogy, the study of self-determined learning, may be viewed as a natural progression from pedagogy and andragogy. It is learner-centred as opposed to teacher-centred learning. Teacher-centred learning has to be organised by others who make the appropriate associations and generalisations on behalf of the learner. Thus, random individual experiences are taken to be inadequate as sources of knowledge, the educational process is seen to need disciplined students, and literacy is seen to precede knowledge acquisition.

(p. 4)

As in the theory of heutagogy, the participants in this study were equipped with the knowledge and reflective practice processes to make their own decisions about how their involvement in this research project would affect their teaching practices. The participants were given responsibility, as learners about teaching, to navigate their way through the learning resources and activities provided on the RPW to make decisions independently about their teaching. Working with students rather than neophyte teachers, Cochrane and Withell (2013) recently investigated the potential for enhancing the self-directed nature of heutagological learning by facilitating interactivity and collaboration in online spaces. They found that, when designed to incorporate appropriately interactive tasks, online and mobile technologies could transform the nature of learning to the point at which student engagement increased through use of their own self-selected devices.

In a similar way, the RPW acted as a form of model and coach within an online context, encouraging each neophyte to reflect on and articulate their learning in the spirit of a cognitive apprenticeship (A. Collins et al., 1989). This allowed the neophytes to see how to apply their newfound knowledge. The mechanism of the online environment also meant that the neophytes did not need a facilitator or instructor in order to make their transition to an ‘autonomy applied’ (Willison, 2007) position, at
which they were approaching the extended abstract level of complexity of Biggs and Collis’ SOLO taxonomy (Biggs, 2003; Biggs & Collis, 1982).

By comparing the findings of this study to other research on the professional development of teachers, the outcomes of this research have contributed to our knowledge about the way in which neophyte teachers, although at an early stage in their academic careers, can be guided to partake independently in scaffolded reflection tasks. Further, the findings of this study show how the scaffolds can be faded out (A. Collins et al., 1989), even in online contexts, to promote teachers’ accelerated leap towards independent reflection and the making of autonomously informed choices about how to apply their theoretical ideas to practice.

**Summary and Conclusion**

This chapter has correlated some of the results of this study with findings evident in previous and contemporary literature. While this process has illuminated areas of overlap and confirmation as well as areas of tension and controversy, some of our findings nonetheless remain unresolved. When compared to what we already know about neophyte teachers in university settings, the major contribution to knowledge of this study has been to influence our understanding of the specialised needs of neophyte teachers in terms of customised professional development programs that incorporate individual reflection activities. This study provides an example of how neophytes’ COTs develop over time, supplementing the existing literature, which has tended to document the COTs that are held by teachers at a single time point. This study has also extended our current knowledge about how neophytes’ COTs incorporate their nascent academic identities.

The study demonstrated that the neophytes’ COTs were not as polarised or hierarchical as has been reported in previous literature about teachers’ COTs. The neophytes in this study showed signs of emotional awareness in their COTs, especially in relation to enjoyment of and enthusiasm about teaching, which has not been a strong theme in the literature to date. Further, their COTs did not strongly reflect communalistic or citizenship values: a deficiency that has often been reported by other researchers. These findings contribute to the overall study of COTs to date, which has mostly focused on the cognitive nature of teachers’ COTs.

This study has reinforced previous research findings that have identified the benefits gained by university teachers from engaging in reflective practices as part of professional development programs. Some evidence in this study further emphasises the significance of teachers engaging in the full cycle of reflective practice, thus adding to
the literature to date on how reflective practice occurs. However, some questions remain regarding the role of individual and collaborative reflection processes. By introducing the idea of *reflection incubation*, this research has presented some evidence that early career university teachers prefer to engage in individual reflection rather than the collaborative reflection processes referred to by other researchers, including but not limited to dialogic reflection (Hatton & Smith, 1995), supported reflection (Hegarty, 2011) or dialogic, relational activities with colleagues (Light & Cox, 2001).

This study has also supplemented current understandings on how neophyte tertiary teachers benefit from online programs that incorporate opportunities for choice and individualised reflection. When such a learning environment is constructed, it could catalyse and facilitate teachers’ reflection and evaluation of their own teaching. Although many earlier studies have investigated the impact of formal professional development programs on teachers’ COTs, this study represents a new wave of research into less formal professional development programs that promote effective university teaching and contribute to our knowledge of the developing theory of heutagogy.

This chapter has outlined how the outcomes of this study have integrated, reinforced, augmented and sometimes disagreed with findings published from previous research studies. The content of this chapter has also identified some disparities and controversies in the research literature on the topics associated with this study. The outcomes of this discussion will now be drawn to a conclusion in the following chapter, in which the findings and recommendations of practice from the study are summarised alongside an account of some suggested areas for future research.
CHAPTER ELEVEN

CONCLUSION

Introduction

This study was contextualised in the early tertiary teaching experiences of five academic staff at a metropolitan university. The researcher investigated how engagement in reflective practice processes set within an interventional program of reflective practice influenced these neophytes’ COTs. This final chapter draws together the conclusions from the four research questions, followed by an account of the limitations of the study, some recommendations for teaching and research practice and some further research possibilities.

This study showed that the neophytes’ COTs at the beginning of the study were typically informed by their own learning experiences rather than being theoretically informed. They were characterised by teacher-centred views of teaching. At the end of the study, the neophytes’ teaching conceptions were increasingly student-centred and theoretically informed. They were also forward looking and characterised by thoughts and plans for action about changing their teaching practices to boost the quality of their students’ learning. The exposure to multiple theories of teaching led the neophytes to be able to think more comprehensively about teaching. They understood multiple, and sometimes personally conflicting, theories of teaching; they had deepened their COTs. The flexible and easily accessed online reflective practice program influenced the way the neophytes reflected on and evaluated their teaching. The engagement of this group of neophyte teachers in this interventional program of reflective practice provided them with a scaffolded and efficient way to engage in reflective practice.

What the Study Did not Achieve

Although opportunities were provided throughout the implementation of the interventional program of reflective practice, a community of practice did not develop between the participants in this study who opted to work alone. Nor did the participants engage extensively with the researcher beyond the data collection points and a few incidental moments where questions were asked regarding activities on the RPW. A more systematic effort needs to be included within the design to assist participants in the formation of a community of practice. Closer attention to Tuckman’s (1965) stages of group development in the overall design of the program of reflective practice may have promoted more engagement by the neophytes in collaborative reflective practices.
Limitations of the Study

Some limitations were identified that had the potential to affect the quality, generalisability and application of the study’s results. These are described below, with particular acknowledgement of the setting and duration of the study.

Perceptions of Neophytes

With the exception of the observations by the researcher in this study, the study gathered self-reported data. The purpose of the self-reported data was to investigate comprehensively the self-perceptions held by the participants in this study regarding their COTs and how these changed based on their engagement in the interventional program of reflective practice. The mostly self-reported nature of the data could be construed as a limitation of the study.

Application to Other Populations of Neophyte Teachers

As this research aimed to conduct an in-depth investigation into the COTs held by a group of neophytes, the sample size could be considered insufficiently large. Owing to the small size of the study, the results cannot be extrapolated and generalised to the wider population of neophyte tertiary teachers (Shenton, 2004). The trade-off for a small sample is the opportunity for depth. Since the case studies in this research were in-depth investigations of five individuals (Ary et al., 2002, p. 27), the results from these cases are richly described to assist readers in their own particular generalisability.

Practical Teaching Approaches

This study focused on the COTs held by neophyte teachers and on how these were influenced by an interventional program of reflective practice. Subsequently, the researcher did not extend data gathering processes into tracking the neophyte teachers’ abilities to apply their COTs to practice, except by analysing their statements of intent about their future practice.

Recommendations for Teaching and Research Practice

The following recommendations for practice within university teaching contexts, especially in relation to the professional development of new academic staff, are offered to readers of this thesis to consider for application to their own context. Whether these recommendations would suit the particular context of each unique university is a decision that will be left with the reader, as the researcher does not claim that the recommendations that follow would be suitable to apply to all neophyte teachers across all disciplines in all universities.
Support for Neophytes to Engage in Reflective Practice

Neophyte teachers often begin their teaching duties without having had opportunities for coaching in the reflective practice techniques that would otherwise help them to develop their teaching practice. According to this study, when reflective practice coaching is a part of a neophyte’s initial teaching experiences, they are more likely to become practitioners who can move towards better teaching practices and develop the skills of a good teacher faster and more successfully than would otherwise be the case. If adroit institutional encouragement and appropriate support is in place for neophytes to develop sound reflective skills, they may be more likely to become self-developers who independently engage in practices that improve their teaching and their students’ learning. Such programs could be conducted through online systems.

Varied and Sustained Methods of Reflection

This study engaged the participants in a variety of experiences in which they were guided through reflection practices to the point at which they developed skills associated with being a reflective practitioner. The results illustrated how the participants’ involvement in reflective practice across a one-semester period enabled them to reflect on their teaching in a range of contexts and at a number of points across the teaching period. Rather than facilitating a process of reflection in relation to one aspect of teaching, such as assessment or the preparation of materials, these findings suggest that neophyte teachers benefit from engagement in cyclical reflective processes across repeated and varied activities over a sustained period. The study offers evidence of the significance of teachers engaging in the full reflective process.

Initial Type of COTs

There was evidence in the findings that teachers who hold COTs that are based on teacher-centred models may need a greater intensity of professional development activities related to effective university teaching. Teachers with a more teacher-centred view of teaching at the beginning of the study showed less change compared to those neophyte teachers who demonstrated a more progressive student-focused view of teaching at the beginning of the study.

Efficiency of Online Professional Development Frameworks

While traditional university professional development programs typically incorporate the use of on-campus workshops and on-campus seminars by experts in teaching, the findings of this study suggest that an online component to professional development programs may also be effective in developing neophyte teachers’ COTs. The findings of this study offer no suggestions regarding the efficacy of campus-based
professional development activities; they simply illustrate that a structured online resource, such as the RPW, may act as a catalyst for the advancement of new university teachers’ understanding of teaching. This form of professional development has been shown to be efficient, especially when it incorporates some elements of choice and informality. It could be administered to individual neophytes or groups of neophytes, led by a skilled facilitator. Further, as evidenced in this study, such a resource could be formatively tailored throughout the professional development cycle to cater for the individual needs of the participants. This type of online resource has the potential to be modified according to the unique setting and policies of particular higher education institutions, and could be set within an institution’s Learning Management System.

**Placement of Collaboration in the Reflective Process**

Although the process of collaborating with mentors and colleagues is often recommended for inclusion in reflective practice and professional development programs as a way of learning more about theories and practices of effective university teaching, the participants in this study did not avail themselves of the collaborative opportunities that were offered. Rather than engage with fellow participants in discussions about their teaching and learning, they showed a preference for personal reflective practice. This is not to say that these participants will not choose to engage in collaborative practices in the future; they may do so once they are more comfortable with and confident about their COTs, or when they are no longer in the neophyte stage of their academic careers. However, this does suggest that neophyte teachers may benefit from a period of reflection incubation to build their confidence to share their ideas about teaching with others.

**Methodological Use of Personal Journals**

The way in which the personal journals were used by the participants in the study was partially successful in capturing the participants’ in-depth views about teaching as they developed their teaching conceptions over the course of the study. Moreover, the online format of the journals allowed the participants’ easy access to this tool and facilitated the researcher’s efficient collection of these records. However, because it was difficult to determine accurately the original date of the participants’ journal entries, the data represented by the neophytes’ journal entries could only be used to supplement the data from their interviews and questionnaires. For example, if a participant recorded a journal entry on 14 August and modified this original entry on 19 November, the entry would be tagged with the later date. For future studies of this type where personalised journals are deemed appropriate data-gathering tools, the researcher
would recommend the use of an online digital tool that enables more fine-tuned date tracking of participants’ journal entries. This would offer a more accurate interpretation of whether the participants’ comments represented their views about teaching towards the beginning, the middle or the end of a data collection timeframe. An online blog or wiki may be an appropriate tool to use for such purposes.

**Further Research Possibilities**

While this study contributes knowledge to add to our understanding of the needs of neophyte university teachers to date, it is clear that more research in this area is required, especially in terms of neophytes’ preferences for various aspects of reflective practice as part of professional development programs. Further, throughout the period of conducting this research, a number of issues surfaced that prompted more questions than answers. Based on the results of this research, a number of areas have been identified for future investigation. These ideas for future research address issues related to the nature of reflective practice and higher education teaching, as well as the possible settings, scope and methods of future research projects that focus on neophyte teachers in universities.

**Ongoing Impact on Practical Approaches to Teaching**

Lasting impacts of the study may influence the neophyte teachers’ teaching practices, with some evidence of these plans for the future found in the neophytes’ explanation of their ideas about teaching during the final stages of the study. ow the changes in the neophyte teachers’ COTs were actually operationalised in their teaching practices as a result of engaging in the interventional program of reflective practice and, consequently, how these practices affected the quality of their students’ learning could be investigated in future studies.

**Extension of Case Study Approach to Groups**

The case study approach of analysing each of the participants’ experiences in this study was chosen to enable the in-depth study of five individual neophyte teachers. To gain a more extensive understanding of the influence of the interventional program of reflective practice on groups of neophyte teachers, cohorts of new university teachers could be introduced to the program on a regular basis. The role of collaboration in reflective practice, which was not evident in the findings of this study, could be further investigated in a group context with a larger sample.

**Enjoyment of and Enthusiasm About Teaching**

Although not a strong theme in the literature on university teaching and professional development of teachers, the role of enjoyment and enthusiasm, and
emotion in general, in teaching may provide grounds for future research directions. Based on a review of the literature on the COTs held by university teachers with either little or extensive experience, past research has been mainly concerned with the cognitive and social aspects of teaching. However, there was some evidence in this study that the participants’ COTs incorporated views about the role of enjoyment and enthusiasm in teaching. Future research could be undertaken to investigate how the emotional aspects of teaching influence a teacher’s COTs, especially in relation to enjoyment.

Extended Data Collection

Future research into the COTs of neophyte teachers could incorporate the analysis of teaching artefacts that represent their views of teaching. For example, the documentation associated with lecture materials, assignment instructions, assignment feedback and student evaluations could be examined as additional sets of data. Video clips of the neophyte teacher in a lecture or tutorial with students could be used as evidence of how COTs are enacted in practice. Content, media and document analyses could be employed to analyse such artefacts to establish whether the neophytes’ ideal COTs are aligned with their enacted practical teaching approaches.

Varied Disciplines

Neophyte teachers who are employed to teach in disciplines not included in this study could be investigated to determine whether differences in COTs, and how they changed because of engagement in reflective practice, were discipline-dependent or discipline-independent. While some evidence was presented in this thesis to show that the neophytes’ COTs were somewhat context-dependent, whether their teaching discipline was influential on the teachers’ COTs was not determined.

Final Conclusions

In comparison to other research studies that have investigated the COTs held by teachers in university contexts, very few of these studies have focused particularly on neophytes. Likewise, very few studies have focused on neophyte teachers without an educational qualification or a background in the discipline of education. By focusing on these two aspects of neophyte teachers, this study has contributed to research in an area that has yet to be thoroughly researched. As neophyte teachers typically require different forms of professional development compared to experienced university teachers, the outcomes of this study have revealed additional knowledge to inform the practical approaches that support neophyte teachers in the future. Future application of the lessons learned from this study about how neophytes develop their COTs may affect
the quality of university teaching, which is mostly performed by casual teachers, many
of who are neophytes.

The findings of the study have confirmed the value of reflective practices in
association with COTs, and have identified that further research is required in how
neophyte teachers engage in individual and collaborative reflection. The outcomes of
this study have contributed to our understanding of how COTs are developed by
neophyte teachers, including as regards the cognitive and emotional aspects. Ramsden’s
(2003) acknowledgement of the role of enjoyment in teaching and learning resonates
with the sentiments of some of the participants in this study, highlighting the holistic
nature and multi-dimensionality of the construct that we refer to as a COT. One of the
major discrepancies with previous research that has emerged from this research is that
the neophytes in this study did not exclusively hold student-centred or teacher-centred
COTs, but appeared sometimes to hold more than one COT simultaneously. This
finding has the potential to modify the dimensionality with which COTs are defined in
the future.
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Appendix 1: Information Statements

Invitation to Participate

Jack Seddon at Edith Cowan University is conducting an investigation into how to best assist university teachers to gain reflective skills and how this may help them in their teaching practice. I am interested particularly in how these reflective skills can help teachers understand more about how they teach.

Reflective practices are a powerful way to monitor practice and the model I wish to use is a cognitive apprenticeship of reflection and alternative conceptions of teaching. During the project you will be asked to visit an information website several times to participate in a survey and join a few convenient meetings to talk about how the project is progressing.

You will be using the survey and other tools in a project exploring your own teaching over the semester.

I will be asking you to keep a journal about your experiences during the project and I will be analyzing these notes. Only I will see the original notes which will be kept in a locked cabinet in a locked room at the Mount Lawley Campus of Edith Cowan University, and then finally destroyed after the project ends.

All participation is completely voluntary and you will be not disadvantaged if you choose not to participate. You can withdraw at any time without disadvantage. All participants will be anonymous in all published results.

I anticipate very useful results from this study and cannot foresee any risks to any participants other than those associated with self-reflection. I look forward to your participation.

Should you have any concerns about this project please contact Jack Seddon (j.seddon@ecu.edu.au)
If you have any concerns or complaints about the research project and wish to talk to an independent person, you may contact: Dr Tony Fetherston (93706373, email t.fetherston@ecu.edu.au), or Professor Mark Hackling (Community Services, Education and Social Sciences) on (08) 9370 6339.
Appendix 2: Informed Consent Form

Informed Consent

I, ___________________________________________ acknowledge that I:

Have been provided with a copy of the Information Letter, explaining the research study.
Have read and understood the information provided.
Have been given the opportunity to ask questions and has had any questions answered to my satisfaction.
Am aware that if I have any additional questions I can contact Dr Tony Fetherston at ECU on 9370 6373.
Understand that participation in the research project will involve me in reflective and self-critical activities and that these activities have been explained to me and I have been given the opportunity to ask questions and have had any questions answered to my satisfaction.
Understand that the information provided will be kept confidential, and that the identity of participants will not be disclosed without consent.
Understand that the information provided will only be used for the purposes of this research project, and understand how the information is to be used.
Understand that I am free to withdraw from further participation at any time, without explanation or penalty.
Freely agree to participate in the project.

I have read the above information and I hereby give my consent to participate in the planned research activity. I give permission for results of this study to be published provided that neither myself nor my school is identified.

Signed: ___________________________________________

Date: (mm/dd/yyyy)___________/________/_____________
Appendix 3: Interview Protocols and Interview Questions

The outcomes of teachers being reflective Interview questions and instructions

Question development

These interview questions have been partially sourced from Nebraska University and have been further developed and cross-linked with this study’s specific research questions, to ensure responses elicit information that is more likely to be able to answer those research questions. Furthermore, these interview questions have also been included with consideration of the questions contained in the Teaching Perspectives Inventory (TPI) (Pratt et al., 2001) in order to facilitate triangulation of the data collected from both the TPI and these interviews.

Instruction to be given to interviewees:

Thank interviewees for giving their time and agreeing to undertaking the interview. Let them know that during the interview they should feel free to answer the questions in your own words. Let them know they should take time to consider each question and they should feel free to question the question. Also let them know that there are no correct answers to any of the questions and that whatever is said will be a valuable contribution to this study. The interview should take about 30-60 minutes, although they should feel free to continue after this time if you like.

Instruction to interviewer:

Try to conduct the interview at a location that is likely to put the interviewee at ease. As the interviewer try and manage the session in a comfortable easy-going and professional manner. To assist you in covering all questions in the 30 minute interview session, please tick them off in the box provided (✓) as they are asked. You may also find that in conversation other questions on this list get answered when another question has been asked. To avoid asking them twice you can tick these questions off as well. This will help you notice the gaps in the questioning as you come close to the end of the session and easily perceive where you need to return to in order to acquire good coverage of the whole list. You may also find the notes column useful to record any other observations you consider important to the interpretation of a particular question or response.

Thank you for conducting this interview. The interview questions begin on the following page.
**Interview begins**

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<th>Done</th>
<th>Interview Questions</th>
<th>Notes</th>
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<td></td>
<td>What does your community expect of its teachers?</td>
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<td>How do you feel about being a teacher in your community?</td>
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<td>Can you give a brief description of what you do when you teach a class?</td>
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<td>Are you aware of any gaps in your own understanding of HOW you teach?</td>
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<td>Why do you want to teach?</td>
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<td>Do you plan to make teaching part of a career?</td>
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<td>What is the difference between teaching and learning?</td>
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<td>What characteristics separate the above-average teacher from the average teacher?</td>
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<td>What do you expect of your students?</td>
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<td>What is/are the most important contribution(s) you can make to your students?</td>
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<td>What is/are your strongest trait(s) in teaching?</td>
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<td>What is/are your weakest trait(s) in teaching?</td>
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<td>How competent a teacher do you feel you are?</td>
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<td>How would you describe the qualities of a good teacher?</td>
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<td>What is the importance of having confidence in your teaching?</td>
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<td>How important is it for a teacher to develop a rapport with their students?</td>
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<td>Are there any ideas or innovations that you will try to use in your teaching?</td>
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<td>In your opinion, what are the ingredients of an effective learning program?</td>
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<td>Question</td>
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<td>What teaching techniques are effective for you?</td>
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<td>How important is it to motivate students?</td>
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<td>Do you see reflection as a useful tool for teachers?</td>
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<td>How do you think being reflective could help improve your teaching?</td>
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<td>What kinds of experiences have you had which will be helpful to your teaching?</td>
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<td>What type of classroom atmosphere would you try to establish to prevent discipline problems?</td>
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<td>Do feel that your ideas about teaching match those of your university?</td>
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<td>What new and innovative teaching methods are currently being used in your university?</td>
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<td>What do you consider to be the overall strengths and weaknesses of the unit/s that you teach?</td>
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<td>How do you communicate with the coordinator of the unit/s you teach?</td>
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<td>What kind/s of support do you receive to help you conduct your teaching in this unit?</td>
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<td>What do you feel is the best support you receive for your teaching?</td>
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<td>How do you think the support you receive for your teaching could be improved?</td>
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**End of questions for INITIAL interview sessions**

**Additional Questions for inclusion only in FINAL Interview Sessions**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tr>
<td>Do you think there has been a change in your conceptions of teaching over the project?</td>
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</table>
Did having access to the online support website help your teaching and in what ways?

What skills or understandings will you take with you after this project has ended?

How do you think you will be able to develop as a teacher in the future?

End of questions

Thank the interviewee for their time in undertaking the interview and adding to the success of the research project.

References

Interview questions partially selected from:
http://www.unl.edu/careers/education/eduinterview.shtml

Appendix 4: Summary of Five Perspectives on 'Good Teaching

The following are summaries of the TPI's five perspectives on good teaching that are presented here in the TPI authors own words (Pratt & Collins, 2001a)

**Transmission Perspective**

Effective teaching requires a substantial commitment to the content or subject matter. Good teaching means having mastery of the subject matter or content. Teachers' primary responsibilities are to represent the content accurately and efficiently. Learner responsibilities are to learn that content in its authorized or legitimate forms. Good teachers take learners systematically through tasks leading to content mastery: providing clear objectives, adjusting the pace of lecturing, making efficient use of class time, clarifying misunderstandings, answering questions, providing timely feedback, correcting errors, providing reviews, summarizing what has been presented, directing students to appropriate resources, setting high standards for achievement and developing objective means of assessing learning. Good teachers are enthusiastic about their content and convey that enthusiasm to their students. For many learners, good transmission teachers are memorable presenters of their content.

**Apprenticeship Perspective**

Effective teaching is a process of socializing students into new behavioural norms and ways of working. Good teachers are highly skilled practitioners of what they teach. Whether in classrooms or at work sites, they are recognized for their expertise. Teachers must reveal the inner workings of skilled performance and must translate it into accessible language and an ordered set of tasks which usually proceed from simple to complex, allowing for different points of entry depending upon the learner's capability. Good teachers know what their learners can do on their own and where they need guidance and direction; they engage learners within their 'zone of proximal development'. As learners mature and become more competent, the teacher's role changes; they offer less direction and give more responsibility as students progress from dependent learners to independent workers.

**Developmental Perspective**

Effective teaching must be planned and conducted ‘from the learner's point of view’. Good teachers must understand how their learners think and reason about the content. The primary goal is to help learners develop increasingly complex and sophisticated cognitive structures for comprehending the content. The key to changing
those structures lies in a combination of two skills: (1) effective questioning that challenges learners to move from relatively simple to more complex forms of thinking, and (2) 'bridging knowledge' which provides examples that are meaningful to the learner. Questions, problems, cases, and examples form these bridges that teachers use to transport learners from simpler ways of thinking and reasoning to new, more complex and sophisticated forms of reasoning. Good teachers adapt their knowledge to learners' levels of understanding and ways of thinking.

**Nurturing Perspective**

Effective teaching assumes that long-term, hard, persistent effort to achieve comes from the heart, not the head. People become motivated and productive learners when they are working on issues or problems without fear of failure. Learners are nurtured in knowing that (a) they can succeed at learning if they give it a good try; (b) their achievement is a product of their own effort and ability, rather than the benevolence of a teacher; and (c) their learning efforts will be supported by both teacher and peers. Good teachers care about their students and understand that some have histories of failure resulting in lowered self-confidence. However, they make no excuses for learners. Rather, they encourage their efforts while challenging students to do their very best by promoting a climate of caring and trust, helping people set challenging but achievable goals, and supporting effort as well as achievement. Good teachers provide encouragement and support, along with clear expectations and reasonable goals for all learners but do not sacrifice self-efficacy or self-esteem for achievement. Their assessments of learning consider individual growth as well as absolute achievement.

**Social Reform Perspective**

Effective teaching seeks to change society in substantive ways. From the Social Reform point of view, the object of teaching is the collective rather than the individual. Good teachers awaken students to values and ideologies that are embedded in texts and common practices within their disciplines. Good teachers challenge the status quo and encourage students to consider how learners are positioned and constructed in particular discourses and practices. To do so, they analyse and deconstruct common practices for ways in which such practices perpetuate conditions that are unacceptable. Class discussion is focused less on how knowledge has been created, and more by whom and for what purposes. Texts are interrogated for what is said and what is not said; what is included and what is excluded; who is represented and who is omitted from the dominant discourse. Students are encouraged to take critical stances to give them power
to take social action to improve their own lives and the lives of others. Critical
deconstruction, though central to this view, is not an end in itself.

Appendix 5: Mid-Semester Unit Review

*Please review your experience of this unit by giving answers to the following*

**Unit code:** ________________  
**Lecturer/Tutorial Group:** ________________

<table>
<thead>
<tr>
<th>Unit Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> The unit is well organised (e.g. instructions, requirements, library materials)</td>
</tr>
<tr>
<td>- Strongly disagree</td>
</tr>
<tr>
<td>- Disagree</td>
</tr>
<tr>
<td>- Neutral</td>
</tr>
<tr>
<td>- Agree</td>
</tr>
<tr>
<td>- Strongly agree</td>
</tr>
<tr>
<td><strong>2</strong> The unit materials are helpful (e.g. handouts, schedules, notes)</td>
</tr>
<tr>
<td>- Strongly disagree</td>
</tr>
<tr>
<td>- Disagree</td>
</tr>
<tr>
<td>- Neutral</td>
</tr>
<tr>
<td>- Agree</td>
</tr>
<tr>
<td>- Strongly agree</td>
</tr>
<tr>
<td><strong>3</strong> I have a clear idea of what has to be completed and the level of work that is expected</td>
</tr>
<tr>
<td>- Strongly disagree</td>
</tr>
<tr>
<td>- Disagree</td>
</tr>
<tr>
<td>- Neutral</td>
</tr>
<tr>
<td>- Agree</td>
</tr>
<tr>
<td>- Strongly agree</td>
</tr>
<tr>
<td><strong>4</strong> The facilities are adequate (e.g. laboratories, classrooms, lecture rooms, media, Internet, email, administration)</td>
</tr>
<tr>
<td>- Strongly disagree</td>
</tr>
<tr>
<td>- Disagree</td>
</tr>
<tr>
<td>- Neutral</td>
</tr>
<tr>
<td>- Agree</td>
</tr>
<tr>
<td>- Strongly agree</td>
</tr>
<tr>
<td><strong>5</strong> The unit is engaging and interesting</td>
</tr>
<tr>
<td>- Strongly disagree</td>
</tr>
<tr>
<td>- Disagree</td>
</tr>
<tr>
<td>- Neutral</td>
</tr>
<tr>
<td>- Agree</td>
</tr>
<tr>
<td>- Strongly agree</td>
</tr>
<tr>
<td><strong>6</strong> Overall, I am satisfied with this unit</td>
</tr>
<tr>
<td>- Strongly disagree</td>
</tr>
<tr>
<td>- Disagree</td>
</tr>
<tr>
<td>- Neutral</td>
</tr>
<tr>
<td>- Agree</td>
</tr>
<tr>
<td>- Strongly agree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tutor Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> The tutor assists in developing my understanding of the subject matter</td>
</tr>
<tr>
<td>- Strongly disagree</td>
</tr>
<tr>
<td>- Disagree</td>
</tr>
<tr>
<td>- Neutral</td>
</tr>
<tr>
<td>- Agree</td>
</tr>
<tr>
<td>- Strongly agree</td>
</tr>
<tr>
<td><strong>2</strong> The tutor encourages my participation in the unit</td>
</tr>
<tr>
<td>- Strongly disagree</td>
</tr>
<tr>
<td>- Disagree</td>
</tr>
<tr>
<td>- Neutral</td>
</tr>
<tr>
<td>- Agree</td>
</tr>
<tr>
<td>- Strongly agree</td>
</tr>
<tr>
<td><strong>3</strong> The tutor is available to answer students' inquiries</td>
</tr>
<tr>
<td>- Strongly disagree</td>
</tr>
<tr>
<td>- Disagree</td>
</tr>
<tr>
<td>- Neutral</td>
</tr>
<tr>
<td>- Agree</td>
</tr>
<tr>
<td>- Strongly agree</td>
</tr>
<tr>
<td><strong>4</strong> My interactions with the tutor are productive</td>
</tr>
<tr>
<td>- Strongly disagree</td>
</tr>
<tr>
<td>- Disagree</td>
</tr>
<tr>
<td>- Neutral</td>
</tr>
<tr>
<td>- Agree</td>
</tr>
<tr>
<td>- Strongly agree</td>
</tr>
<tr>
<td><strong>5</strong> The tutor responds well to my requests for assistance</td>
</tr>
<tr>
<td>- Strongly disagree</td>
</tr>
<tr>
<td>- Disagree</td>
</tr>
<tr>
<td>- Neutral</td>
</tr>
<tr>
<td>- Agree</td>
</tr>
<tr>
<td>- Strongly agree</td>
</tr>
<tr>
<td><strong>6</strong> Overall, I am satisfied with the teaching of this tutor</td>
</tr>
<tr>
<td>- Strongly disagree</td>
</tr>
<tr>
<td>- Disagree</td>
</tr>
<tr>
<td>- Neutral</td>
</tr>
<tr>
<td>- Agree</td>
</tr>
<tr>
<td>- Strongly agree</td>
</tr>
</tbody>
</table>
Thank you for participating in this mid-semester unit review and helping to improve it.

### Lecturer Evaluation

<table>
<thead>
<tr>
<th></th>
<th>The lecturer is enthusiastic about this subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>The lecturer makes the content interesting and engaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>The lecturer makes clear the standard of the work expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>The lecturer organises the subject matter in a way that helped my learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>The lecturer caters for my individual needs in this unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Overall, I am satisfied with the performance of this lecturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

### General Comments

<table>
<thead>
<tr>
<th></th>
<th>What are the best aspects of this unit?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>What changes would you suggest for this unit?</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Thank you for participating in this mid-semester unit review and helping to improve it.
Appendix 6: Screen Captures of the Reflective Practice Website

In order to give some sense of what participants were exposed to on the Reflective Practice Website some representative screen captures are included here. Figures 31, 32, 33, 34, 35 and 36 are from Activity 1.

*Figure 31* shows an introduction to reflective practice and observation in one's own professional practice. This is followed by a cognitive exercise in self observation.

*Figure 31. Introduction to reflective practice and self-observation.*
Figure 32 shows more of Activity 1 with an introduction to David Kolb's model of John Dewey's concept of learning cycles.

**Figure 32.** Introduction to learning cycles.

In Figure 33, participants are introduced to the usefulness of journaling or writing when practising reflection. This figure also illustrates the initiation of the personal journals and prompts participants to make their first journal entry, while they are still in the first part of Activity 1.

**Figure 33.** Prompting participants to add their first journal entry.
In *Figure 34* from Part 2 of Activity 1 neophytes are exposed to ideas about how they can think of themselves with a *concept of self*. The activity then to introduce a competency model of learning.

