Contesting the Culture of the Doctoral Degree: Candidates’ Experiences of Three Doctoral Degrees in the School of Education, RMIT University

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Declaration

I certify that, except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work that has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged, and RMIT ethics procedures and guidelines have been followed.

Judith Maxwell

March, 2009
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Dedication

This thesis is dedicated to my parents:

Riti Topp and the late William (Bill) Topp
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Summary

This study is situated within a context of the changing role and value of the university, particularly in terms of a renewed focus on the importance of ‘practical’ research. It seeks to explore candidates’ experiences of the culture of three doctoral research degrees in the School of Education, RMIT University. The degrees in question are the Doctor of Philosophy by thesis, the Doctor of Philosophy by project and the Doctor of Education (EdD). The PhD (project) and the EdD were developed as a response to diversification of prospective candidates and their changed motivation for study, as well as the Australian Government’s imperative for universities to produce more work-relevant research. The research sought to problematise and contest current understandings of doctoral candidates’ experiences by highlighting complexities in the process and identifying differences and similarities between each of the three degrees. Although there is copious literature discussing doctoral study generally, there is less on identifying how doctoral candidates themselves perceive the culture of doctoral study. This is particularly true of doctoral study outside of the ‘traditional’ PhD, and especially from the perspective of a comparative study of candidates’ experiences of three doctoral degrees in one School. Further, in identifying the commonalities experienced by candidates in each program, the study contributes to the debate on what defines a doctorate. To a more limited extent, it adds to the debate on practice-based research.

The main research question is ‘How do candidates perceive the respective cultures of traditional, practice-based and professional doctoral education?’ To answer this question, a nested, multiple-case study of the three doctoral modes was used to address the first three sub-questions. These focused on the norms and practices of candidates; the extent to which their needs and expectations were met; and differences in their notions of research and practice. Data from semi-structured, in-depth interviews with seventeen candidates (six from each of the PhD programs and five from the EdD program) and six supervisors (two from each doctoral program) are discussed and analysed in three chapters forming case studies of each of the doctoral degrees. This is followed by the cross-case analysis, where differences and similarities between the degrees are analysed, leading to answers to the fourth sub-question which sought to identify what can be learned in terms of supervisor pedagogy and learning support. The research design was underpinned by a Bourdieuan epistemology and a critical theoretical perspective. Bourdieu’s theory of practice with its concepts of habitus, field, capital, agent and practice allowed analysis of candidates’ experiences and the doctoral structures within which their practice resides through one critical lens. It is argued that this analysis offers deeper and more
critical insights into candidates’ experiences and into the sometimes taken-for-granted assumptions of previous studies.

Each of the doctoral degrees is at a different stage in its history within the School. The PhD by project is relatively new. Compared to the PhD by thesis, candidates and supervisors in the PhD by project have few traditional ‘rules of the game’ to guide them. Conversely, EdD candidates interviewed were among the last still enrolled in this program. A limitation to the study was the unrepresentative negative bias evident in dissatisfaction felt by most EdD candidates as a result of particular issues stemming from a program in demise. It was felt, however, that the remaining data allowed for valuable comparison between the other programs and, as a secondary issue, it also allowed issues in declining and emerging programs to be captured.

The data revealed many issues common to all doctoral programs. These include the importance of understanding the various habitus’ and relative amounts of cultural capital of candidates, and the impact of a perceived lack of learning community. Other findings related to ambivalence regarding the types of cultural and social capital appropriate for doctoral candidates not aiming to work in an academic environment where these are in conflict with the workplace. Three meta-themes were developed: tensions between and within the field; challenges to autonomous principles; and the importance of habitus and cultural capital in doctoral study.

The study added to the literature aimed at increasing understanding of candidates’ trajectories toward success in the doctoral field, thereby informing supervisor and learning support pedagogy. In particular, using Bourdieu’s key concepts provided another layer of understanding of candidates’ issues in the doctoral experience within the particular structures of the various subfields and fields of doctoral study. Five recommendations were proposed, aimed at producing a vibrant doctoral learning community with a deeper understanding of candidates’ issues.
Chapter 1

Introduction

1.1 Preamble

This study is an exploration of candidates’ experiences of the culture of three doctoral research degrees in the School of Education, RMIT University: the Doctor of Philosophy by thesis, the Doctor of Philosophy by project and the Doctor of Education. It comes at a time in which universities in Australia and much of the Western world are experiencing a change in perceptions of the value and role of the university in society, particularly in terms of a renewed focus on the importance of ‘practical’ research (Barnett, 2000; Marginson, 2007; Pearson, 1999b, 2005a). This has been particularly noticeable in the many professional doctorates developed in a range of disciplines and project-based doctorates in the creative arts and design disciplines over the past fifteen or so years. Much of the debate around the nature and value of the doctoral degree has focused on the development and diversification of doctoral programs resulting from changing patterns of demand and origins of candidates (Evans, 1997, 1998; Gale, 1999, 2003; Pearson, Evans, & Macauley, 2008; Pearson & Ford, 1997; Usher, 2002), particularly in terms of research training for the workplace. Generally, however, there has been comparatively little research into understanding the culture of doctoral degrees from the candidates’ perspectives from within one faculty or school where it is possible to compare three different doctoral degrees.

1.2 Context and background to the study

Universities, as with other institutions, have always undergone change. From what some would say are its origins in Plato’s Academy and Aristotle’s Lyceum, to the medieval universities at Bologna, Paris and Oxford, to the modern university and into postmodern directions, the idea of the university has continued to be redefined. The one constant factor underpinning all of these changes, however, is the age-old question of the aim of universities: the dichotomy between a classical, academic approach and a professional, utilitarian approach continues to simmer beneath the surface.

More recently, higher education in the Western world has been undergoing a fundamental shift in its relationship to society (Barnett, 1990). Universities are experiencing changing social, economic and political forces at a pace not seen before. In the past half century they have gone from the
multifunctional institutions of the 1960s portrayed by Kerr (1963) to the ‘anti-organic, anti-
systematic, anti-totalizing’ universities of the 1990s (Scott, 1995, p. 45) to the ‘attenuated university’
of the new millennium (Barnett, 2000, p. 14), and into what Marginson (2007) calls the ‘post post-
public era’ where corporatisation is equalised by ‘a renewed concern about public purpose and
conditions’ (p. 118).

The recent culture change is in no small way due to the impact of reduced university funding through
successive neo-liberalist government policies (Marginson, 1997b). This has led to corporatisation of
universities, the result of which is that the ideas and language of commerce have rapidly replaced
those of academia as we knew it. However, although corporatisation and its associated
commodification of programs are the effects of reduced funding, they are also bound up with other
important issues such as globalisation, internationalisation, new epistemologies and methodologies,
and increased numbers and diversity of students. The combined effects of these factors have produced
the new non-linear university where both form and function are fragmented and contested.

In higher degree by research (HDR) programs this is manifested in, for instance, the increasing
numbers of fee-paying international and local students at universities in Australia and other Western
countries. It is also seen in the increased numbers of vocationally oriented HDR programs; as well as
professional doctorates, there is an emerging number of HDR programs located within the site of this
study: RMIT University. For example, there have been clusters of practitioner-researchers enrolled in
Masters in Education by project programs, sharing a sharing a facilitator/supervisor, who conducted
action research within worksites (Reeders, 2002). As well as contributing to professional and
discipline knowledge, their research aimed to produce workplace change or better informed practice.
They deviated from the norm by often using a methodology once thought not to be ‘rigorous’ enough
for a research degree in the discipline of education, and, rather than the more traditional individual
supervisors, they were supervised as groups. Similarly, in Britain there are Postgraduate Training
Partnerships where academia and industry come together to jointly supervise postgraduate research
projects (Adams, 2000). Embedded in these new types of research degrees, of course, is a change of
purpose. Once thought of primarily as an apprenticeship into academia, research degrees are now
being used for promotion within the workplace.

These changed conditions at a time when the very idea of a university is called into question demand
some understanding of emerging tensions and possibilities. Some key questions we need to debate
are: What is a good HDR? What counts as research? What counts as knowledge? What
methodologies are legitimate? What constitutes an original contribution to knowledge? Who will give
us the answers to these questions? What currency will a traditional HDR have? What currency will any sort of HDR have? What is the candidate’s experience in all of this?

This last question is the catalyst in the present study. The researcher is a learning adviser in the Study and Learning Centre, RMIT University, and in the context of this work has often engaged in discussions with research candidates across the University who have varying understandings of the processes and expectations of the culture within which they are studying. These show themselves variously as thesis writing and study issues as well as difficulties in the supervisor relationship. None of this is new, of course; there has been much research showing the particular issues of postgraduate research candidates (see for example Barnacle & Usher, 2003; Conrad & Chipperfield, 2004; Harman, 2002, 2003a, 2003b; McAlpine & Norton, 2006; Pearson & Ford, 1997). What is needed, however, is a study that looks to understand the candidates’ emotions, and their ‘bodily dispositions’ and ‘practical consciousness’ (Bourdieu, 1980/1990) of their habits and activities within particular cultures: in this case, in each of three doctoral programs or modes in the School of Education, RMIT University. By doing this, the study aims to increase knowledge of research candidates’ journeys and thus provide information to facilitate better structured experiences leading to increased success.