**What do I need to know about myself as a teacher?**

At any given point in time, our understanding about ourselves can be influenced by a range of factors. Some of these include:

<table>
<thead>
<tr>
<th>Concept of Self</th>
<th>Biography</th>
<th>The events in our life that have had an impact on the way we are at the present.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cognition</td>
<td>The processes we use to understand a situation</td>
</tr>
<tr>
<td></td>
<td>Information</td>
<td>The stimuli that prompt us to action.</td>
</tr>
<tr>
<td></td>
<td>Attitudes</td>
<td>The beliefs and emotions we have towards particular situations and ourselves.</td>
</tr>
<tr>
<td></td>
<td>Values</td>
<td>Considerations about worth, usefulness and importance.</td>
</tr>
<tr>
<td></td>
<td>Perception</td>
<td>The stimulus created in our sensory organs.</td>
</tr>
<tr>
<td></td>
<td>Culture</td>
<td>The interaction of the location we live and the people we live with the rules</td>
</tr>
<tr>
<td></td>
<td></td>
<td>that govern them.</td>
</tr>
<tr>
<td></td>
<td>Motivation</td>
<td>The different drives we have.</td>
</tr>
</tbody>
</table>

**A competency model of learning**

Comptency is a term that means ability. Another way of thinking about competency is an expression of what we have learned.

Three major categories of learning

- Cognitive learning
- Psychomotor learning
- Affective learning

The output from Cognitive learning is what we know = our knowledge.
The output from Psychomotor learning is what we do = our skills.
The output from Affective learning is what we feel = our attitudes.

These attitudes can be traced back to our belief systems or paradigms.

*Figure 34*. Thinking about self-concept and competency models of learning.
Activity 1, Part 4 offers a condensed summary of 'considering the ideal teacher' and *Figure 35* lets participants consider some different approaches to teaching (particularly teacher-centred and student-centred) along with some of their advantages. At this point participants are asked to make a journal entry about their ideas of what a 'good teacher' is, thus articulating their conceptions of quality teaching.

*Figure 35.* Introduction to teaching approaches.
Part 5 of Activity 1, is concerned with ways about thinking of teaching and giving a short introduction to philosophical contexts of teaching and learning and then concentrates on the philosophy of a student-centred approach to teaching. Thus, the neophytes is offered a way of how to practically think more deeply about various approaches to teaching (see Figure 36).

Figure 36. Introduction to thinking about the philosophy of teaching.
Appendix 7: Interpretations and Representative Quotations from Interviews with Case 2, Laura

Theme 1: Awareness of conceptions of teaching

Conceptual awareness

When considering Laura’s conceptual awareness of teaching theory and practice before the start of the teaching semester, she explained that the few readings she had engaged with so far about teaching theories had made an impact on her, although she found it difficult to plan classes that reflected the theory she was reading about. Laura felt that even with a new realisation for contemporary theories her class planning was continuing to be influenced by the models of traditional teaching that she had experienced as a student herself.

I'm reading stuff like that and it's really really making sense to me, but when I go to try and plan what I'm going to do in these classes… The models I've have in my head… Like all the ways that I've been taught are from the old paradigms of teaching.
(Initial interview with Laura, Case 2, theme 1)

Laura also revealed an awareness of teaching theory when she recounted her love of teaching people and then interposed her comments with the reflective realisation that she habitually visualised a traditional teaching model. Laura displayed a cognisance that her mental model needed updating to effectively incorporate her new theoretical understandings into her teaching practice. Although Laura did not currently possess the educational language to describe what she was going through she gave a distinct impression of cognitive dissonance.

I was saying, learning is my reasons for being so, I love learning, and so being a teacher … So I kind of naturally do it anyway with people because I like … well there you go … the old model of teaching of putting things into people. It needs updating to include … but, I like teaching people.
(Initial interview with Laura, Case 2, theme 1)

By the final interview Laura was relaying her thoughts about changing teaching conceptions and conceptual awareness with more complex language and showed advancement in her understanding of how learning occurs by making connections between learners' cognitive dissonance and learner confusion. Laura noticed her students' confusion when they encountered new material which catalysed a lack of
confidence for learners. For Laura this series of effects highlighted some of the unpleasant and uncomfortable aspects of learning.

So we're talking cognitive dissonance … To me, that was such a big click [big realisation], when reading that self-reflective writing, and it talked about, when you're learning a new skill you feel a lack of confidence, you feel confusion, and there was this whole list, and I thought, that's me that's what's going on, and that that is my students ‘Big Click’… and this is what I mean about the horrible things when you're learning, because you are in some kind of confusion, and you do you really do have that lack of confidence.

(Final interview with Laura, Case 2, theme 1)

Comments like the above, provide evidence of how the online reflection activities that she was scaffolded through during the research study provided her with opportunities to engage in deep thinking about her own practices and theories. Furthermore, her engagement with the seminal readings about teaching theories that she encountered through the Reflective Practice Website (RPW) activities enabled her to attach commonly used labels to her own ideas and practices.

**Different teaching styles for different learning styles**

During the initial interview Laura pondered in a simple manner about the varied in ideas that different learners hold.

I have to keep reminding myself that yeah, that they have different stuff going on in their heads.

(Initial interview with Laura, Case 2, theme 1)

In the final interview, Laura appeared to connect her own experience as a learner with the experiences of her students. She exhibited a marked development in her conceptions of deep and surface learning strategies. Through her comparisons, her conception of different learner types evolved to a more comprehensive understanding.

So I think I had an expectation that they would be deep learners. This is something I really got out of reading ... about deep learning and surface learning. Like I've done two degrees. In the first one I always turned everything in late, I hardly turned up to class... The second-degree, you know, straight A's. I therefore thought that I had an understanding of the range of different types of students. That I had somehow covered the spectrum. I'd been at both extremes. I hadn't been in the middle, I thought I got it. But I didn't. I didn't get it all ... when I thought when I was a slack arse I thought I was a surface, but I was actually a deep learner, because I was thoroughly engaging with what I was doing, [outside the objective of the course] because I took the theory of what we were doing in the classroom and took it out into political activism, etc. and I lived and ate all the stuff I was learning and I stayed up all night talking about it with friends. So I really clicked when I was reading the stuff about deep and
Conceptions changing

In the initial interview with Laura, she spoke about whether her ideas about teaching matched those espoused by her university. She felt her teaching practices were in need of development to enable her to effectively adopt the philosophies she believed. She also hoped that her example of constructivist teaching practices would inspire other lecturers and tutors to move towards more constructivist practice themselves.

When my habits catch up to the way I'm thinking then, yes. I think the theory is out there in terms of constructivist stuff, but I don't think the practice is out there and I'm hoping mine will help make that shift.

In the final interview with Laura she discussed becoming aware that there are different types of learners. Her initial expectation that student would be deep learners altered to allow for the inclusion of other learner types she encountered during activities and readings that she engaged with on the RPW. Laura became aware that the student cohort was comprised of varying individuals with different motivations and strategies for participation. She felt that her practices should seek not only to develop methods that would nurture inclusiveness of different learning types but also to encourage the advancement of her students towards deeper learning.

… this is a big question, because … and this is shifting at the moment. So I think I had an expectation that they would be deep learners. This is something I really got out of reading this stuff about deep learning and surface learning … they have such different expectations of learning than I do. It's taken me all semester to wrap my head around it and I was expecting them to be deep learners, and I think that's part of why the whole semester was so hard for me. I had really high expectations of myself, but also of them. I didn't understand. I didn't think I was having high expectations of them. When I wrapped my head around the surface learning thing it all started to make sense … So I guess what I expect of them now is to be a mix of the two [surface and deep learners] with a smaller percentage of deep learners…which is a shame.

In the final interview with Laura she spoke of the importance of having rapport with students, illustrating some self-awareness that her conceptions of teaching had changed with the realisation that her understanding of rapport was valid in the context of teaching.
I would say it's all about rapport. That's the funny thing too, I feel rapport is everything in terms of everything. Like that's one of my throwaway comments, that 'rapport is everything', but I didn't know that applied to teaching. But now I know, that applies to teaching.
(Final interview with Laura, Case 2, theme 1)

As Laura spoke about her changing conceptions of teaching and reflected whether she had changed over her initial semester of teaching, she felt it was inevitable that there would be change. She went on to say how her exposure to readings on the RPW confirmed how much her existing knowledge was pertinent for her teaching.

How could I do my first semester teaching without having changing conceptions of teaching? So hell yes, but specifically from the project, it was a huge click when I realised that the theories I know about in cultural studies that I feel really confident with, that they are actually applicable to teaching. That was a big click [realisation]. I only got that through reading those particular readings on the website [The Tertiary Teachers Reflective Website].
(Final interview with Laura, Case 2, theme 1)

Laura's interview comments about her own conceptions of teaching illustrated an awareness of how these conceptions could change and how they incorporated both theoretical ideas and practical applications. As she progressed through the reflection activities that were part of her participation in this study, she increasingly recognised the constructivist ways of teaching espoused by the university in which she taught and her own role in her institution as one in which she could actively put into practice her conceptions of teaching.

**Theme 2: Sees teaching as a social process**

*Constructivist paradigm*

In the initial interview, Laura showed her awareness of constructivist paradigms in teaching by explaining that as she was not taught in that manner. As such, she lacked experience of constructivist methods from a student point of view. Laura also added that she would like a deeper understanding of constructivist teaching methods and practices, indicating she was not only aware of constructivism, but that she knew its importance. She felt that, with better understanding, she could bring better teaching practices to her classes.

I think that's a really big gap, just not having that experience of that constructivist paradigm, having more of that would be good.
(Initial interview with Laura, Case 2, theme 2)
In the final interview with Laura she partially identified her overall mental picture of a good teacher. It appeared that Laura had engaged with the attributes of good teaching through the RPW readings and activities, although she still saw it as a difficult task to possess all of these attributes in unison.

I have this really good teacher in my head, and I can see them, but it's actually trying to describe it in words. Do you know what I mean? It feels like a holistic thing, rather than you can do, ‘this’ or ‘that’. It feels like they've got to be all those bloody traits that are always listed as a good teacher.’
(Final interview with Laura, Case 2, theme 2)

Encourages active learning

Laura's conception of teaching as a social process not only included her awareness of her own communication and facilitation skills, but she was also aware of the value of active learning and student interaction. In the initial interview Laura further mentioned a link between students' activity and learning in basic of terms.

They're doing and they’re learning.
(Initial interview with Laura, Case 2, theme 2)

In the final interview, Laura gave a stronger sense of her theoretical awareness and her perceived importance of active learning in good teaching. She felt frustrated by the fact that she had to deliver lectures which had been written by someone else and therefore felt she was curtailed in her expectations of active learning practices.

I'm so limited in what I can do, because I have to deliver what they have already got. But it's not just the unit itself, to me it's the whole course and the culture of the course. It's very much set up that way. And everybody's expectations are that way. So, to me an effective course would have the expectation of active learning. From everybody, culture, teacher and students.
(Final interview with Laura, Case 2, theme 2)

Laura also mentioned problems with course design and its overall culture. She envisaged restructuring the unit she taught in order to move away from the passivity she saw as being endemic in its design.

Another one of the failings for me, would be that it [her unit] is structured in terms of that passive learning … I want to restructure the whole bloody course. The course is set up for passive learning … An effective learning program to me would be about active learning. Yeah, it's that simple
(Final interview with Laura, Case 2, theme 2)
Develops cooperation among students

Although Laura did not mention student cooperation in the initial interview, which is the likelihood that one's actions will encourage the action of others to be of a similar character, in the final interview Laura declared her beliefs about the importance of student interactions as a teaching technique.

The most useful, I would say are things that just get the students interacting.
(Final interview with Laura, Case 2, theme 2)

Friendly with students

Laura did not talk about her closeness to students in the initial interview but in the final interview she painted a picture of how being friendly with students can lead to conflicts of interest and varied perceptions of fairness, especially within the assessment process.

I had a student who complained about a mark. I also had a situation where I had a friend in the class and I wanted the [rest of the] class to know that there was a process by which it was all above board and fair. So I let them know I had set it up so that a staff member would be moderating my marking. I wanted them to check over my marking in terms of bias for those two people in particular.
(Final interview with Laura, Case 2, theme 2)

Laura expressed a range of ideas about teaching as a social process in which she acknowledged the role of the teacher as a communicator and facilitator, and the role of students as interacting with each other. She also suggested that interactions help for the accepted culture of the learning environment.

Rapport

Initially, Laura when asked about rapport with students, she saw its importance as paramount for good social interaction in teaching situations. She described it as ‘Essential!’. Along with Laura’s high regard for rapport with her students, she also attached value to the worth of social skills. Later in the initial interview she explained her confidence in her personal skills and further remarked that personal skills were a significant attribute for good teachers.

And not just attitude. I feel confident in my social skills. Not in my teaching skills but I think a big element of teaching skills is personal skills.
(Initial interview with Laura, Case 2, theme 2)

In the final interview Laura reiterated her initial belief about establishing rapport but further explained her realisation of the applicability of rapport for teaching. Laura again
exhibited a newly-found understanding where existing beliefs can be applicable to
teaching. Furthermore, this is evidence that the mix of exposure to theory and reflective
processes extends conceptual understanding.

I would say it's all about rapport. Those are the funny things too, I feel rapport is
everything in terms of everything. Like that's one of my throwaway comments, that 'rapport is everything', but I didn't know that applied to teaching. But now I
know, that applies to teaching, yeah. Wow!
(Final interview with Laura, Case 2, theme 2)

**Theme 3: Developing minds**

**Create understandings themselves**

During the initial interview Laura showed her conceptions of teaching
concerning developing minds by explaining her view that students should try to relate
their studies to their personal interests with the hope it would encourage her students to
deeply understand what they were learning so they could use it in contexts that were
important to them.

I want them to relate to the stuff they are being taught, and to their own interests, their own stuff. Especially in photography. I want them to twist it to their own
means.
(Initial interview with Laura, Case 2, theme 3)

**Empathy towards student**

Laura revealed an underdeveloped conception of empathy in the initial
interview, when she linked empathy with students achieving potential and a desire to
inspire them to do so.

I really have that empathy for other people too. Like, I am really interested in
other people reaching their potential too and also inspiring people that it's
possible to do that.
(Initial interview with Laura, Case 2, theme 3)

In the final interview Laura spoke of how reflecting on her own experience as a student
made her more empathetic towards her current students' learning experiences. Here she
was using the idea of empathy more succinctly that she had done in her prior interview.

I remember doing this unit at TAFE. There was one class which I just dragged
myself to every week. It was a drawing class and I love drawing, but I just
despised having to sit there and do something. I had that mind-set of don’t wanna [sic] be there, and how do I do the assignment and to get out of here as
fast as possible. I really had to put myself back into that to empathise and get an
understanding of what was going on for a really high percentage of the class.
(Final interview with Laura, Case 2, theme 3)

**Student-centredness**

In the initial interview Laura offered her ideas about teaching orientations and how they were affected by her attendance at her university’s teaching orientation day. Laura confided that her original methods leaned towards being teacher-centred but that, after the orientation session, her stance was changing and she wanted to teach in a constructivist manner with a student-centred orientation.

Teacher centred, absolutely. So just from that one day my thinking is shifting. So how I want to teach is the constructive stuff, but the natural way that was coming through me was teacher centred and so, that one day has made a big, big difference.
(Initial interview with Laura, Case 2, theme 3)

Moreover, Laura supported her stance on student-centred teaching when she mentioned some of the attributes of good teaching and spoke negatively of passive teacher-centred teaching methods.

Approachable, enthusiastic that they facilitate learning rather than do the passive learning stuff…all the teacher centred stuff.
(Initial interview with Laura, Case 2, theme 3)

In the final interview, Laura's ideas about student-centredness had become more complex and were focusing on future improvements to her practices.

So, for me … being able to understand what's going on from them in that moment, in terms of what they're bringing to it and what they're getting, what their emotional reactions are, what they are needing, what they are wanting and being able to translate all that individuality into one thing that you are doing or a whole bunch of things that you are doing.
(Final interview with Laura, Case 2, theme 3)

Laura's ideas about how to nurture and develop students' minds throughout the learning process showed she did have empathy for students' needs and interests. Her comments also revealed a strong focus on having positive expectations of her students' potential in her descriptions of how she would ideally like to teach.
Theme 4: Fostering Understanding

Deep understanding

In the initial interview Laura intonated her desire to adjust the style in which her unit would be taught from passive learning to encourage deep learning approaches in her students.

Yeah, also the change from passive to deep learning approaches. The whole...I'm trying to change the whole way it's taught basically.
(Initial interview with Laura, Case 2, theme 4)

Connections between various opinions and ideas

In the initial interview Laura showed that a part of her conceptions of teaching included trying to foster understanding in her students by connecting with other opinions and ideas. She hoped she could encourage her students to incorporate each others' ideas if she by generating some student feedback about an idea and then integrated it holistically into her teaching. The process Laura recounted was also an example of her desire to encourage depth in her students' learning approaches.

Like, when analysing theory ... getting them to stop for a minute and write down what you think of this and they all write down and then to get feedback from some or all of them and incorporate it.
(Initial interview with Laura, Case 2, theme 4)

In the final interview Laura explained her view of the feedback she received from some students at the end of the semester, noticing that different students had varying opinions about the unit. Laura felt that her students' experience of the mid-semester evaluation she administered encouraged them to offer more feedback at the end of the semester. Laura found some pleasure in explaining to the students that they held such differing opinions.

I had one student at the end of semester tell me how they love it [the unit]. They knew that I wanted feedback, because I'd done that feedback thing [the mid-semester review questionnaire]. I love that they think what they think is what everybody thinks, when it's so not. One of the students said that the readings were pitched way, way too high and had not done any of the readings. Another student, who also hadn't done any of the readings, (he just refused to), said, this course is pitched way, way too low. I had great joys telling them that I had just had the opposite conversation.
(Final interview with Laura, Case 2, theme 4)
Emphasise critical concepts

In the final interview Laura told of her efforts to link important readings with critical concepts with the aim of motivating deeper engagement with the readings.

I thought I would identify the readings which are really important and why it's important to do this particular reading and all that kind of thing.
(Final interview with Laura, Case 2, theme 4)

Laura's comments about how teachers foster student understanding in the learning process were strongly connected to her ideas on eliciting feedback from students. These comments illustrate her continuing tendency to focus on students in her approaches to teaching.

Theme 5: Preparation and materials

Preparation

Over the course of the study Laura recognised that effective preparation was critical for good teaching. In the initial interview she saw planning as very useful and, to her surprise, enjoyable.

Like yesterday doing preparation and doing… I was trying to do lesson plans for the whole day and I was only like half finished. It was taking forever but oh my God, I had fun and I thought I'd hate it. It's a bit like doing essay plans… like it's the most useful part.
(Initial interview with Laura, Case 2, theme 5)

In the final interview Laura relayed that she continued to be engaged in the preparation of the content of the unit she was teaching next semester and the very act of planning was acting as a catalyst for firing her enthusiasm.

I've started preparing the next semester and the contents got me all enthused again.
(Final interview with Laura, Case 2, theme 5)

Organisation of learning

By the time Laura came to the end of the semester she had begun to grasp more of the detail that existed within the structure of the unit she taught. Furthermore, Laura introduced more detail (both positive and negative), into her evaluation of the effectiveness of the unit's components. Laura's more complex view about this issue was an indication that her conceptions of teaching were developing complexity.
Overall, an analysis of Laura's comments about planning as a component of a teacher's duties showed that she understood the role of planning and was also enthusiastic about the process.

**Authentic materials and tasks**

In the initial interview Laura again showed her discomfort with her unit’s assessment process, alluding towards her belief that good assessment should utilise authentic tasks aimed at developing real world skills.

The weakness first is that the reasons for the unit like its real world application hasn’t been defined.

(Initial interview with Laura, Case 2, theme 5)

In the final interview Laura described how she felt about the redesign of her unit’s assessment tasks. Laura explained that the tasks were now orientated towards active learning and the enhancement of real world skills.

Instead of them just doing a photographic narrative (the unit's subject is photomedia) now they are going to go through a curatorial process with a curator out in the community and they're going to get exhibited and work towards that. I don't know the right terminology and everything, but obviously them learning by doing and the real world situations.

(Final interview with Laura, Case 2, theme 5)

**Accessible information**

Laura held a conception at the beginning of the study that an attribute of good teaching is organising materials and making them readily accessible.

Also, that information is easily accessible, and organised. I think that's part of an effective program as well.

(Final interview with Laura, Case 2, theme 5)

**Up-to-date material**

She noted that materials should be up-to-date and at the same time she further exhibited her belief that good teaching, like good learning, should use authentic situations.
I've been able to change this unit to update it a bit. Part of that for me was being able to hook it into a real world situation as well.
(Final interview with Laura, Case 2, theme 5)

**Theme 6: Engaging students**

**Discussion**

Although Laura did not mention discussion as a teaching strategy in the first interview, in the final interview she brought up the idea that discussion was an invaluable tool to facilitate student involvement in a constructive cycle of student interactions.

So [doing] lots of activities where students would discuss amongst themselves [and then] bring that [outcome] back to the class and then we would draw that in back to the content.
(Final interview with Laura, Case 2, theme 6)

**Engagement**

In the course of the initial interview Laura referred to the most important contributions she could make to her students. She saw inspiration and relevancy as important components of encouraging student engagement.

If I can inspire them and if I can engage them in what they're doing and make it relevant to them.
(Initial interview with Laura, Case 2, theme 6)

In the final interview Laura explained another technique of engaging students in their learning, recalling that she attempted to promote engagement by suggesting that students relate their own experience to their learning tasks. She was recognising the power of this strategy to be effective across cultures which attests to the development of complexity and broader awareness of her conceptions of teaching.

Getting involved and engaging with it. I say to them, ‘Try and relate it to your own experience’, or say, if their international students, then something from your own environment, and some of them do, they're really good.
(Final interview with Laura, Case 2, theme 6)

**Expects student effort**

During the initial interview Laura explained that she expected students should prepare for their learning. She also expected all students would achieve a pass in the unit.
This can be difficult. There's a difference between what you want and what you expect. I expect them to be prepared ... I would expect them to all pass, yeah and then certainly I would expect some of them to do very well.

(Initial interview with Laura, Case 2, theme 6)

In the final interview Laura extrapolated her ideas on the expectation she held for her students. She explained her expectation that all students would be deep learners but this idea became tempered by her new understanding of different learner types which she had gained throughout the process of participating in this study.

... they have such different expectations of learning than I do. It's taken me all semester to wrap my head around it and I was expecting them to be deep learners, and I think that's part of why the whole semester was so hard for me. I had really high expectations of myself, but also of them. I didn't understand. I didn't think I was having high expectations of them. When I wrapped my head around the surface learning thing, it all started to make sense.

(Final interview with Laura, Case 2, theme 6)

Furthermore, Laura confirmed her reformulated conception of expectations by making links with data obtained from her students' responses gathered from the mid-semester review questionnaire and her new understanding of different learners. Laura also was seeing further into the situation and noticed the difference between her expectation of what she would like to occur and her expectations of what is most likely to occur.

They put it on the [mid-semester review questionnaire] evaluations, you know. 'no readings', 'less readings'. But then you see, I'm expecting the deep learning and they are expecting the surface learning, of course they don't want to do readings.

(Final interview with Laura, Case 2, theme 6)

Laura's comments thus indicated her reflection on the differences in the expectations she had of students compared to the expectations they may have for themselves.

**Motivation**

In the initial interview, as Laura was asked about the qualities of a good teacher, she felt that one of the attributes of a good teacher was their ability to motivate their students.

They [teachers] can motivate people.

(Initial interview with Laura, Case 2, theme 6)

In the final interview when asked how important it is to motivate students, Laura felt strongly that motivation was crucial to good teaching but illustrated her frustration
about achieving it. She suggested motivation is only attainable through circumstances that were accidental rather than planned out.

Well my answer is that motivation is absolutely essential and also absolutely impossible unless it's a complete accident of circumstance.
(Final interview with Laura, Case 2, theme 6)

**Self-motivated students**

In the final interview Laura reiterated her beliefs about the importance of motivation for learners when commenting about the advantage of student self-motivation.

If you had a class of self-motivated learners… ‘Oh, how hot would that be?’
(Final interview with Laura, Case 2, theme 6)

Overall, an analysis of Laura's comments about engaging students in their own learning processes showed that she believed there were some definite strategies that teachers could use to achieve student involvement. She mentioned strategies such as inspiring students and giving their learning relevancy were effective but also said that sometimes motivation occurred by chance.

**Theme 7: Facilitating and organising Learning**

**Facilitator**

In the initial interview Laura mentioned facilitation as being so important for good teaching that she went as far as renaming teachers as facilitators. Like many teachers who are new to constructivist ideals Laura was labelling herself as a facilitator.

I wasn't going to call it a teacher; I was going to call it facilitator. That the lady running it [a professional development course run by her university with compulsory attendance for new teaching staff] just facilitated it and we did everything. Any question she'd ask, she'd get us to write down… ‘have a think for a minute and write down…’, and then she'd ask questions. I thought what a great technique for shy students and to get people to talk.
(Initial interview with Laura, Case 2, theme 7)

Laura also initially held the view that good teachers should facilitate learning instead of producing a learning environment that is passive and teacher-centred.

Approachable, enthusiastic that they facilitate learning rather than do the passive learning stuff all the teacher centred stuff.
(Initial interview with Laura, Case 2, theme 7)
In the final interview with Laura, she still saw facilitation as a component of good teaching, although she still felt drawn to transmissive teaching. This mind-set is an illustration of the cognitive dissonance that is experienced when old conceptions are in juxtaposition with newly encountered conceptions, causing conflict between the two as they are evaluated and judged against each other. In the following quote Laura has theoretically accepted a new conception of ‘good teaching is facilitating things’ as appropriate, but as far as her practice is concerned, she remained habitually attached to her conception of ‘teaching is transmission of knowledge’. Laura began to consider how constructivist ideals are a preferable philosophy to teach from but it will still take time for her to be able to instinctively practice in the new paradigm.

You know how I was talking before about the old framework and the new framework. It’s like it [the old framework] just switches me back to that teaching is transmission thing, but I know good teaching is facilitating things.
(Final interview with Laura, Case 2, theme 7)

**Advance organising**

In the initial interview Laura declared advance organising as an important factor for good teaching as a way to promote links between ideas.

I want to us to outline the whole course at first but also along the way always make links between things and kind of map out. You know, map and make the links.
(Initial interview with Laura, Case 2, theme 7)

Laura also took the view that being up-front with her students about the course objectives and the learning activities fostered better engagement and more effective learning progression.

I want to let them know what they're looking for in the readings and stuff like that.
(Initial interview with Laura, Case 2, theme 7)

**Approachability**

In the initial interview Laura referred to the importance of approachability when consulting with students outside of the structured environment of the classroom.

Approachableness, definitely. In photography, being willing to spend time with students outside the class. So you're there for student consulting hours and being approachable, that is really important.
(Initial interview with Laura, Case 2, theme 7)
While considering the role of a teacher as a facilitator, Laura's comments also revealed her difficulty in putting some of these ideas into practice in light of the strong tradition towards transmissive ways of teaching that she noted in herself, the unit materials and the institution. She showed an awareness of the need for students to take responsibility for their own learning and was attempting to come up with strategies which would enhance their abilities to do so.

**Responsibility for learning**

In the initial interview Laura spoke of giving students responsibility for their own learning in her classes as an idea she would dictate to them.

So they will be taking more responsibility for it [learning] anyway. (Initial interview with Laura, Case 2, theme 7)

In the final interview Laura again detailed her experience during the semester of giving students more responsibility for their own learning. In her explanation she bemoaned that, although she began with the intention of giving responsibility for learning to her students, she found that in fact she still shouldered the bulk of the responsibility for their learning. Laura’s questioned how to achieve a shift in responsibility and was coming to understand that it would take more complex teaching strategies to bring about a shift.

… there was some idea like doing that exhibition at the end of semester. The whole point of doing that exhibition was to do a student-focused thing rather than top-down, above sort of exhibition. Give them real world skills and all that sort of thing. And so much of the responsibility fell on me, rather than on them. The buck stops here [with the teacher]. I said to myself …'what's the way that I can do it where the buck stops with them [the students or learners] cause I won't do that again'. (Final interview with Laura, Case 2, theme 7)

**Theme 8: Behaviour management**

**Boundary setting**

During the initial interview Laura discussed setting up behaviour management expectations in her classes. She hoped to communally construct a consensus of behaviour standards with her students but the time constraints led her towards simply declaring a list of expected behaviours of her own making. She strongly believed that communal construction of these expectations would be better. Although with the extra time to run such an activity she was considering putting aside her preferred teaching
technique and using an authoritarian approach that would be more efficient but less student-centred.

I really wanted to do a group activity, on coming up with our standard of behaviour for the class or expectations for the class…that kind of thing…and get them to determine them. I'm a bit worried about time. Maybe I'll just put up a list. But I really wanted to do it that way so that they're coming up with them.  
(Initial interview with Laura, Case 2, theme 8)

In her final interview Laura specified how she felt about the setting up of rules and boundaries in her first semester. She explained that she had attempted to have the group formulate rules communally but it was unsuccessful. Laura confided that the failure was in the way she ran the session and she was considering more effective methods that might be ‘more real’ in the immediate social context.

I'm just reacting because I remember when I started hearing stuff about this as an issue, and I was a bit nervous of how to deal with it. When you said it I just realised, ‘Oh, I didn't have anyone doing anything bad, but I realised, that I kind of failed a little bit, just by being disapproving. Which isn't something that I would have intended. It’s not the way I would have intended to deal with it, but I remember (as a student) people talking, while someone else was talking and so I did the standard thing at the beginning and talked about not doing that stuff. But I would not do that again, that setting up the group standards and everything. It was a complete washout. Now I would have a kind of more real way of doing it, rather than a book way. So they did that (talking over others) and I was like, ‘Hey guys’ because I couldn't believe how rude they were being.
(Final interview with Laura, Case 2, theme 8)

**Institutional philosophy correlates**

Laura’s feelings that her teaching processes were often undermined by her existing habits and old ways of thinking was confirmed by her retort in her initial interview when asked whether her university’s philosophy about teaching correlated with her own.

When my habits catch up to the way I'm thinking then, yes.  
(Final interview with Laura, Case 2, theme 8)

**Knowing institutional policies and procedures**

Laura did not speak of institutional procedures in her initial interview, but in the final interview she related how her own lecturers had given marginal feedback and that although she attempted to follow in the existing culture, in which lecturers gave minimal feedback to students, she felt ethically compelled to do more. Some of the new
ideas that Laura was confronting were becoming more powerful than those she had
know previously and they were beginning to take over as her new conception.

I never got feedback in photomedia when I did it. You usually got a yellow
sticky note with your mark on it. If you were lucky, you would get one word.
When I came to it. I tried to do it the way other people did it, but I couldn't. My
ethics wouldn't let me do it.
(Final interview with Laura, Case 2, theme 8)

An analysis of Laura's comments about the need for rules and boundaries in her classes
showed that she was aware of the need for such ground-rules in her teaching but that she
also struggled with how to incorporate these ideas into practice. Her comments
illustrated how her views were in line with her institution's but that her teaching
methods needed to evolve in order to fully cement these ideas.

Theme 9: Assessments

Authentic assessment

In the course of the initial interview Laura exposed some of her thoughts about
assessments with a description of what she felt was a badly designed test. She portrayed
a sophisticated view of learning as she lamented the test’s use of memory and
knowledge regurgitation as a means of assessing student learning. She also bemoaned
that to make the marks harder to achieve, the number of questions was simply increased.
Laura noticed that the test was treating learning as transmissive and that adding to the
number of questions was not a good method of addressing the initial problems inherent
in the test’s overarching regurgitative design.

Okay, we had [administered] a test that didn't go towards any marks, but the test
was my nightmare test [in terms of the test's design]. It was like, filling in the
missing words and being given all the words in the first place. They are given
some sentences, and they don't know which words are missing. And then they
have to fill in the words. I would do really badly on that, because I can't just
memorise. It's changing next semester, they'll get marks for it and it will count.
So now they've made it so there's five questions in one question and if they don't
get all five right they don't get the mark, which is to make it harder to get the
marks. Now how bad is that?
(Initial interview with Laura, Case 2, theme 9)

Assessment deadlines

In the final interview Laura felt it was useful to enforce assignment submission
deadlines with some sort of penalty for lateness which she found effectively eased the
logistics of submissions and marking for her.
One thing we did do was… we had our mark before the exhibition, and there was this big deadline, where, if you were late you didn't get feedback, because I had to get it all marked within that time and do all the exhibitions stuff. That was good. I liked that. It's amazing how few people are late when they only can exhibit, if they get it in on time.

(Final interview with Laura, Case 2, theme 9)

Overall, an analysis of Laura's comments about the role of assessment in the unit she was teaching showed that she had a clear understanding of how assessment processes impacted on the quality of student learning. Her comments demonstrated her concern for the quality of assessment tasks that would assess genuine learning and were not confined to assessment of memory only.

**Theme 10: Evaluating Teaching Practices**

**Experimenting with methods**

In the first interview, Laura was asked about innovations that she would try out in her teaching. In response, she mentioned her intentions of experimenting with the application of authentic learning.

Yeah, the authentic learning… [pausing, while saying to herself, ‘ideas or innovations’] ideas or innovations in terms of teaching. I've definitely got innovations in terms of content.

(Initial interview with Laura, Case 2, theme 10)

In the final interview Laura felt she ran her unit well, citing that other staff acknowledged her efforts as innovative. Furthermore, she exclaimed her attempt at changing the unit's passive teaching approach towards deeper learning. It is worth noting that, different learning styles and teaching approaches was the subject of one of the readings in the activities on the RPW.

They were calling what I did in my unit, innovative. As in the other staff were. I also tried to change from passive to deep learning approaches.

(Final interview with Laura, Case 2, theme 10)

**Student beliefs of teaching and learning**

At the beginning of the semester Laura espoused consternation that her students would resist a move towards deeper learning as they were more familiar with passive learning processes.

I'm aware that in their school at the moment they're used to passive learning, and so I'm worried that they will be really resistant to it.

(Initial interview with Laura, Case 2, theme 10)
All in all, Laura's comments about the role of evaluation as part of teaching practice illustrated her use of a wide range of strategies to gather evaluation data about her own teaching. Furthermore, her comments were characterised by a willingness to incorporate this feedback into her teaching practice in an improvement-driven manner. There was very little evidence of being defensive in the way in which she received feedback about her teaching.

*Model to draw on*

Laura’s intentions at the beginning of the semester were guided by understandings she gained from her attendance at her university’s orientation session. She found that the orientation session had given her a model to draw upon and significantly assisted her with planning.

Yeah, I just came out with so much from that day [her university’s orientation session]. Now I have a model which I can go to as well. This made a massive difference when I went to plan.

(Initial interview with Laura, Case 2, theme 10)

*Evaluate one’s own teaching*

During the initial interview Laura mentioned her discovery of the importance of evaluating her teaching. She recounted her aspiration to incorporate information she gathered through the evaluation process into her own teaching. Laura was beginning to use reflective processes and this development was evident in her keenness to self-evaluate.

I found out that evaluation is an important part of it as well, so I want to do that.

(Initial interview with Laura, Case 2, theme 10)

In the final interview Laura was asked about how she thought her teaching was improving. She appreciated that, although the evaluation process was not an all encompassing fix that would produce the perfect teaching and learning environment, evaluation would tend to bring about positive continual, if incremental, improvement.

It's not going to work in that 100% way. It's that you just keep coming up with these innovations and keep adjusting what you're doing and reviewing what you're doing ra ra ra, and it's just like little chinks out of the iceberg or something. So I have to keep adjusting my thinking to it [how she teaches] that way.

(Final interview with Laura, Case 2, theme 10)
Reflecting

Laura also evaluated her teaching through the process of reflection. In the initial interview Laura was asked about reflection and how it might be of assistance to improving her teaching. She had a good grasp of the ideas of reflection and how to use it to improve.

… because you go to work out how. [something that has happened in your teaching]. Hopefully it's relatively easy. You see what works and what doesn't and make the links. You work out what you need to know, do some more work on it or find some more info on it, or get some help with it.
(Initial interview with Laura, Case 2, theme 10)

By the final interview, Laura was completely convinced of the value of reflection on her teaching as a crucial process for improvement.

How could it not. What else could improve your teaching!
(Final interview with Laura, Case 2, theme 10)

Laura further explained she felt that participation in this study and its activities had helped her to appreciate the merits of reflection as a process which was very valuable in the evaluation of one's teaching. She thought she would not have developed so soon if not for her involvement in these processes during the study. Laura also related that without the realisation of the usefulness of reflective practice to teaching she may not have continued to teach.

After, I got the chance to go into the Website [the Reflective Practice Website used during this study] and I had a proper look and I got processing. The first thing I clicked at the end of it was to do with the reading of the self-reflection article. Definitely that article was great. That article to do with the having to reflect on it [one of the website's activities], was an enormous click that I wouldn't have got without doing reflection as a process. I know I wouldn't have. I think if I hadn't been using that stuff, then I wouldn't have had that click until next semester, and I needed to have that click then to keep teaching.
(Final interview with Laura, Case 2, theme 10)

Theme 11: Practitioner of teaching

Competent to teach

In terms of Laura’s conceptions of her teaching practice and her competence to teach, she initially felt she possessed the right attitude. However, she realised that to become competent in practice she required experience that she felt she was lacking.
I feel competent in my attitude, but I really don't feel competent in terms of experience. I don't, I really don't.
(Initial interview with Laura, Case 2, theme 11)

Confidence

Later in the initial interview Laura also verbalised her thoughts about a teacher’s confidence in themselves and their teaching capacities.

… a good teacher is confident about who they are, in terms of their weaknesses and their strengths and you're fine with that and I think having that kind of confidence. I think that's really, really important for teaching.
(Initial interview with Laura, Case 2, theme 11)

In the final interview Laura revealed her views on confidence more succinctly as she spoke about the value and powerful effect that good confidence had on her ability to take her beliefs and intentions through into her practical teaching.

The importance [of confidence] to me, would be that I would get out of my own way and to get on with it and relax and find my feet. All these things that I can see that I need to have to be a good teacher, they would just get there, and develop, because I would get this pressure [to achieve immediately] out of my way. So it's [self-confidence] very important and is a roadblock.
(Final interview with Laura, Case 2, theme 11)

Also in the final interview when Laura was asked how she might gain confidence, she said she gained confidence from an understanding of her colleague’s experiences and the knowledge that many of the things she was experiencing in her teaching were normal and happening to others as well.

Yeah. So I was finding out what the norms of teaching work through all these people [her colleagues], which I did not know. That was really important in terms of my confidence.
(Final interview with Laura, Case 2, theme 11)

High confidence was most important to Laura and this was brought out once more in the final interview as she spoke about the weaknesses in her teaching.

The weakest obviously would be lack of self-confidence.
(Final interview with Laura, Case 2, theme 11)

Laura commented further on the subject of lacking confidence saying that although she was sensitive to students' needs she was confused about how to tackle the required adjustments in practice.
Because a lot of the semester for me was feeling out what the students liked and didn't like and being quite confused about how to meet it... so that also sums up in terms of experience and lacking confidence.
(Final interview with Laura, Case 2, theme 11)

**Enthusiasm, loves to teach**

In the initial interview Laura told of her love for teaching.

Yeah, I love to teach people things. I really adore doing that. I love learning things and I love teaching things.
(Initial interview with Laura, Case 2, theme 11)

In the final interview Laura gave a similar enthusiastic impression, although she described the ideas in a more sophisticated manner and illustrated it from the viewpoint of an enthusiastic learner.

Like from me, learning is my reasons for being and it's this incredible joy. So it would seem that if you want to be a teacher, it's because of that, so you can pass on the joy.
(Final interview with Laura, Case 2, theme 11)

**Teaching experience**

A key factor for Laura was teaching experience. In the initial interview she mentioned she had no experience as yet but she was expecting a huge change as she actually began teaching.

The other big gap I have of course, but it's a massive one is experience. I don't have it yet 'cause I'm starting. I'm expecting a lot of that even from the first day.
(Initial interview with Laura, Case 2, theme 11)

In the final interview she had changed her conceptions of her experience or lack of it, saying that she now realised she brought her own experience of the subject, as a learner. With reflection, show saw how valuable that student experience was in her teaching.

… the experience [of the subject and as a student] that I bring in as well. Which I am clicking [realising] more and more and more is valuable in the classroom.
(Final interview with Laura, Case 2, theme 11)

**Teaching from own perspective**

During the initial interview Laura discussed the support she received and, although she was given the materials by the unit coordinator, the practical teaching methods she would use were left entirely to her.
I got all the course material given to me. So all the materials. That's been great. I haven't had any... kind of advice, on how to do it in terms of running a class. So the stuff that I got out of that teacher training day, thank God for that. [Asks herself... what other kinds of support...] I feel like it's really mainly up to me. And as little as I ask them [the coordinator] the better.

(Initial interview with Laura, Case 2, theme 11)

In the final interview at the end of the semester Laura revealed she felt unsure of lecturing because she had to deliver someone else’s prescriptive content without input to the layout and design.

That taught me so much because I felt really crappy at lecturing, until I did my own. It's really difficult to deliver someone else's content, especially when it's already all laid out and you have to picture that in some sense [the author's intended meaning within their prescribed presentation].

(Final interview with Laura, Case 2, theme 11)

Later, in the final interview Laura brought this into clearer focus by identifying her view that ownership of the content to be taught would engender confidence as a teaching practitioner.

... if it's your own content, and you've researched it and distilled it into those points, then it actually flows naturally from you.

(Final interview with Laura, Case 2, theme 11)

**Theory informed practice**

In the initial interview Laura talked about the vagaries that existed for her in terms of her conceptions of teaching and learning theories, and how they could be put into practice.

I've downloaded more [readings] than I've read at the moment, but just getting going with that, and from doing a certain project management unit before and learning a little bit about...is it constructivist and cognitivist or whatever and I'm not so familiar with them but I done some at TAFE on behavioural. I have just a vague little bit in my head about these different theories [of teaching and learning] or what to do with them.

(Initial interview with Laura, Case 2, theme 11)

In the final interview Laura was showing more awareness of some theoretical constructs and relayed the need for greater theoretical understanding to support a broader understanding of teaching.

It feels like a holistic thing, rather than you can go, then this, that, that. It feels like they've got to be all those bloody traits that are always listed as a good
teacher. You know, all the constructivist things.
(Final interview with Laura, Case 2, theme 11)

In summary, an analysis of the interview transcripts gathered throughout the interviews with Laura revealed that she had conceptions about a teacher-practitioner in terms of reflection on her own practice and in consideration of her colleagues' practices. She recognised the roles of experience and confidence in the practical aspects of a teacher's work and frequently expressed her thoughts by noting the strong link between teaching and learning.
Appendix 8: Supplementary Findings from an Analysis of Personal Journals: Case 2, Laura

The entries that Laura made in her personal journal provide evidence of her developing conceptions of teaching. Analysis of these comments supplement the analyses of her interview and TPI data.

Laura's personal journal exposed some significant moments in her thinking as she noted her responses to the activities presented to her during the program of reflective practice. Some of these activities included seminal readings about constructivist teaching methods and her collection of evaluation data from students halfway through the semester. The quotes and commentary on the quotes included below are evidence of how Laura's conceptions of teaching were contemplated while the program of reflective practice was in progress.

In the first activity which asked for some thoughts on her own experiences of learning, Laura spoke about the enlightening and empowering moment when she saw learning as an activity she was in charge of herself:

My most useful experiences were gained once I realised I could learn outside of an educational setting and took responsibility for my own learning. Now I can find something relevant to me in most classes, books, TV shows, etc.
(Journal, Laura, Case 2): Activity 1, Published 03/08/05

Laura recorded that she currently relied on three bodies of knowledge, which she used to make sense of her teaching observations. Firstly, she provided some vague understanding of teaching styles or approaches linked to theories of teaching. Secondly, she noted the professional development sessions run by her university for new sessional teachers and, thirdly, her first couple of teaching experiences. Interestingly, she was surprised by the difference between her expectations driven by what she had learned in formal learning settings and the actual experience of teaching.

I have a sketchy knowledge of constructivist, cognitive and behavioural methods from [various units] I completed.
(Journal, Laura, Case 2): Activity 1, Published 03/08/05

[The university's PD session] The training provided me with some invaluable experience of learning via a student-centred approach. Reading new approaches doesn't stop me from habitually turning to the old paradigms I have been taught within. Being taught by new methods gave me a model to draw upon in my mind. Essential!
(Journal, Laura, Case 2): Activity 1, Published 03/08/05
Having done … my first week of classes I actually have two real life experiences to draw on … but my experience in the classroom was totally new … Surprise! It is also the most useful knowledge I have to draw on at the moment. (Journal, Laura, Case 2): Activity 1, Published 03/08/05

As evidenced in the analysis of data gathered during interviews with Laura, many of the observations she recorded in her journal are also expressed throughout her interviews.

At this point it should be noted that the remainder of quotes from Laura's journal postings are time-stamped on 23rd December. As was mentioned in the introductory section of this chapter, it is likely this is a re-stamping due to her re-entering to check over her journal entries, the majority of which Laura did earlier in the semester.

Laura considered her own theory of teaching in Activity 2 by reflecting on teaching approaches which she has just been exposed to during Activity 1. She mentioned student-centred teaching alongside her comments that her past learning has been conducted in a teacher-centred paradigm. This issue was also clearly reflected in Laura's initial interview. Laura continued to aim towards constructivist ideals. According to her journal entries, she believed that learning is better if the learner 'owns' the process and it relates to the student's view of the world and what they already know.

I think I agree with the student centred approach, but have been trained in a teacher centred approach in my learning experiences. I believe learning is individual, has to relate to a student's world, to what they already know. I feel they learn more if they 'own' the process of learning. (Journal, Laura, Case 2): Activity 2, Published 23/12/05

Laura's response to the question of what good teachers are illustrated a state cognitive dissonance. While she had been exposed to and had thought about some ideas and theory of what good teaching and learning entailed, at this point she felt confused and lacking an answer. Moreover, she was quite surprised by her unsettled state.

I’m finding this one really hard after the last few weeks. I was going to trot out what I thought before, but can’t bring myself to. I guess I’m just not sure anymore. I feel really confused about this, and quite shocked that I’m confused. (Journal, Laura, Case 2): Activity 2, Published 23/12/05

This evidence of continuing cognitive dissonance also emerged from an analysis of Laura's interview and TPI data.

Recording her thoughts on what separates above average from below average teachers, Laura reeled off an extensive, thought-provoking list of attributes, many of which included teachers being domain savvy, fair, interesting and communicative. One
particularly interesting trait Laura mentioned was that teachers should be aware of good teaching practice or 'knowing what they are doing'. The importance she placed on rapport showed that she conceptualised the social aspects of teaching and learning to be very important.

Heaps. Knowledge of subject, communication skills, listening skills, energy, motivation, caring, charisma too – which often means rapport with those around them, boundaries, openness, willingness to own up if they don’t know something, AWARENESS, knowing what they are doing, not boring, dull or static, understands students realities.

(Journal, Laura, Case 2): Activity 2, Published 23/12/05

An analysis of Laura's interviews also revealed her ongoing concern with developing a positive rapport with her students.

In the next part of Activity 2 Laura was asked to make a journal entry which captured what she felt were 'two things she could do to improve her teaching'. The first item she mentioned was to 'be more confident'. Laura felt she was not prepared well enough to teach and was anxious to do well. She desired feedback from her students but felt the university's evaluations were not getting to the heart of what she needed to find out about her teaching. For this reason Laura was left flailing with no means of reflection or a basis from which to plan improvement.

I’ve been thrown in the deep end … I want a chance to shine… I wish I could get that from students to, i.e. that they would communicate what they want, so I could adjust … These [the university's] evaluation forms don’t facilitate that … they just simplify things to the point that they don’t communicate … I don’t feel that they are communicating to me either what I’m doing right or wrong.

(Journal, Laura, Case 2): Activity 2, Published 23/12/05

The way Laura saw improvement through feedback as being important in her teaching was also a strong theme that emerged from an analysis of Laura's interview transcripts.

Secondly, Laura saw further training as a way to improving but she perceived so many areas for improvement that it was overwhelming her.

I’m doing the obvious things like more CLD training. But I think there aren’t two things but a thousand things.

(Journal, Laura, Case 2): Activity 2, Published 23/12/05

Demonstrating sound reflective thinking, Laura went on to explain how she thought she could be supported. She was asking for a better understanding of the teaching and learning process and explicit recognition from the university that she was a beginner.
teacher (neophyte), wanting an apprenticeship period. Although Laura was coming from a low base, she thought she was teaching well but she felt that her lack of expertise could strongly affect her teaching career. Finally, to alleviate the difficulties she was experiencing, she identified a need for official mentoring as a key support.

… support that would help is an understanding of the [teaching] process. That where I am now is natural, AND that my employers know that (there’s just too much hidden pressure about teaching… I wonder if it’s like this elsewhere … (I can really tell from this how much it’s affecting me). I want a clearly defined apprenticeship period, where I’m allowed to get it wrong. I must sound like I’m doing a terrible job, and I really don’t feel that I am - I feel that I’m doing fine. [but] I am just feeling like I have to get it perfect now, and that it affects my whole future. I feel that there isn’t an environment of sharing experiences, of acceptance … But it would be good if the institutional culture recognised beginning teaching as an apprenticeship in the same way that they recognise PhD’s as apprenticeships. That would involve a formal mentoring system. That’s what I want.

(Journal, Laura, Case 2): Activity 2, Published 23/12/05

In the second part of Activity 2, Laura was exposed to Vygotsky's theories and other social constructivist ideas. She records an enlightening moment realising that when a student asks a question, a teacher does not always have to know or provide the answer, but can use the moment of 'uncertainty', facilitate the student’s further discovery and at the same time give responsibility for learning to the learner.

The teacher also takes advantage of ‘uncertainty’ (I love that), providing the information necessary for the student to take the next steps themselves.

(Journal, Laura, Case 2): Activity 2 Part B, Published 23/12/05

Laura's growing awareness of teaching theories and the language of pedagogy associated with this new awareness, is also illustrated in many of the comments in her interviews, especially towards the end of the semester.

The following quote from Laura's journal illustrated how she was integrating the educational theories of constructivism with theoretical underpinnings from her previous philosophical understanding. Her consistent attempt to link her theoretical knowledge with practical application in her teaching was also a recurring theme that emerged from an analysis of her interview data. In her journal comments, she exposed a period in her thinking where she was using known theories from her main knowledge domain to understand and conceptualise newfound educational theory. This was significant as it demonstrated conceptual changes are variably affected in conjunction with a participant's current knowledge.
To make their own models and meaning. Seems to be the equivalent in the education field of the cultural studies shift from New Critical, Structuralist and Semiotic theories to Post-structuralist and Postmodern theories that acknowledge context. Context exists in both space and time (i.e. Foucault’s genealogy that incorporates the different threads of historical, social, institutional, etc, discourses in the creation of meaning). Similarly, constructivist stuff seems to acknowledge the threads that a student brings to the classroom, and recognises that meaning is made only in relation to all the existing threads.

(Laura, Case 2): Activity 2 Part B, Published 23/12/05

Laura read an article which outlined different learning styles and applicable teaching approaches. This gave her ideas of how to encourage 'deep learning' in her students. She had felt during the semester she should be trying to encourage students to learn deeply but had not yet heard of 'different leaning styles'. The newfound understanding of learning styles and how to approach them in practice, boosted Laura's confidence to continue some of what she had been doing. This milestone in her reflection about her teaching in this study was also identified as a strong theme in an analysis of the data gathered throughout interviews with Laura. Furthermore, it provided her with validation of her competence, both in how she was teaching and what she was conceiving as the learning needs of her students.

I started reading the web site going ‘thank god, actual information on how to encourage the deep approach, this is what I needed all along’… Reading this was really useful in that it confirmed for me that I actually do have some skills… It’s a great term to use as a map for what’s happening in the classroom… I guess if I know that I am doing the right things but, that they don’t need to be 100% successful, then I can keep doing them without feeling like they are failing.

This section has really increased my confidence that I know what I’m doing – the irony considering that the major feeling I’ve had all semester is that I don’t know what I’m doing. This entire activity has served to reinforce for me that I was naturally, as a result of who I am now in life, doing the right things for this particular style of teaching.

(Laura, Case 2): Activity 2 Part B, Published 23/12/05

In the last part of Activity 2, Laura made an entry in her journal in which she considered the benefits of reflective practice in teaching. She noted that a formal reflective process helped her to relax and worry less about being a perfect practitioner from the beginning. Her comment exposed the stresses which are often placed on neophytes by high expectations for their teaching performance. Her response also suggested that the collection of data on one's own teaching practice, coupled with reflection and a continuous improvement strategy, can assist in understanding if one is performing adequately. For Laura, a lack of knowledge of acceptable performance
could create a barrier to smooth development. Her remarks on reflective practice indicated changes in her conceptions of teaching in general and her own self-efficacy as a teacher.

I think that being more conscious of doing it [reflection] (or doing it formally – i.e. mid-semester evaluation etc) could help lessen my [concerns about] perfectionism. I think this whole project plus the entire learning curve over the semester, has helped me, kind of relax a bit [and feel] that I’m doing ok. ‘self-efficacy’ – that’s all I need to keep on keeping on! That kind of reassurance is probably the biggest key to my success.

(Journal, Laura, Case 2): Activity 2 Part B, Published 23/12/05

Her acceptance of the process of gradual improvement was also evident throughout her interviews.

While doing Activity 3 Laura was asked to make a journal entry about her experience collecting data about her own teaching using a mid-semester review questionnaire. She began by exposing her feelings of the responses that held even a small amount of criticism.

I’m reading the article on the reflective practitioner again. I think that I barely took in the first activity when I did it… I’m going back over the whole website realising I didn’t really understand what it was all about. So I’m starting again, but the great thing is, I just did the evaluation last night, and I’m feeling shattered from even a little negative response, so this is the perfect time to read it all …

(Journal, Laura, Case 2): Activity 3, Published 23/12/05

After examining the results of her foray into student feedback questionnaires and beginning to reflect about her teaching Laura recorded her feeling in a rather verbose diatribe about some feedback that was hard for her to take on but then she suddenly had a moment of realisation where she saw the worth of the reflective process.

Oh thanks Jack, I so get the point of doing this. I really just needed to say all that… I think I’ll just sit here for a while.

(Journal, Laura, Case 2): Activity 3, Published 23/12/05

In the last activity of the RPW, Activity 4, Laura carried out some of the suggested analysis on the data she had collected mid-semester, commenting in her journal about the responses. She considered whether there were many comments which were repeatedly the same.

Yes, most questionnaires reported that they did not understand the standard of work expected, that they strongly agreed that I was enthusiastic and that I was
available for them.
(Journal, Laura, Case 2): Activity 4, Part A, Published 23/12/05

Laura then considered the most likely comment that would be candidate for a change in the way she approached her teaching.

I think the main issue is students not understanding the standard of work expected.
(Journal, Laura, Case 2): Activity 4, Part A, Published 23/12/05

Laura followed this by considering whether she had noticed anything of interest in light of her understanding of learning and teaching. She wrote of good and bad examples showing complexity in her observances and then adding analysis which turned her attention to recognising a possible area for improvement. Furthermore, she considered reasons for the failings, the effects that may have occurred and again this is likely to lead to her making changes in her approach in the future.

There was an assessment item where the previous course coordinator had given a number of visual examples of ‘what not to do’, without any examples of ‘what to do’. While I had plugged the gap by finding examples from industry, I missed [did not notice at the time], the fact that this didn’t give the students a ‘student example’ that was successful, or examples related to particular marks. Plus, I think the abundance of examples that didn’t work just decreased student confidence and was particularly ineffective.
(Journal, Laura, Case 2): Activity 4, Part A, Published 23/12/05

According to the data that Laura gathered from her students through a mid-semester review questionnaire, her students commented positively on the high level of enthusiasm she brought to the classroom. Later, when she was confronted with some negative criticism in the feedback, she suspected her enthusiasm was likely to wane in the next semester but, as she reflected more upon this factor, she bounced back from the darker side of the reflective process.

I think that I'll get enthused all over again, if I evaluate, review and improve.
(Journal, Laura, Case 2): Activity 4, Part A, Published 23/12/05

Laura demonstrated increasingly advanced ways of reflecting that were producing productive ways of thinking about her teaching. Above all, Laura was identifying the central attributes of a continuous improvement loop and moreover conceived the process as not only a way to improve but as a route to revitalise her passion for teaching. By this point in Activity 4, Laura was even reflecting on the
evaluation questionnaire itself and thought of ways to improve it to capture more specific feedback.

I think doing tailored evaluations [for each unit] that elicited suggestions for improvements or the specifics of criticisms would be more effective (and more motivating)…(Journal, Laura, Case 2): Activity 4, Part A, Published 23/12/05

Laura went on to reflect about the lecturing she had done and the way she had been advised to do it, mentioning how this method was not suiting her. She gave reasons for the discomfort of the approach and noted how she felt better when the lectures were presented using her own material. The following quote illustrated how reflection helped Laura navigate through evolving conceptions, going through a state of change, discovering reasons for an approach and generally developing her own theory of teaching.

I also think that I was not as effective in my lecturing. One reason is that I was asked to read the lectures straight from the unit outline (which I agreed to because I was new [to teaching] and doing what I was asked). While I mixed it up a lot (activities in between, questions, etc), I ditched the whole idea very quickly for the rest of the lectures. Now I would never agree to reading them, and have the experience and confidence to argue for something else. Another reason is that I think I’m not particularly suited to the linear format of delivering information that we call a lecture… feels like I would have to have memorised the entire thing.

Just rereading this [what she has just written above], I clicked [realised], that it’s actually about teaching someone else’s lecture. I totally didn’t feel that when I gave my own lecture.
(Journal, Laura, Case 2): Activity 4, Part A, Published 23/12/05

Finally in Part B of Activity 4, Laura attended to the last step in the reflective process and directly considered ways to improve what she had reviewed. In the following quote she showed how she has taken an area that she identified earlier in the process and had taken steps to learn new skills in order to take her closer to achieving her perceived solutions. It is well worth noting that while Laura’s enrolment in a course to further the skills she felt were respectively important was totally self-guided and not part of the suggested activities of the intervention, but was derivative of involvement of evaluation and reflection practices.

The big improvement I want to make is in the area of lecturing. I want to take the skills I have in [teaching] one-to-one to [and apply them to] one-to-many. After these evaluations, I enrolled in a ‘Good Lecturing’ workshop.
(Journal, Laura, Case 2): Activity 4, Part B, Published 23/12/05
In the next quote from the same area of her journal, evidence can be seen of the complexity with which Laura was thinking about her teaching. She attended to the content and the practical aspects of presentation and teaching styles. It illustrated not only what she saw as problems but how her ideas altered and how she changed her practices. Similarly, as with the previous quote, it is worthwhile noting that with sound metacognitive skills on her side, Laura was driving her own development further and faster than if she was not working as a reflective practitioner.

Being a participant [in the lecturing course she enrolled in] and having the shoe on the other foot... helped me understand that I was practising good lecturing skills (yay) [sic], but that I was also really rushing the content – and it’s impossible to engage with content that someone is rushing. I think this is somewhat due to the course [which she was teaching], being designed for other teaching paradigms... with my techniques requiring too much time... For the second half of semester I time managed the seminars better. By then I had also learnt that it was ok to skip things. I was also more adept at adjusting spontaneously to what was working and what wasn’t.

(Journal, Laura, Case 2): Activity 4, Part B, Published 23/12/05

Laura also looked further into finding and acting on solutions to another issue she had identified from the mid-semester evaluation she had conducted.

For the next assessment, I provided examples of successful student work, and tied these examples to particular grades. I also informed the three classes that one class had identified in an evaluation that for the first assignment they didn’t understand the standard expected and that I wanted to make sure everyone did understand this time. I then checked that they did understand.

(Journal, Laura, Case 2): Activity 4, Part B, Published 23/12/05

The next quote exposes some interesting notions of how a community of practice can help with confidence of a neophyte teacher. Shared experiences of teaching between colleagues can help bolster confidence. Laura also showed that she was hungry for the next set of feedback, in this case the end of semester unit surveys. This was important as she was showing a more complex way of looking at feedback, utilising newfound formalised reflective practice skills.

Interestingly enough I then found out from the program coordinator that all the tutors in this program score badly on this [understanding expected standards] in the UTEI’s. I’m interested to see what the end of semester UTEI’s show for this point.

(Journal, Laura, Case 2): Activity 4, Part B, Published 23/12/05

Laura returned to think about the negative feedback that had bothered her so much and worked through the issue.
In regard to the negative responses... I identified what I think was an issue [of rapport]... and when I thought about it [reflection took place]... The penny dropped! ...[when good feedback was given], the particular student that was being negative seemed to be much more present.

(Journal, Laura, Case 2): Activity 4, Part B, Published 23/12/05

Laura rebuilt her conception of negative feedback which allowed her to use it positively, rather than let it erode her confidence and disposition to teach in the future.

However, I also learnt by then not to take it so personally... If I’m not taking it personally, it’s not affecting my commitment and enthusiasm.

(Journal, Laura, Case 2): Activity 4, Part B, Published 23/12/05

Finally, as Laura was asked to look at her own development in the future, she wrote about realising that she did not have to be the perfect teacher immediately and that she was presently ‘doing ok’. She understood that becoming an expert teacher was a complicated undertaking and therefore a time consuming process. She had become more accepting of her current limitations. Laura's increased understanding of her own learning about teaching was allowing her the space to develop confidence in her teaching, while she also developed better methods of thinking about and practising her teaching.

I think increasing my own confidence is really the key at the moment. It is the one thing that is going to allow me the flexibility to be able to respond well to the spontaneity... The absolutely biggest improvement I can make to improve my student’s learning is to get off my own back and realise that noticing everything I could do better doesn’t mean I’m not doing ok right now. Over the semester I have received feedback that has made me feel more secure about continuing work opportunities. The experience of teaching has made me realise that it’s a lot more complicated and harder to get right than I expected, and that this means that it’s a long learning process, not an overnighter.

(Journal, Laura, Case 2): Activity 4, Part B, Published 23/12/05

One of the final comments in her journal was concerned with the integration of teaching styles in the quest to find her own style. She documented how she needed to blend styles to come to one she was happy with. Furthermore, Laura feels constrained by the way her coordinator worked, the lack of input afforded by her sessional status and frustration with the teaching style imposed on her. Laura was keen to take full control of all aspects of her teaching.

I also had to quickly integrate the old and new teaching styles that were available to me to find my own style... the extra-curricular teaching (the exhibition) that I did was definitely [taught] more through that [constructivist] paradigm, leant itself more easily to it, and was very successful... I would have
to have permission to totally restructure the course to do the whole thing [unit] that way (and what sessional has that?). Bring on fulltime-employment!… I think it’s really important to note that I had to find my own style.

(Journal, Laura, Case 2): Activity 4, Part B, Published 23/12/05
Appendix 9: Interpretations and Representative Quotations from Interviews with Case 3, Ben

Theme 1: Awareness of conceptions of teaching

In the initial interviews with Ben he did not offer any insight into his knowledge of theories and practice of teaching. Ben was coming from a low base which limited his ability to recognise change in teaching and learning.

Different ways of learning

Ben did not mention different ways of learning in his first interview but in his final interview he articulated a narrow attitude toward students whom did not tend to verbalise well. He suggested that if a student in a communications course cannot talk about their field, they are not measuring up. Ben was demonstrating a restricted point of view and did not appear to recognise alternative ways of doing things.

I think at the end of the day, you need to be able to verbalise what you are learning, because if you can't talk about it there's not much point and it is a communications degree. There's not much point in doing a communications degree if you can't communicate.
(Final interview with Ben, Case 3, theme 1)

Conceptions changed

In the final interview with Ben, he revealed that he thought his conceptions of teaching had only changed slightly over the time he had been involved with the study’s activities. He expressed that it was hard to gauge what the changes were and their rate of occurrence over the continuum of the program. Ben said he felt more relaxed and confident about his teaching and mentioned operating with less overall structure and being more approachable. When asked about his changing conceptions of teaching, he commented on the complexity of his conversations about teaching and learning.

Maybe slightly, I think … sometimes it's hard to gauge because its ongoing the whole way through. So I think you're always changing a bit. I have been a lot more relaxed and a lot more confident this semester. So that's probably … there's been that bit of change. It's been a lot less structured and I feel I've been a lot more approachable.
(Final interview with Ben, Case 3, theme 1)

Ben felt that many issues arose over the semester he participated in this study. He explained that, although he had previously attempted to understand the disposition of his students towards learning, an expansion of his awareness of different learning styles
had reinforced what he thought felt about his students and this enabled his ideas to become more accessible to his teaching practice.

I think a lot of the things that came up. The deep and surface and strategic learning and stuff like that. Understanding where the students are coming from. I always did that before, but it just wasn't so neatly pigeonholed into those sort of free things that you do [tasks that become second nature]. So I guess it sort of gives you the consideration of where they're coming from.

(Final interview with Ben, Case 3, theme 1)

Ben gave the impression, that over his participation in this study, its theoretical and reflective activities had helped him to combined theoretical knowledge with observations of his teaching and students. This helped him to form more structured conceptions that enabled him to connect what he saw with what he was thinking.

It [the reflective program in this study] formalised my observation of the theoretical principles, so it’s been all that. And it’s good to know. ‘These ideas are pretty confused, but with my observations as well, everything sort of fits normally’. So… I feel more capable, which is always good.

(Final interview with Ben, Case 3, theme 1)

**Theme 2: Sees teaching as a social process**

*Encourages active learning*

In the initial interviews with Ben he identified the use of a social process in his teaching practice through his use of small group discussions that he drove to encompass the whole class in the activity.

Yeah, so basically in small groups to get them talking. And then I opened it up to the group.

(Initial interview with Ben, Case 3, theme 2)

Across the final interview Ben’s conception of good social interactivity was often related to good communication skills and other social and cultural aspects of teaching.

We could do it down the pub and it would be just as effective, probably more.

(Final interview with Ben, Case 3, theme 2)

Between the initial and final interviews Ben seemed to have changed little with regard to his conception of the role of social interactions and continued to feel that the establishment of an easy going and relaxed social atmosphere was one of the most effective contributions to a good teaching environment.
Fellow learners

In the initial interview, Ben showed realisations of teachers and students being fellow learners by noticing he also learned from his students.

… like doing first-year units, and then you're sort of like, actually I should be talking about all of this stuff in my thesis. And you're sort of like… wait a sec. I'm doing a Masters, and I'm learning from a first-year core unit.