1.3 Research setting

RMIT University (the registered trading name, but also still known as Royal Melbourne Institute of Technology), began its life as the Working Men’s College, Melbourne, in 1887. Full-time programs in engineering and applied science were offered from 1899, with practical trade teaching following. It became Melbourne Technical College in 1934, and renamed the Royal Melbourne Institute of Technology in 1954. Other work-related discipline areas such as accounting, food technology and real estate gradually began to be taught, and the first RMIT University degrees were awarded in 1981. In 1988, it was the first College of Advanced Education in Australia to award its own Doctorate of Philosophy (RMIT, 2006a), and, with the Australian Government’s Unified National System (see Chapter Two), it became a university after merging with Philip Institute of Technology in 1992 (RMIT, 2006a).

RMIT is a dual sector university, having both Technical and Further Education (TAFE) and higher education (HE) sectors. Reflecting its history in applied learning, it is committed to providing students with work integrated learning, with a focus firmly on ‘work-relevant education and high quality research which is engaged with the needs of industry and community’ (RMIT, 2006b). It has a long history of practice-based research in postgraduate education going back to the 1980s with, for
instance, project degrees in architecture (Reeders, 2002). RMIT University is a member of the Australian Technology Network (ATN), a coalition of five Australian universities whose aim is to build partnerships and undertake research that is relevant to industry and community expectations (ATN, 2004).

As with most universities, RMIT University has undergone several organisational changes over time. One such change in 2004 involved the restructuring of all sections of the University into six service portfolios and three academic portfolios. All faculties dissolved into schools which were aligned with one of the three academic portfolios: Business; Design and Social Context (DSC); and Science, Engineering and Technology (SET). In this change, the Faculty of Education, Language and Community Studies (itself only six years old) became divided into the School of Education (SoE) and the School of International and Community Studies (ICS). The School of ICS then merged with the School of Social Science and Planning to become the School of Global Studies and Social Sciences Planning (GSSSP) in 2006. All of these schools are part of the DSC Portfolio. In a further move, Portfolios were all renamed Colleges in 2008; thus, the School of Education is now part of the College of DSC.

RMIT is a large university; in 2006 (the final year of data collection for this research) there were 63,070 students enrolled over both the TAFE and HE sectors, the latter having 31,715 enrolled students, of which 1,687 were enrolled in research degrees (RMIT, 2006c). This study focuses on the culture of doctoral studies in the University’s School of Education. The School has a purpose-built building on the Bundoora West Campus (situated in the northern suburbs, 18 kilometres from Melbourne) where undergraduate and most postgraduate programs are run. Although doctoral supervisors are located at the Bundoora Campus, there is an office at the City Campus where they occasionally meet with candidates. Because the School has been in existence for only four years, the issue of culture is interesting. It is yet to settle into a stable culture because the current Head of School has been in that position for only a short time. Changes have been made, particularly in governance, through a new structure of committees. Although there has been the usual turnover of staff, some key long-standing staff are still providing the flavour of a past, relatively stable time.

Until recently, the School had two doctoral programs: the Doctor of Philosophy (PhD) and the Doctor of Education (EdD). The PhD in this School can currently be studied either by the

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1 Note that, because of US-developed academic administration software used, what are referred to as ‘courses’ in most other Australian universities are called ‘programs’ at RMIT University.
traditional mode of a thesis or by project. The PhD by thesis would seem to need no introduction to those working in the field of postgraduate study and perhaps to those outside of this field (although there are variations both between countries such as the US and the UK, and also within Australia, as discussed in Chapter Two). At RMIT University, the PhD (thesis) consists of a single research study completed under supervision, the outcome of which is a thesis. It differs from the EdD in that the latter had a smaller research element which was preceded by four one-semester coursework units. Although many other Australian universities had introduced this degree from the early to mid 1990s (Trigwell, Shannon & Maurizi, 1997), the EdD was not introduced to the School of Education until 1997, first offered as a coursework doctorate, and in 1999 as a research degree. The PhD by project was offered in the School for the first time in 2000. It consists of a research study, usually completed in the candidate’s workplace, and a durable record of the project which includes an exegesis. Candidates are also examined orally. It should also be noted that all of these programs/modes are deemed by the Australian Government to be higher degrees by research – that is, research constitutes a minimum of two-thirds of its assessable content (DEST, 2003b). In 2005, when interviews for this study took place, the School had 35 PhD candidates and 13 EdD candidates. In 2008, the School had 55 PhD candidates but only 2 EdD candidates enrolled.

The EdD and the PhD (project) developed as a response to diversification of prospective candidates and their changed motivations for doctoral study (Usher, 2002) as well as the Australian Government’s ongoing agenda for universities to produce more work-relevant research (Dawkins, 1988; Kemp, 1999). The focus of both is clearly on professional or work practice. EdD candidates undertake ‘studies and professional development in depth in a significant part of a field of professional activity’ (RMIT, 2007c, p. 14). However, for PhD (project) candidates, the link to the workplace is usually more entrenched: the aim is to produce change and a tangible outcome in the workplace by using action learning or research approaches within the framework of a research project (RMIT, n.d.).

The requirements of all RMIT University’s PhDs, including both the PhD (thesis) and by project, are that the candidate must demonstrate ‘a significant and original contribution to knowledge of fact and/or theory; independent and critical thought [and] the capacity to work independently of

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2 While Pearson’s (2005) point that there is an ‘uncritical acceptance of there being a “traditional” PhD’ (p. 123) is taken, ‘traditional’ as used here merely describes the PhD by thesis with research methodology being the only coursework involved, which is common to Schools and Faculties of Education, among others.

3 During the course of this study, a new Australian Government was elected; the Department of Education, Science and Training (DEST) was replaced by the Department of Education, Employment and Workplace Relations (DEEWR).
supervision’ (RMIT, 2007c, p. 13). Although there is much competition for Australian Government funded places, eligibility criteria for direct entry into a PhD program is diverse: the applicant must have one of the following: a research Masters, a Masters by coursework with at least a one-semester research component, a Bachelor degree from RMIT University with first class honours or upper second class honours, another award deemed to be equivalent to any of these categories, or ‘other qualifications or experiences as the Portfolio/School considers appropriate’ (RMIT, 2007c, p.17). In addition to the RMIT University requirements, the School of Education selection decisions for the PhD (both by thesis and project) are based on the compatibility of the proposed research to the School’s research strengths and supervisor capacity. For the EdD program, the School’s entrance requirements were ‘an appropriate Master of Education (or equivalent) degree in the core discipline area of the proposed doctoral program and appropriate advanced professional experience’ (RMIT, n.d.). Candidates in all doctoral degrees must also have completed a research course or have equivalent experience in conducting research projects (RMIT, 2007a). Research methodology courses have seen many changes over the past few years, in part because of University organisational changes, with different iterations ranging from one-semester courses covering all major research methodologies to those where candidates were able to choose workshops on methodologies relevant to their own study.

The written submission requirements for the PhD (thesis) are as they are in most other Australian universities: a thesis of no more than 90,000 words (RMIT, 2007c, p. 37). For the PhD (project), a durable record of the project is submitted which includes an exegesis with a recommended length of 20,000 to 40,000 words (RMIT, 2007c, p. 40). This length is problematic, however, with some candidates having submitted larger exegeses, sometimes of 60,000 to 80,000 words (see for instance Brearley, 2001). The EdD requirements are four semesters of coursework units and a thesis of no more than 60,000 words (RMIT, 2007c, p. 37).

These three doctoral programs are at different stages in their histories. In 2006, because of insufficient numbers to sustain the program, the EdD was ‘rested’. There was no new intake of candidates in 2007 or 2008 and the EdD is not expected to be resurrected (School of Education Executive decision 2005). The PhD (project), along with the research Masters by project, was initiated in the then Faculty of Education, Language and Community Services in 2000 (Reeders, 2002). Reflecting RMIT’s philosophy of practical and relevant research, it was also seen as a

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4 For expediency, from this point on, each of the three iterations of the doctoral degree are referred to as ‘programs’, despite the PhD (thesis) and PhD (project) being alternative modes of the one PhD program. Similarly, ‘RMIT University’ will be referred to as RMIT.
response to the Australian Government’s agenda for increased collaboration with industry to improve the quality of research training (Kemp, 1999).

1.4 Aims of the study and research questions

This research aimed to capture the cultures of different doctoral modes through a case study of the three doctoral programs in the School of Education, RMIT, and, based on these understandings, to suggest some changes to supervision and learning support practices in the School. Although the main focus is the doctoral candidates’ experiences in their journey towards their respective completion of traditional, practice-based and professional doctoral studies, this is complemented by supervisors’ experiences.

In order to achieve this aim, the research sought:

- to provide detailed description and analysis of the cultures of the three doctoral programs in the School of Education, RMIT, particularly from the perspective of doctoral candidates
- to problematise and contest current understandings of doctoral candidates’ experiences by highlighting the complexities in the process
- to demonstrate the particular experiences of doctoral candidates enrolled in declining, emerging and traditional programs of study.

The main research question is:

- How do candidates perceive the respective cultures of traditional, practice-based and professional doctoral education?