(Initial interview with Ben, Case 3, theme 2)

Friendly with students

In the initial interview, Ben felt that his proximal age to his students played a role in creating good social relations with students and made him more approachable.

A degree of familiarity, or being familiar with the students. I sort of find that… each teacher works in their own way, but I find I guess being a bit younger than most staff. Like tutors, they might have had in the past. It's a lot easier to become, not chummy, but a bit more personal, and I think that makes you a lot more approachable as a teacher, and so they don't mind saying, I don't understand this or can you give me a bit of a hand. I try to get rid of that hierarchy.

(Initial interview with Ben, Case 3, theme 2)

Ben further remarked that friendliness should be tempered and professionally based to encourage approachability outside the classroom.

You know, not being too chummy, but at the end of the day being friends with the students in a way. You know, I see them around campus and stop and have a chat.

(Initial interview with Ben, Case 3, theme 2)

In the final interview, Ben described an external social occasion and how the class environment created a respect that falls away in external social situations.

I was at a pub with about five or six students one night and I thought, ‘okay, everyone is pretty chummy’, I don't know, but in the classroom there is still that sort of respect there, that you are the one in charge.

(Final interview with Ben, Case 3, theme 2)

Ben also felt that even the classroom respect could erode with too close a relationship.

Yeah, but it is a fine line. I could see how it could erode.

(Final interview with Ben, Case 3, theme 2)
Although Ben has continued to socialise with students externally, between the initial and final interviews, he appeared to have become more aware of the complexities and difficulties of maintaining social relationships with students.

**Rapport**

In the initial interview Ben demonstrated his beliefs concerning the importance of establishing rapport to help overcome social barriers. Ben felt that by communicating from the students' point of view, rapport would be generated and this would stimulate mutual respect.

> Yeah, I think, talking to them exactly how you'd want to be talked to as a student. So yeah really, I guess putting yourself in their shoes and breaking down the walls and all that stuff … I guess that helps mutual respect.
> (Initial interview with Ben, Case 3, theme 2)

Ben also saw that the ‘dilution of hierarchies’ between students and teachers to be an important catalyst for rapport and social participation.

> I try to get rid of that hierarchy. So it's not like I'm the teacher and I'll stand at the front here and talk and I know all the answers.
> (Initial interview with Ben, Case 3, theme 2)

In the final interview, Ben remained concerned with the dilution of hierarchies between students and teachers which he saw as necessary in order to establish a relaxed social atmosphere. During the final interview, his comments revealed that Ben conceived the importance of good communications.

> So being able to understand that and extrapolate it… so I think it's largely communication. And that probably comes with breaking down the power and speaking to them on their own terms. We'll just chat to the first 5 to 10 minutes of the class and get everybody relaxed and a sort of make a good social atmosphere.
> (Final interview with Ben, Case 3, theme 2)

Furthermore, in the final interview Ben spoke metaphorically of needing good confidence in one’s teaching, suggesting that students perceived the lack of confidence in a teacher’s demeanour and could react in a predatory manner similar to those exhibited by animals when stimulated by the scents exuded by injured prey. Although he felt strongly about maintaining a relaxed attitude and aimed to provide a comfortable environment for his students. Ben showed he was aware of keeping learning on track.
… it's like a shark with the sniff of blood. They're not going to be relaxed, unless you're relaxed. You've got to make them feel at ease, but keep it controlled. (Final interview with Ben, Case 3, theme 2)

Ben also explained that good rapport with students assisted him in understanding their dispositions, to identify confusion, contextualise explanations and communicate effectively. Furthermore, he saw successful rapport as a two-way street which benefits both teachers and learners.

Very important. Without that rapport, you don't get a sense of where the students are coming from, why they don't understand something, how to work out the best method to make them understand it, the best context to put it in. What elements of it, they don't understand. Like sometimes, the student gets to a point where they can't grasp something, but sort of looking at it from their own perspective, and I'll say okay, I can identify what is confusing them. Like making distinctions say, the difference between how a word is used in a theory and how a word is used in everyday life. Making sure that that difference is blatantly clear and that they understand it, before they move on. If you don't have that rapport you can't engage comfortably and you can't, I guess, understand where they're coming from and they can't understand you. (Final interview with Ben, Case 3, theme 2)

He added that good rapport enabled a better approach to him being able to understand his students' learning difficulties.

And you individualise that rapport. Sometimes, you can see something in a person and you can say, 'That's not quite clear is it?' (Final interview with Ben, Case 3, theme 2)

In the final interview Ben explained how he felt that good rapport improved his choice of contextualised examples to convey concepts that were within the students' experience. He also mentioned how he felt that humour led to greater accessibility.

Yes, and a lot of them just come to you afterwards, for instance, one guy will come up and at the end and say, 'okay…'. And you've got a few things in common, because you've been talking for two hours throughout the tutorial. So you know who they are, you know, what shows [on TV] they have been watching you know, you know what music they listen to, and you sort of know… if you know, they watch, Family Guy and you're discussing something and you know, you can draw on an example from it, and the class understands it and they understand it well, and they find it funny as well, which gives them the extra accessibility to it. (Final interview with Ben, Case 3, theme 2)

Between the initial and final interviews Ben displayed an increasingly sophisticated conception of rapport with students.
**A decent person and good communications**

In the initial interview, Ben did not mention any comments which could be categorised using this code, but in the final interview he conveyed that being a decent person with a sense of empathy encouraged approachability and diminished students' fear of coming forward. Furthermore, he felt that his clarity of communication would improve with empathy.

Good communications. A degree of empathy. Knowing where the other person is coming from. Clarity of communications. That accessibility as well, so people aren't afraid to come and see you if they have a problem or just being approachable. There's lots of ways you can do it. Really, just being a decent person. Not being domineering. Being flexible. Being available.

(Final interview with Ben, Case 3, theme 2)

**Social expectations**

In the final interview Ben touted that he did not consider his social expectations very much, preferring to focus on encouraging a relaxed and friendly learning environment.

I guess I don't consider that really too much. I do try to make it as relaxed as possible and friendly.

(Final interview with Ben, Case 3, theme 2)

**Delineating responses that are acceptable**

In the final interview Ben illustrated how he attempted to delineate acceptable responses with those of lesser importance or correctness. Although he was engaging students in the process, his underlying conception continued to be that of the teachers holding all the knowledge.

Like we're looking at post-modern style, so go to the board and tell me what's a post-modern style. And then just writing down, whatever they say, then, I'll go all right, with pretty much got it all here. You know, these ones are particularly important.

(Final interview with Ben, Case 3, theme 2)

**Theme 3: Developing minds**

**Caring, nurturing and developing minds**

In the initial interview Ben described how his role as a teacher was to nurture and develop his students' minds to help them determine their life goals.
I think really helping them to identify what they want to do with their life, I guess…
(Initial interview with Ben, Case 3, theme 3)

**Empathy towards student**

While discussing empathy towards students in the initial interview, Ben stated that his ability to speak to students on a less formal level was instrumental in a good teaching environment.

So just being able to say, I understand, this is boring the hell out of you or I think, this is this theory and we've got to learn that it but, you think it's crap, I think it's crap, but we've got a know why it's crap or something like that. I guess really speaking to them on their level.
(Initial interview with Ben, Case 3, theme 3)

Similarly across both interviews, when Ben was asked about the attributes of good teaching, he spoke of his empathetic qualities as being one of the strongest attributes of his teaching.

I think my strongest [attribute] would be that degree of empathy that I've just touched on earlier, and being a bit more personable maybe, and being reasonably relaxed.
(Initial interview with Ben, Case 3, theme 3)

A degree of empathy is good. Knowing where the other person is coming from.
(Final interview with Ben, Case 3, theme 3)

**Caters for individual needs**

During the final interview Ben considered how he catered for the individual needs of students by explaining that interaction with individuals allowed him the chance to straighten out major misconceptions earlier, to promote better understanding of the work they submitted and improved the feedback he gave.

When they [the students] come and see you, it normally makes the marking easier, because they come and say I don't understand this, and you say, well alright. So then, in the assignment, you're aware of where they're coming from, you know what they're doing, and generally the big mistake aren't there, and if the big mistakes aren't there, then it is so much easier to read. It also makes it much easier to give feedback on rather than sitting down for two hours going, what the hell is this kid on about, because I don't get it.
(Final interview with Ben, Case 3, theme 3)
**Reshape students' visions of the world**

In the initial interview Ben described reshaping the students' vision of the world as he extended their appreciation beyond the confines of a traditional classroom.

Just to stretch their minds outside of that box that they’re in, in the class.
(Initial interview with Ben, Case 3, theme 3)

In the final interview Ben used his own experiences to express his conception of reshaping students' vision of the world. He felt that if a student’s views remained static, their learning would be minimal and, instead of a growing complexity of understanding, the learning process would be reduced to simple affirmation of knowledge.

I was out of Uni for a while, and basically just stagnated. But now being back the amount that I've changed and that people say that I've changed, through whatever reason, learning or … I guess all the opportunities that come to you are just immense, and I don't just think, if you're in a position of learning and you're not changing why you're doing it, then you're probably not learning very much. You're just reaffirming it.
(Final interview with Ben, Case 3, theme 3)

**Shelve egos**

In the final interview Ben brought up the idea that teachers should monitor their egos and prioritise their practices to maximise student learning, instead of simply flaunting their own knowledge. Ben's view reflects a student-centred way of thinking that takes the focus off what he knows and permits students a comfortable environment to contribute with their own thoughts.

It might still only be a fraction of your knowledge in the area, but your priority is the students really, not to massage your own knowledge ego or anything like that. You are there to get ideas across and thinking across not to show people how much you know. So you've got to get your priorities right.
(Final interview with Ben, Case 3, theme 3)

**Student-centredness**

During the final interview with Ben, he described his method of using small group interactions to draw out different opinions, which he believed could then be discussed and legitimised by the class as a whole.

Then we maybe break into small groups. You know, three people groups and go round and ask for everyone's opinion, and then come back to the bigger group, and maybe brainstorm on the board.
(Final interview with Ben, Case 3, theme 3)
Theme 4: Fostering understanding

Imparting knowledge

In the first interview Ben spoke of imparting expert knowledge that would culminate in potential employers recognising his students' advanced credentials. Ben had a view of teaching that was focused on teachers transmitting knowledge in to enable students to gain a credential. This conception of teaching highlighted one of the more traditional that Ben held at the beginning of the semester.

To impart specialised knowledge on a particular field, so they have recognised credentials, recognised knowledge in that area, whether it be institutionalised through a university degree or some amount of recognised knowledge can then be imparted on people for the gaining of similar credentials.

(Initial interview with Ben, Case 3, theme 4)

In the final interview Ben still thought of the purpose of his teaching in a traditional manner although he now brought newly encountered ideas of different learning styles to bear, as he concluded that different students would have different levels of comprehension.

I think it's largely communication. The whole process is getting something across to the students, but not every student is going to be able to take that on at the same level.

(Final interview with Ben, Case 3, theme 4)

Recognise concepts

In the course of Ben’s initial interview he described the process he used to ensure students were able to recognise important concepts by utilising appropriate examples taken from wider contexts.

With two hours, I like to find some good solid examples like you know, if there's an idea say … usually you can find an episode of The Simpsons that reflects it. Get them to go to that and get them to recognise the concepts in the writing in, say, a media text or a photo or a painting or just somewhere outside the context of that article just to make it a bit more accessible.

(Initial interview with Ben, Case 3, theme 4)

In the final interview Ben’s view of concept recognition was similar; he described a conversational process that he felt enforced his students’ engagement and linked the relevant concepts with real-life situations. The questions he asked appeared crafted to avoid simple yes/no responses and to elicit more complexity.
Yeah, and then making sure by getting them to identify, rather than going, ‘did you see exactly how this idea was present?’ But instead I go, ‘Did anyone see examples of reflexivity? Where? So really getting them and forcing them to engage. Forcing them to do what you're hoping they will do in everyday life outside the classroom, but just making sure that they get it in class.
(Final interview with Ben, Case 3, theme 4)

Deep understanding

During his initial interview Ben revealed his conceptions of fostering understanding by explaining that marks are only indicative of learning at one point in time and true understanding is mainly confirmed by what is known to be known by the learner sometime after the learning has taken place.

The stuff you learn is what you recognise that you know, two years down the track. So, irrespective of the few who get 80% for a unit. It doesn't mean you know, 80% of what you could have known or anything like that. So the marks become to a degree irrelevant. Although they're going to be a reasonable indication, you would hope, but they're still… yeah that degree of what you recognise that you know, years down the track as well.
(Initial interview with Ben, Case 3, theme 4)

In the final interview Ben described understanding as the ability to apply learned knowledge. He felt that application of what was learned to be pivotal to deep understanding.

I guess one of the main objectives is to have them [the students] understand it, but if they can't apply it to anything, they're going to have problems understanding it in the first place.
(Final interview with Ben, Case 3, theme 4)

Using wisdom

Although in the first interview Ben portrayed his confidence and competence in his teaching as fairly high, in the final interview he felt that his age hindered his ability to use wisdom and act as a mentor for students who are older. He cited his lack of experience and a feeling of appearing less credible in the eyes of older students.

Yeah, and as a 26 year old teaching 28 year olds, I can't give them that much experience. You know, theories and stuff, you can help them understand it, but you can't really relate to having that mentor kind of feel (because of the lack of experience), as opposed to the 17-year-olds who are just out of high school, where you can say, ‘ if you've got any troubles, if the University way of thinking is too much for you, just come and see me, or send me an e-mail. I'm happy to help you out with whatever. It doesn't quite rub off the same way with the 28-year-olds.
(Final interview with Ben, Case 3, theme 4)
Emphasise critical concepts

Like his thoughts on students’ recognition of concepts, in the final interview Ben revealed his thoughts on emphasising critical concepts. He felt that distinctions between theoretical and common usages needed highlighting and needed to be made explicit.

Like making distinctions say, the difference between how a word is used in a theory and how a word is used in everyday life. Making sure that that difference is blatantly clear and that they understand it, before they move on.
(Final interview with Ben, Case 3, theme 4)

Theme 5: Preparation and materials

Preparation

In the initial interview Ben felt he could do more to prepare for his teaching.

I guess I could be a lot better, particularly with the preparation.
(Initial interview with Ben, Case 3, theme 5)

In the final interview Ben related how the coordinator of a unit, which ran for the first time, had appeared to have done little preparation for his lectures and tutorial sessions. Although Ben was describing someone else’s practices (employing the voice of his coordinator), he was identifying the problem of insufficient teaching preparation to highlight his conception that preparation is important.

Yeah, it was kind of, ‘you guys [the tutors] can do whatever you want in the tutes’. And I think he treated the lectures the same way. He just thought he’d do whatever he felt like. It was the first time the unit ran so there were a lot of teething problems and a lot of students were really annoyed by it.
(Final interview with Ben, Case 3, theme 5)

Examples and explanations

In the final interview Ben also indicated that if students can show that they are able to provide an example of a concept, they are more likely to have gained understanding of it.

Make sure that people can throw up some examples to illustrate that they have understood it.
(Final interview with Ben, Case 3, theme 5)

Appropriate readings

In his final interview Ben felt that lectures and tutorials were somewhat disjointed and that this impeded continuity of learning by relying too heavily on a
student's disposition to participate and their level of enculturation in the learning environment.

There's no real unity between tutorials and lectures at least, it was not evident, and it was pretty much up to the students to determine. Which is all right, but when it's first-year students who don't want to do it, then it becomes highly problematic. The lectures were pitched a little bit too high. Some of the readings were a bit inaccessible. There were quite a few problems.
(Final interview with Ben, Case 3, theme 5)

Up-to-date material

In the initial interview Ben regarded reflection as an important evaluation device when he spoke of aging units that had lacked updating.

The unit is getting sort of a bit of a rework, particularly when I was in the latter stages of my bachelors and then my honours and doing the first bit of tutoring. Actually, the units were quite clearly years old, and hadn't been, I guess, reflected on in any way.
(Initial interview with Ben, Case 3, theme 5)

He also mentioned that some fields change rapidly and must be reviewed regularly to avoid becoming outdated.

In a field like media, it changes non-stop, and particularly core units. It's not the sort of thing you can let a unit just sit there for 10 years, and stay as it is because it just becomes out of date.
(Initial interview with Ben, Case 3, theme 5)

In the final interview Ben displayed consternation that materials were out-of-date in the units he taught. He felt emphatically that examples, which were in tune with the times, would be better accepted by students.

What the hell do 20 year olds want to watch a film that was made before they were born for a theory about today?
(Final interview with Ben, Case 3, theme 5)

Theme 6: Engaging students

Discussion

During the initial interview Ben revealed some of his notions of engaging students in their learning. He felt that discussion was a principal tool, but that teachers should restrain their input during conversations and allow students to be the focus rather than themselves. Furthermore, Ben described how he would play devil’s advocate with the aim to encourage students to participate in discussions.
So, I find really discussion is the best tool, I find, but the problem with that is. It does rely on the students having something to say, and at the end of the day. You know, I can direct it but then it becomes more of a teacher … you know, high school teacher at the front of the class, which I don't think is the best way to learn. So it's good to maybe sort of ignite discussion and maybe just throwing in something that … you know, a position, a thought or a theory that is clearly wrong, just to make them start talking. [then adding] You know that's not right, because of such and such …

(Initial interview with Ben, Case 3, theme 6)

Also in the initial interview, Ben commented on the use of discussion in his classes. He thought it was valuable to let students freely debate ideas as they formulated their own concepts. In this comment, Ben was displaying one of his more constructive views of teaching.

A lot of discussion. A lot of open discussion is good, I guess in sort of formulating ideas and throwing ideas back and forth. I guess a lot of debate over ideas.

(Initial interview with Ben, Case 3, theme 6)

In the final interview Ben still had a similar conception of open discussion and debate. He explained that it facilitates his (and his students') awareness of the different points of view.

Yeah debate. Being aware of the things. Being able to take them on … [the ideas]. Not necessarily having to agree with them [other students' ideas], but just discussing or being aware of them.

(Final interview with Ben, Case 3, theme 6)

Also in the final interview Ben described harnessing in-class discussion in order to elicit concept recognition within the visual examples he utilised.

All right, watch this clip. Make a note of anything you see in here that relates at all to any of these concepts. Then after about 10 minutes, I'll go, ‘Okay, tell me what you saw’.

(Final interview with Ben, Case 3, theme 6)

**Expects student effort**

In the initial interview Ben discussed his expectation of students and explained that he did not expect anything from his students, other than they did not waste time and that they prepared for the class, although he was not perturbed if they did not.

I don't think I expect anything actually. If they rock up… I expect them not to waste my time or their time, or anyone else's time. Well it’s their time; they can waste if they want. If they rock up I prefer it if they had done the reading, I
guess I expect them to do the reading, but I am not surprised or agitated when they don't.
(Initial interview with Ben, Case 3, theme 6)

At the time of the final interview with Ben, he displayed little change in relation to his expectations of students. However, his view may be seen as harsher than it was at the beginning of the semester. He commented that if students did not wish to be in the class, he would prefer them not to be.

If you don't want to be here … I'd much rather you're not here, than be here rolling your eyes, because if you roll your eyes, it pisses me off! And that's not beneficial to anyone. And basically to do the minimum of what's expected of them.
(Final interview with Ben, Case 3, theme 6)

Later in the final interview Ben further exposed his low expectations of students by describing his reaction to student indifference to their learning, suggesting student learning outcomes were highly dependent on their personal goals and disposition to learn well. This stance tended to repudiate his responsibility to engage students in their learning, although it alluded to the idea that he held hope for students to take responsibility for their own learning.

Low expectation! If you want to shrug your shoulders and get all uppity, because it's not plain as day, and it's not directly related to what you want to do, because what you want to do is what you want to do and you're going to earn your 70 grand a year and that's what you want. You only get out, what you put in pretty much.
(Final interview with Ben, Case 3, theme 6)

Motivation

An analysis of Ben’s initial interview revealed that although he ascribed little importance towards motivation, he believed that he should assist students with the work they initiated themselves. He suggested that good teachers catalyse students' motivation with appropriate presentation of materials. He also felt that while it was not his job to motivate students, it was a derivative of good teaching.

I don't treat it [motivation] as very important, but I think it probably is, to an extent. If they're completely disinterested, then you can't really. I don't see it as my job to make someone do the work that they enrolled to do. I'm sort of, to assist them doing it or help them get the most out of the learning they initiate themselves. But to an extent you've got to make things sound exciting, and I guess by being a good teacher and throwing up ideas and making say, a reading become a bit more informed or a bit more complex or a bit more, you know, something they can often relate to real life or discuss with their mates down the
pub or something like that; then that becomes the motivation for them, I think in a way, but the initial point isn’t to motivate them. It’s a sort of by-product of good teaching, maybe.
(Initial interview with Ben, Case 3, theme 6)

By the end of the semester in Ben’s final interview he had changed his conception of the value of motivation and considered it to be of greater importance. He still felt that motivation was mostly the students' responsibility, but with good motivation students would have more fun, be more perceptive and achieve better outcomes.

It [motivation] is very important, but quite often pointless. You've got to get them interested in it, but sometimes, they're not going to, because at the end of the day, particularly with core units, there is other stuff that they'd rather be doing. And so you can only motivate people so much to make them do something that they don't want to do. It's good to make it relevant to them and make it accessible, but I'm not going to be an advertising executive and lie to them and tell them why it's really important or lull them into a false sense of necessity, by saying you have to learn this. At the end of the day if they don't want to do it, they don't have to. If they make that choice, then I'm not going to lose sleep over it.
(Final interview with Ben, Case 3, theme 6)

Yeah, and it [motivation] makes it more fun and people are then just more perceptive.
(Final interview with Ben, Case 3, theme 6)

Yeah, definitely. Starting from scratch with motivation people come up even higher [achieve more], I think.
(Final interview with Ben, Case 3, theme 6)

**Theme 7: Facilitating and organising Learning**

**Facilitator**

During the initial interview Ben spoke in simple terms with regard to how he best helped his students learn. He saw himself as an assistant to learning and he saw learning as a process that students instigate.

I'm, sort of, to assist them doing it or help them get the most out of the learning they initiate themselves.
(Initial interview with Ben, Case 3, theme 7)

However, in the final interview Ben gave a similar but more complex view of being a facilitator, making use of a ‘coaching the team’ metaphor.
Probably a better analogy would be a football coach that you know, gives them the basics, push in them in the right direction and sort of guide them towards what they want to be doing, but at the end of the day, if they go out and do it, it is their responsibility.

(Final interview with Ben, Case 3, theme 7)

During the initial interview, before Ben had developed an understanding of what it meant to be a facilitator, he bemoaned the way students did not engage with set readings and how this would regularly disrupt his teaching plan.

So it's 15 [students] that haven't (done the reading), and so you're like well, the plan is to discuss the readings. But there's no point. I'm not going to sit here and talk to five people, while 15 of you sit there and twiddle your thumbs. So it's sort of like get into groups and talk about something relevant and just tell me what you talked about at the end.

(Initial interview with Ben, Case 3, theme 7)

In the final interview, Ben still experienced disruption of his teaching plan due to ill-prepared students, but he now dealt with it in a more facilitating manner.

Like we're looking at post-modern style, so I go to the board and say, ‘tell me what's post-modern style’. And then just writing down, whatever they say, then, I'll go all right, we've pretty much got it all here. You know, these ones are particularly important.

(Final interview with Ben, Case 3, theme 7)

Between the initial and final interviews, Ben altered his approach and, by the end of the study, he actively drove the learning forward, rather than simply collapsing the task that had been disrupted by a proportion of the students.

**Responsibility for learning**

In the initial interview, Ben responded quite eloquently about the conception of students taking responsibility for their own learning, taking a quite sophisticated view of learning that was more concerned with the learning processes than the product.

… they should be driving their own learning more than anything else. You're not there just to say, here's a fact, there's a fact, put them in an essay and hand them back to me, but really encouraging independent research and critical engagement with ideas, and being able to look at something and whether you agree with it or not, argue either side competently. So I think a lot of this, and I guess there's a lot more to it than that. But these sort of ideas of independent learning with the guidance of lectures and tutors and stuff like that is really important, and I think it's the best way. Well, it certainly works best for me. If I go out to find something and I want to find it out myself. Then, it's a lot easier than just being told it. I guess there's a degree of… you get told something and it's quite easy to just say, ‘well, I've been told it so I'll remember it’ and then, you just forget it.
So, I find doing the work works best. You remember the process of finding of the thing out, and so that's more than just a memory.
(Initial interview with Ben, Case 3, theme 7)

In Ben’s final interview, when referring to students responsibility for their own learning, he displayed less tolerance of students who were lacking application and was more direct in his retort.

Yeah, and they are like, ‘we are confused’. But it's the norm, you know, everything is not easy. Some stuff's hard and difficult and sometimes you have to apply yourself to understand it. If you're not going to apply yourself to understand that I'm not going to cram it down your throat.
(Final interview with Ben, Case 3, theme 7)

Making a difference

In the initial interview Ben alleged a transmissive view of teaching that imparting knowledge was enjoyable and made him feel that he was influencing his students.

It's good. I liked the process [of teaching], because you're imparting knowledge, and you feel like you making a difference to these people.
(Initial interview with Ben, Case 3, theme 7)

Visual aids to explain abstract concepts

In the initial interview Ben describes using clips from well-known cartoons as visual aids to explain abstract concepts. He felt that using this kind of popular cultural media was an effective means of getting abstract concepts across to his students and, he explained, such resources had the additional benefit of injecting humour into the learning situation.

Yeah, and also just to make it more interesting. Because if you're just dealing with words on a page, particularly if they are core units as well. Then they're just, ‘I'm bored by this, so …’ So you just whack a bit of The Simpsons on and you know, have a laugh and they get the idea of it better usually.
(Initial interview with Ben, Case 3, theme 7)

Theme 8: Behaviour management

Boundary setting

Ben did not talk about setting boundaries in the initial interview but in the final session he described how he was often able to communicate classroom expectations and arrest inappropriate behaviour by using looks of disapproval.
The worst I've ever had, is that every now and again you'll get a couple (of students) on the side who haven't been part of the conversation, and I just stare at them for five seconds, and they see me staring at them and they just stop. I've never really had anyone really kicking up.
(Final interview with Ben, Case 3, theme 8)

**Culturally sensitive**

In the final interview Ben felt that having proximal age to his students and therefore a shared popular cultural allowed him to run an informal classroom that promoted a relaxed atmosphere which was more conducive to learning.

It's very informal and we are all coming from the same thing. Most of us are aged 18 to our late 20s, so we are in the same bracket. Popular culture is shared. All that sort of thing.
(Final interview with Ben, Case 3, theme 8)

**Flexible deadlines**

In the final session Ben revealed how his conceptions of managing deadlines was changing as he took on a more institutional role of a teacher in which he advocated less flexibility. He remarked that being over-friendly with students could affect the way he was able to manage deadlines.

A lot of them just coast through to get the pass mark or whatever. Which actually reminded me of another thing we do. That flexibility. Just being a bit too flexible, with respect to deadlines and stuff. I think a lot of that can come from being chummy as well. Like a student will say, ‘look, I’ve had a tough week.’ and you feel obliged to go, ‘don't worry about it mate’ just get it done we will be happy. I just want to see it in.
(Final interview with Ben, Case 3, theme 8)

**Knowing institutional policies and procedures**

Although from one end of the semester to the other, Ben had retained his relaxed social attitude, he was coming to realise that social ties with students tended to complicate the management of equitable deadlines. In the following two quotes, Ben was contextualising his stance and coming to appreciate that the effects of his teaching efforts are also part of the wider institutional objectives.

… which can be bad because it can undermine the lecturer or undermine other parts of the University, which I really shouldn't be doing.
(Final interview with Ben, Case 3, theme 8)

At the same time, there are those guidelines [university rules]. You've got to be aware of them, however flexible I am being.
(Final interview with Ben, Case 3, theme 8)
Theme 9: Assessments

Checking understandings

In the final session with Ben he commented on checking students' understandings in his tutorials, beginning with a discussion of the lecture in an attempt to identify anything that students may have not been able to grasp. His intentions to promote consistent understanding and assess student progression was sound but asking if students are ‘completely lost’ may be viewed as a somewhat ego-centred question and pointed towards conflict with the statement he made concerning learning priorities appearing as 'shelving egos', in Theme 3. Ben had some sophisticated ideas about teaching but still needed to refine how he put them into practice.

I like to start off with any questions about the lecture. Is there anything that comes out of the lecture … is there anything that happened in the last hour or two, that you're completely lost on?
(Final interview with Ben, Case 3, theme 9)

Targeted properly

In the final interview Ben emphasised the benefits of resources and examples which are well targeted towards their intended audience.

Yeah, and they [cartoon shows like The Simpsons] are good with this generations. That closeness and generation. You get a lot of older academics who don't know. It's like the episode of Get Smart or The Brady Bunch or Gilligan's Island, or something where I barely remember it. People three or four years younger than me aren't going to remember it. It's good to have everybody on the same page.
(Final interview with Ben, Case 3, theme 9)

Exams not effective

In the final interview Ben indicated he held a low opinion of exams that did not comprise a substantial component of a unit’s marks, as it encouraged students to put in less effort if they had already gained sufficient marks to pass the unit. However, he did not mention the exam structure or content. Ben did give his reasons for problems with exams but these reasons were mainly related to students.

The exams I don't think are particularly effective. Usually, because they're not worth much [marks] and students tend to not try, because they have already passed the unit, or they know they don't really need to get much from it. So marking exams… I have 95 exams to mark this semester, and there probably would have been about 55 fails in the whole lot, which is really appalling. And people getting like two or three out of 20, just in not trying.
(Final interview with Ben, Case 3, theme 9)
**Theme 10: Evaluates teaching practices**

*Experimenting with methods*

During Ben’s first interview he discussed experimenting with different methods in his teaching, portraying a willingness to bring new methods into his teaching, but he did not have a systematic approach to evaluating their level of success or failure.

If I come across something that I think is going to work, I'll pick it up pretty quickly. Pick it up and incorporate it pretty quickly, and if it doesn't work, then drop it if it works then keep it in. I guess that period of, ‘I really should include something like that’, usually isn't too long, because if something tweaks my interest and the enthusiasm is enough to, like that's good, you've got to get that in, and I'll do it straight away otherwise it will go in the basket.

(Initial interview with Ben, Case 3, theme 10)

*Evaluate one’s own teaching*

When Ben considered his conceptions of evaluation and reflection, he mentioned in the final interview that the findings of institutional surveys (UTEI) were dependent on the relative ineffectiveness of other teachers.

Doing the student feedback mid-semester… that was the class where I had the most positive feedback. So I guess also a lot of your effectiveness depends on how ineffective the people around you are as well.

(Final interview with Ben, Case 3, theme 10)

*Reflecting*

In the course of the first interview Ben described his thoughts on reflection and felt that he mainly used it to focus on what might be missing from his teaching practice. He did not demonstrate understanding of reflection as a cyclical evaluation technique.

Focusing on or becoming aware of the bad things that are in my practice as a teacher. The things that are being omitted particularly.

(Initial interview with Ben, Case 3, theme 10)

In the final interview Ben gave a more complex description of the reflective cycle. He now asked himself not only what was missing in his teaching, but also what was good and bad. Unfortunately, Ben was not fully completing the planning and improvement phases of the reflective cycle. He tended to lay blame on his students dispositions, labelling them as excessively needy. Ben did appear, however, to be at a cusp, needing only to take his reflection one step further to realise how he could use what he had already found out through his reflective process and, thus, to complete the improvement cycle.
Yes. I guess, having in this process [reflective practice] present over the semester has made the reflective process a bit more… I think it's always been there, it's just a bit more conscious. I found that after every tute I automatically just reflect on it. ‘Jeez. That was good. Jeez, that was crap.’ ‘Why did it work, or why was it bad?’ The unit, we had trouble with, which was a bit problematic… I had two classes, one after the other. The first class was sensational. The second class was terrible. They did nothing. They were like pole opposites [the two classes]. With a first-class, you'd go through it and you think ‘this is fantastic, it's great’, then the second class, it would be like walking through mud or banging your head against a brick wall. It was terrible, and at the end of the day. I thought, I've done nothing different, and I probably wouldn't do anything different. It was that this second class wanted to be spoon-fed or wanted to understand without thinking or trying to understand.

(Final interview with Ben, Case 3, theme 10)

Ben’s conceptions of reflection were still conflicted and he continued to somewhat pass over the benefits that are inherent in the process. He claimed to be reflective and explained that it helped to make him aware of what he was already doing. His conception of reflection emerged to be more of a process that was mostly internal rather than one which includes external evaluation and planning for his future teaching that might propel continual improvement.

Being aware that I am reflective? How beneficial, that is for me I'm not sure, but it did make me more aware of certain things that I was already doing, which can't hurt.

(Final interview with Ben, Case 3, theme 10)

In the final stage of this study Ben conceived reflection as a means of increasing his self-awareness of his teaching practices, but he required a further shift to encapsulate the entirety of the reflective cycle.

I guess, being a bit more aware of my own practices, which made the going through the activities of the [study's] web site easier. I have been more conscious of what I'm doing as a teacher. You probably coast along a lot of the time and just go by instinct, but then you do think, ‘This is what I'm actually doing here’.

(Final interview with Ben, Case 3, theme 10)

**Theme 11: Practitioner of teaching**

*A job*

During the initial interview Ben spoke of his conceptions of teaching in the light of his experience as a teaching practitioner. He noted that teaching had been his most enjoyable occupation and he wanted to do as much as possible. Ben also felt that others inaccurately perceived the good hourly rates of payment he received for his teaching
due to the fact that he was only paid during the time units operated - only half of the full calendar year.

Firstly, it's an enjoyable way to get paid. I think it's the only job that I had where I've actually enjoyed doing it and haven't… never takes me to the end of my tether. And I never like … you know, like shiftwork or something else. You know, extra shifts come up or something else comes up, and you'll make any excuse to get out of it. With teaching, it's always I want to do as much as I possibly can, because I enjoy it.
(Initial interview with Ben, Case 3, theme 11)

Like you tell people how much you're getting paid, and that's great but it's like there's only three months for a unit, and you get a big break over summer.
(Initial interview with Ben, Case 3, theme 11)

During the final interview with Ben he considered his perceptions of how teachers are viewed by the general community. He felt that there was a general respect for teachers that was similar to the esteem shown to doctors.

I guess, there is an expectation of teaching them the benefit of society. The community in general is hard to gauge. A sort of general respect … I don't know, you get the old stories of doctors being respected people. You tell people that you're teaching at university, you get a sort of class effect.
(Final interview with Ben, Case 3, theme 11)

**Competent to teach**

In the initial interview Ben considered he was a fairly competent teacher and was comforted by the positive feedback he had received from the student experience survey carried out by his institution.

Reasonably. I could be a lot more competent but I feel pretty comfortable with, whatever. Like I've never really thought about it … a particular level of myself in comparison with other teachers. But I feel pretty comfortable, where I'm at, and I'm pretty sure, my students … the students I've had, are you know … the unit UTEI or whatever the feedbacks always been pretty positive and the students always talk to me semesters after having taught them, so I feel pretty competent.
(Initial interview with Ben, Case 3, theme 11)

At the end of the semester in which this study took place Ben’s competence had been boosted by teaching in units that he had not studied formally and this had increased his confidence in feeling competent to teach in areas that he had previously perceived as being outside his domain of speciality.
I feel pretty confident that I’m competent, yeah. Especially after this semester I did [taught] a couple of units in public relations, which I've never studied in. It's loosely related to my thesis. So, they were sort of short of PR people and are they thought, we will get a theory person. So they asked around, and a couple of people suggested me, so they got me on. It was kind of good to step into something where I knew less than the students. So to be able to go in and do that reasonably well was kind of good. And that makes me feel that I am not just limited to what I already know.

(Initial interview with Ben, Case 3, theme 11)

**Confidence**

In the initial interview Ben exposed his thoughts on being confident in one’s teaching when intonating that having a high level of confidence was crucial in lessening the divide between ‘good and bad teachers’ and that students are likely to gain more from a confident teacher even if the teacher is less prepared.

I think that's the difference between good and bad teachers. I think. Well maybe not that much, but it's a big key factor. If you are nervous and you don't know what you're doing, then you're going to be crap. And if you are confident and you know what you're doing, even if you are not perhaps as well-prepared as someone who lacks confidence, they are going to get a lot more out of it.

(Initial interview with Ben, Case 3, theme 11)

By the end of the semester Ben described his confidence level as high, saying he thought he was a ‘good’ teacher.

I think I'm pretty good at it and I've got a lot of confidence doing it.

(Final interview with Ben, Case 3, theme 11)

Furthermore, the final interview with Ben brought out his thoughts about the external effects that he felt were induced by teachers having low confidence levels. Although this quote was also coded in relation to creating rapport with students, it is again presented to highlight his apparent perception of the connection between teacher confidence and the social effects of self efficacy.

Yes, it [confidence] is immensely important. If you're crapping yourself or feel like you don't know enough and you feel that you're not capable of doing it … it's like a shark with the sniff of blood. They're not going to be relaxed, unless you're relaxed. You've got to make them feel at ease.

(Final interview with Ben, Case 3, theme 11)

**Enthusiasm, loves to teach**

When discussing his enthusiasm for teaching Ben pointed towards enjoyment and remained comfortable within his physical capacity.
Firstly, it's an enjoyable way to get paid. I think it's the only job that I've had where I've actually enjoyed doing it and haven't ... never takes me to the end of my tether. And I never like ... you know, like shiftwork or something else. You know, extra shifts come up or something else comes up, and you'll make any excuse to get out of it. With teaching, it's always, I want to do as much as I possibly can, because I enjoy it.

(Initial interview with Ben, Case 3, theme 11)

At the other end of the semester Ben spelt out a similar attitude and noted that he felt good after teaching.

Because I actually enjoy it. I think I said in the first one [the first interview], it's one of the few jobs where you walk out of it and actually feel good.

(Final interview with Ben, Case 3, theme 11)

**Expert in subject matter**

In the initial interview Ben espoused that he found the best grounding for teaching a subject was having studied the same subject himself in the past. Interestingly Ben noted in his final interview that his confidence had increased after attaining successful results in teaching units he had not previously studied.

Probably the best experience is having done the course that I'm teaching.

(Initial interview with Ben, Case 3, theme 11)

**In my day**

In the final interview Ben mentioned problems with learning and assessment tasks which required the use of the internet. He felt that students had too many excuses as to why they had not done an exercise by a deadline. He held the line that some of the new technologically-dependent tools and resources lacked effectiveness and related how it was done ‘in his day’ which revealed he has yet to adequately acquaint himself with these new tools.

There's a big move to have assessment tasks using an online blogs, which I don't think as particularly effective. In my day, you'd have a page summary, and you handed it in at the start of the tute. If it wasn't handed in it wasn't done. Now, you've got a have a blog done the day before the tute. But, you know, 90% of them handed it in late. If you say you've got to have it in by this time and it’s electronic. People go, ‘Oh, the net was down’. There are just so many excuses.

(Final interview with Ben, Case 3, theme 11)
Practitioner teaching community

During the final interview with Ben he related his recent experience with unit evaluation concluding that there was an advantage to engaging in a communal process which evolved improvement.

Yeah, so things got better and evolved. Like we had a few meetings during the semester, where one of the full-time staff, said, ‘Why isn’t this working?’ How do you think we can make it better? So we’ve got that sort of communication going. And then about five or six weeks later, we had another one [meeting] and asked, how can we make this better? And how can we improve? That sort of thing. So that was the advantage.
(Final interview with Ben, Case 3, theme 11)
Appendix 10: Supplementary Findings from an Analysis of Personal Journals:

Case 3, Ben

In Activity 1, designed to introduce and catalyse the reflective process, Ben was asked to think back to his own experiences of learning. He thought it was most effective to be self-directed via the facilitation of teachers rather than to be fed information.

I find that the most effective teachers were those who could direct my learning more so than inform it … Those teachers who encouraged my own research and discovery were generally those I considered to be the ‘better’ teachers. (Journal, Ben, Case 3): Activity 1

Ben's thoughts on learning and teaching revealed his ideas about a separation of learning from classroom teaching. As he mused over how he saw reflection distancing teaching from learning, he was exposing his conceptions of teaching and learning as knowledge transmission and acquisition, respectively. The following quote shows that Ben also felt that the good teacher moved further by motivating and developing students’ learning skills. Although, he equated learning with knowledge acquisition Ben seemed well aware of the development of the mechanism by which the individual comes to acquire knowledge.

In part I think this kind of teaching nurtures the reflective process in that it distances teaching from learning. That is learning becomes less restricted to the confines of the classroom but rather something that occurs in your own space, giving you time to consider concepts and reflect upon them in relation to personal experience and any research you have conducted own your own. From memory any strong academic ideas be they arguments, counter arguments or unique applications of specific concepts has, for me, occurred on busses, in pubs, in the shower, rather than in the classroom. For me I think the role of the teacher is to stimulate this aspect of the student's mind, the result being not only the acquisition of knowledge but also the development of the mechanism by which the individual comes to acquire the knowledge. (Journal, Ben, Case 3): Activity 1

As Ben began to reflect on his own teaching, he saw it as beneficial for a teacher to be youthful and therefore able to relate more closely to the student experience and break down hierarchies of power. Ben again revealed that he was very concerned with teachers making students comfortable in the learning environment.

In reflecting and observing my own teaching practices I rely largely on my experiences as a student. In this sense I am reasonably lucky in that I am still in my mid-twenties and can still identify on a more everyday level with students … I believe this helps to break down a lot of the assumed power hierarchies. (Journal, Ben, Case 3): Activity 1
Still during Activity 1, Ben places his own expectations of his students' learning to be higher than his students.

Personally I find that the majority of students, even the good ones, are lazy, uninspired, goal orientated (in that their final mark is the only indication of learning), and conservative.

(Journal, Ben, Case 3): Activity 1

Ben then offered his ideas on what teachers should do about students’ self-esteem. He saw it as critically important to give extensive feedback and that letting students know both the good and the bad aspects of their work was essential for them to go forward with increased confidence which also led to greater enthusiasm.

Student self-esteem is a primary concern for me when teaching. It is incredibly common that students don’t answer questions out of fear or that students answer half a question and then trail off before completing it because they fear they are wrong … I feel that feedback particularly with regards to assignments is crucial … in particular I feel it is important, especially on the weaker assignments to reinforce the strengths as well as point out where the work fell down … I think when students know they have done certain things well and the mistakes the made are easily rectified then they are more enthusiastic come the next assignment for the reason that they more confident of what they can do

(Journal, Ben, Case 3): Activity 1

In Activity 2, Ben related his theory of teaching. He sided with a Socratic style, which relies on discussion, asking and answering questions, critical thinking and logical thought. This was also evident throughout his comments about Activity 1 which were often focused on how well students answer questions.

I guess in harmony with much of my previous learning at … my teaching method is probably best described as largely Socratic. In essence I don’t see my role as being primarily that of imparting knowledge, but rather guiding learning. In part I don’t see information/facts theories as being the sole aim, though they are central, but rather a way of thinking critically about the theories put to them as well as the world itself. Though at the same time I do try to be flexible in relation to the unit itself and its content, realising that not all units and not all material can be taught in the same way. In my view this is also how good university teachers teach: informally and with a view to learning skills as well as information. Learning should not be considered as something that occurs exclusively within the classroom.

(Journal, Ben, Case 3): Activity 2

As Ben responded to questions about the differences between above average and average teachers, he felt good communication was at the heart of the differences by
making materials accessible and relevant. Again Ben spoke about growing student confidence and good teachers making themselves available outside of class times.

I think largely the distinction comes through communication skills. That is, those teachers who excel make the material both accessible and relevant to each individual student at their specific level… Following on from this, those teachers who make themselves available for extra consultation help to encourage students to work on their learning and at the same time allow for nuances in student confidence to be integrated into the learning process.

(Journal, Ben, Case 3): Activity 2

The comments Ben made in his journal for Activity 2, regarding how learning occurs inside and outside the classroom, and his comments about students’ self-esteem and confidence, showed that he was considering how learning and teaching occurred beyond the traditional cognitive learning domain within a tutorial or lecture room. The last part of Activity 2 that Ben responded to was his response to the question about how he could improve his teaching and what support he would need. His reply mainly concerned his own levels of knowledge and how they could be improved. This concern did align with his earlier proclamation of a mainly Socratic method of teaching. He indicated that he held conceptions of learning and teaching that were concerned with learning as acquiring knowledge and his view of teaching was based on acting as an expert to answer questions. Ben’s responses to these activities indicated that he had not yet developed a multi-dimensional conception of teaching which extended beyond providing facts and answering questions. However, it’s interesting that, although his conception of learning was very much focused on the acquisition of knowledge, he also showed awareness that learning can happen in informal and formal settings, and that self-confidence and self-esteem impact on the learning process.

Ben felt self-doubt and had less confidence when he was not in possession of all the facts. He remarked that his youth was related to this problem. He added that he did have the resources to remedy the issue.

Primarily I feel my own knowledge of the field is one area where my teaching could really evolve. I guess part of this comes from being relatively young, but my only real regret I get after teaching is when I know I could have (and perhaps should) have known more about a certain area. I think this is important as it can help to develop the discussion in class if you introduce a similar theory or a particular criticism of a theory. I also see this as a problem that I can fix personally and have the available resources to do so.

(Journal, Ben, Case 3): Activity 2
Again, his reflections about these issues suggest that his conception of teaching was focused on providing facts to his students. He saw that his collation of information would improve as he came to ‘know more’. Discipline knowledge was important to him but these comments indicated he had a fairly quantitative view of teaching (Biggs & Moore, 1993; Samuelowicz & Bain, 1992) in that he believed teaching involved providing information and answering questions about information.

Ben did collect some data about his own teaching through the mid-semester review questionnaire administered to his students. Unfortunately, Ben did not offer any analysis or reflection on the information he collected and so we miss any insights or improvements he might have uncovered. This practice is commensurate with his ability to reflect, as demonstrated throughout the study. Instead of engaging in the full reflective cycle, Ben focused mainly on the early stages of reflection and had yet to bring his reflections to a point where they could be put into practice in a way that aligned with his beliefs. The incomplete nature of Ben’s journal prevented the opportunity to fully evaluate his ability to engage in reflective practice. Likewise, the manner in which he presented his journal also made it difficult to gain a greater sense of how his conceptions of teaching developed, as he moved through the program's activities.
Appendix 11: Interpretations and Representative Quotations from Interviews with Case 4, Anita

Theme 1: Awareness of conceptions of teaching

Aware of gaps in teaching practice

In the initial interview with Anita, she revealed concerns that she had no formal teaching qualifications, her conceptions of teaching were vague, and she wondered how she would develop better practices.

So that was one of my biggest fears in becoming a sessional was that you don't have that (a formal teaching qualification). It's probably not quite as necessary in teaching adults as it would be for children, but even so there are obviously best practice and good techniques for teaching which I'm not aware of, so I go to as much training as I can. I practise my techniques and I'm still working on them. (Initial interview with Anita, Case 4, theme 1)

Different teaching styles for different learning styles

In the final interview Anita mentioned theories from both readings and reflective practice, both of which she was exposed to during the intervention in the activities on the RPW. Anita connected both theory and reflection in a statement that illustrated her greater conceptual understanding. She exhibited a desire to practise her teaching in a theoretically responsive manner and, furthermore, she suggested she could utilise reflection in the process.

Try and look at your teaching style and try and deliver it in different ways and try and reflect on it. (Final interview with Anita, Case 4, theme 1)

In another moment during the final interview, Anita revealed her increasing conceptual complexity when she spoke of many attributes that made students different. She commented on the difficulties of teaching when there are so many different types of learners with so many different ways of thinking. With her new awareness of different learning and teaching approaches, Anita was now beginning to conceive how important it is to accommodate for student differences in her teaching.

There's such a wide variety when you look at this sort of groups that we are dealing with. You've got different age groups, different nationalities, different cultures, different religions and stuff and to try and start homogenising is just ridiculous and impossible. (Final interview with Anita, Case 4, theme 1)
Conceptions changed

In the final interview Anita offered a more complex view of how she would continue to tackle her ongoing development. She now intended to use reflective practices to evaluate her teaching and to seek ways of continual improvement.

I think, just keep on reflecting and keep on looking what you're doing. And keep on keeping up-to-date. Keep on talking to other people. Always be open to change in the way you're teaching. Yeah, and just looking how you can always improve, and I've always been like that. I think continual development is so important, whatever you do.

(Initial interview with Anita, Case 4, theme 1)

Theme 2: Sees teaching as a social process

Encourages active learning

When it came to Anita’s initial thoughts on teaching as a social process and the interactions between teacher and students, she felt that the typical student attends lectures and tutorials, listens and submits their work, but that she would prefer there was more active collaboration.

The basic student attends and listens and hands in their stuff, but I would more like them to participate and be there actively working and collaborating between one another.

(Initial interview with Anita, Case 4, theme 2)

Anita's response in the initial interview about teaching as an active and social process showed she had some understanding of the potential learning power of social interactions in learning environments. In the final interview she offered a similar response to how she thought about the encouragement of active learning, but her explanation included ideas that were infused with a greater understanding by incorporating references to different teaching techniques, students' social backgrounds and student levels of confidence. Importantly, Anita gave recognition to fostering engagement beyond simple delivery and moving students towards active and collaborative learning. Moreover, at the end of the semester Anita looked back and reflected upon the results of the student experience evaluation surveys and attempted to analyse and learn from them.

And just trying to get them engaged rather than just delivering the material. I think it's important to really get them to try and participate and get them in a more active role than a passive role, and that is so hard. We tried different techniques this semester to do that. And some of them respond to it better than others, and it depends on their cultural background as well to a large extent, and
to their confidence levels as well. From my results, I looked at the fact that the tutorials, scored higher than the lectures, which you can interpret different ways. I felt that they preferred the tutorial type of style, where they get involved and they do collaborate and stuff. Whereas the lecture is just delivered and is passive.

(Final interview with Anita, Case 4, theme 2)

**Theme 3: Developing minds**

*Caring, nurturing and developing minds*

As Anita considered the nurturing and development of student minds in her initial interview, she very simply felt that a good teacher had to care about students.

Care, you've got to care about them.

(Initial interview with Anita, Case 4, theme 3)

In Anita’s final interview she again brought more ideas and complexity to her answers. She became more conscious of nurturing from a teaching perspective.

I think I do try to nurture. I wouldn't have thought of teaching as nurturing previously, but I suppose there is a nurturing sort of side.

(Final interview with Anita, Case 4, theme 3)

*Generic skill development*

Initially, Anita felt that teachers should strive to develop students’ generic skills, but did not elaborate on what this meant.

They've also learnt how to collaborate in their groups and so on.

(Initial interview with Anita, Case 4, theme 3)

In the final interview, Anita offered a greater depth in her description for generic skill development, including the practical difficulties that teamwork introduces and, its learning goals and objectives. Her tendency to include more educational terminology denotes a deepening understanding of the intricate connections between theories and practice or processes and outcomes.

I'm also a strong believer in teamwork as well. I know there are all sorts of issues with it such as, teamwork assessment, but it really does develop them for the future and industry.

(Final interview with Anita, Case 4, theme 3)

The whole thing with the generic life skills, I think is excellent and to do with graduate attributes. So, I totally agree with doing that.

(Final interview with Anita, Case 4, theme 3)
Caters for individual needs

Anita’s initial conceptions of catering for students’ individual needs centred around individual communications and tuition.

As I say, I try to communicate with each student individually in each tute [group tutorial].
(Initial interview with Anita, Case 4, theme 3)

When it came to Anita’s final thoughts on the individual needs of students she had consolidated her ideas to be more considerate of what would be realistic and time-feasible in practice. Whereas in the initial interview Anita saw a need to spend time with every student in every class, by the final interview she related that she needed to distinguish them as individuals, but no longer saw the need to visit them all separately. This stance seemingly increased the responsibility Anita was transferring to students for their own learning.

Try to see them as individuals. Try to see that they do all have their issues and problems and stuff. So some of them might be struggling, but there may be real reasons for it, but we don't have to have one on one meetings to deal with every little bit.
(Final interview with Anita, Case 4, theme 3)

Never giving up on a student

Anita did not like to categorise students, in so far as she wanted to avoid always thinking of them in one way. Her broader conceptions showed movement beyond initial encounters.

So I try not to preclude them or try not to say, ‘Oh, well, it's only first year.’ I try not to put them in a box.
(Final interview with Anita, Case 4, theme 3)

Student-centredness

By the final interview Anita was trying to allow for the different perspectives and points of view held by students and thought that these differences should be respected rather than suppressed and standardised.

There's such a wide variety when you look at this sort of groups that we are dealing with. You've got different age groups, different nationalities, different cultures, different religions and stuff and to try and start homogenising is just ridiculous and impossible. You have to respect to get along. You're not here to change them and they will probably go back.
(Final interview with Anita, Case 4, theme 3)
Theme 4: Fostering understanding

**Imparting knowledge**

At the end of the semester Anita gave an indication of the level of expectation she held for her students, with the main components being their commitment and level of effort to take their understanding to a higher level.

I expect the commitment that they will at least try to achieve a certain level of expertise or knowledge by the end of the unit.

*(Final interview with Anita, Case 4, theme 4)*

**Deep understanding**

In terms of her ideas about fostering understanding, Anita proffered the impression that deep understanding was signified by students’ remarking on their understanding or sound knowledge acquisition.

I actually get a big buzz out of people saying to me … That really makes sense now or I really understand that now. But I actually get a lot out of being able to develop them further than just the course.

*(Initial interview with Anita, Case 4, theme 4)*

By the final interview Anita had increased the complexity of her thoughts about deep understanding. She now felt that not only the acquisition of knowledge, but also that the assimilation of new with old knowledge was a way of judging deep understanding. This expanded conception appeared to be leading her towards fostering more depth and breadth of a student’s investigations and to expand their ability to use new knowledge.

Learning is obvious when it has had an impact on the learner … on the person and they have actually taken something in and they have assimilated it or whatever and they have actually done something with it.

*(Final interview with Anita, Case 4, theme 4)*

**In-class activities to reinforce new material**

In Anita’s initial interview she discussed using in-class activities to reinforce new material, sighting that clarification and discussion as being useful.

I just briefly go through that, then I generally try to ask them if there is anything from the lecture that they want to discuss or they want clarified. Have a quick discussion on that.

*(Initial interview with Anita, Case 4, theme 4)*

In the final interview Anita showed increased understanding and, with the help of evaluation results, she considered strategies for improvement in her practice.
I was thinking and reflecting about the lecture delivery and because the lectures didn't do as well as the tutorials (in the mid-semester review questionnaire, or the UTEI's), I was trying to think of ways to integrate the two. So that you are not just delivering material. Especially in a small room because there is only… if you're not in a big lecture room. Then there's a possibility of maybe, doing four or five slides, and then doing some review. This time, we had been doing the lecture and then review questions afterwards in the tutes. I thought maybe integrate that, so they're not just sitting there passively.

(Final interview with Anita, Case 4, theme 4)

**Connections between various opinions and ideas**

Anita mentioned two aspects of the theme, fostering understanding in the final interview that she did not refer to in the initial interview. She believed that encouraging connections between various opinions and ideas were important and that it was important to expect students to have intentions to increase their knowledge during the unit.

I do believe in the concept of making them think about other viewpoints.
I always get them to do that.

(Final interview with Anita, Case 4, theme 4)

**Theme 5: Preparation and materials**

**Preparation**

Anita talked about preparation throughout both interviews. In the initial interview she seemed to be centreing on preparedness as being up-to-date and having all the materials available and functional, which for Anita was seen as a mainly technical issue.

I think being up-to-date, but showing that you are prepared. You come along and you have all your materials up-to-date. You've got it all there and it's working.

(Initial interview with Anita, Case 4, theme 5)

Anita still felt similarly by the final interview, but she gave a response that included a possible solution, which showed a reflective way of thinking.

… there should be some sort of procedure, where all the materials should be there at the beginning of the semester. So you can prepare. Sometimes I get materials sent to me the night before, or not at all. So I go to the tutorial, and I don't even know what I am supposed to do. Now I find that really annoying. I don't go in unprepared. I do my very hardest not to go in unprepared, but sometimes I've had to turn up when I don't actually know what's going on.

(Final interview with Anita, Case 4, theme 5)
**Authentic materials and tasks**

Anita felt in both the initial and final interviews that exams should be ‘properly targeted for the audience’. She saw the passing of exams as ‘needing to get through to the next phase’ and that the community and parents were ‘looking for their kids to get through exams’. As with most of the themes employed to uncover Anita’s conceptions of teaching, in the final interview, she extended her interpretations to include the need for tasks and materials to be authentic, although she thought they should be provided within a somewhat protected learning environment.

I suppose it's trying to deliver material to them in a way that is real for them and authentic for them… and having an environment where they feel comfortable to have a go at it. So giving them that safe environment to have a go at it, and where possible, set it in an authentic setting.

*(Final interview with Anita, Case 4, theme 5)*

**Resources available online**

Although Anita did not mention online resources during the initial interview, by the final interview she recognised the burgeoning of online resources for students. It appeared that she was appreciating this as a means of materials being made available for learners in a useful and timely manner.

I suppose we’re really getting into this online learning, aren't we? Blackboard is the new thing, like online learning and resources and stuff. I get the impression that is a lot more online stuff going on and a lot more resources made easily available to the students.

*(Final interview with Anita, Case 4, theme 5)*

**Theme 6: Engaging students**

**Expects student effort**

At the beginning of the project Anita spoke about her expectations of students which were were linked to student effort and it seemed that she was prepared to give them time in a one-to-one session only if the student had put in the expected level of effort into their work.

I expect them to work hard. As long as you're working I can give you one to one and stuff.

*(Initial interview with Anita, Case 4, theme 6)*

In the final interview Anita provided more succinct explanation for her thoughts, although she still saw her expectations of students to be centred on behavioural and
classroom issues, and did not mention her expectations with regard to how well students might fare scholastically.

But what I'd expect from you then, is that you don't bring your mobile phones in and if you do, then you turn them off, or you tell me at the beginning that you've got an emergency at home...do you know what I mean? What I really expect from them is to be professional about their attendance, to put in the hard yards and so on.
(Final interview with Anita, Case 4, theme 6)

Motivation

With regard to motivation, inspiration and fun, Anita confided in the first interview, that she used humour in her teaching as a catalyst for initiating student reactions.

I tend to use a lot of sense of humour and make it fun and then get them to react to me and whatever.
(Initial interview with Anita, Case 4, theme 6)

In her final interview, when asked about her thoughts about motivation, Anita suggested that promoting student interest provided a means of motivation. Her idea demonstrated some capacity to operationalise her teaching conceptions.

Oh, God, you've got to motivate, you've just got to. It is absolutely crucial, yeah. Peak their interest.
(Final interview with Anita, Case 4, theme 6)

Theme 7: Facilitating and organising learning

Facilitator

In the initial interview when Anita was asked about teaching and facilitating learning she struggled to express her understanding of the educational language.

You can talk about teacher and facilitator and all that different sort of terminology, I mean ... but ummm ... That's hard actually.
(Initial interview with Anita, Case 4, theme 7)

By the final interview Anita offered a more sophisticated view of facilitation, explaining that good teachers should not just hand feed students factual knowledge or coach them to the pass level, but be able to suggest fruitful avenues for discovery and encourage them to learn for themselves.
Learning to actually get them to do that [discover knowledge] is hard because it's tempting just to give them stuff all the time. But I think if you're good, you should at least be able to know where they can go and get it. It's basically sending them off in the right direction.

(Final interview with Anita, Case 4, theme 7)

**Responsibility for learning**

Furthermore, in the final interview, Anita felt that although she wanted to treat students as adults, experience had told her that there was a need for fostering the transition from high school to university learning environments and that the driving force behind this revelation was the need to encourage students to take on responsibility for their own learning.

I particularly didn't want to treat them as children. I made a point of not doing that the first time with the first years, but then realised that that was a mistake, because they haven't developed from that high school to university and taken on more responsibility.

(Final interview with Anita, Case 4, theme 7)

**Making a difference**

In the initial interview Anita saw making a difference as an issue that was central to herself and her personal enjoyment of the teaching task.

Yeah that was the first experience of first year which is another issue again. But no, I actually get a lot … I get a kick out of it, I get a lot out of it, actually being able to make a difference to it.

(Initial interview with Anita, Case 4, theme 7)

By the final interview Anita’s views on making a difference included improving her students’ learning experience and revealed that she had now shifted her conceptions of teaching towards a more student-centred approach. Where she had been concerned with what teaching gave her, she had become more concerned with how she could make a difference to her students.

I just think if you can make a difference for them, and you're good at it, then you should do it. And it's nice to be able to make a difference to a person's outlook and to make their experience worthwhile and enjoyable.

(Final interview with Anita, Case 4, theme 7)

**Contactable out of class**

Initially Anita represented the theme of facilitating and organising learning as coaching and being contactable outside of class.
I do say to them that I don't have an office here, but that doesn’t mean you can't get hold of me. You can get back to me by email and I'll get back to you within 24 hours. I've always said that to them. I could give them my mobile, but I haven't gone down that route because I've found I can get back to them. I'm normally here every day so I can email straight back to them and make arrangements to meet them and sort things out.

(Initial interview with Anita, Case 4, theme 7)

In the final interview Anita gave a conceptually similar retort as in the initial interview, when she says that although not having an office creates difficulties, students are still able to contact her outside of class by email.

Case 1 final: but now that I'm at the other end of that, I'm thinking, yeah. It's very difficult when you don't have an office for them to come and see you at. You do have an e-mail address, and I do always say to them. I'll get back to you within 24 hours, and I always do. Very rarely do I not. Obviously, during the weekend, it's different, but, they can still contact you and you can give them some feedback and guidance.

(Final interview with Anita, Case 4, theme 7)

**Theme 8: Behaviour management**

*Culturally sensitive*

In her initial interview, Anita thought there was a need for cultural sensitivity; helping those from other cultures to feel more comfortable interacting and trying to learn more about their ideas.

You don't need to put your hand up [laughs]. I feel for the Asians especially. Like, my name is Anita, because they do find it difficult, you know. They still call you ‘Sir’ or whatever. Just trying to make them feel comfortable and bring up other areas and discussing them and saying how do you feel about these, you know. You know, well they're there to learn aren't they?

(Initial interview with Anita, Case 4, theme 4)

In the final interview she was seeing awareness of cultural differences as not only important both for teachers and students, but cross-culturally as a staff member of her institution.

Internationals are a big percentage of our students, so you have to have that sensitivity to other cultural ways…. They find our [learning/teaching] style, quite difficult.

(Final interview with Anita, Case 4, theme 4)
Knowing institutional policies and procedures

Anita relayed difficulties she had with the behaviour of a past student and showed concerns for not being sufficiently aware of the procedures to deal with the situation.

Not knowing the procedures and the policies was actually difficult for me, because I didn't really know what to do with him. I didn't know whether I should have called security, whether I should have got someone or what I should have done. I was just concerned about, obviously, the safety of the other students. I sort of sensed it was ok and it was okay. But yeah… it would be better to know a little bit more about what you do in this sort of situation. And if somebody did have an outburst, and you did have a problem, what do you do?

(Initial interview with Anita, Case 4, theme 4)

In the final interview Anita thought she understood more of her institutions policies. With regard to behaviour problems she thought it was something that should be part of the university's induction program.

It's probably our responsibility to go in make yourself familiar with that, but I think as a new tutor that you should have to go through something like that in induction. Health and safety yeah…. I do have a better knowledge of the university and the way they want us to work, but I still don't always feel totally a part of it really.

(Final interview with Anita, Case 4, theme 4)

Theme 9: Assessments

Achieving certain levels

In relation to assessments, Anita’s initial notions were somewhat loosely formed with open-ended goals. She wanted her students to emerge from the learning experience successfully, but she found it difficult to gauge that success.

I get a big buzz if they have achieved something. It doesn't have to be what you're trying to achieve in that tutorial or workshop, it's nice if they come away with something and um...You want them to do well.

(Initial interview with Anita, Case 4, theme 9)

Although the learning objectives still remained somewhat open-ended in Anita’s final response, she articulated particular outcomes and articulated on the qualities of what she wanted students to emerge with.

To increase their knowledge, ability and skills in the subject. To strive to be good at what they do and come out fulfilled.

(Final interview with Anita, Case 4, theme 9)
Theme 10: Evaluating teaching practices

Evaluate one’s own teaching

When talking about the evaluation of her own teaching, Anita initially spoke of feedback as something she obtained from her students.

Not just demonstrating and presenting. It's very much like, a small chunk and then get some feedback from them and then a bit more. Really get some feedback rather than standing there and talking.

(Initial interview with Anita, Case 4, theme 10)

In the final interview Anita had (with the aid of her unit coordinator) developed a deeper sense of evaluation with a greater regard for her own practice and the successes and failings of the unit she taught.

He is brilliant, you suggest stuff, and he's really receptive. In fact, he encourages that sort of feedback so he can make changes all the time, it's great. Yeah. And they will ask … well, not all of them … but most of them are to a great extent … they will always sit down afterwards and discuss what we can do better. It's good.

(Final interview with Anita, Case 4, theme 10)

Reflecting

When communicating her ideas on reflection Anita felt that there was value in reflection but the issue of time was a constraining factor which sometimes prevented her from reflecting regularly.

If it works you want to use more of it. If it's got good results then you want more of it or develop that technique, or if something has gone wrong … well, not gone wrong, but that was flat or that wasn't particularly brilliant. It's like what can I do to improve that. So yeah, it's [reflection] really valuable. The problem comes with sitting down and giving yourself time to do it.

(Initial interview with Anita, Case 4, theme 10)

By the end of the study and during the final interview Anita said she was reflecting more frequently and intended to continue to do so. She felt her engagement in the program of reflective practice had caused her to deepen her appreciation of reflective practice.