To answer this question, a nested, multiple-case study (Yin, 1994, 2009) of the three doctoral modes in RMIT’s School of Education was used to address the following sub-questions:

- How do the norms and practices of candidates in each program differ?
- To what extent does each program meet candidates’ needs and expectations?
- What are the differences in notions of research and practice in each program?
- What can we learn from answers to these questions in terms of supervision pedagogy and learning support?

At this point it is important to identify a major limitation that emerged during the course of this study, which impacted on the integrity of the research questions and the study generally. As previously discussed, the EdD program ceased to accept new candidates in 2006. However, the number of EdD candidates began to reduce in the few years before this, causing difficulties both in the provision of
coursework units of the variety expected by candidates and in some related administrative issues. This led to a considerable amount of dissatisfaction evident in candidates’ interviews, effectively producing a strongly negative bias in terms of program comparison. A decision needed to be made regarding whether to omit all data and discussion related to the EdD and reconceptualise the study as comparison only between the PhD (thesis) and PhD (project). It was decided to maintain the original objectives of the study, partly because valuable discussion of issues unrelated to the coursework issues would be lost, along with the positive thoughts about the coursework units from some candidates. Further, it enabled the study to satisfy one of the aims (above) of capturing issues in declining and emerging programs. However, in order to ensure as balanced a comparison as possible between each program, the specific negative coursework issues of EdD candidates has been discussed predominantly in the context of issues within declining programs, and where mentioned elsewhere, the reader is reminded of this limitation.

1.5 Rationale for and significance of the study

The primary contribution to knowledge of this study is to not only further our understanding of traditional, practice-based and professional doctoral education, but also to further our understanding of the culture of doctoral study in general. Despite the copious literature on doctoral study generally, there is little research into the nature and complexities of Australian doctoral education (Evans, 2000; Neumann, 2003), particularly on identifying how doctoral candidates perceive the culture of doctoral study, and this is particularly true of doctoral study outside of the ‘traditional’ PhD. Existing research focuses mainly on supervisor issues from the supervisors’ perspectives: their understanding of student issues from within their own perception of the culture of doctoral study. However, it is important to understand how the candidates feel about themselves as doctoral researchers and to understand their processes of and rationale for achieving doctoral status and what different issues emerge from candidates in each of the doctoral programs. In doing so, it aims to fill the gap in research identified by Pearson (1999b), who argues that there has been:

…insufficient attention to the way doctoral education proceeds within particular contexts and settings, and insufficient attention to the lived experience and perceptions of participants in specific research and learning environments (p. 270).

The School of Education at RMIT is at an interesting point in history where, within the bounded system of research doctoral programs, each of the three iterations are at a different stage in its own history (as explained above). The EdD candidates interviewed are among the last still enrolled in this program. The ‘by project’ mode of the PhD, on the other hand, is relatively new and, although there
are guidelines, the candidates and supervisors have few traditional ‘rules of the game’ to assist them, as they do with the conventional and established PhD (thesis). It is therefore interesting, as a secondary issue, to look at the commonalities experienced by candidates in each program in order to contribute to the debate on what defines a doctorate (Gale, 2003), and to identify any different cultural perceptions and specific issues between each of these doctoral studies from which information can be used to inform other academic areas which have programs that are new or require termination. To a more limited extent, it adds to the debate on practice-based research.

While bearing in mind the limit to generalisation of qualitative research, understanding some of the complexities of life as a doctoral candidate will be useful for supervisor pedagogy and learning support in terms of implementing changes to ensure future cohorts of candidates are well supported. Many factors including the uneven quality of supervision, family pressures and a sense of isolation have led to high attrition rates for doctoral candidates in Australian universities (Ferman, 2002; Neumann, 2003), and to an increasingly high percentage of research candidates accessing learning support at Australian universities (Knowles & Lake, 2003). It is only when those within academic units have a concrete understanding of the norms, values and beliefs of their culture that they are more likely to be effective (Toma, Dubrow, & Hartley, 2005).

### 1.6 Disambiguating concepts of ‘practice’

The term ‘practice’ is used in two senses throughout this thesis, one of which is to denote practitioner research, or research based in the workplace. Although RMIT’s focus is on workplace-relevant research, it is of course not the case that all research is exclusively based in, or for the specific benefit of, workplaces. The thrust of this study relates to a comparison between the more traditional PhD by thesis program and the programs likely to be more practice-based such as the EdD and, more particularly, the PhD by project. Used in this sense, ‘practice’ as used in ‘practice-based research’ belongs to university marketing and policy discourses. However, the definition of ‘practice-based’ research is not straightforward, partly because the term is often used interchangeably with ‘professional’ research, and compounded by research showing that although what is termed ‘practice-based’ professional research might be practitioner-oriented, it is not necessarily practice-based (Malfroy, 2004; Maxwell & Shanahan, 1997; McWilliam, et al., 2002). Because it is not within the scope of this thesis to engage with these definitions further, practice-based research here is assumed to mean research aimed at a change in work practice, producing practitioners who are more skilled and knowledgeable in their workplace, and an addition to professional and scholarly knowledge.
(Hodges, 2006). What is deemed ‘professional research’ is taken to mean that which is aimed generally at the profession, which may or may not embody specific workplace change.

The other sense of the word ‘practice’ is the subject of this research: the ‘practice’ of doctoral education; in other words, how those involved operate and what their work is. However, practice in this sense is also contested. Although it must involve the technical knowledge and skills of supervisors and candidates, it is not ‘a simple summation of practices at the individual level’ (Barnes, 2001, p. 23). Further, it encompasses more than supervisors and candidates. In arguing for a deeper and more sophisticated conception of doctoral education practice, Boud and Lee (2006) identify seven areas of doctoral education practice that warrant research: supervision; governance and regulation; assessment; program provision; establishment of working environment and research culture; candidature; and research work and writing. Other commentators focus on practice as embedded in a social context (Bourdieu, 1972/1977; Bourdieu & Wacquant, 1992a; Giddens, 1982; Schatzki, 2002; Wenger, 1998). The present research to a greater or lesser extent relates to all seven areas mentioned above, and is underpinned in particular by Bourdieu’s understanding of practice as the integration of agency and structure, which is explained in Chapters Three and Four.

Given the potential confusion of discussing the engagement of ‘practice’-based research within doctoral ‘practice’, it is necessary to distinguish between these usages. From this point on, where the thesis refers to the practice of doctoral education or discusses practice in relation to Bourdieu’s ‘theory of practice’ (1992/1997), it will be indicated by ‘practice’. Where it makes reference to ‘practice-based’ doctoral research or discusses general practice in relation to theory, it will be indicated with a capital: ‘Practice’.

1.7 Research design in brief

Research was conducted through a nested multi-case study using semi-structured, in-depth interviews. Data was provided by six candidates from each of the PhD (thesis) and PhD (project) programs and five EdD candidates, along with two supervisors from each program. All participants were from RMIT’s School of Education and candidates were either current (in their final year, or final two years for part-time candidates) or newly submitted doctoral candidates.

In order to identify the cultural context of doctoral study in the School of Education, a clear sense of the practices and social environment were needed. Further, Schein (2004) argues that culture is more than the tangible and objective, so a theoretical and analytical framework that provides a
simultaneous objective and subjective social lens was needed. The research design was therefore underpinned by a Bourdieuan epistemology and a critical theoretical perspective. Bourdieu’s theory of practice (1972/1977; 1980/1990), with its concepts of habitus, field, capital, agent and practice, allowed analysis of candidates’ experiences, and the doctoral structures within which their practice resides, through one critical lens. It offers deeper and more critical insights into candidates’ experiences and into the sometimes taken-for-granted assumptions of previous studies. Grenfell and James (1998a) argue that Bourdieu’s theory-as-method and its stance in relation to culture can bring new insight to understanding educational issues and settings.

1.8 Overview of the thesis organisation

This chapter has introduced the study. Chapter Two identifies and explores themes in the literature related to the research questions. Chapter Three introduces Bourdieu’s theory of practice and discusses intersecting fields in doctoral study. Chapter Four outlines the research design, including epistemological issues and theoretical framework. Chapters Five, Six and Seven contain the findings and analysis of interview data making up the respective case studies of the PhD (thesis), PhD (project) and EdD programs. The three individual case studies are brought together in a cross-case analysis in Chapter Eight, while Chapter Nine contains concluding statements relating to the culture of the doctoral degrees and recommendations for change in the culture of doctoral study in terms of supervision and learning support pedagogy.
Chapter 2

Literature Review

2.1 Introduction

The current and developing changes in purpose, epistemologies, methodologies and literacies of the higher degree by research (HDR) have their roots in massive changes in operations and perceived functions. Along with the many debates around the nature of general changes in universities there has also been some engagement with the effects of these changes in the characteristics of awards generally, including the HDR, and the doctoral degree specifically. Doctoral study needs to be seen in light of Barnett’s (2000) general recasting of the university as being engulfed in unremitting multiple frames of understanding which he calls supercomplexity, making reframing research critical (Maxwell, 2002). It has also moved from ‘an elite but peripheral role to occupy a more visible position’ (Neumann, 2002, p. 167), and although the message is clear that universities need to adapt to ensure their survival, it is also clear that we need to fully understand in what ways the doctoral degrees may be evolving to ensure their survival. As an important element of universities, there is a need to identify the impact of the changing political economy on doctoral degrees in terms of institutional and government policy, doctoral candidates, supervisors and examiners.

This chapter begins by briefly describing the history of the doctoral degree before providing a critical review of the literature, identifying and analysing current knowledge and understanding surrounding the research focus of traditional, Practice-based and professional doctoral study. Where salient, comparisons will be made between doctoral programs in Australia and elsewhere, although discussion is mainly focused on the situation in Australia.

2.2 The development of the Higher Degree by Research in Australia

Although Pearson (2005) warns against the assumption of unbroken continuity in the development and spread of the PhD, it is important to contextualise this study by providing a brief history. The titles ‘master’ and ‘doctor’ were used as far back as medieval times, with the first doctoral degree conferred in Paris around 1150 (Noble, 1994). However, it was not until the nineteenth century in Germany that the PhD began to take on the qualities of a research degree (Pearson, 2005). In 1860,
Yale University was the first to offer the degree in the United States from where it spread to other colleges in that country, although in a different form which included coursework. The research PhD as we have known it was first offered in Britain only as recently as 1917 (Pearson, 2005), first at Oxford, then Cambridge. The degree fitted well with the existing personal relationships between academic staff and students and the disciplinary departmental system which had spread from Scotland to England (Pearson & Ford, 1997).

It took another thirty years to reach Australia, where the first Australian PhD was awarded by the University of Melbourne in 1948 (Pearson, 2005). Modelled initially along Scottish lines (Pearson & Ford, 1997), the PhD degree took some time to become established in Australia, with 11 PhDs awarded in 1950 and still only 137 awarded ten years later (Nelson, 2003). This was followed by steady increases from the early 1970s to the early 1990s (Gallagher, 1990). They increased by two and a half times in the decade up to 1999 (Johnston, 1999) and in 2002 there were 34,040 enrolments (DEST, 2003b). In 2003, however, in line with the Research Training Scheme (a new Australian Government policy discussed below) which reduced the number of Government funded places, there were 31,140 candidates enrolled in doctorates by research, with 72 percent being over 30 years of age (Evans, Macauley, Pearson, & Tregenza, 2003). In all, growth in enrolments of doctoral candidates increased from just over 5,000 in 1979 to almost 40,000 in 2004 (Pearson, Evans & Macauley, 2008). The discipline of Education formed part of this growth: between 1988 and 1998 the number of completed PhDs jumped 180.7% (Kenway, 2002).

This rise in doctoral candidates can be explained by various factors. Along with the general increase in the Australian population, the increased pool of students with undergraduate degrees qualified to enrol in higher degrees (a result of the ‘massification’ of undergraduate students in recent decades) has undoubtedly led to great increases in HDR candidates, including those completing a doctoral degree. There are also new HDR programs which have attracted ‘non-traditional’ candidates. For instance, as a result of the Unified National System, HDR programs spread into newer ‘applied’ disciplines such as the creative arts leading to a new cohort of students ready to avail themselves of these new options (Holbrook & Johnson, 1999; Pearson & Ford, 1997) and, of course, before this could occur, staff in these areas needed to obtain the research degrees themselves (Neumann, 2002). Similarly, Maxwell and Shanahan (2001) point to many established disciplines such as education and commerce having developed professional doctorates, most of which are classified as HDR programs.

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5 The Unified National System was the consequence of an Australian Government Policy in 1987 which created amalgamations and mergers of 19 universities and 51 Colleges of Advanced Education into 38 Universities (Dawkins, 1988).
despite some degree of coursework. These are aimed at working professionals and therefore attract increasing numbers of part-time students and, although relatively new, enrolments increased over 150 percent in the five-year period between 1996 and 2000 (Maxwell & Shanahan, 2001). Further, the push by Australian universities for revenue through international students led to a 20 percent increase in the number of international HDR candidates between 1992 and 2001 (DEST, 2001).

The buoyancy of postgraduate education (at least up until the end of the 1980s) is explained by Gallagher (1990) as due in large part by Australian Government policy. In 1957 the Murray Committee observed a general failure of universities to promote postgraduate research (at the time, on a pro-rata basis, Australian universities produced one quarter of the PhDs of British universities and one fifth of those in the United States) and within two years the Australian Government initiated a postgraduate scholarship scheme (Gallagher, 1990). In the mid-1960s the Martin Committee urged the continued expansion of postgraduate education; this was echoed by the Australian Universities Commission (AUC), which pointed to the danger of insufficient trained researchers (Gallagher, 1990). By 1975, the AUC stated that few, if any, interested and qualified students were unable to obtain financial assistance to complete full-time higher degrees by research (Gallagher, 1990).

However, any Government assistance contributing to the increase in HDR students must be seen within a context of general reduction in Government funding for universities. Despite the positive Australian Government rhetoric, there has been a gradual shift from government-funded higher education towards a user-pays system over the past two decades, evidenced by the introduction of the Higher Education Administrative Charge in 1987, the adoption of the Higher Education Contributions Scheme in 1989 and the continuing growth of full-fee-paying courses for both international and local students. In 2003, Australian higher education revenue from the Australian Government was 59 percent (Nelson, 2005), down from the 1991 figure of 62 percent (DEST, 2002a) and the period between 1991 and 2000 saw the number of fee paying overseas postgraduate students rise by 84.5 percent, fee paying domestic postgraduate students rise by 37 percent, and total non-government sources of income as a share of university revenue double (DEST, 2002b). There was also a reduction in the number of new Postgraduate Research Awards from 725 to 555 in the early 1980s and by 1986 the Commonwealth Tertiary Education Commission was questioning the need to offer PhDs in all disciplines in all universities (Gallagher, 1990).

Two years later, the Government once again acknowledged the importance of postgraduate education in an economy increasingly dependent on knowledge and technology (Dawkins, 1988), and again in 1998, when the West Review identified the vital contribution that research training makes to the
national economy (West, 1998). However, again the rhetoric was generally matched by policy changes for which there was far from universal acceptance. For instance, in 1999, the Government announced a new initiative in their White Paper, _Knowledge and innovation: A policy statement on research and research training_ (Kemp, 1999). Out of this came the Research Training Scheme (RTS), a performance-based funding structure for the allocation of HDR places where students pay nothing for their tuition, comprising three elements with associated weighting: 50 per cent for HDR completions, 40 per cent for research income and 10 per cent for publications (Kemp, 1999). In this scheme, which began in 2002, there is pressure for research candidates to complete their research degrees within a reduced time frame, with support limited to two years EFT for Masters and four years for doctoral degrees, although the latter must be completed in only three years if supported by an Australian Postgraduate Award, which provides financial support to the candidate (Kemp, 1999). Pressure therefore has been put on the universities, and in particular, supervisors, to ensure candidates actually complete: failure to do so means their places are reallocated among universities according to a performance-based formula. Thus there is a Government expectation of ‘greater institutional responsiveness to students’ (Neumann, 2002, p. 171) to ensure a quality research training experience for their candidates: universities were required to establish research training management plans to provide professional development for supervisors and associated workshops for HDR candidates, such as RMIT’s Research Supervision Development and Training Program and the Postgrad Research Forum (RMIT, 2007b). Apart from enhanced quality of research training and attention to the needs of candidates, in clear deference to accountability for ‘useful’ knowledge, the objectives of the RTS were to ensure HDR programs were relevant to labour market requirements to improve the employability of graduates.

However, there has been dissension from academics. For instance, this over-reliance on completions does not take into account the number of part-time students, which Barnacle and Usher (2003) believe may lead to universities discouraging part-time enrolment. Neumann (2002) cites strong arguments by Chubb as well as from Neumann and Guthrie that the RTS will encourage universities to select students on the basis of being able to complete within the time funded; further, there is a Government perception that part-time candidates are less likely to complete, although this is contested by Evans (2002) and Pearson and Ford (1997). Neumann (2002) also points to the incompatibility with both the policy intention of the White Paper and the Prime Minister’s Innovation Statement which ‘explicitly focus on responsiveness to student needs and the development of a culture of innovation’ (p. 173). The RTS also fails to take into account the complexity of research education, such as the change in dynamics of the social space within which research training takes place from the academic autonomy
of a genuine research *education* environment to one of training: ‘a technicist form of regulation’ (Doecke & Seddon, 2002, p. 97). Further, the Council of Australian Postgraduate Associations (CAPA, 2000) pointed to the lack of any new HECS-exempt HDR places (capped at 21,500) and the lack of any planned future increase. This, in fact, was a fall of 13 percent for the first time in a decade (Neumann, 2002).