You know this has made me realise. And I do reflect because I am a reflective person. I think I probably should reflect more. This has been useful (The Reflective Practice Project), and because it actually makes you do it. You probably tend to reflect when something's gone wrong. You don't tend to reflect so much when things go well. So, I think that's been quite useful in that I can sit down and think about it, and what you do, do right, made me think. How do I do
more of that? So, more reflection would probably be good.
(Final interview with Anita, Case 4, theme 10)

Immensely. I think it would good to spend some time after each one (each teaching session in each unit)
(Final interview with Anita, Case 4, theme 10)

It was good, and the fact that it did… once you actually did sit down, that was my problem with getting that time. Once I actually did sit down and do the activities it did make you think about stuff, and I did make you reflect, and start to consider how you could improve your teaching and stuff.
(Final interview with Anita, Case 4, theme 10)

In the final interview Anita also alluded to the importance of reflection, to talk to others and be open to making changes to her teaching practice. She further demonstrated how she saw the worth of reflective practice and the loop of continual development it could enable.

I think, just keep on reflecting and keep on looking what you're doing. And keep on keeping up-to-date. Keep on talking to other people. Always be open to change in the way your teaching. Yeah, and just looking how you can always improve, and I've always been like that. I think continual development is so important, whatever you do.
(Final interview with Anita, Case 4, theme 10)

**Theme 11: Practitioner of teaching**

**Confidence**

When Anita spoke of her confidence in her ability to teach in the initial interview she seemed to have fairly low confidence.

My weakness is experience. I mean I've only been teaching for a year and a half.
(Initial interview with Anita, Case 4, theme 11)

Also, in the initial interview Anita considered how her confidence might be fostered, she remarked that a mentoring process would be appreciated.

The mentoring probably from others. It’s the confidence building.
(Initial interview with Anita, Case 4, theme 11)

In the final interview with Anita she seemed more confident than at the beginning of the study when she linked her teaching competence to being confident and in turn she linked her confidence to preparation.
I feel competent. I do feel competent, probably because I am confident. Which has taken time. I feel competent. I never ever go to the lecture or tutorial, without preparing at least one or two hours each week.  
(Final interview with Anita, Case 4, theme 11)

**Teaching experience**

By the final interview Anita came to a greater insight when it came to dealing with the complexity of practical teaching situations. She felt that experience was the a good teacher.

I feel like you would have to have experience. You have to have a big grab bag of skills that you feel you can use competently.  
(Final interview with Anita, Case 4, theme 11)

**Practitioner academic**

Anita mentioned in the final interview, she has heard people talking about sessional teachers in a way that suggests they are of lesser importance than the full-time teaching staff. Although she does not feel this way, she was upset by the idea that some people do.

The whole feeling I get now is that we are secondary. Not with all the people I deal with on a day-to-day basis, I don't see it like that. A lot of people don't realise that I'm sessional, but I've heard some stuff about 'you're only sessional'. I have heard this and it's not good. It shouldn't happen at all, and it really put me off.  
(Final interview with Anita, Case 4, theme 11)

**Practitioner teaching community**

During the final interview Anita responded to how a mentoring process could be catalysed. She felt that a casual, collaborative approach would work for her.

I think that just knowing whoever you are working with has got the door open and you can go in and talk with them any time and you can collaborate. You can get some feedback from, you can get their opinion, and just feed off each other, and that really works well for me.  
(Final interview with Anita, Case 4, theme 11)

**Sessional feeling non-academic**

In the initial interview, Anita also mentioned issues which surrounded being marked as a sessional teacher and being distanced from the full-time academic teaching staff.

I almost feel sometimes, well, I'm not academic staff. You know what I mean, because we are sessional. You don't get made to feel ostracised, but you do sort
of know that you're sessional not academic. So, it would be really good if they brought something where they brought everyone together and showed everybody and talked like as if like we are all part of the academic team.
(Initial interview with Anita, Case 4, theme 11)

This was further elucidated in the initial interview while talking about being an academic practitioner that sessional teachers tend to operate in isolation compared to their full-time colleagues.

Bringing the sessionals [sessional teachers] together would be really good.
(Initial interview with Anita, Case 4, theme 11)

**Teaching as performing**

During the interviews with Anita, the theme of ‘practitioner of teaching’ was raised on quite a few occasions. In the initial interview she felt that a teacher’s performance is difficult to sustain and control.

Well, it’s hard to create a stream of reality in a performance. It’s easy to say on a piece of paper that we will do this for ten minutes and we will do that for ten minutes, but it only took you five seconds to write that. There’s another 9 minutes and fifty-five second to go in the actual activity and to keep that stream of consciousness for a whole room of different thinkers … is pretty hard.
(Initial interview with Anita, Case 4, theme 11)
Appendix 12: Supplementary Findings from an Analysis of Personal Journals:

Case 4, Anita

When Anita recorded her ideas about her own learning experiences, she wrote of mentors being important to her and her wish to bring this experience to her own students.

I realise that I have been strongly influenced by mentors throughout my learning experiences… This has been extremely important to me, especially at certain times of my development. I hope that I am able to get a good mix with my own students.

(Journal, Anita, Case 4): Activity 1, Published 29/08/05

She identified her own learning style and then recorded a question to herself about how she could adapt her teaching to the different learning styles of her students. Interestingly, different learning styles and different teaching approaches was the subject of one of the theoretical reading offered early in the intervention activities.

I am a very self-directed learner, but this is not the same for all students and this is something that I am trying to deal with. How do you tailor your teaching to accommodate for both self-directed and those that wish to be lead in their studies?

(Journal, Anita, Case 4): Activity 1, Published 29/08/05

Anita voiced thoughts about the disposition of learners at different levels. At this point her notes revealed a relatively lower level of complexity of ideas, but she was talking about differentiating instruction to accommodate different student levels.

There is a distinct difference between 1st and 3rd years, which as a facilitator you have to take into account between different units, but also within same group you have mixed ability and mixed levels of dedication. How do you tailor your teaching to accommodate this? (I am actually having some good ideas on this now…. offering materials at different levels, some material for those who are ahead and giving some individual attention and then concentrating on those at the lowest level).

(Journal, Anita, Case 4): Activity 1, Published 29/08/05

At the end of activity 1 Anita considered what it was to be a student. Her main comments were about students being individuals with individual needs, different learning styles and using differing teaching approaches. She also recorded that she was currently reflecting on these ideas, which illustrated use of a more formal reflective practice process.
Above all a student is an individual with individual needs and requirements, responds to their learning in different ways and will have varying degrees of aptitude and application, which is a reflection of their previous experiences, their backgrounds and their prior learning. Obviously this is the argument for tailoring learning to compensate for this individuality and needs a lot of careful thought and preparation and is not always easy in a full class of students….This is something that I am actually reflecting on at this moment.

(Journal, Anita, Case 4): Activity 1, Published 30/08/05

Then, in activity 2, Anita explained her theory of teaching as follows.

I now try to base my teaching on a student-centred approach, where I act as facilitator rather than ‘teacher’.

(Journal, Anita, Case 4): Activity 2, Published 12/09/05

Further along in this post Anita revealed that her conception of constructivism held some of the theoretical components, but still did not have a well rounded understanding of its broad application, as shown when she relegated constructivism to be more appropriate in tertiary teaching than in other teaching contexts.

I base my teaching on a constructivist approach, as this is more appropriate for tertiary teaching… in tertiary environment we should be encouraging students to construct their own learning… important to provide the necessary material, equipment, resources… The difficulty with this is… students who have not yet developed… responsibility for their own learning.

(Journal, Anita, Case 4): Activity 2, Published 12/09/05

Although she showed the beginnings of reflective thought, Anita was not yet taking the reflective process through to the later stages of a cycle of improvement. She noted to herself the idea of talking to students about their attitude to the responsibility of their own learning, thus exposing her realisation that she could better guide learners on how to think about their own learning process. However, she did not connect her own responsibility to foster and facilitate this by teaching metacognitive skills to her students.

I encourage students to investigate and do their own research by suggesting areas of study, approaches to their learning. I am sometimes disappointed by their response to this, as some do not seem to want to take responsibility for their own learning. [then in italics] (I think I need to emphasise the importance of this [taking responsibility for their own learning] at the beginning of semester, especially for the 1st years, who are used to being spoon-fed information).

(Journal, Anita, Case 4): Activity 2, Published 12/09/05
In Activity 2, Anita recorded the following ideas and thoughts to various questions.

**How do good university teachers teach?**
University teachers should be adopting a student-centred approach… where students work in ‘authentic’ work environments, in teams with real clients.
(Journal, Anita, Case 4): Activity 2, Published 12/09/05

**What separates the above average teachers from more average teachers?**
Above average teachers are constantly reflecting on and attempting to improve their teaching. Above average teachers care about their students and the outcomes of their teaching. Above average teachers also keep abreast of changes in their field and strive to be experts in their fields. Brilliant teachers are passionate about what they do. This drives them … to improve.
(Journal, Anita, Case 4): Activity 2, Published 12/09/05

… average teachers continue on in the same vein semester after semester …
(Journal, Anita, Case 4): Activity 2, Published 12/09/05

Towards the end of Activity 2 Anita was asked to share what she could do to improve her teaching. Her response was based on a teams-based unit she taught. Her comments show how she expressed concern for students as individuals and the difficulties they encountered with teamwork.

- Tailor learning to individual needs - skill and ability levels.
- Provide more assistance for conflict resolution for teamwork.
(Journal, Anita, Case 4): Activity 2, Published 12/09/05

She followed this with what she felt would be necessary to achieve the improvements and she suggested mainly coordinator support. The reply exposed her desire to be involved in the improvements, by asking for support, rather than simply asking for improvements to be done.

- Support of unit coordinator to tailor material
- Provide a framework for levels of material.
- Support for development of material to assist with teamwork.
(Journal, Anita, Case 4): Activity 2, Published 12/09/05

Although Anita carried out Activity 3 (administering a mid-semester review questionnaire to her students), she did not record anything in her journal about the process. However, she did record her responses to Activity 4, which asked her to reflect on and suggest changes based on the results she received from the mid-semester feedback from her students. One of the final comments she made in her journal after considering the feedback she obtained gave quite a powerful indication of how the
process had affected her conceptions of teaching, especially with respect to teaching styles.

The fact that they made comments about teamwork and its benefit and relevance and being able to apply knowledge learned to their real world was very encouraging and this was obviously important to them as they made comment about it so tertiary students do appreciate and see the benefit to a more constructivist approach to learning and I believe at their age and stage of development we, as tertiary teachers should try to adopt more of this type of approach. 

(Journal, Anita, Case 4): Activity 4, Published 12/12/05

Beyond her feelings of the importance of teaching styles and her evident desire to move towards constructivist methods and active learning techniques, Anita echoed these when recording a list of ideas on how she might be able to improve her teaching.

Where there is a small group opportunity then try to deliver the lecture in a way that will elicit more response and interaction with the students.

Try to make the activities even more ‘real’ - for example in PM [Project Management] develop a team disciplinary procedure for students that are not performing etc.

Develop some materials to help with teamwork and especially conflict resolution to avoid team breakdown and resultant demotivation [sic] of student groups.

Encourage students to assess/critique/manage conflict in a safe environment, where the tutor acts purely as facilitator and only intervenes where the situation is deemed to be irretrievable.

(Journal, Anita, Case 4): Activity 4, Published 13/12/05

Anita's final journal entry showed how she considered how she might plan to instigate some of her ideas on improvement to her actual teaching. One area she felt was needing change was the didactic nature of the lectures. She thought that discussions would be a good way to inject an interactive approach to encourage active engagement, but also emphasised how it was necessary to advance organise students about the new lecture format and expectations for students' participation.

Create a more participative approach to lectures - maybe every 4 to 5 slides there should be open discussion and encourage students to look at other viewpoints etc. It must be clearly understood by the students at the outset that this will be the format for the lectures and what is required of them. This will hopefully improve engagement, give them a more active role and improve satisfaction in this area. I have actually noticed them become a lot more livelier.
as we move from lecture mode to tutorial mode when we have discussed review questions. Perhaps these two areas could be combined?

(Journal, Anita, Case 4): Activity 4, Published 13/12/05

Anita's efforts during the activities to obtain feedback from her students and then to reflect upon them had given her a more complex way to consider the ways in which she was teaching and how she might change to improve. Throughout the study she had also been exposed to some teaching and learning theory which has catalysed her thoughts and allowed her to develop a deeper understanding of some related issues. This appeared to bolster her ability to analyse and postulate improvement strategies for her future teaching.

Anita's journal entries provided examples of how she engaged with self-educative habits and reflective practice methods to inform herself about how learning and teaching occurs. The synergistic benefits brought on by the cross-support of these activities allowed her to develop as a teacher.
Appendix 13: Interpretations and Representative Quotations from Interviews with Case 5, Mary

Theme 1: Awareness of conceptions of teaching

Conceptual awareness

In the initial interview with Mary, when she was asked about reflection as a practice, she commented that although she knew of reflection, she did not have a good understanding of the processes involved or how to utilise reflection in her practices.

Yes [to having heard of reflection], but I have to qualify that by saying I'm not absolutely sure what reflection is.
(Initial interview with Mary, Case 5, theme 1)

In the final interview, Mary felt that she had a deeper understanding of reflection and that, with the processes she had been introduced to, along with the materials and exercises, reflection was allowing her to conceptualise her own work as a teacher.

I think it's been valuable for me to recognise my own way that I work, and that I can perhaps understand it.
(Final interview with Mary, Case 5, theme 1)

Later, during the final interview, Mary revealed that her participation in this study had been worthwhile and she had learned from the materials on the RPW and noted that they exposed her to educational and teaching theory as an area she had had little to no experience in before this study.

I think it was really worthwhile. Yeah, I learnt. The first activity, where we had to do the readings about the different sorts of learning approaches … Also, as I said before, the readings were useful, because I didn't have any sort of real teaching/educational theory experience, really.
(Final interview with Mary, Case 5, theme 1)

Aware of gaps in teaching practice

As Mary considered her competency as a teacher in the final interview, she indicated that she was doing quite well. While realising there was still much for her to learn about the craft of teaching, she felt she gave value to her students.

I think I'm competent, but not very competent. I think the students probably get value for money. I hope. But I've still got a long way to go. There's lots of room for improvement.
(Final interview with Mary, Case 5, theme 1)
Different teaching styles for different learning styles

Initially Mary had some exposure to concepts of different learning styles from her participation in professional development activities while she had been working as a teacher’s assistant at an all girls secondary school.

I know from school. The PDs (Professional Development) and things we have at school, with the different learning styles … that some students are oral learners.
(Initial interview with Mary, Case 5, theme 1)

In response to questioning about what teaching strategies she was aware of in relation to different learners, she tentatively offered that such strategies would help different learners learn.

… something that tries to help different learners learn.
(Initial interview with Mary, Case 5, theme 1)

By the final interview Mary had broadened her understanding of different teaching and learning styles. She considered there was a need to teach with a range of methods that allowed students with different learning needs to participate, warning that this should preclude teaching by simply delivering by lecture.

… a program that allows people with different learning strengths or different learning styles to get something out of it. So a program that incorporates visual things where they have to [also] listen. Things where they can contribute themselves. So a range of different things, but not just the lecturer standing up and talking and they just sit and listen.
(Final interview with Mary, Case 5, theme 1)

Furthermore, in the final interview Mary revealed her new understanding when she offered an example that related different learning styles to the activities she had undergone during this study. Her realisation also points towards a thought process which exhibited reflection and extended her new understanding within another teaching and learning context.

So, you are getting the same information, but maybe in different ways, that might appeal to different learning styles, I suppose. Though that brings me back to that online forum. That may be a way that would appeal to certain people more than contributing to group work.
(Final interview with Mary, Case 5, theme 1)

Challenging conceptions and changing students

When considering how to challenge the conceptions of her students in the final interview Mary’s wish was to broaden their views. It is interesting to note that she drew
on language from the literature she encountered during the activities of this study, mentioning ‘seeing the world in a different way’. Furthermore, Mary showed a much greater complexity of thinking about learning and teaching in that she was synthesising her retort to include awareness of what are essentially higher order thinking skills and, in particular, learning as seeing something in a different way (Marton et al., 1993).

In an ideal world, that’s what I’d like to do, and hopefully also they learn something about the topic that we are doing or that they may have shifted their views, if they had really narrow views, or that they might have maybe started to see the world in a different way.

(Final interview with Mary, Case 5, theme 1)

**Conceptions changing**

In the final interview Mary characterised her own learning style as strategically aimed towards obtaining good marks, but explained that, with her new understanding, she recognised that she did not learn as deeply as she would have liked. She also acknowledged that she continued to take this approach at times, which alluded to the difficulty of transferring new conceptions into actions.

I know with myself and my own learning style, that there is a certain element that is surface, and I’ll admit that over the years, that I have approached units, particularly ones that I didn't enjoy. I thought what do I have to do to get a good mark out of this. I freely admit to that. I've just got so much on my plate. What do I mean to do. Okay. This is what the lecturer wants. Okay. I'll give them exactly what they want. Now I realise, after having gone through teaching and having done those activities in the project that I probably short change myself. And I know I still do it. I still do it to a certain extent.

(Final interview with Mary, Case 5, theme 1)

**Conceptions changed**

In the final interview, when asked about changes to her own conceptions of teaching, Mary felt there had been changes especially in the ‘doing’ of the study’s activities.

Yes, yeah, especially having done all your workshops (the project activities).

(Final interview with Mary, Case 5, theme 1)
Moreover, in the final interview Mary explained a deeper realisation that teaching was not a simple task. Her comments also embodied a newfound understanding of reflection as a cycle of continual improvement.

I've realised teaching is hard work, and it's not a static thing. You can't go in there and expect that just because you have planned something you can stick to that. You do have to reflect and respond and change, and that's what your project has done. It has also affirmed that to me, that it is okay to do that as well.

(Final interview with Mary, Case 5, theme 1)

Further along in the final interview, Mary also commented on how the conceptual changes she was experiencing had given her a greater sense of the dynamics of teaching and the reflective cycle.

I feel I have an appreciation of the dynamics of the situation now. It's a real cycle. Each bit feeds into the other. I saw that and did know that, but it affirmed it for me.

(Final interview with Mary, Case 5, theme 1)

Again in the final interview Mary relayed that the activities she participated in over this study provided her with better appreciation of, not only different types of learners, but also how to conceptualise assessment that is more aligned to deeper learning.

In those readings it talked about, encouraging deeper learning, and the sort of assessment tasks to do (to encourage deeper learning). So that sort of thing has been really helpful.

(Final interview with Mary, Case 5, theme 1)

**Theme 2: Sees teaching as a social process**

*Constructivist paradigm*

Mary did not mention constructivism in the initial interview but in the final interview she appeared to favour constructivism although not naming it formally.

You're building on knowledge that you already have. So, I think it's all incremental, in a way.

(Final interview with Mary, Case 5, theme 2)

*Fellow learners*

In the initial interview, Mary felt that in a good learning environment there was sharing of information between students.

It’s almost a sharing of information with others [other students].

(Initial interview with Mary, Case 5, theme 2)
By the final interview Mary gave a more detailed explanation of her thoughts, realising that there are techniques which encourage sharing and she realised how they could be incorporated into her teaching approach to attain a mutual and sharing learning environment.

The whole point of the little group discussions with the students is so that they can share what they know. So in a way, they are teaching, and I'm learning, and the other students are learning from them.

(Final interview with Mary, Case 5, theme 2)

Rapport

Between the initial and final interviews Mary appeared to have grown substantially in her conception of the role performed by establishing good rapport between students and teachers. In the initial interview with Mary she simply stated that rapport was of high importance, but did not offer any further reasoning.

Very important, yeah.

(Initial interview with Mary, Case 5, theme 2)

By the final interview with Mary she saw establishing a rapport as a crucial component in order to catalyse sociability between teacher and students.

I think it's crucial personally [to have rapport with students]. It's a social thing, if you don't have rapport then how would you do that.

(Final interview with Mary, Case 5, theme 2)

Further into in the final interview Mary expanded on her reasoning as to why she felt it is so necessary to establish a good rapport with her students.

I think it's really, really important because without them feeling that they have some rapport with you, if they're having some difficulty, they may not come to you. They may not feel that they can call you up and ask for help. Also, if they don't have rapport with you, I think they're less likely to listen to you at all.

(Final interview with Mary, Case 5, theme 2)

By the end of the study, Mary's understanding of rapport had developed into an understanding of how effective teachers conveyed a sense of being approachable to their students.

A decent person

In the initial interview when queried about what the community expects of a good teacher Mary declared that teachers were expected to have good subject
knowledge, prepare well and have communication skills as well as being a decent person, with sound and moral characteristics.

That I know the subject matter. That I am well-prepared, and that I am able to convey that to the students, and I think the community also expects teachers to be of a certain mould or calibre.
(Initial interview with Mary, Case 5, theme 2)

**Accentuate the positive**

In the initial interview, Mary felt that accentuating the positive was important, although she added that can be difficult to put into practice due to the nature of marking criterion.

I also find it very hard to mark the seminar presentation, because I try to put something positive. I always do put something positive, but sometimes it's really hard to be positive. And just the way in the criterion and the marking key is setup.
(Initial interview with Mary, Case 5, theme 2)

While in the final interview, Mary drew upon her own student experience explaining empathetically that if you did accentuate the positive it would have beneficial effects on students' confidence.

There's women that have come back after a long time at home or out of the workforce. All sorts of people, and if they could just feel better about the fact that they can do this. Because I've been there. I came back as a mature age student, not knowing if I could do it. When I started out I started doing an associate diploma, because I just didn't know whether I could handle university. I didn't know if I was up to it. So, if they can come out thinking, I can do this, then, they will. It was all to do with confidence and feeling good.
(Final interview with Mary, Case 5, theme 2)

Over the course of the semester, Mary’s emphasis seemed to shift from concentrating on the practical difficulties of accentuating the positive (teacher-centred), towards conceptualising the outcomes of being positive (student-centred).

**Asking questions**

In the initial interview, Mary felt that asking questions and breaking students into small groups was an effective method of encouraging student involvement.

So I tried to talk for a bit and then I put them in groups, and I might pose them a question, and I have only got about 35 students, so that's small enough to put them into groups within the lecture and get them to move around and say something and they all contribute more. I also mix it up with video or things like
that.
(Initial interview with Mary, Case 5, theme 2)

**Culturally effective communication**

Mary did not mention culturally effective communication in the initial interview, but in the final interview she indicated that she was trying to encourage international students to consider issues within the context of their homeland experiences.

Getting involved and engaging with it. I say to them, ‘Try and relate it to your own experience’, or say, if their international students, then something from your own environment, and some of them do, they're really good.
(Final interview with Mary, Case 5, theme 2)

In terms of cultural sensitivity towards her students, Mary acknowledged in the final interview that different students come with different cultural understandings, and she thought that her strong point was listening to them.

They’re [international students] starting from different points and I try and listen to what they have to say. That would probably be my strongest.
(Final interview with Mary, Case 5, theme 2)

She further indicated that she strives to appreciate the different backgrounds of her students.

I do generally try and see them as individuals with different backgrounds.
(Final interview with Mary, Case 5, theme 2)

**Theme 3: Developing minds**

**Empathy towards students**

As Mary considered her capacity to empathise with students during the initial interview, she felt that having the ability to empathise with students was an attribute held by above average teachers.

Empathy with students separates good teachers from the average ones.
(Initial interview with Mary, Case 5, theme 3)

In the final interview Mary spoke of students that might be participating in her unit in order to fulfil their course requirements, rather than enrolling in a unit by choice. This awareness of students' course structures demonstrates an increasing complexity in Mary’s thinking, which permitted her to link her new knowledge of different types of learners and their learning needs with her empathy of them as individuals.
I see students that are totally surface learners, they are just doing the unit because they have to. They couldn't pick another unit because it wasn't the right time, so they're doing this one.
(Final interview with Mary, Case 5, theme 3)

**Generic skill development**

Mary did not mention the development of generic skills in the final interview, although in the initial interview she made reference to students being able to speak in front of an audience. This illustrated the importance she perceived in regard to cultivating generic abilities in her students.

Public speaking for instance. It shows they can put up with the pressure. That they can get up there and do it. I used to hate it too and I still don't like getting up. I used to be the same. [she whispers] I don't wanna [sic] get up. I don't wanna speak. But now I can.
(Initial interview with Mary, Case 5, theme 3)

**Shelve egos**

In considering her ego within the context of her teaching in the course of the initial interview, Mary felt simply that there should be respect and a teacher should talk to students in a way that did not leave them feeling inadequate in their presence.

Teachers that respect students don't talk down to them. They don't treat the students like they are idiots.
(Initial interview with Mary, Case 5, theme 3)

In the final interview Mary indicated that teachers should not portray themselves as overconfident and would be served well by assuming a somewhat humble approach.

… just perhaps, not overconfident. It's just got to be the right mix, whatever that is. I think that humble is probably not a bad word for it actually. Self-effacing.
(Final interview with Mary, Case 5, theme 3)

**Student-centredness**

In the initial interview Mary considered her ideas of legitimising student perspectives. She attempted to view things from their perspective in an attempt to understand the approach they may be taking. She encouraged them to contribute in an effort to galvanise the value of their existing knowledge. Mary appeared to appreciate constructivist values, as shown when she challenged students to build on their existing knowledge.

I try and see things from their perspective. Try and understand how they may be approaching something and I try and get them to contribute so that they can see
the knowledge that they already have is valuable. And what I asked them to do is to build on that knowledge.
(Initial interview with Mary, Case 5, theme 3)

In the final interview Mary’s conceptions of legitimising the student perspective were similar to her initial response, although in this instance she was again exposing her deepening constructivist values by associating deeper thinking such as multiple perspectives and entitlement to individual beliefs.

… about challenging people's thinking, and I think I could usually I do, or sometimes I do, because I'm conscious that people are entitled to their own beliefs, so I don't want to challenge them so much that they feel that they are threatened. But nevertheless, I like people to look at things from a different way, maybe a way that they haven't viewed an issue before and try and see that there really are two sides to this and then let them make up their own mind.
(Final interview with Mary, Case 5, theme 3)

Furthermore, in the final interview Mary declared that she may not always agree with what students say but can respect their views.

I don't necessarily agree with what they are saying, but I can respect it.
(Final interview with Mary, Case 5, theme 3)

Mary did not mention the central importance of students' experiences in the initial interview, but in the final session she attached importance to this concept by suggesting that students attempt to relate subject matter to their own experiences. Mary connected this conception with encouragement of student engagement and involvement and, moreover, she again connected this aspect of teaching with cultural sensitivity for the needs of international students.

Getting involved and engaging with it. I say to them, ‘ Try and relate it to your own experience’, or say, if their international students, then something from your own environment.
(Final interview with Mary, Case 5, theme 3)

**Building student confidence**

In the final interview Mary examined her ideas of building student confidence and felt that it referred to feeling good about one's own cognitive processes, but she was concerned about her capacity to convey this idea successfully.

… but it was all to do with confidence and feeling good, when you're thinking. I don't know whether I can do this.
(Final interview with Mary, Case 5, theme 3)
Experienced as a student

Mary spoke about her own lengthy experience as a student in the initial interview, extolling the virtues and benefits she perceived from her various teachers.

I think being a student for such a long time … I feel like I've been here forever, and I have sort of gleaned from those aspects or characteristics of lecturers. I found that really helpful for my learning, and vice versa.
(Initial interview with Mary, Case 5, theme 3)

In the final interview Mary gave a similar reply as in the initial interview, but at this end of the semester she included comments about how she gained conceptions of teaching strategies and the motivation this provided. It should be noted that she also valued points of view, which did not motivate her, and she used this information to gain an understanding about which methods were not useful to her in her teaching.

Having been a student for a long time, I've absorbed or I’ve developed ideas about what I think have been helpful teaching strategies and conversely things that haven't helped me or haven’t motivated me. More importantly, teaching strategies or styles, that haven't motivated me.
(Final interview with Mary, Case 5, theme 3)

Theme 4: Fostering understanding

Deep understanding

In the final interview with Mary, she looked at her conception of deep understanding for learning, and this brought together a sense that she was linking her newer understanding of teaching theories with other parts of her conceptual thinking, such as learning styles, deeper learning and possible assessment options.

I think understanding that there are different learning styles and maybe more of an idea of how to help people. Going back to the learning styles. The surface learning and the going deep and so on. In those readings it talked about, encouraging deeper learning, and the sort of assessment tasks to do (to encourage deeper learning). So that sort of thing has been really helpful.
(Final interview with Mary, Case 5, theme 4)

Using wisdom

Mary reflected on the feeling of her conceptual advancement as she focused on the passing on of wisdom in her teaching. She spoke of actually living new knowledge and emphasised the power she believed active learning has and how it can create deep understanding and have impact on the evolution of a teacher’s practical intentions.
It's stuff that I actually took on and lived, that's become part of me and that's what I didn't think was relevant, but is. And that's the same stuff that will help me find my feet, because it just means be yourself in the classroom and the use what you know. Using your wisdom, rather than the skills or knowledge of what you know.

(Final interview with Mary, Case 5, theme 4)

**Connections between various opinions and ideas**

During the initial interview Mary indicated her conceptions of fostering understanding with respect to making connections between various opinions and ideas. She wanted to encourage different ways of thinking and connect them with different points of view. What appeared to emerge was an attitude that aimed to foster deeper thinking in learners.

So to try and get them to think about things in a different way. If they have always thought about something from a certain perspective. I suppose, to try and present them with other perspectives, otherwise, it seems an issue that they may not have thought of before.

(Initial interview with Mary, Case 5, theme 4)

The following quote from Mary’s final interview is reiterated here in relation to this theme, as it is a useful example of how that shows she is broadening her conceptions and linking them with other considerations of her teaching.

… about challenging people's thinking, and I think I could usually I do, or sometimes I do, because I'm conscious that people are entitled to their own beliefs, so I don't want to challenge them so much that they feel that they are threatened. But nevertheless, I like people to look at things from a different way, maybe a way that they haven't viewed an issue before and try and see that there really are two sides to this and then let them make up their own mind.

(Final interview with Mary, Case 5, theme 4)

**Theme 5: Preparation and materials**

**Preparation**

During the initial interview Mary showed one element of her conception of teaching as being preparation when she considered what she felt were the attributes of a good teacher. Preparation was one attribute that was important to her along with the ability to exhibit teachers were in a state of preparedness. She also alluded to shelving egos as she mentions not needing to have ‘all the answers’.

Teachers that are prepared to put the effort in. To be prepared for the lesson, and that's not to say that they know all the answers, but at least they look like they've
come in and they have made an effort for that lesson.
(Initial interview with Mary, Case 5, theme 5)

Although Mary also honestly stated that she was still learning herself and prepared as best she can, she did not credit herself with the fact she was an advanced student in the field in which she taught.

... to try and make sure that even though I'm still learning the topic myself, I'm as best prepared, as I can be.
(Initial interview with Mary, Case 5, theme 5)

In the final interview Mary seemed much more at ease with herself and her preparation appeared to have taken on a more professional approach, with less onus placed on fending off embarrassment.

I like to think that my strongest traits would be that I prepared really well, or as well as I can. I prepared to the point where I will go through the whole thing that I've got to do that day, the night before, and often even more.
(Final interview with Mary, Case 5, theme 5)

Further on in the final interview Mary further explained her preparation methods with a desire to make sure she produced a smooth flowing learning experience for her students.

Lots of preparation, so I know exactly what I am doing. I have all the handouts ready and everything, so I am not fluffing about, because I don't like that.
(Final interview with Mary, Case 5, theme 5)

Accessible information

In the final interview Mary contemplated accessibility of information and spoke of online methods to disseminate it. She felt that if online methods are integrated into students' work, there would be more likelihood that all students could access the same resources. Mary also suggested that an online forum for students would appeal to some students in group learning situations. Again this showed Mary’s broadening understanding of different learning styles and ways of working.

So, you [everybody involved in a unit] are getting the same information, but maybe in different ways, that might appeal to different learning styles. I suppose though that brings me back to that online forum. That may be a way that would appeal to certain people more than contributing to group work.
(Final interview with Mary, Case 5, theme 5)
Up-to-date material

In the final interview Mary thought that learning materials needed to have currency and explained how she attempted to integrate examples from modern media.

I try and add to it with things that come up maybe on TV or … so it's not like it's all the older stuff.
(Final interview with Mary, Case 5, theme 5)

Theme 6: Engaging students

Listening

During the initial interview Mary revealed an element of her conception of teaching as that of engaging students, when she mentioned listening to others. As was common in the initial interviews she drew on her experiences as a mother to elucidate her thoughts.

I've got three children. Three adult children now, so … and I know … I listen to them, the things that they say. The things they like about their lecturers. Not like anything … as in, she's a nice person, but things that they like about their teaching. What helps them to learn!
(Initial interview with Mary, Case 5, theme 6)

In the final interview Mary mentioned listening and consequentially incorporation of students ideas as a quality of good teachers. Once more Mary exhibited growing conceptual understanding with an ability to appreciate and link together conceptions into a practical outcome.

I think teachers that really listen to their students…I'm not saying that I do this, but when, I think of teachers like [coordinator’s name], will stand out. Teachers who listen to what their students have to say, and can build on what their students have to say and can incorporate that within the lesson as well.
(Final interview with Mary, Case 5, theme 6)

Further into the final interview she identified listening as one of the strongest attributes of her teaching, relating this to viewing students as individuals.

I do generally try and see them as individuals with different backgrounds. There's starting from different points and I try and listen to what they have to say. That would probably be my strongest.
(Final interview with Mary, Case 5, theme 6)

Again when relating to the issue of her confidence in her teaching Mary included a comment that alluded to her desire to take the focus from herself and her performance
towards a more student-centred approach of learner inclusivity and being a better listener.