The RTS may now, however, be about to change. Soon after a new Australian Government was elected, an inquiry into the contributions made and challenges faced by Australian universities in recruiting and training researchers was announced. The Standing Committee on Industry, Science and Innovation is currently examining the effectiveness and adequacy of research training schemes and issues around training, recruiting and retaining research graduates (Parliament of Australia, 2008). Common among the many submissions in response to the inquiry is the call for an increase in the number of RTS-funded HDR places. For instance, the Australian Council of Deans and Directors of Graduate Studies (2008) identify the lack of increase in the total pool of funded HDR places in the last eight years, resulting in reduction of PhDs per head of population compared to other OECD countries. The Australian Association for Research in Education (AARE, 2008) point to the importance of more RTS places with specific reference to the discipline of education. Although education research generally attracts less than two percent of the Australian Research Council’s 6 Discovery Grant Scheme funding, publications of research in education is high relative to other disciplines. They point out that much of this growth has been contributed by research students and that ‘education research is therefore heavily reliant on HDR students’ (AARE, 2008, p. 4). The call for increased flexibility is another plea in common with many submissions. Reflecting issues pertinent to HDR candidates in education, the AARE (2008) argue for support for part-time professionals working in research through industry (for example, school) networks along with inter-university collaboration. Similarly, the Australian Council of Deans and Directors of Graduate Studies (2008) recommend modification of the RTS funding formula allowing for inter-university collaboration through joint PhD programs, a phenomenon that is occurring internationally, and Evans, Macauley and Pearson (2008) argue for Government support for candidates, universities and employers to develop research capacity and outcomes by working together.

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6 The Australian Research Council is a major Australian Government funding body for research.
2.3 Defining the doctoral degree

In the current climate of contested and contestable attributes and definitions it is useful to understand what is meant by the term 'research'. To give a basis for discussion, the OECD definition of Research and Experimental Development is used:

Research and experimental development comprises creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man [sic], culture and society, and the use of this stock of knowledge to devise new applications (OECD, 1996a).

Under this definition, legitimate research can be pure or applied, a necessary requisite for later discussion of new modes of knowledge production and its impact on research degrees.

Doctoral degrees are not standard across the Western world. The US postgraduate program, for instance, unlike that in Britain and Australia is generally concentrated in graduate schools, some universities having more graduate than undergraduate students (Clark, 1995). PhD study in the US is based on the German system, combining research with coursework (Clark, 1995), and in most US universities it involves written and oral examinations, research papers as well as a substantial dissertation. Although there is no set minimum or maximum length and can therefore it can vary widely, the average length is between 65,000 and 80,000 words (Columbia University, 2008). As in Australia, the candidate has an adviser, but unlike most Australian universities, the dissertation is internally examined. Students in the US often first enrol in a Masters program and transfer into doctoral candidature, as is sometimes the case in British universities. The PhD program in most British universities is very similar to Australia: supervisors are provided, a research methodology coursework program must be completed and an externally-examined thesis of not more than 100,000 words must be produced. However, the British PhD candidate must also undergo a viva voce - an oral defence of the research, whereas in Australia, an oral defence is required only for a PhD (project), not a PhD (thesis).

The nature of a research degree within a country is also not homogeneous. Although there have always been various doctoral programs with some coursework (Trigwell, Shannon, & Maurizi, 1997), new programs have more recently been developed as a response to changes in knowledge and skills required of HDR graduates. For instance, over the past fifteen years Britain, Canada, New Zealand and Australia have introduced professional doctorates. In Australia, most of these are classified as ‘research’ degrees, despite the addition of coursework over and above the required research methodology course. In Britain, ‘NewRoute PhDs’ provide flexibility to develop programs to suit individual needs by combining coursework in generic professional skills, discipline study and
research training, alongside the thesis (NewRoute PhD, 2002). In such a program, the results are based on coursework assessment and thesis, unlike the professional doctorate in which the coursework component is largely used as a threshold or satisfactory/unsatisfactory manner (Bourner, Bowden, & Laing, 2001; Trigwell, et al., 1997), and results are based on the thesis alone; in this way they are more aligned with US programs (David, 2002). In Australia and elsewhere, innovative Practice-based research degrees (discussed below) are now beginning to be seen in areas other than the design disciplines in which they began.

Defining the superficial parameters of the typical Australian PhD seems not to be difficult if we draw on information in university research policy handbooks. RMIT (2007c), for instance, states that the requirements for a PhD include the production of a thesis based on original research that has not previously been presented elsewhere, which shows evidence of reviewing sources, designing the study, gathering and analysing information, critical appraisal, synthesis, drawing conclusions, a significant and original contribution to fact and/or theory and the ability to work independently. The thesis is required to consist of no more than 90,000 words and is to be examined by at least two external examiners. Regulations for PhD study in other Australian universities are largely identical. Almost all research degrees in Australian universities also make mandatory a coursework unit on research methodology (with provision for exemption if the student has research experience).

More complex is identifying the parameters of professional doctorates. These contain various amounts of research and coursework and can contain other activities such as clinical Practice, exhibitions and performances. A research degree is distinguished from a coursework degree predominantly by the amount of research (documented in a thesis or exegesis) compared to coursework. The Australian Government states that at least two thirds of the degree must consist of research (DEST, 2003a), although this has not been constant: before 1995 a research degree needed to consist only of 51 percent research with coursework making up the remainder (Liljegren, 1998). Not all professional doctorates, therefore, are classified as a higher degree by research. However, the research component is generally the major element in the degree, and this seems not to have changed in the short history of the professional doctorate. In 1997, for instance, Maxwell and Shanahan identified the majority of existing Doctor of Education degrees, which formed the majority of professional doctorates at the time, as being research degrees (having only one-third coursework component). This was confirmed in 1999 (Council of Australian Deans and Directors of Graduate Studies) and in 2002, McWilliam et al. identified 61 percent of professional doctorates in Australia as fulfilling the requirements of a research degree. A fuller discussion of issues surrounding the professional doctorate can be found later in this chapter.
However, these descriptors merely describe the surface features of a research degree. The definition of the intrinsic nature of a research degree, such as the epistemological framing or methodologies, is more problematic. Research, including doctoral research, in most disciplines before the 1970s was essentially believed to be positivist and couched within an objectivist epistemology, embodied with what Burns (1997) identifies as the four most important characteristics of science: control, operational definition, replication and hypothesis testing. Additionally, theses were generally written in the standard chapters of Introduction, Literature Review, Methodology, Results, Discussion, Conclusion and Recommendations (Paltridge, 2002). Pearson (2005), however, warns that assumptions that can lead to an uncritical acceptance of a speculative idea of a ‘traditional’ PhD and division between tradition in older established universities and innovation in newer universities. She points to a study which found that since 1948 ‘…thirty universities have awarded one or more PhDs in the creative and performing arts…Nineteen of these universities had at least one PhD graduate whose PhD involved a creative or performing arts work’ (Evans, Macauley, Pearson & Tregenza, cited in Pearson, 2005, p. 123). Similarly, although qualitative methodologies have generally been accepted only from the 1970s (Burns, 1997), ethnographic research has been used in the social sciences at least since the early part of the twentieth century (see for instance Malinowski, 1922/1961).

While these may have been exceptional cases, it is clear that doctoral degrees are still undergoing enormous changes, both to form and function, and developing in an eclectic array of innovative possibilities. Qualitative research, allowing researchers to understand the complexity of human experience in terms of the meaning that people assign to their worlds, has expanded considerably since the 1970s (Richardson, 2001) and has been validated through its acceptance by universities and governments and the publication of a large number of scholarly handbooks such as the comprehensive volume edited by Denzin and Lincoln (1994, 2005). They have provided new philosophical, theoretical and methodological foundations for research, particularly in humanities or arts based disciplines. Similarly, research has been taking place in many new academic disciplines, the inevitable result of the Unified National System of Australian universities. The project or focus of research can now involve activities such as designing a range of fashion garments, choreographing a dance sequence, producing artwork for an exhibition, and writing a novel, or it can be the result of new transdisciplinary combinations such as, for instance, education and media. Along with these new ways of producing knowledge are also new kinds of research writing. We can now find innovative electronic scholarship through PhD theses on-line or on CD-ROM, produced as a lateral ‘choose your own adventure’ mode; for instance, Craig Bellamy’s PhD thesis is a hypertextual history...
documentary about an inner-city Melbourne suburb which recently won an award at an International Symposium on Electronic Theses and Dissertation (Bellamy, 2002).

Arguably the most profound recent change to doctoral studies comes from within the context of the knowledge economy, bolstered by the triple helix of university, industry and government with the purpose of stimulating knowledge-based economic development (Etzkowitz & Leydesdorff, 1997), and driven by Australian Government imperatives (discussed above). It is this shift that has underpinned the development of professional doctorates and Practice-based doctoral research, and, Brennan (1998a) argues, emerging supervisor and candidate practices and new relationships between the university and the workplace are likely to continue. This can also, however, lead to conflict between academic values and market forces (Usher, 2002); stakeholders may find themselves in the situation of asking ‘Whose knowledge is of most worth?’ (Apple, 1993, p. 195). This fragmentation of the form and function of a research degree has led to difficulty in identifying such a degree today. Indeed, ‘a crisis exists in regard to what the Doctorate is meant to be’ (Barnacle, 2005, p. 180).

2.4 The value of the doctoral degree

Despite the difficulty of defining the doctoral degree, its value to a range of stakeholders has been well-documented. It has been for many years the pre-eminent degree used as a training ‘apprenticeship’ into research and scholarship for those beginning a career in higher education and for promotion. Noble (1994) also argues the importance of the contribution that holders of doctorates can make ‘to educational institutions, to the gross national product of countries through scientific research and development work, and to the intellectual and cultural life of nations’ (p. 35). There is Government rhetoric along similar lines, research candidates being ‘a major resource, underpinning much of the leading edge research conducted around the world…’ (Kemp, 1999, Section 3.3).

The increasing debate surrounding research degrees clearly shows the value bestowed by both Australian Government and university stakeholders as evidenced in conferences and scholarly publications (for instance, Cullen, 1993; Green, Maxwell, & Shanahan, 2001; Holbrook & Johnson, 1999; Lee & Green, 1998; Zuber-Skerritt & Ryan, 1994). More recently, complete issues of scholarly journals such as Higher Education Research and Development (Volume 25, Issue 2, 2005) and Studies on Continuing Education (Volume 26, Issue 3, 2004) have been devoted to doctoral studies. In addition, there have been Australian Government-funded reports (for instance, McWilliam, et al., 2002; Neumann, 2003; Pearson & Ford, 1997; Trigwell, et al, 1997). From 1994, there have been biennial conferences held in Adelaide on Quality in Postgraduate Research, and conferences on
specific issues such as the Which Way for Professional Doctorates? conference in 1996, as well as the Australian Association of Educational Research mini-conference entitled Defining the Doctorate held in 2003. These publications and conferences have debated issues such as government and institutional policy, pedagogy and supervisory relationships, examiners, and new forms of doctoral degrees such as professional doctorates and other Practice-based degrees.

However, research degrees also have their detractors. The Harvard Monthly as far back as March 1903 published a humorous, although earnest, article entitled The PhD Octopus by William James. He believed the universities’ penchant for ‘decorating their persons with diplomas’ contributed to ‘the increase of officialism and snobbery and insincerity’ and that ‘they ought to keep truth and disinterested labor always in the foreground’ and treat degrees as ‘secondary incidents’ (James, 1903). More recently debate has mostly focused on the purpose and structure of the HDR. In England in 1993, for instance, the Government was concerned that the traditional PhD did not meet the needs of careers outside of academia (Bareham, Bourner, & Stevens, 2000), and existed merely to train new researchers and academics.

Criticism of the PhD has also been cited in Australia. For instance, Sekhon (1989) explored the views of PhD graduates and employers and found consensus in weaknesses, which include ‘inadequate training in handling the complex, intertwined problems of industry; lack of interdisciplinary perspectives; academic training slanted towards scholarship; primary emphasis on the generation of new knowledge; and undue stress on research ability in a narrow and specialised area’ (p. 207). In line with the Government rhetoric of the day urging more practically-based and useful knowledge (Brennan, 1996), Sekhon (1989) concluded that a new form of industry-oriented doctorate should be developed which would include practical problem-solving and strengthen the relationship between industry and universities.

This debate around the nature and value of the PhD in terms of the need for alternative forms of higher degrees such as the professional doctorate (Evans, 1997, 1998; Pearson, 1999) was largely focused on the appropriateness of the research degree for employment outcomes. The PhD still has some currency as an essential but generally insufficient hurdle for those seeking an apprenticeship into academia. Not surprisingly, a study of postdoctoral students found that 78.3 percent wished to remain working as academics (Thomson, Pearson, Akerlind, Hooper, & Mazur, 2001); however, the West Review (West, 1998) identified that only 44 percent of research graduates seeking academic employment actually found full-time employment as an academic or researcher, and recommended that graduates be better informed of their career prospects.
Increasingly, candidates are seeing the value of the research degree not as a passport to an academic position, but to engage at a high level with the professions and industry. With changes in knowledge production and the need to link research training to the needs of industry and the professions, there are now increasing numbers of mid-career professionals enrolling in research degrees (particularly professional doctorates and Masters by research) in order to further their professional knowledge. An early study by Moses (1994) found that an academic career was the least likely motivation for enrolling in doctoral study, rating just 22 percent of the participants. Improving job prospects, developing high-level research skills and extending professional knowledge rated 31 percent, 30 percent and 36 percent respectively. Interestingly, in this study the most common reason given was personal satisfaction, at 50 percent. Similarly, in a large study of around 1,500 PhD candidates across all disciplines in two Australian universities, only 54.6 percent of candidates were looking for academic research careers after graduating, with 21.3 percent stating they were definitely not interested, and a further 24.1 percent were not sure (Harman, 2002). The lowest percentage of candidates expecting an academic career were from the Education discipline, reflecting the possibility that they were already working in their profession; of all candidates enrolled in the Education discipline in Australian universities in 2003, 67 percent were studying part-time (Cumming & Ryland, 2004) with the strong probability that they were working either full-time or part-time as teachers.

In terms of actual employment post-graduation, Neumann (2002) found a similar situation, with a decline in academic career destinations of PhD graduates and a doubling of employment in the industry or commerce sector. Although, preliminary findings of a more recent major study analysing career trends of doctoral graduates found most to be employed in the education, finance and health industry sectors, an in-depth analysis of the higher education appointments showed only 23 percent of doctoral graduates employed in teaching and research academic appointments (Neumann, Kiley, & Mullins, 2008). Similarly, at RMIT, the career destinations of research graduate respondents to the Postgraduate Research Experience Questionnaire (PREQ) in 2006 showed only 40 percent were destined for the public sector (which includes, but is not, of course, limited to higher education), with 42 percent finding work in the private sector and 17 percent in the non-profit sector. This showed an increase in those working in the private sector, non-profit sector or self-employed from 36 percent in 2004 to 59 percent in 2006 (RMIT, 2007b). All of this, of course, has implications for the relevance of doctoral programs for non-academic employment.
Out of this need for a stronger workplace focus for research degrees comes the question of exactly what capabilities and skills will best enable HDR candidates to adequately contribute to the knowledge economy (Barnacle & Usher, 2003) and to this end, the idea of generic skills or generic capabilities surfaced. For instance, the aim of the Council of Australian Deans and Directors of Graduate Studies (2005a) in their ‘Framework and Context Statement for best practice in generic capabilities for research students in Australian universities’ is to address Government and community concerns about the lack of employability skills in research degree graduates. The value to research degree candidates in terms of improving the quality of their experience though a greater awareness of their transferability to present or future workplaces is obvious, and studies have shown that candidates value some focus on generic skills (Borthwick & Wissler, 2003; Gilbert, Balatti, Turner, & Whitehouse, 2004; Pearson, 1996). However, although these programs exist in most Australian universities (Borthwick & Wissler, 2003), it is not clear if the programs are being evaluated effectively, and further, no information has been provided to universities to provide direction on what is to be done (Council of Australian Deans and Directors of Graduate Studies, 2005a). Furthermore, there have been doubts expressed about the value of generic capabilities or skills. For instance, Gilbert, Balatti, Turner and Whitehouse (2004) have reservations about whether skills or capabilities can actually be transferred to another context and whether focus on these skills will be at the expense of more reflective or critical goals. Similarly, Barnacle (2003) found a disparity between the acquisition of capabilities and their importance to the workplace, particularly with oral communication and project management skills, as well as use of relevant information technologies and, perhaps more importantly, ‘creativity, flexibility and adaptability’ (p. 4).

 Debate around the idea of a curriculum for research candidates has also surfaced. For instance, McWilliam and Singh (2002) argue that the Government’s reform agenda and the knowledge economy are ‘rendering the processes and products of higher degree research more calculable to stakeholders within and outside university settings’ (p. 4, emphasis in original). They argue that while the old model of the implicit disciplinary master and apprentice must now be challenged and that the idea of a new curriculum is now a necessary part of research, they point to the challenges of this new curriculum given that it must take account of new modes of knowledge production that demand different knowledge – less certain, less discipline-specific – and different work – more team-based, more trans-disciplinary and more accountable (McWilliam & Singh, 2002, p. 3). Gilbert (2003) builds on this and synthesises a range of classifications of others that he believes may potentially be useful in conceptualising kinds of knowledge for a doctoral curriculum. These include abstract propositional or declarative knowledge, abstract procedural knowledge, action knowledge, tacit or habituated
knowledge, cultural understandings of the perspectives and experiences of others, and embedded knowledge residing in systematic routines and procedures. These arguably would all add value to the doctoral degree for the candidate in any work situation and is congruous with Barnacle and Usher’s (2003) belief that ‘academic’ and ‘work’ knowledge are compatible. They criticise the Australian Government’s view of opposing and non-mutual sets of skills between the university and the workplace, finding that although many capabilities were developed in both sites, skills such as critical and analytical thinking that were developed through the research program were ‘attributed special significance for the workplace’ (p. 349). There are others, however, who see the curriculum in the narrow terms of preparation for an academic career; for instance, it has been argued that doctoral study involves a range of activities as preparation for entry, such as writing the thesis, developing contacts within the discipline and developing a profile in research publishing (Collins, Rendle-Short, Curnow, & Liddicoat, 2001). A further point of contention is the seemingly interchangeable notions of generic capabilities and a research curriculum. Both show examples of broad and narrow skills and the general aim of both is to build skills in research that are able to be transferred to the workplace; it is, as Gilbert, Balatti, Turner and Whitehouse (2004) argue, fraught with problems of inadequate definition.