I think for me if I did have a little more confidence in my teaching. I could relax a bit more, and not worry about those sorts of issues. I could devote more energy to actually engaging with the students and it may be really listening to what they're saying, instead of the 30% of me, which is trembling, and all that other crap would just wash off me. Then it wouldn't matter. I wouldn't have that little doubt of thought at the back of my head.

(Final interview with Mary, Case 5, theme 6)

**Discussion**

When asked in the initial interview about her feelings on discussion within her teaching, Mary referred to enjoyment of talking to students.

I enjoy the students. I like talking to the students.

(Initial interview with Mary, Case 5, theme 6)

Subsequently in the final interview Mary spoke of discussion in reference to student group learning and sharing knowledge with others. Her comment showed a deeper appreciation of discussion as not simply enjoyable, but displaying an understanding of its benefits in a learning environment.

The whole point of the little group discussions with the students is so that they can share what they know. So in a way, they are teaching, and I'm learning, and the other students are learning from them.

(Final interview with Mary, Case 5, theme 6)

**Expects student effort**

In Mary’s initial consideration of her expectations of students’ effort she talked about students’ doing preparatory reading and extending themselves. She mentioned only some students do this and how she noticed which student do not.

I expect them to put an effort in as well. To do the readings and to try and extend themselves where they can. I think. Yeah, I suppose that's the bottom line, because when I was a student ... It's in my nature, I tried the hardest that I can, and I know that not everybody does that, but you can see the ones that don't try.

(Initial interview with Mary, Case 5, theme 6)

By the final interview Mary offered a similar, yet subtly more empathetic and student-inclusive response to her expectation of student effort including; contributing to the class experience and allowance for individual personalities.
I expect that, as adults, they will try. They will make an effort to extend themselves. They will make an effort to contribute, as much as they are able to, within the bounds of their own personality. I recognise that for some of them, that is really, really hard.

(Final interview with Mary, Case 5, theme 6)

**Motivation**

In the initial interview Mary judged the motivational effects of an enjoyable learning environment to be very important and that without it there would be a less effective learning taking place.

I think it's really important. I don't know whether I do it, but I think it's really important to. Because if they don't want to do it then they'll go through the motions of doing the unit, and they'll pass, but I don't think they will have learnt anything or changed the way they think.

(Initial interview with Mary, Case 5, theme 6)

In the final interview Mary again illustrated a more complex understanding of this conception by connecting fun with attributes of good teaching and empathy for different personalities. Moreover, she related this to the beneficial aspect fun lends to group rapport and encouragement of learner contributions.

… so they learn, but also, they enjoy it and it is relaxed. I think that's the other thing, I think that an above-average teacher, for me, would be someone who makes the class a relaxed place, so that people (students), particularly the quieter students and the more introverted, can relax enough to maybe contribute now and again.

(Final interview with Mary, Case 5, theme 6)

Additional support of Mary’s conceptual belief lies in another comment in the final interview, in which she shared her opinion on motivation leading to increased success.

If they're motivated … they're more likely to succeed …

(Final interview with Mary, Case 5, theme 6)

**Theme 7: Facilitating and organising learning**

**Facilitator**

Mary did not mention being a facilitator in the initial interview, although in the final interview she indicated that during group discussions she spent time with each group listening, questioning and suggesting ideas.
So while they’re talking I tend to go around to each group and just sort of listen in and make a comment or ask a question.
(Final interview with Mary, Case 5, theme 7)

Responsibility for learning

In the initial interview Mary mentioned that responsibility for learning is with the teacher. Although it should be noted here that Mary’s previous teaching experience was predominantly as a teacher’s aide in primary and secondary education, rather than at a tertiary (university) level.

It is that all the responsibility comes back to you as a teacher whereas a learner, you can choose to just opt out if you want to and sit in a lecture and not pay attention and think about something else. But you can't do that when you're teaching. You've got to be with them, all the time.
(Initial interview with Mary, Case 5, theme 7)

Additionally in the initial interview Mary mentioned giving students responsibility for their own learning, explaining that as they are adults (in a tertiary setting), they must take some responsibility.

I think there is a joint responsibility. They are adults. They’re not little kids, so they have to take some responsibility themselves.
(Initial interview with Mary, Case 5, theme 7)

In the final interview Mary provided a similar response but was more specific in relation to the level the students were at in their studies. It seemed that, as a tertiary teacher, she conceived that taking on responsibility for their own learning only began at the commencement of university, rather than earlier in their education.

I suppose too, for the first year students, it's just learning that they really have to be responsible for their own learning. I mean, I'll help them as much as they want help. I'll meet them after class, and you know, but at the end of the day they are adults.
(Final interview with Mary, Case 5, theme 7)

Building on existing knowledge

In the initial interview Mary mentioned building on existing knowledge, relating her desire to encourage students to consider their previous experience.

And start to look at it at a different way, maybe. So, maybe that’s the strongest characteristic of my teaching, is that I try and let them see that they actually do know this stuff. To think about their own experiences.
(Initial interview with Mary, Case 5, theme 7)
In the final interview Mary’s conception of building on existing knowledge appeared very similar to her initial attitude.

None of them would not have experiences and I can say that with a fair bit of confidence. So they have a good start in a way and I try and encourage them to use their experiences to inform and build upon.

(Final interview with Mary, Case 5, theme 7)

However, later in the final interview, Mary revealed quite a sophisticated viewpoint about the kinds of existing knowledge students brought with them. She characterised the unit she taught (techno-media), as a cultural topic that abounded with knowledge picked up as one lived within a cultural space. She qualified this view by explaining that, because it was not knowledge as in the hard-sciences such as chemistry, there may be less culturally pervasive knowledge to build on.

I think it’s a unit that all the students bring knowledge about. They come then and I say to them, you will know a lot about this subject. Even if you don’t think you do, you do. Because you live in a techno culture world and you have opinions and beliefs and values about it even if you are not aware of them. So it’s not like you are trying to teach chemistry, where you’re starting maybe with very little knowledge.

(Final interview with Mary, Case 5, theme 7)

Theme 8: Behaviour Management

Boundary setting

During the initial interview Mary relayed her conceptions of behaviour management in relation to her teaching practice. She thought that respect for each other was important and this included listening to others and allowing them to contribute.

Probably the basic one would be respecting each other. So that you don’t hold a stick over other people. You listen to other people's opinions, even if you don’t agree with it. They have a right to voice it. Generally just respecting that everyone has the right to have a say and contribute.

(Initial interview with Mary, Case 5, theme 8)

During the initial interview, Mary also spoke of students talking during lectures, bringing her own student experiences to bear, in a fashion that simply laid down the law to her students.

I don't allow students to talk during the lecture, unless it's part of the group. As a student, I found it so annoying to have someone next to me having a conversation during the lecture and them [the lecturer] not doing anything about
it, because I don't want to listen to them.
(Initial interview with Mary, Case 5, theme 8)

In the final interview, Mary demonstrated more skilful behaviour management ideals when she mentioned how she thought a good teacher goes about the setting of boundaries in a more social manner that is less hierarchical.

… somebody who is able to control the class at the same time as not putting people down, to do it.
(Final interview with Mary, Case 5, theme 8)

Mary further discussed her thoughts on the setting of boundaries in the final interview, saying that if the rights of students, such as voicing their opinions without distain or interruptions from others, are fostered within the class environment, there is a greater likelihood of a desired conduct being successfully integrated into student behaviour.

For me, discipline problems that you might get in a tertiary classroom, would be more likely to be people interrupting other people, not allowing people to finish what they're saying. So if you had fostered an environment where people respect that other people have the right to another opinion, then maybe it will be more likely that they will listen to others.
(Final interview with Mary, Case 5, theme 8)

When queried as regards to other rules she expected in her classes, Mary brought up the issue of mobile phones again, using her own student experience as an example. She went on to say how she would handle the situation by conveying a solution of compromise, rather than simply berating or imposing outright prohibition of behaviour. By suggesting a compromise Laura was moving the setting of rules into the realm of shared social construction.

I do always talk about mobile phones, because I was in my last year (as an undergrad) in a lecture, and we were watching Gallipoli (the movie) and it got to right near the end, when it was all very dramatic and this guy's mobile phone rang about two rows down from me. I thought he would just turn it off that he actually answered it and had a conversation (in the lecture), and I would have loved to have said, 'go outside with that please', and the lecturer didn't say anything. So, I always say that if you have to have it on, because there's an emergency, put it on silent, put it in your pocket and you'll know and then you can go outside.
(Final interview with Mary, Case 5, theme 8)
**Respecting others**

Mary did not mention this code in the initial interview, although in the final session she did comment that she expects her students to listen to and respect the opinions of others.

I expect that they will be respectful of other people's opinions and listen to other people. That's probably it. Just to try to be respectful.

*(Final interview with Mary, Case 5, theme 8)*

**Institutional philosophy correlates**

In the final interview, Mary's response to whether her own philosophies correlated with the philosophies of the university she worked at was the correlation did exist, but her actions were not yet in line with her beliefs and intentions.

When my habits catch up to the way I'm thinking then, yes.

*(Final interview with Mary, Case 5, theme 8)*

**Theme 9: Assessments**

**Setting objectives**

As Mary spoke about her feelings on the setting of learning objectives, she was able to discuss linkages between learning objectives with assessment and moreover she perceived this as a universal teaching practice that was not simply valid for her own teaching.

I would say, fairly clear, learning objectives or learning outcomes, with whatever assessment whether they are assignments or exams or what you have contributing to that. So that they have got to be linked to that [the objectives and outcomes]. It's no good just doing something that's got just nothing to do with what you're trying to achieve through that unit.

*(Final interview with Mary, Case 5, theme 9)*

**Giving prompt feedback**

In the final interview Mary considered promptness of feedback to students and explained how she conducts impromptu assessment of her students’ ideas for their assignments by questioning their plans. She then tries to provide immediate feedback to them and suggests how they may improve their intentions. By engaging with this method Mary showed a desire to deepen student learning and prevent shallower or surface interaction with assessment tasks. This comment also suggested that Mary carried out her feedback sessions with a demeanour that, instead of taking a superior stance, encouraged the students to make decisions for themselves.
What I thought of doing, because at the beginning of the semester in about the second week, they have to choose a topic, that they will present and what I wanted to get them to do was to come to me when they're ready and tell me what they want to present and what the key points are that they are going to bring out. Then if it looks to me as if they are basically just doing a rehash I can, maybe try and encourage them …we'll that's really good but have you thought about this or …

(Final interview with Mary, Case 5, theme 9)

Exams not effective

During the initial interview Mary showed her conceptions of teaching with respect to exams as an assessment, surmising that although she did not feel a major exam was such a good method of assessment, the exam was a part of the unit structure and had to be engaged with. Although Mary was not comfortable with exams, she was attempting to work within the requirements of her institution.

There is an exam, which I don't and the coordinator doesn't really… I don't think she's that crazy about the exam either. The fact is that they have to do an exam, but that's what you have to do.

(Initial interview with Mary, Case 5, theme 9)

Theme 10: Evaluating teaching practices

Evaluate one’s own teaching

During the semester in which this study took place Mary was asked to look at the feedback received from the unit evaluation carried out by her university. She looked through the comments in her own time and in the final interview she discussed her reflection on her thoughts and understanding of evaluating her own teaching. She had considered what issues were raised by the comments that students returned on the unit evaluation forms and postulated how she could alter her practical methods to make changes to improve. Mary appeared to have taken on the evaluation cycle with a realisation of the benefits of a continual improvement approach.

I do too much talking, and it's something in the future that I will try to mix up more, because of the feedback I've got from them, means that they like being able to talk to each other, about what we've been going through. So while they're talking I tend to go around to each group and just sort of listen in and make a comment or ask a question.

(Final interview with Mary, Case 5, theme 10)

Open to debate

In light of Mary’s newfound approach to evaluating her teaching and the utilisation of reflection, she responded in the final interview about her being open to
debate with students in learning situations. She felt that although she may not always agree with what was said, she respected their comments. Showing respect for students was important for Mary and she returned to the theme quite often.

I don't necessarily agree with what they are saying, but I can respect it. (Final interview with Mary, Case 5, theme 10)

Further on in the final interview Mary again mentioned her ideas about her openness to debate, commenting that a teacher must be able to take a humble approach at times, when they feel they may not know everything about a subject and freely admit it. She thought that if a teacher could not do this, students would observe it anyway.

I've recognised teaching adults is that you just can't go in there and pretend that you know everything, because you don't, and they will see through you. If you say something, and it's happened to me in class, where I've said something and somebody has disputed it and I thought, 'They might have something here' and if you're too proud to say something like, ‘Oh, I think you might be right there, I think I'd better go check my facts.' They will see right through you. (Final interview with Mary, Case 5, theme 10)

Openness to debate came up once more in the final interview and with more focus on students. Mary explained that it was alright to debate and to still disagree at the end of discussing the issue. This attitude suggested that Mary was developing a sense of student-centred approaches and likewise she was respecting her students with allowance for individual opinions and their right to hold differing opinions.

… if they can recognise that it's okay to have the debate. It's okay to disagree with somebody, but … and you can still disagree at the end the day. (Final interview with Mary, Case 5, theme 10)

**Experimenting with methods**

In the final interview Mary was asked how she felt about trying out different methods within her teaching and she responded that, with the hindsight of experience, she now felt more able to do so. She also mentioned that she was less afraid to try different approaches and this was important when it came to having the confidence to attempt changes rather than simply continuing with methods that are already in place. This revealed Mary’s willingness to engage with ideas that emerged from evaluation and reflection on her teaching practices.

I am able to open up more and to try different things. Opportunities like to try the online forum and try different things. Not being so afraid. I think that when you're really worried, you just tend to go into this little ball or cocoon and just
do what you know, even if it's not really working, because before you do something you're too scared to change.
(Final interview with Mary, Case 5, theme 10)

Flexible methods

During the initial interview Mary unveiled her conceptions of flexibility in her teaching practices when recognising there are times when a prepared learning plan can be altered in situ to account for changing circumstances.

If you're doing a class that is missing a few students it's got to be able to be flexible. So you know, okay, today, we won't do that, because there's not enough [students].
(Initial interview with Mary, Case 5, theme 10)

Reflecting

In the initial interview, Mary’s understanding about reflection was revealed when she was asked whether she was aware of reflection and if she had used it with respect to her teaching. She seemed to have a reasonable grasp of how to reflect upon her teaching and teaching events. Although she did not mention a cycle of reflective evaluation directly, she appeared to have a conception of a cyclic process of improvement.

I have actually and I should have gone over it, because after each lecture, when I get home, I make notes. Just really brief, you know. It's about what went well, and what didn't go well, and the next year, what to try.
(Initial interview with Mary, Case 5, theme 10)

In the final interview Mary said she had gained a higher appreciation of the reflective process by participating in this study.

Yes, yeah, especially having done all your workshop things [this study’s activities].
(Final interview with Mary, Case 5, theme 10)

In the initial interview Mary also considered reflecting on teaching problems and indicated one example where her lecture did not go so well. She identified that there was a flat spot, during the lecture and how she might attempt to alleviate it next time.

Like one lecture, the students may not have thought it went badly, I just felt it was really flat. Then when I came out, I went home I was trying to think what I would do next year. That lecturer really needed to mix it up a bit more put a bit more variety in there. Maybe try and … some weeks, questions that I could give them or topics for discussion. Don't present so easily, but I think with that one, I saw the thought, I'll really thought, I'll think hard about how I can mix that one
up a bit, because there was definitely a flat spot there that they … I felt anyway. I have to go home and read that note now.
(Initial interview with Mary, Case 5, theme 10)

When in the final interview, Mary was asked how she thought being reflective could help improve her teaching; she seems to have taken on the nature of reflection and its benefits to her practice. Mary intoned some of these thoughts in the initial interview, but here in the final session she speaks of ‘helping to develop’ and appeared to grasp the cyclical character of reflective practice as a helpful process towards continual development.

It might help me to review what I have been doing and maybe be a little bit more objective about what I've been doing and the outcome of what I have been doing in terms of student behaviour. Rather than just blindly proceeding through the semester, which is probably what did the first year I taught. Because I was so terrified I basically just put blinkers on. I can't afford to do anything else. This is just what I'm doing. Helping me to develop and respond to changes and student behaviour and that sort of thing.
(Final interview with Mary, Case 5, theme 10)

**Theme 11: Practitioner of teaching**

*Competent to teach*

Mary did not make mention of her competence to teach in the initial interview, but in the final interview she reported a feeling of adequate competency. Her reference to ‘room for improvement’ alluded to her newfound appreciation of a cycle of continual improvement.

I think I'm competent, but not very competent. I think the students probably get value for money. I hope. But I've still got a long way to go. There's lots of room for improvement.
(Final interview with Mary, Case 5, theme 11)

*Confidence*

With respect to whether she had adequate confidence to teach, Mary felt that her coordinator believed that she was capable and this was a great boost to her teaching confidence.

It's going to sound corny, but I think it's just that she [the unit coordinator] has that faith in me. If I'm not feeling that great about myself it's just that confidence she gives me.
(Final interview with Mary, Case 5, theme 11)
Nerves played a part in Mary’s growing confidence. Although they continued to hamper her, she declared an improvement by the end of the study.

My other weakness would be just nerves. I'm getting better, but sometimes it hits me.
(Final interview with Mary, Case 5, theme 11)

Interestingly, Mary also relayed a story explaining that, although she felt reasonably confident, she did feel that some feedback she received did not equate with her actual feelings about her own confidence. Mary’s admission of her lack of confidence was countered with a declaration of being ‘quite good’ which illustrated that there was often a combination of beliefs at work when she was attempting to define a conception, especially of herself.

I know now that I can face those things. The first time I went in to do a lecture. I was absolutely terrified. Just so scared, but I’m quite good. The boyfriend of one of my daughters in Sydney is a guy that I taught in second year. I hadn't met him by that stage and I didn't find out until a few weeks into the course, who he was. I said to him, much later, that I was actually absolutely terrified and he said, ‘You could never tell.’ And I think I am quite good at it…Some people will say to me, ‘You're really confident, aren't you?’ But I'm not.
(Final interview with Mary, Case 5, theme 11)

**Enthusiasm, loves to teach**

Mary spoke of the pride and enjoyment she experienced from teaching, but still felt she was not able to pronounce herself a teacher. This juxtaposition was likely brought about by her still being a student herself.

I don't say I am a teacher, but I'm quite proud of it. I think it's a really privileged thing to do. To share that with the students, I think I get a real kick out of it, yeah.
(Final interview with Mary, Case 5, theme 11)

**Expert in subject matter**

Mary’s view’s on being a practitioner of teaching came out when in the initial interview she mentioned she was expert in the subject matter and well prepared.

That I know the subject matter. That I am well-prepared. And that I am able to convey that to the students, and I think the community also expects teachers to be of a certain mould or calibre.
(Initial interview with Mary, Case 5, theme 11)

In the final interview Mary linked having good knowledge of subject matter with gaining good confidence to teach.
If they had a much better knowledge of the subject, then they probably are confident. For many, confidence comes also from knowing what I'm doing. From knowing the stuff that I am teaching, that gives me confidence.
(Final interview with Mary, Case 5, theme 11)

**Teaching from own perspective**

Considering the use of her own views in her teaching brought out a concern for the appropriate levels of inclusion and the opinion that care needs to be taken when injecting them.

I often wonder how much they expect us to inject our values and our beliefs, into what we are teaching, and I think there are some people that probably think that teachers inject too much of that into their classes.
(Final interview with Mary, Case 5, theme 11)
Appendix 14: Supplementary Findings from an Analysis of Personal Journals:

Case 5, Mary

Mary began her journal by looking back on her own learning experiences. In high school she recalled that these experiences were about transferring knowledge and suggested a teacher-centred style of teaching, where the teacher held the knowledge and in some manner gave it to the learners.

When I think back to my learning experiences, particularly in high school, it was a case of the teacher imparting the knowledge, and the students absorbing as much of it as they could. (Journal, Mary, Case 5): Activity 1, Published 19/08/05

Mary remembered more rote learning than anything else, although she now tries to use methods that would broaden her learning towards deeper outcomes. She still felt that her earlier learning experiences were influencing her current learning style. It is worth noting that Mary is a sessional teacher and a PhD candidate who has had quite some years of learning experience at a tertiary level. However, her formative years have obviously made a lasting impact on how she conceives learning. To be fair, she mentions how she is attempting to change her learning ways and this is an illustration that her conceptions are changing. What is interesting is how those changes may drive her conceptions of teaching.

I tended to be more a rote learner…in fact, while I try now to situate my learning within a broader context, and draw upon earlier learning and life experiences to make sense of new information, I'm aware this is not an area I'm particularly good at - it takes some time for me to make the links. (Journal, Mary, Case 5): Activity 1, Published 19/08/05

Mary added the following to her journal after reading an article highlighting Schön's work on reflective practice (1983). Here she showed a willingness to take on the ideas of 'reflective learning' going as far as suggesting that, within his processes, may be ‘where the deeper learning occurs’. Even this initial exposure to theory caused Mary to look hard at her conceptions of learning. With due respect to her previous comment, it may fair to say that Mary was making some links already.

Schön's presentation seems to me to highlight the ongoing checking practices that occur during the learning process - the building upon knowledge previously acquired; the checking of current facts and problems against that knowledge to contextualise them; and then arriving at possible solutions or deeper understandings. I think that for some people this process occurs more easily / more automatically - maybe this is where the deeper learning occurs. (Journal, Mary, Case 5): Activity 1, Published 19/08/05
Mary was asked to write in her journal about the bodies of teaching and learning knowledge that she used to make sense of her professional (teaching) observations. As with many neophyte tertiary teachers Mary had no formal teaching qualification and initially was relying on her past experiences as a student to inform her teaching. She was aware of a dearth of theoretical knowledge that could support her in her new teaching role.

I don't have professional qualifications in teaching, so don't have a strong body of theoretical knowledge to draw on - therefore I suppose in critiquing my own teaching practices I tend to contrast the situation in my classroom with my experiences as a student at university over the past few years.

(Journal, Mary, Case 5): Activity 1, Published 19/08/05

Mary noted that she tried to use the methods that her teachers utilised which she felt were successful. She was relying on modelling the processes she felt good teachers use, but this did not prove or disprove she had understanding of the learning and teaching theories to support her existing conceptions.

I've had some really good teachers, and I try to apply the sort of techniques and practices they demonstrated, which I thought were successful.

(Journal, Mary, Case 5): Activity 1, Published 19/08/05

As Mary wrote she continually referred to her previous work as an assistant in a school library (a private K-12 girls school), and mentioned the observation she had made of different teaching approaches, although at this time she found it difficult to explain the differences. She suggested reasons for the differences, but her grasp of educational language to describe what she thinks was beyond her at that stage. As she progressed further into her own teaching practice she learned new educational language that will help her to consider explanations.

I also work in a school library, and observe teachers in teaching situations every day … there may be up to 3 classes running in the library at the same time … I have observed it that different teachers can use very different strategies, and the classes may seem to have different atmospheres, but the students still seem to achieve - maybe the dynamics between teacher and student adjust to suit the occasion and personalities???

(Journal, Mary, Case 5): Activity 1, Published 19/08/05

Mary moved on to consider what it was to be a student. She said students' come with a previous set of skills and experiences, and move forward with goals driven by their current views. Mary then set out some attributes that were at the surface of her thoughts and were likely to be a part of what she thought teaching needed to involve.
She also tried to consider what the attributes meant for students, but again the support for her conceptions was not from a theoretical standpoint.

*Students are people,* with different backgrounds, experiences, life skills, theoretical knowledge, expectations, desires, attitudes etc…

*Ethnic background* - different ethnic groups might have very different attitudes and approaches to the education process / may come with varied experiences (particularly recent migrants, refugees).

*Age* - this might impact on what expectations they have for the atmosphere in the classroom - formal / informal etc. / the type of knowledge they may already possess / their past learning experiences may impact on future learning outcomes.

*Gender* - may impact on their ability to contribute in group situation.

(Journal, Mary, Case 5): Activity 1, Published 19/08/05

The next quotation from Mary's journal illustrates that she saw learning and teaching as a social interaction between teacher and students, and not simply as a transfer of knowledge. The second part of the quotation particularly suggested that, even in the early stages of this project, Mary had begun to think about teaching in a broader and deeper manner than she was doing in her initial quotations. This showed she was viewing learning and teaching as transfer of knowledge.

In a way we're all students, summed up by the catchphrase 'lifelong learner' - everyone has some unique insights or knowledge they can pass on - in a classroom situation, knowledge and understandings can be seen as being exchanged in a multi-directional process, rather than uni-directional from teacher to students.

(Journal, Mary, Case 5): Activity 1, Published 19/08/05

When asked about how what teachers should do about student's self-esteem, Mary pointed out that it was critical to foster positive learning outcomes. She felt that students' self esteem affects learning and social outcomes, which showed Mary may have been seeing teaching as a social activity rather than simply the transfer of knowledge she experienced in high school. This supplemented her comments above in which she explained learning as a process of transferring of knowledge.

I think teachers should be aware of how critical healthy self-esteem is to positive outcomes, both educational and social. I don't think a teacher can single headedly turn around someone who has low self-esteem, but sometimes even little gestures can make a big difference.

(Journal, Mary, Case 5): Activity 1, Published 19/08/05

Mary continued recording her ideas about student self-esteem, adding the importance of reflecting students' ideas and respecting opinions. She also recorded her ideas that
teaching is often ‘presenting another point of view’, which leads to seeing teaching as changing a student's view of the world, and a higher order of thinking.

… reflecting their comments back, to ensure you've understood them, and to show them you're listening; respecting their opinions, even if you don't agree with them… for many topics there's no right or wrong answer - their answer is just as valid as yours, but maybe the lesson may be an opportunity to present another point of view to them.

(Journal, Mary, Case 5): Activity 1, Published 19/08/05

Some of the other attributes that Mary recorded about attending to the self-esteem of students are to do with the sensitive conduct of teachers, but they also present her thoughts on social enculturation as she exemplifies her preferences of mutual respect and some behavioural expectations.

timely and helpful feedback on assignments, with positive comments acknowledging their efforts; where possible learning their names; respecting the knowledge and skills they bring to the class, and encouraging them to share that knowledge (where appropriate); encouraging an atmosphere of mutual respect within the class - only one person speaking at a time etc. and positive expectations, despite negative past experiences.

(Journal, Mary, Case 5): Activity 1, Published 19/08/05

However, much of her understanding of teaching appeared to have originated in her past experience with primary and secondary teachers in her library employment.

The following quotation revealed an interesting juxtaposition that could occur between the observations of teaching in primary and secondary contexts with the modelling of teaching in a tertiary setting.

I've recently watched a teacher interact with a high school student who had previously been caught shoplifting, and who has something of a sour disposition - the teacher was positive and encouraging, and did not in any way present a judgmental attitude towards the student. When I spoke to the teacher afterwards, she said she always tries to approach each interaction with difficult students as a fresh start, rather than carrying over into the interaction negative attitudes. I think this is a valuable strategy to build more positive relationships between teachers and students, and might particularly help students with behavioural problems. Mind you, I don't know if I could do it!

(Journal, Mary, Case 5): Activity 1, Published 19/08/05

Moving to Activity 2 (theories of teaching and learning), Mary, like other neophytes in this study, found it initially difficult to describe her theory of teaching. However, she did expose two important notions here: firstly, that she conceived
teaching as a multi-directional, collaborative process that takes time and, secondly, she believed that the teaching process should include reflection in some way.

I'm not sure how to handle this question - I don't know that I really have a 'theory of teaching'. I think teaching is a collaborative process between teacher and student, with information going in both directions, rather than a one way street, with the teacher imparting information and the student soaking it up. The teaching process needs to be an evolving process, which allows for unexpected situations to arise, and takes into account the development of the student - I suppose this draws on a reflective process in some way.

(Journal, Mary, Case 5): Activity 2, Published 14/09/05

It can be seen that Mary is trying quite hard to include students' ideas as a starting point when she described how good teachers teach in universities. Another idea which came out strongly in this passage is the importance she placed on developing rapport and a socially conducive atmosphere to allow all students to participate. Furthermore, it is interesting to note that Mary brought the idea of ‘different learning styles’ into her description, which is one of the theoretical concepts brought up in this second activity.

Maybe by drawing on their students’ experiences and understandings to further develop concepts and thinking. By respecting their students as individuals. By supporting the development of an atmosphere in which all students can develop, learn and share their knowledge - i.e., mutual respect; listening to others; maintaining control so all students get the opportunity to contribute, and not just the loudest; using a variety of methods to appeal to different learning styles.

(Journal, Mary, Case 5): Activity 2, Published 14/09/05

When asked to say what separates average university teachers from above average teachers, Mary described some attributes of the above average teachers as being passionate, well organised and prepared. She added class control of noisy students as important and a teacher's ability to encourage contributions to class discussions. Mary saw that a sense of fun is yet another important aspect good teachers can bring to the learning environment. These are all well known attributes, but Mary was starting to think about them in a deeper, more connected way.

From my observations, the better teachers are those who have a strong grasp of the topic they are teaching, an obvious passion for it, and are well organised and prepared so they can share their knowledge effectively with the class. Also I appreciate a teacher who can control the class - minimise chatty students in lectures etc who distract & annoy me (& maybe others!), but at the same time encourage students to contribute appropriately to class discussions. Making the lecture/tutorial fun also helps.

(Journal, Mary, Case 5): Activity 2, Published 14/09/05
In considering what could she do to improve her teaching Mary felt she could gain confidence with a broader knowledge of the subject she taught. She believed this would smooth her practice. Then she added further professional training as a way to improve her teaching, a sign that she would like to enhance her ability of teaching and not just fumble through on growing experience alone.

Become more knowledgeable of the area in which I teach, through reading etc. - not only will this improve my understandings, which will hopefully flow through to my teaching, but may also improve my confidence, and allow me to concentrate on teaching, rather than my nerves!… Perhaps consider undertaking professional tertiary teacher training.

(Journal, Mary, Case 5): Activity 2, Published 14/09/05

As for the support she thought she might need to achieve the improvement she set out, Mary felt her coordinator could advise on becoming more broadly read, but what really shone through was that she felt the need for mentor style discourse or at least the ability to connect with a community of practice.

Seek assistance from my unit coordinator on extra reading material to supplement core texts to improve my own knowledge in this area, and speak to other people in this area.

(Journal, Mary, Case 5): Activity 2, Published 14/09/05

Mary was asked questions about how she saw the roles of both teachers and student in a constructivist classroom. She did not refer to the teacher's role, but did offer what she thought is the students' role. She wrote about 'students being active learners and not simply being directed by teachers'. This showed that she not only drew on the constructivist readings in Activity 2, but blended them with a sense of student-centred practice.

Students in a constructivist learning environment need to be active participants in the learning process/classroom. Rather than relying on the teacher to generate questions and direct students, the students themselves need to become more fully involved with the topic.

(Journal, Mary, Case 5): Activity 2, Published 14/09/05

At this point, Mary was taking this project to heart and was trying to teach using constructivist principles. Exposure to teaching theories was helping to bridge the gap between what were her early experiences of learning being a 'transfer of knowledge' with what she was coming to believe as a better way to teach.
I'm now attempting to structure my tutorial classes along constructivist lines … I try to impress upon students that the tutorial is the time they can explore issues that appeal to them as individuals. The hope is that their passion will inspire their peers interest, and spark animated discussion. Sometimes this works, and sometimes they sit there like statues, waiting for me to ask the questions and stimulate discussion. Maybe the key to helping this process to succeed is for me to learn how to stimulate the students to take a more active role, through the types of questions I ask, or by identifying and acting upon students' perceived areas of interest.

(Journal, Mary, Case 5): Activity 2, Published 14/09/05

After being exposed to theoretical readings concerning constructivism, cognitivism, behaviourism and Vygotsky's theory of social cognition, Mary commented in her journal on how learning styles might influence her teaching. She felt she could easily identify the deep and the surface learners and was trying to encourage deeper learning styles. She thought there was more chance to encourage deeper learning in the tutorial environment which offered a broader individual choice of topic exploration. Moreover, she revealed her thoughts about how she felt motivation was an important component to enable students to take on deeper approaches to their learning. Another important aspect of this quotation is that it showed how she was beginning to connect the two sides of the learning and teaching equation; namely how different teaching approaches can be adopted to deal with different learning styles.

Firstly, from my experience, it's fairly easy to identify the two extremes - the deep & surface learners, but not quite so easy to motivate surface learners to adopt deep learning strategies. I'm trying & encourage deep learning approaches particularly in tutorials, where the students have a fairly wide choice over what topic they explore. The hope is that they will choose an area they are interested in, and therefore be motivated to undertake extra research etc. I'm also aware that positive attitudes can be important in encouraging students to put that little bit of extra effort in, and I try to motivate students through example - the topic I teach can be very interesting, and I try to transmit that enthusiasm to the students.

(Journal, Mary, Case 5): Activity 2, Published 15/09/05

Mary followed the previous quotation with a statement that illustrates she had reflected on the structure of her lectures and hoped to bring more interactivity to her lectures.

I need to look again at how I structure the lectures, to see where I can involve the students more actively, and hopefully stimulate interest in those who are inclined to adopt the surface approach.