As already alluded to, candidates are also seeing value in doctoral studies not necessarily in terms of the ‘rational/effectiveness thrust of current policy directives’ (Leonard, Becker, & Coate, 2005, p. 135) but for intrinsic interest in their research topic and personal satisfaction. Despite Moses’ (1994) research findings that personal satisfaction was the motivation for half of the doctoral candidates interviewed, it remains a little-researched phenomenon. In a British longitudinal study of alumni of PhDs in Education, Leonard et al. (2005) found that along with vocational and economic reasons, most graduates felt personal growth, both intellectual and emotional, to be as important or more important. Similarly, Wood (2006) cites a study by Marton, Beaty and Dall’Alba (1993) which found that learning led to seeing the world differently and therefore changing as a person. Wood’s study with part-time EdD candidates in a UK university found that half of those interviewed felt they had grown personally, which was shown in their ability to recognise alternative epistemological stances and differences in the nature of professional Practice; understand the basis of others’ perspectives; recognise the differences in the nature of learning; and engage in personal reflection, appreciating its role in understanding (Wood, 2006). Even in non-completion, candidates can sometimes find personal transformation in terms of, for instance, feeling balance in their lives and allowing a reflexiveness that they did not previously have (McCormack, 2005).
The value of research degrees in terms of their relative standards is also an issue not widely researched. With research degrees available in virtually all universities around the world and the substantial movement of academics between universities, usually with a research degree as prerequisite, there is an expectation of some sort of universal currency. Brown (1999), however, in discussing the possible application of benchmarking to postgraduate study, believes this not to be the case, citing the difficulty in being accepted to study for the PhD in some universities relative to others. Evans (1998), from within the context of developing professional doctorates, attempted to benchmark the doctorate in order to prevent erosion and argues that ‘all doctorates should consist substantially of research training and practice, and be founded on three years of full-time equivalent study after an appropriate honours or Masters degree’ (p. 288). Arguably, however, this is too broad to be of use in identifying or upholding any idea of value of the PhD. Brown (1999) in fact, goes further, pointing to the relative lack of rigour in defining and applying assessment frameworks for higher degrees compared to undergraduate level because of diversity at the research degree level. In discussing the impossibility of comparing, for example, a doctoral degree in electrochemistry with one in education, she alludes to the intransigent belief of some that ‘hard’ science is more difficult (and therefore inherently more value) than ‘soft’ disciplines (or vice versa). However, Pitkethly and Prosser (1995) argue that the examination of doctoral theses by international examiners, as is often the case in the Australian tradition, is important as a means by which the international quality of Australian PhDs can be benchmarked.

2.5 New modes of knowledge and knowledge production

Any discussion of doctoral degrees and their uses demands some analysis of the state of knowledge and its production. We are now in a ‘knowledge economy’ where labour and capital have been superseded by technology and knowledge; the creation of wealth is now through the generation and exploitation of knowledge (OECD, 1996b). Further, the Australian Government rhetoric, as discussed above, has given clear imperatives that postgraduate research be more in tune with this new knowledge environment. However within the definitions of knowledge lie contradictions and tensions: between pure or scientific knowledge on one hand and applied or professional knowledge on the other; and between explicit knowledge and tacit knowledge.

Lam (2000) argues that explicit knowledge is codifiable (and thus can be stored and distributed), acquired through formal study and collected as objective information. He identifies tacit or implicit knowledge as intuitive, contextual, social and acquired only through practical experience. At first glance, the tensions between explicit and tacit knowledge seem to be aligned to those between pure
and applied knowledge, and also seen in the distinction between what Gibbons and his associates (1994) called Mode 1 and Mode 2 knowledge. Mode 1 knowledge is constructed predominantly within the university and is disciplinary, homogenous, and hierarchical. In this type of knowledge, universities have ‘credentialled and endorsed particular individuals and social groups as authorised knowledge producers’ (Seddon, 1999, p. 3). Although Practice may be a focus for theory, the discipline is the basis of all knowledge claims, and knowledge is accountable to the academic community. This seems to be the predominant form of knowledge production in universities, particularly in ‘traditional’ research degrees. This knowledge production is in contrast with Mode 2 knowledge, which Gibbons et al. (1994) describe as transdisciplinary, heterogenous and transient. This knowledge is most often constructed outside the university and applied to specific problems in specific industry and business settings to which it is accountable. The authors stress that the modes are complementary, and that there is intermingling between both modes.

Although the predominant form of knowledge production in most universities would seem to be Mode 1 (particularly in traditional doctoral programs where candidates are aiming for academic employment), professional doctorates and practitioner research are often aligned with Mode 2 knowledge production. McWilliam et al. (2002), however, point out that despite the increasing importance attributed to this mode, industry is still under-represented in research training, regardless of the mode. They point to the research of Maxwell and Shanahan (2001) into the operation of professional doctorates, who found that most were university-centric, with workplace issues given little attention. This is counter to Pearson’s (2005) argument that Australian universities have always had ‘a strong utilitarian bent’ (p. 126) with research developing both within and outside of universities and ‘reflecting the needs of a growing economy’ (p. 126).

There are tensions both between and within knowledge that is pure, explicit and Mode 1 compared to knowledge that is applied, tacit and Mode 2. Houghton and Sheehan (2000), for instance, state that although a characteristic of the new knowledge economy is an increasing codification of knowledge (Mode 1) leading to increasing commodification, there is not only a resultant shortage of tacit knowledge, but the increased rate of codification of information is, at the same time, producing a shift in focus towards tacit skills.

The issue of tacit skills is, in fact, important and contentious. Little, Quintas and Ray (2001) point out that tacit knowledge, although leading to application, cannot be aligned with Mode 2 knowledge. They have labelled it Mode 3, and define it as the collective knowledge of a bounded group – the things we know but do not know we know, following from Polanyi’s statement: ‘We can know more
than we can tell’ (Polyani, 1966, p. 4, emphasis in original). The strong version of this mode allows for no explicit understanding of our tacit knowledge, and therefore an absolute inability to express it (Cook & Brown 1999, cited in Little, Quintas & Ray 2001). In the weak version of this mode, Little, Quintas and Ray (2001) cite Nonaka and Takeuchi’s conception of tacit knowledge as something that cannot be articulated ‘very easily’.

This is very similar to Scott, Brown, Lunt and Thorne’s (2004) dispositional knowledge, which they also call Mode 3 knowledge. Although they do not go so far as to label it ‘tacit’, they do understand it as ‘non-predictable, non-deterministic, situation-specific and contextualised’ (p. 37). As in Little, Quintas and Ray’s (2001) account of Mode 3 knowledge, their version also identifies knowledge within the bounded groups of the workplace, where texts produced outside of the workplace (through the university, for instance) even when understood as useful resources for practitioners, cannot provide knowledge for use in the workplace. In their strong version, they state that outside theorists may not have a role because they operate outside the work-place Practice. If this is so, there are obvious ramifications for supervisor relationships with research degree candidates in Practice-based research. However, in their weak version, they point out that outside theorists can produce knowledge of the educational settings which practitioners then adapt and change in the light of possibilities in their own work Practices. This version of Mode 3 knowledge, therefore, is concerned with explicit reflective knowledge, and thus is obviously not compatible with Little, Quintas and Ray’s strong version of tacit knowledge.

Further, Scott et al. (2004) identify a fourth mode: critical knowledge. In this, they identify the purpose as explicitly or implicitly political, and point out that one of the purposes of a professional doctorate is to intervene in the field and identify how an organisation functions, what it produces and to identify the effects; it is concerned with identifying power structures and destabilising them, opening up the way for more equal arrangements to be made. In contesting the technical-rationalist knowledge base, this echoes the ideas of Boyer (1990) and Schon (1995), who argue for the importance of rethinking theory as ‘a practical discipline oriented towards social renewal rather than as a static conceptual “thing”’ (McNiff, 2000, p. 1).

The simplistic binary ideas of Modes 1 and 2 knowledge, therefore, ‘easily disguise the many ways knowledge can be created’ (Neumann, 2002, p. 169) and need to be considered with caution. Barnett (2000) in fact believes that we have little understanding of new and diverse forms of knowledge production, in effect deconstructing the dichotomy of Mode 1 and 2 knowledges promoted by Gibbons and his associates (1994). He points out that, instead of the essentially homogenous,
theoretical, discipline based Mode 1 knowledge, or the heterogeneous, applied Mode 2 knowledge, we are faced with ‘knowledges, plural, sustained through different complexes of knowledge processes’ (Barnett, 2000 p. 18); we know things in many different ways, in much the same way, perhaps, as we have many intelligences (Gardner, 1983). This concurs with Scott’s (1997) earlier views, believing knowledge to be complex and multi-dimensional, essentially conflating both modes.

Usher (2000) has a different but related view. Although he argues for the existence of Mode 1 and Mode 2 knowledge, he sees them as ‘always interlinked and inter-relational, always existing in tension with and yet necessary to one another’ (p. 103). He points out that the ‘unhelpful binaries’ (p. 101) mask the fact that although Mode 2 knowledge had not been named as such, it is not new, and that research has been ‘constantly shifting between the fundamental and the applied’ (p. 102). There are parallels here with Boyer’s (1990) often-cited ideas of the scholarship of teaching which encompasses the overlapping functions of discovery, integration, application and teaching. He understands knowledge to be acquired ‘through research, through synthesis, through practice and through teaching’ (p. 24) which together enable the gap between teaching Practice and theory to be bridged: theory leads to Practice and Practice to theory and the best teaching ‘shapes both research and practice’ (p. 16).