(Journal, Mary, Case 5): Activity 2, Published 15/09/05

With respect to Activity 3 (collecting data on one's own teaching), and Activity 4 (reflecting and planning improvements), Mary did not manage to administer a mid-
semester review questionnaire to her classes. However, as a substitute, she did go to some trouble to access the data that was collected by her university's end of semester evaluations and attempted to organise and analyse it.

I divided the [university unit evaluation] responses up between unit, lecturer and tutor evaluation, and picked out from those particular questions that focused on teaching. There were similar themes coming through in the student responses, both in the multiple choice answers, and in written responses. Most of the responses were positive, particularly in areas relating to organisation. Several students provided constructive suggestions on relying less on written notes in the lecture.
(Journal, Mary, Case 5): Activity 4, Published 12/12/05

As Mary moved through Activity 4, she looked at whether there were repeatedly similar responses in the data. She identified a polarised nature of opposing responses to the format of tutorials. Mary found the differing responses of her students to be perplexing and did not suggest a way to incorporate them into improvements.

Not many of the students wrote comments, but of those that did, many commented on the nature of the tutorials. The tutorials are conducted in an inner circle/outer circle format, designed to encourage intimacy and hopefully better group dynamics and discussions. The comments were fairly polarised, with some loving it, and others hating it - I'm not sure what to make of this!
(Journal, Mary, Case 5): Activity 4, Published 12/12/05

As Mary continued with her reflection she revisited the issue of the ‘structure of her lectures’, but now she was coming up with ways of improving them by interspersing discussion to add interactivity.

Student responses regarding group discussions suggests a need to incorporate more opportunities for this in the lectures, to break them up a bit. I think my lectures are also a bit wordy, and need to be streamlined so students don't get bored.
(Journal, Mary, Case 5): Activity 4, Published 12/12/05

Mary further exposed the value she was placing on discussion and considered how she might encourage student to use discussion as part of their presentations. Many quotations from her journal like this one portray the high importance Mary attributed to facilitating discussion and interactivity in the learning environment.

Encourage more productive tutorials by assisting students to plan their presentations in ways that will encourage group debate.
(Journal, Mary, Case 5): Activity 4, Published 12/12/05
Mary further utilised the data to reflect on and suggest ways to improve her teaching. She reiterated some of the previous statements which highlights the usefulness of a journal tool to archive thoughts and feelings as Mary used these as a valuable source for reflection. Furthermore, it demonstrated that when a comprehensive record is kept, there is a better chance of connections being made between the different parts of one's teaching practice and the outcomes they facilitate.

Looking back over my previous journal entries, I note I've recognised the need to encourage more discussion among the students, to help them to develop a deeper learning approach… It therefore seems important to incorporate more opportunities for the students to discuss issues with each other. I need to have another look at my lecture materials, and work out where I can streamline the material to be delivered to allow more interactive time.

(Journal, Mary, Case 5): Activity 4, Published 12/12/05

Along with the lecture improvement strategy, Mary came up with some other ideas for improvement. Facilitating students to draw on their own experiences and sharing them with others featured strongly in Mary's ideas. The second part of this quotation revealed her desire to map assignment tasks with marking criteria (a rubric).

Provide more real life examples to illustrate issues and problems, rather than rely on examples in the text. Ask students to share their own experiences.

Re-evaluate essay questions to ensure they match aims and objectives of the unit, and can draw on students' own experiences and knowledge.

(Journal, Mary, Case 5): Activity 4, Published 12/12/05
### Appendix 15: Thematic structure of interview coding

Table 13 lists the top-level thematic structure with evident sub-themes used to represent the actual conceptions of teaching of the participants when coding their interview data. This list represents all the codes that emerged during analysis of the data from all participants.

Table 58

**Thematic Structure of Interview Coding**

<table>
<thead>
<tr>
<th>Conceptions of teaching (COT)</th>
<th>Sub-theme Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COT 1 Awareness of conceptions of teaching</strong></td>
<td></td>
</tr>
<tr>
<td>Conceptual awareness</td>
<td>The participant is conceptually aware of COTs.</td>
</tr>
<tr>
<td>Aware of gaps in teaching practice</td>
<td>Participant is aware of gaps in their teaching practice.</td>
</tr>
<tr>
<td>Different ways of learning</td>
<td>The participant is aware of different styles of learning.</td>
</tr>
<tr>
<td>Different teaching styles for different learning styles</td>
<td>Shows evidence that participant is aware of different learning styles and appropriate alignment of approaches of teaching.</td>
</tr>
<tr>
<td>Changing students</td>
<td>The participant teaches to change students in some way.</td>
</tr>
<tr>
<td>Challenging conceptions</td>
<td>The participant feels their COTs are being challenged.</td>
</tr>
<tr>
<td>Conceptions changing</td>
<td>The participant feels their COTs are changing.</td>
</tr>
<tr>
<td>Conceptions changed</td>
<td>The participant believes their COTs have changed.</td>
</tr>
<tr>
<td><strong>COT 2 Sees teaching as a social process</strong></td>
<td></td>
</tr>
<tr>
<td>Constructivist paradigm</td>
<td>The participant is aware of and/or tries to teach with a philosophy of constructivist methods.</td>
</tr>
<tr>
<td>Encourages active learning</td>
<td>Denotes that the participant tries to encourage active learning, using activities as an important method in their teaching.</td>
</tr>
<tr>
<td>Develops cooperation among students</td>
<td>The participant tries to develop reciprocity and cooperation among students.</td>
</tr>
<tr>
<td>Expert controls students interactions</td>
<td>Denotes that the participant tries to control students interactions.</td>
</tr>
<tr>
<td><strong>Conceptions of teaching (COT)</strong></td>
<td><strong>Sub-theme Description</strong></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Encourages contact of students and faculty</td>
<td>Denotes that the participant tries to encourage contact between students and faculty.</td>
</tr>
<tr>
<td>Fellow learners</td>
<td>The participant tries to encourage students and teachers to be part of a cohort of fellow learners.</td>
</tr>
<tr>
<td>Friendly with students</td>
<td>The participant is friendly with students as part of a social teaching process, but this could be within or beyond boundaries conducive to good behaviour management (for example, is very friendly with students and is socialising with them outside the learning environment).</td>
</tr>
<tr>
<td>Approachability</td>
<td>The participant is or feels they are approachable by students.</td>
</tr>
<tr>
<td>Rapport</td>
<td>Rapport is a factor in good teaching.</td>
</tr>
<tr>
<td>A decent person</td>
<td>Being a decent person as they teach is important.</td>
</tr>
<tr>
<td>Accentuate the positive</td>
<td>The participant tries to accentuate positive aspects of student’s journey and progress.</td>
</tr>
<tr>
<td>Asking questions</td>
<td>The participant tries to ask questions of students as an important element of their teaching methods.</td>
</tr>
<tr>
<td>Good communications</td>
<td>The participant tries to communicate well and encourages student to do likewise.</td>
</tr>
<tr>
<td>Culturally effective communication</td>
<td>The participant tries to communicate in a culturally effective and sensitive manner.</td>
</tr>
<tr>
<td>Enculturation</td>
<td>The participant tries to enculturate students appropriately for the learning environment.</td>
</tr>
<tr>
<td>Social expectations</td>
<td>The participant communicates social expectations to their students and or have social expectations of student conduct.</td>
</tr>
<tr>
<td>Delineating responses that are acceptable</td>
<td>When teaching, the participant delineates responses from students that are seen as acceptable to the teacher.</td>
</tr>
<tr>
<td>Mediated and controlled</td>
<td>Denotes that the participant mediates and controls their students learning environment.</td>
</tr>
<tr>
<td><strong>COT 3 Developing minds</strong></td>
<td></td>
</tr>
<tr>
<td>Caring, nurturing and developing minds</td>
<td>Sees caring and nurturing a major part of teaching. Aims to not simply give information passively, but actively develop students' minds.</td>
</tr>
<tr>
<td>Create understandings themselves</td>
<td>Aims for students to actively create their own meanings and understand deeply and to own their knowledge.</td>
</tr>
<tr>
<td>Empathy towards student</td>
<td>The participant tries to have a sense of empathy with their students.</td>
</tr>
<tr>
<td>Generic skill development</td>
<td>The participant tries to develop generic skills in their students (e.g. good graduate attributes).</td>
</tr>
<tr>
<td>Caters for individual needs</td>
<td>The participant tries to see and accommodate students as individuals with varying needs.</td>
</tr>
<tr>
<td>Metacognitive skills</td>
<td>The participant tries to teach thinking skills.</td>
</tr>
<tr>
<td>Conceptions of teaching (COT)</td>
<td>Sub-theme Description</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Never giving up on a student</td>
<td>The participant tries to let students learn at a pace they can achieve and not ignore them if they cannot keep up.</td>
</tr>
<tr>
<td>Reshape students' visions of the world</td>
<td>The participant tries to engender changes in how the student understands the/their world.</td>
</tr>
<tr>
<td>Shelve egos</td>
<td>The participant tries to keep their egos out of the teaching and learning equation.</td>
</tr>
<tr>
<td>Student-centredness</td>
<td>The participant facilitates the learning and learning environment to be more about the students needs than the teachers needs. The participant sees and respects that the experiences of students' to be central to the learning journey.</td>
</tr>
<tr>
<td>Students perspectives are legitimised</td>
<td>The participant explicitly lets student be aware that what they think is valuable and important to the class.</td>
</tr>
<tr>
<td>Building student confidence</td>
<td>The participant tries to foster good self-confidence in their students.</td>
</tr>
<tr>
<td>Communicates high expectations</td>
<td>The participant expects students to achieve well in their classes and lets the students know their expectations.</td>
</tr>
<tr>
<td>Equal treatment</td>
<td>The participant gives equal treatment to all learners and provides equal opportunities to all students.</td>
</tr>
<tr>
<td>Ethical development</td>
<td>The participant tries to develop a sense of ethical practice in students while conducting classes ethically.</td>
</tr>
<tr>
<td>Experienced as a student</td>
<td>The participant drawing on their own experience as a student in their teaching.</td>
</tr>
<tr>
<td>Mentoring</td>
<td>The participant acts as an experienced expert guide or model while encouraging and supporting students to maximise their potential.</td>
</tr>
<tr>
<td>Peer motivation</td>
<td>Comments relating to motivation initiated between learners.</td>
</tr>
<tr>
<td><strong>COT 4 Fostering understanding</strong></td>
<td></td>
</tr>
<tr>
<td>Imparting knowledge</td>
<td>Participant's comments concerning teaching as knowledge transmission (sage on the stage). The participant's ideas about the old paradigm of teaching by transmitting knowledge and assessing by checking recitation. The concept of teaching and learning as a student's mind being a vessel to be filled with facts.</td>
</tr>
<tr>
<td>Undebatable meanings</td>
<td>The participant's ideas about whether meaning are debatable or they are set in stone by the teacher.</td>
</tr>
<tr>
<td>Recognise concepts</td>
<td>The participant's ideas about students recognising concepts and giving them appropriate examples.</td>
</tr>
<tr>
<td>Deep understandings</td>
<td>Participant's ideas on teaching to encourage deep understanding.</td>
</tr>
<tr>
<td>Conceptions of teaching (COT)</td>
<td>Sub-theme Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Using wisdom</td>
<td>The participant's ideas about the use of their wisdom or extended experience in teaching.</td>
</tr>
<tr>
<td>In-class activities to reinforce new material</td>
<td>The participant’s ideas about the uses of activities to reinforce new material.</td>
</tr>
<tr>
<td>New knowledge integrated with old knowledge</td>
<td>Bringing new knowledge old together with students' existing knowledge.</td>
</tr>
<tr>
<td>Connections between various opinions and ideas</td>
<td>Participant's ideas on combining understandings that might otherwise be isolated.</td>
</tr>
<tr>
<td>Putting theory into practice</td>
<td>The participant's ideas about putting T &amp; L theories into their teaching practice.</td>
</tr>
<tr>
<td>Emphasise critical concepts</td>
<td>The participant’s ideas about highlighting critical concepts.</td>
</tr>
<tr>
<td><strong>COT 5 Preparation and materials</strong></td>
<td></td>
</tr>
<tr>
<td>Preparation</td>
<td>The participant’s ideas about preparing for teaching.</td>
</tr>
<tr>
<td>Organisation of learning</td>
<td>The participant's ideas about organising teaching for learning.</td>
</tr>
<tr>
<td>Authentic materials and tasks</td>
<td>The participant’s ideas about use of real world materials and tasks.</td>
</tr>
<tr>
<td>Examples and explanations</td>
<td>The participant's ideas about use of examples and explanations.</td>
</tr>
<tr>
<td>Accessible information</td>
<td>The participant’s ideas about gathering and making information accessible to students.</td>
</tr>
<tr>
<td>Appropriate readings</td>
<td>The participant’s ideas about readings being appropriate.</td>
</tr>
<tr>
<td>Content control</td>
<td>The participant’s ideas about controlling content by themselves and by coordinators.</td>
</tr>
<tr>
<td>Resources available online</td>
<td>The participant’s ideas about online resources.</td>
</tr>
<tr>
<td>Up-to-date material</td>
<td>The participant’s ideas about the importance of up-to-date materials.</td>
</tr>
<tr>
<td><strong>COT 6 Engaging students</strong></td>
<td></td>
</tr>
<tr>
<td>Involving students quickly</td>
<td>The participant's ideas about bringing students' into an active learning situation.</td>
</tr>
<tr>
<td>Listening</td>
<td>The participant’s ideas about teachers listening to students or each other.</td>
</tr>
<tr>
<td>Discussion</td>
<td>The participant’s ideas about the use of discussion in teaching.</td>
</tr>
<tr>
<td>Engagement</td>
<td>The participant’s ideas about engaging student in their learning.</td>
</tr>
<tr>
<td>Expects student effort</td>
<td>The participant’s ideas about their expectations of the effort students towards their learning.</td>
</tr>
<tr>
<td>Inspiration</td>
<td>The participant’s ideas about inspiring their students.</td>
</tr>
<tr>
<td>Making learning fun</td>
<td>The participant’s ideas about learning being fun.</td>
</tr>
<tr>
<td>Motivation</td>
<td>The participant’s ideas about the motivation of students.</td>
</tr>
<tr>
<td>Conceptions of teaching (COT)</td>
<td>Sub-theme Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Self-motivated students</td>
<td>The participant’s ideas about students motivating themselves.</td>
</tr>
<tr>
<td>Selling the course</td>
<td>The participant’s ideas about capturing students’ initial interest in a course.</td>
</tr>
<tr>
<td><strong>COT 7 Facilitating and Organising Learning</strong></td>
<td></td>
</tr>
<tr>
<td>Coaches</td>
<td>The participant questions students to expose misconceptions.</td>
</tr>
<tr>
<td>Facilitator</td>
<td>Participant tries to be a catalyst for learning and engage learners in active learning and construction of knowledge and skills, rather than passive delivery of standardised content.</td>
</tr>
<tr>
<td>Responsibility for learning</td>
<td>The participant has views on who/where the responsibility of learning lies with.</td>
</tr>
<tr>
<td>Advance organising</td>
<td>The participant tries to use advance organising techniques in their classes.</td>
</tr>
<tr>
<td>Bridging the gap between theory and practice</td>
<td>The participant tries to make the gap between theory and practice explicit.</td>
</tr>
<tr>
<td>Building on existing knowledge</td>
<td>The participant builds on the existing knowledge their learners bring.</td>
</tr>
<tr>
<td>Insight giving</td>
<td>The participant tries to give insight to students where passive teaching would not.</td>
</tr>
<tr>
<td>Keeping students on track</td>
<td>The participant gives guidance to keep the learning within appropriate boundaries of the subject.</td>
</tr>
<tr>
<td>Making a difference</td>
<td>The participant thinks they make a difference to the lives of their students.</td>
</tr>
<tr>
<td>Responsibility for student learning in teacher</td>
<td>The participant feels they are responsible for student learning.</td>
</tr>
<tr>
<td>Responsibility shared</td>
<td>The participant feels that responsibility for student learning is shared by both learner and teacher.</td>
</tr>
<tr>
<td>Contactable out of class</td>
<td>The participant makes themselves available to students outside of class time.</td>
</tr>
<tr>
<td>Visual aids to explain abstract concepts</td>
<td>Visual aids to explain abstract concepts utilises different medias (e.g. video or art) to help make abstract concepts more understandable.</td>
</tr>
<tr>
<td><strong>COT 8 Behaviour Management</strong></td>
<td></td>
</tr>
<tr>
<td>Boundary setting</td>
<td>The participant sets boundaries and expectations of behaviours and ways of interacting in classes.</td>
</tr>
<tr>
<td>Culturally sensitive</td>
<td>The participant is aware of cultural sensitivity and tries to accommodate learners of different cultures.</td>
</tr>
<tr>
<td>Flexible deadlines</td>
<td>The participant comments on the flexibility of the deadlines such as assessment submission and penalties.</td>
</tr>
<tr>
<td>Respecting others</td>
<td>The participant tries to have all students respect each other within a tolerant atmosphere.</td>
</tr>
<tr>
<td>Conceptions of teaching (COT)</td>
<td>Sub-theme Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Institutional philosophy correlates</td>
<td>Denotes comments of the participant's about the balance of their ideas of teaching and the expectations of their institutions.</td>
</tr>
<tr>
<td>Knowing institutional policies and procedures</td>
<td>Commenting about institutional requirements. Knowing what the policies and procedures their institution set out.</td>
</tr>
<tr>
<td>Structured and formal</td>
<td>The participant teaches in a structured and formal way (tends to be a more teacher-centred approach).</td>
</tr>
<tr>
<td><strong>COT 9 Assessments</strong></td>
<td></td>
</tr>
<tr>
<td>Setting objectives</td>
<td>The participant’s ideas about the linking of learning objectives, assessment and learning outcomes.</td>
</tr>
<tr>
<td>Measurable outcomes</td>
<td>The participant's ideas about the outcomes of assessment tasks being measurable.</td>
</tr>
<tr>
<td>Achieving certain levels</td>
<td>The participant's ideas about the levels of attainment of students.</td>
</tr>
<tr>
<td>Achieving milestones</td>
<td>How the participant sees the progression of learning.</td>
</tr>
<tr>
<td>Authentic assessment</td>
<td>Assessment that is based on real world authentic tasks.</td>
</tr>
<tr>
<td>Assessment deadlines</td>
<td>How the participant manages assessment deadlines.</td>
</tr>
<tr>
<td>Checking understandings</td>
<td>Checking the understanding of expected tasks.</td>
</tr>
<tr>
<td>Manageable tasks</td>
<td>The participant's ideas about making tasks manageable for learners.</td>
</tr>
<tr>
<td>Targeted properly</td>
<td>The participant’s ideas about how resources, examples and assessments are targeted.</td>
</tr>
<tr>
<td>Teacher as judge</td>
<td>Participant's thoughts on teacher judgement.</td>
</tr>
<tr>
<td>Giving prompt feedback</td>
<td>The participant’s ideas about giving student timely feedback on their work.</td>
</tr>
<tr>
<td>Exams not effective</td>
<td>The participant’s ideas about the effectiveness of exams.</td>
</tr>
<tr>
<td>Teaching to pass exams</td>
<td>The participant’s ideas about teaching to coach student's for exams.</td>
</tr>
<tr>
<td><strong>COT 10 Evaluates teaching practices</strong></td>
<td></td>
</tr>
<tr>
<td>Feedback from students</td>
<td>The participant's ideas about obtaining and acting on feedback from students.</td>
</tr>
<tr>
<td>Open to debate</td>
<td>Participant's comment about their ideas being open to discussion and that there may be other answers.</td>
</tr>
<tr>
<td>Experimenting with methods</td>
<td>The participant’s ideas about trying different methods and approaches of teaching.</td>
</tr>
<tr>
<td>Flexible methods</td>
<td>The participant's ideas about using different methods for different circumstances.</td>
</tr>
<tr>
<td>Student beliefs of teaching and learning</td>
<td>The participant’s ideas about the interplay between students' and teachers' beliefs about T&amp; L.</td>
</tr>
<tr>
<td>Model to draw on</td>
<td>The participant's ideas about a model of teaching they hold or could use.</td>
</tr>
<tr>
<td>Evaluate one's own teaching</td>
<td>Comments that are about a participant evaluating their own teaching practice.</td>
</tr>
<tr>
<td>Conceptions of teaching (COT)</td>
<td>Sub-theme Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Reflecting</td>
<td>The participant's comments on the reflection process and on problems in their teaching.</td>
</tr>
<tr>
<td>Defending position</td>
<td>The participant’s ideas about defending their position.</td>
</tr>
<tr>
<td><strong>COT 11 Practitioner of teaching</strong></td>
<td></td>
</tr>
<tr>
<td>A job</td>
<td>The participant's ideas about their teaching as employment.</td>
</tr>
<tr>
<td>Age credible</td>
<td>The participant’s ideas about their age in the teaching role.</td>
</tr>
<tr>
<td>Cannot know everything</td>
<td>The participant’s ideas about a teacher being all knowing.</td>
</tr>
<tr>
<td>Competent to teach</td>
<td>The participant’s ideas about their competency to teach.</td>
</tr>
<tr>
<td>Confidence</td>
<td>The participant's ideas about their teaching confidence.</td>
</tr>
<tr>
<td>Enthusiasm, loves to teach</td>
<td>The participant's ideas about their enjoyment of teaching and their desire to teach.</td>
</tr>
<tr>
<td>Teaching experience</td>
<td>The participant's ideas about their own experience of teaching and knowledge of teaching techniques.</td>
</tr>
<tr>
<td>Expert in subject matter</td>
<td>The participant’s ideas about how a teacher is an expert in their domain.</td>
</tr>
<tr>
<td>Teaching from own perspective</td>
<td>The participant’s ideas about teaching their perspective to students.</td>
</tr>
<tr>
<td>Gender male helps</td>
<td>The participant’s ideas about whether gender effects teaching.</td>
</tr>
<tr>
<td>Humour use</td>
<td>The participant’s ideas about using humour in teaching.</td>
</tr>
<tr>
<td>In my day</td>
<td>The participant’s ideas about what teaching was when they were a student.</td>
</tr>
<tr>
<td>Natural teacher</td>
<td>The participant’s ideas about teachers being naturally good teachers or needing to be formally qualified.</td>
</tr>
<tr>
<td>One-to-one</td>
<td>The participant’s ideas about one-to-one teaching.</td>
</tr>
<tr>
<td>Practitioner academic</td>
<td>The participant’s ideas about a teacher being primarily an academic.</td>
</tr>
<tr>
<td>Practitioner industry</td>
<td>The participant’s ideas about a teacher coming from industry.</td>
</tr>
<tr>
<td>Practitioner teaching community</td>
<td>The participant's ideas about being part of a community of practicing teachers.</td>
</tr>
<tr>
<td>Qualified teacher</td>
<td>The participant’s ideas about being qualified to teach.</td>
</tr>
<tr>
<td>Theory informed practice</td>
<td>The participant’s ideas about their teaching being informed by teaching and learning theories.</td>
</tr>
<tr>
<td>Sessional non-academic</td>
<td>The participant’s ideas about the validity of their status as teachers when classed as sessional.</td>
</tr>
<tr>
<td>Teaching as performing</td>
<td>The participant’s ideas about performing in front of students.</td>
</tr>
</tbody>
</table>
## Table 59  
*Activities and Theoretical Components of the Reflective Practice Website*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Activity title</th>
<th>Activity elements</th>
<th>Theoretical components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to website</td>
<td>Interviews and TPI</td>
<td>Teaching conceptions are revealed prior to the intervention beginning (interviews and TPI). This element of revealing conceptions of teaching happens in other parts of the activities as well.</td>
<td>CC1: Revealing existing conceptions: initial interviews and TPI questionnaires.</td>
</tr>
<tr>
<td>interaction</td>
<td>questionnaire</td>
<td></td>
<td>CC2: Discussing and evaluating preconceptions. initial interviews.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RP1: Planning. Neophytes have engaged in planning by preparing for the teaching ahead.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RP2: Doing (occurs outside website). The doing of reflective practice is carried out during the semester of teaching the neophyte teachers are about to start.</td>
</tr>
<tr>
<td>Website overview</td>
<td>Program introduction</td>
<td>Introductory information and preparation for reflection.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Activity title</td>
<td>Activity elements</td>
<td>Theoretical components</td>
</tr>
<tr>
<td>----------</td>
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<td>-------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Activity 1: Part 1</td>
<td>Introduction to reflecting on teaching and learning.</td>
<td>Reading: Background information about reflective practice. Considering some questions about reflective processes in their own practice (not recording answers at this stage).</td>
<td>Activity 1 Purpose: Purpose of this activity is to introduce the activity of reflection and some different ways of thinking about the components of teaching, learning and observing. This activity also includes looking at one's self and their experiences (as a student and teacher), considering the student teacher relationship, thinking about their own thinking and what a good teacher is.</td>
</tr>
<tr>
<td><strong>CA1:</strong> Modelling.</td>
<td>Modelling is carried out by students reading ideas about good teaching practice and some teaching and learning theories along with some diagrams of concept models.</td>
<td>CA1: Modelling. Modelling is carried out by students reading ideas about good teaching practice and some teaching and learning theories along with some diagrams of concept models.</td>
<td></td>
</tr>
<tr>
<td><strong>CA2:</strong> Coaching.</td>
<td>Information about ways of thinking to assist in forthcoming tasks. Considering questions from expert.</td>
<td>CA2: Coaching. Information about ways of thinking to assist in forthcoming tasks. Considering questions from expert.</td>
<td></td>
</tr>
<tr>
<td>Activity 1 Parts 2 &amp; 3</td>
<td>What do I need to know about myself as a teacher? What do I need to know about students in order to teach them?</td>
<td>Observation of one's self as a teacher of students. Other theories of teaching, e.g. competency learning.</td>
<td>CC3: Conceptual conflict. participants are prompted to question themselves, students and multiple theories of teaching.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CA3: Scaffolding. is the introduction of reflective practice techniques and contact with researcher during semester.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CA4: Articulation, is achieved during the activities through the journal entries and forums.</td>
</tr>
<tr>
<td>Activity</td>
<td>Activity title</td>
<td>Activity elements</td>
<td>Theoretical components</td>
</tr>
<tr>
<td>------------</td>
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<td>-------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Part 4</td>
<td></td>
<td><strong>Problem-solving approach.</strong></td>
<td><strong>CA3</strong>: Scaffolding, through comparison of theories.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Journal entry: Thinking back on what you have read and thought about teaching and learning. What makes a good teacher?</strong></td>
<td><strong>CA2</strong>: Coaching. Expert questioning of neophytes to elicit participants' description of a good teacher.</td>
</tr>
<tr>
<td>Activity 1:</td>
<td>Ways of thinking about teaching</td>
<td><strong>Reading about:</strong></td>
<td><strong>CA1</strong>: Modelling. Modelling is carried out by participants reading ideas and philosophies about good teaching practice and some teaching and learning theories.</td>
</tr>
<tr>
<td>Part 5</td>
<td></td>
<td>- teaching within a culture;</td>
<td><strong>CA2</strong>: Coaching. Expert information about ways of thinking to assist in forthcoming tasks.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- teaching in a philosophical context; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- the philosophy of a student-centred approach.</td>
<td></td>
</tr>
<tr>
<td>Activity 1:</td>
<td>More ways of thinking about teaching</td>
<td><strong>Reading about:</strong></td>
<td><strong>CA1</strong>: Modelling. Modelling is carried out by participants reading ideas and philosophies about good teaching practice and some teaching and learning theories along with some diagrams of concept models.</td>
</tr>
<tr>
<td>Part 6</td>
<td></td>
<td>- teaching within a belief system;</td>
<td><strong>CA2</strong>: Coaching. Expert information about ways of thinking to assist in forthcoming tasks.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- bodies of knowledge; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- critically reflective practice (extending part 1).</td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Activity title</td>
<td>Activity elements</td>
<td>Theoretical components</td>
</tr>
<tr>
<td>-------------</td>
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<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Activity 2:</td>
<td>What is your theory of teaching?</td>
<td>Try thinking about these questions and noting your reactions and thoughts in your journal? Summarise the following:</td>
<td><strong>Activity 2 Purpose:</strong> The purpose of this activity is for you to gather sufficient information about some theories of teaching and learning to give you useful vocabulary and understanding to talk confidently about those theories. As the first step towards understanding the theories you will encounter some key ideas. To assist with the integration of these ideas you will be directed to make journal entries. <strong>CA4:</strong> Articulation, is achieved by integrating knowledge gained from previous activities into the participants own ideas of teaching.</td>
</tr>
<tr>
<td>Part A</td>
<td>Thinking about improving your teaching.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>CA1:</strong> Modelling. Modelling is carried out by participants reading ideas and philosophies about selected teaching and learning theories along with related online resources.</td>
<td></td>
</tr>
<tr>
<td>Activity 2:</td>
<td>Investigations of teaching theories</td>
<td>Explore resources (video, websites and readings) according to guided questions about selected teaching theories.</td>
<td></td>
</tr>
<tr>
<td>Part B</td>
<td></td>
<td><strong>CA4:</strong> Articulation, is achieved by integrating knowledge gained from previous activities into the participants own ideas of teaching.</td>
<td></td>
</tr>
</tbody>
</table>

Journal entries on questions about: constructivism; cognitivism; behaviourism; learning approaches and theories; and reflective practice.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Activity title</th>
<th>Activity elements</th>
<th>Theoretical components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 3: Part A</td>
<td>Collecting some data about your teaching</td>
<td>Administering the provided mid-semester review questionnaire (see Appendix 5). &lt;br&gt;Journal entry about the participants experience of collecting data about their own teaching with the supplied mid-semester review questionnaire.</td>
<td><strong>Activity 3 Purpose:</strong> Collecting data about one's own teaching: This activity provided the tools and methods to gather some data about participants’ own teaching for them to glean insight to how their students see their learning experiences. &lt;br&gt;<strong>RP3:</strong> Reviewing. Reviewing begins with gathering data of participants own teaching.</td>
</tr>
<tr>
<td>Activity 3: Part B</td>
<td>Considering the data about your teaching</td>
<td>Considering responses to the mid-semester review questionnaire. &lt;br&gt;Make some notes about what you have discovered. &lt;br&gt;Consider changes in how you teach that unit that might improve how you teach it overall. &lt;br&gt;Journal entry about possible alterations to teaching strategies to accommodate the findings from the mid-semester review questionnaire.</td>
<td><strong>RP3:</strong> Reviewing. The main reflection takes place, as participants consider the data they have collected about their own teaching. &lt;br&gt;<strong>CA5:</strong> Reflection. Neophytes are prompted to reflect on their own teaching through the feedback provided by their student via the mid-semester review questionnaire.</td>
</tr>
<tr>
<td>Activity</td>
<td>Activity title</td>
<td>Activity elements</td>
<td>Theoretical components</td>
</tr>
<tr>
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</tr>
</tbody>
</table>
| Activity 4: Part A | Reflecting upon your teaching and consideration of data you have collected on your teaching. | Make notes on the following questions in your journal as you consider the responses you collected of the mid-semester review questionnaire:  
Are there responses that are repeatedly the same?  
Are there responses that seem to point to similar issues in the learning environment/experience?  
Can you see any other patterns appearing in the responses?  
Are there any responses that stick out as important or lead you to think of a particular issue?  
Consider what you noticed in light of your understanding of teaching and learning and note anything of interest. | **Activity 4 Purpose:** The purpose of this activity is to try and plan ways to improve how we might teach. We will consider what you have found out about your teaching especially from mid-semester review questionnaire and then attempt to plan a possible course of action of how the learning experience you provide for your students can be improved.  
**CA2:** Coaching. Expert questioning of neophytes on the nature of their students' responses to the mid-semester review questionnaire, encouraging focused, evidence-based reflection.  
**RP3:** Reviewing. The main reflection takes place, as participants consider the data they have collected about their own teaching.  
**RP1:** Planning. Participants prepare to plan how they will improve their teaching based on students feedback and their initial reflections on this feedback.  
**ADVICE:** At this point you may find it useful to look back over your journal entries to reflect on your thinking from earlier in the project. |
<p>|           |                |                  | <strong>CA5:</strong> Reflection. Neophytes are prompted to look back at their pre-existing ideas and the ideas that have been presented in the website activities. This reflective process is focused on the problem solving aspects that reflecting offers. |</p>
<table>
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<tr>
<th>Activity</th>
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<tr>
<td>Activity 4: Part B</td>
<td>Reflecting and devising improvements to your teaching</td>
<td>Conduct a brainstorming session considering the responses to your mid-semester review questionnaire (with other colleagues or mentors, if you can). List ideas on how you might be able to improve on how you lead and facilitate your students’ learning experiences. Record your brainstorming ideas in your journal. Armed with your analyses of the mid-semester review questionnaire, consider each issue that you identified and plan how some of the solutions and improvements could be implemented to improve your teaching strategies. Make notes of your plans in your journal.</td>
<td>RP1: Planning (again). As this is the first time the participants have gone through the reflective process the planning is taking place at the end of this reflective improvement cycle, but it is also the beginning of the new reflection and improvement cycle. CA2: Coaching. Participants were encouraged to seek guidance from colleagues or mentors. CC4: Conceptual restructuring. Opportunities are provided for conceptual restructuring during the reflective process. RP4: Improving. Participants devise and plan improvements to their teaching.</td>
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