For universities, the plurality of knowledge and plurality of sites of knowledge production has produced tensions. Usher (2000) points out that universities now have less control over the production of knowledge, with research structured in terms of the workplace rather than a university curriculum, and have lost some of their status. Although he argues that the situation is causing some epistemological problems at ‘conceptual, policy and practical levels’ (p. 104), he also believes that what is really new in universities is the combination of ‘structure and play’ (p. 105). By ‘structure’ he means for instance new multi-disciplinary structures that transcend traditional disciplinary structures; he sees ‘play’ as opportunities for new collaborations, albeit with some sense of uncertainty and discomfort. He argues strongly that universities need to manage both. Similarly, Seddon (1999) problematises the field of doctoral research by showing how ‘the traditional processes of knowledge production and authorisation have been undermined’ (p. 4) by recent developments such as the ‘pluralisation of knowledges [and the] pluralisation of people who produce knowledge and who claim the status of authorised knowledge producer’ (p. 4). She points to the university as the traditional institution that credentialled and endorsed researchers as ‘authorised knowledge producers’ (p. 3), but that this is being challenged by the EdD. In order for ‘knowledge as a public good’ (p. 12) to be retained, she suggests that three activity phases should be used: first, the production of knowledge and understandings; second, actioning knowledge and understandings ‘in ways that make
them widely available and relevant to policy and practice’ (p. 9); and third, validating knowledge as being useful by ensuring that research outcomes ‘stand up to accepted benchmarks and practical judgements’ (p. 9) about usefulness. In maintaining that validation of the research should be a matter for all stakeholders, that is, those ‘who do, read, use and fund research’ (p. 9), there is an acknowledgement that useful, high quality research can occur not just within the ‘gate-keeping’ environs of the university.

However, disputes about the value of particular knowledges are not only seen in debate on the work-university nexus of knowledge production; they have also occurred within the ‘traditional’ academic research paradigm in the university setting. In the discipline of Education, for instance, Kenway (2002) discusses the tensions between basic and applied research, being informed both by the Practice of educating and the parent disciplines, with stakeholders regularly polarised around ‘debates about theory and practice, knowledge and action, “knowing how” and “knowing that”’ (p. 166). Disputes have also existed between radical and more conventional disciplinary research over various ontologies, epistemologies and methodologies as long as disciplines have existed. In a twist, however, Corcoran and Priest (1999) point to the irony seen in the inhibition of PhD candidates to produce ‘innovative challenges conceived by students whose positions and purposes do not conform to traditional methods’ (p. 159). They argue that innovative research is not advised by supervisors and that the discipline is therefore a constraining force on ‘the originality and vitality of its research’ (p. 160).

New forms of knowledge (particularly through unproblematised divisions of Mode 1 and Mode 2 knowledge) continue to be discussed within the context of a changing knowledge economy and changing political imperatives. This is at the heart of the development of innovative Practice-based research degrees reflecting an increased partnership between the academy and industry. New knowledges and Government imperatives have provided opportunities for old doctoral practices to be assessed and new practices to be developed. Doctoral candidates are able to use their research degrees to further their careers in industry and commerce rather than in academia, or to use their research training in subsequent workplace research, providing a means of filling the gap between the needs of industry and postgraduate qualifications (Harman, 2002). These recent innovations will now be discussed.
2.6 Recent innovations in doctoral degrees

Doctoral education is still undergoing what Neumann in 2002 called ‘a time of dynamic change where the role and purposes of doctoral study and the role and production of knowledge in society are changing’ (p. 167). Debate surrounding the relationship between the ‘knowledge economy’ and the need for more flexible doctoral education is copious (see for instance Boud & Tennant, 2006; Brennan, Kenway, Thomson, & Zipin, 2002; Davis, Evans, & Hickey, 2006; Harman, 2002; Malfroy & Yates, 2003; McWilliam, et al., 2002; Neumann, 2002, 2003; Seddon, 1999; Usher, 2002). In 1989, the Australian Government argued the case for universities to develop doctoral degrees to provide advanced training oriented to professional Practice, with the option of an industry-based setting (Poole & Spear, 1997), and it is generally understood that, apart from the new PhDs by publication, new types of doctoral programs developed within this climate of the need for ‘useful’ research and the concurrent reconceptualisation of knowledge. Neumann (2002), for instance, notes that professional doctorates support forms of research more applicable to ‘applied, professionally-oriented disciplines’ (p. 174) and can be a counter to perceptions of the PhD as leading only to an academic career. Similarly, Boud and Tennant (2006) argue that universities are now being seen as ‘producing workers for the knowledge economy’ (p. 294) and that the new focus on learning in the workplace has led to doctoral education reforms.

However, other factors have been identified as contributing to growth in doctoral diversity. For instance, Malfroy and Yates (2003) found that along with a ‘top-down’ university policy approach to the development of work-relevant research, professionals explicitly position themselves by choosing the path of the professional doctorate, from which outcomes can include major changes in their professions. Bourner et al. (2001) also identified a ‘pull’ from within professions, as well as changes in the intellectual climate leading to questioning the relevance of the traditional PhD.

Although the development of new forms of doctoral study is surprisingly rarely discussed in terms of the marketplace, the Australian Government rhetoric of the need for closer ties with industry and the clear understanding that the university is no longer the sole site for knowledge production have meant an urgent need for change in universities. Etzkowitz and Leydesdorff (1997), for instance, point to industry looking to buy useful knowledge and technology from universities, arguing that the relationship between academia and industry has assisted economic growth. Further, in line with Marginson’s (1997b, 1999) commentary on the corporatisation and commodification of higher

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7 This is a relatively new doctorate based on substantial published works over a period of time that have produced an original contribution to knowledge and scholarship. Discussion of these doctorates does not fall within the scope of the present study.
education, Maxwell and Shanahan (2001) also argue that market forces have created a new diversity of doctoral programs. However, it must also be stated that in their study of professional doctoral programs in Australia and New Zealand, they noted the absence of market forces being an important contributor to the thinking of those responsible for the programs. Nonetheless, it is also clear that professional doctorates have assisted in universities’ commodification agendas through doctoral programs designed to ‘serve the research and development training needs of industry and commerce’ (Evans, 2001, p. 285), with the ‘clients’ being more clearly defined in professional degrees than in PhDs. Further, the research Masters and PhDs at RMIT were developed as a result of market interest (Reeders, 2002), and at a more basic level, with many professional doctorates attracting full fees from candidates (Maxwell & Shanahan, 2001), they have provided revenue to dwindling university coffers.

The thesis, in particular, has also been questioned in a contribution to debate on doctoral diversity. In fact, dissatisfaction with the thesis as the sole, or most important, form of the research degree has been debated as far back as 1963. The Robbins report into the structure of research degrees in Britain recommended that, along with the thesis, seminars and formal instruction should be provided as was done in US graduate schools (Robbins, 1963, cited in Burgess, 1997). More recently, Usher (2002) has noted criticism for the traditional thesis as being too specialised, not allowing for collaborative, multi-disciplinary or trans-disciplinary research, and precluding the participation of industry practitioners. In the climate of work-relevant research, he maintains that the traditional thesis does not have the required flexibility and that the outcome of a doctoral degree should provide a more tangible benefit to the workplace than the traditional thesis. Sekhon’s (1989) study identified other weaknesses in the thesis-based PhD. There was agreement between graduates and employers that the PhD programs led to a lack of interdisciplinary perspectives, had a primary focus on the generation of new knowledge and scholarship and provided inadequate training in handling the complex, intertwined problems of industry.

The most prevalent of the new types of doctoral degree, the professional doctorate, emerged in Australia in the late 1980s (Trigwell, et al., 1997), following a similar trend in the United Kingdom. They have also been developed in Canada, New Zealand and the United States (Maxwell, Shanahan, & Green, 2001). In Australia these programs grew at a remarkable rate, with 29 universities having introduced them by 1996 (Poole & Spear, 1997). These were predominantly in the disciplines of education and business, with limited numbers in psychology, health sciences, design, architecture, law and humanities. The number of programs began with two in 1989 and grew to 48 in 1996 (Trigwell, et al., 1997). They continued their growth, more than doubling from 48 in 1996 to 105 in
2000 (Maxwell & Shanahan, 2001), and by 2003 there were 131 professional doctorate programs offered by 35 of the 40 Australian universities existing at that time (Evans, et al., 2003).

Designed to ‘change the practice of universities and also to change professional practice/industry/workplaces’ (McWilliam, et al., 2002, p. 24), the defining principle of a professional doctorate is that it enables the candidate to contribute to knowledge and Practice in their professional context, while not precluding a contribution to scholarship within a discipline. A Doctor of Education, for instance, is designed ‘to enhance, through advanced coursework and research, the practitioner’s capacity to question, analyse, critique and develop the profession and its Practices’… as well as to become aware of… ‘the relationship between research and [candidates’] professional activities’ (Maxwell & Shanahan, 1996, p. 33). An often-cited representation of the professional doctorate is in the form of Lee, Green and Brennan’s (2000) triple-helix of the university, the profession and the workplace, where doctoral candidates negotiate relationships ‘with the profession of which they are a member; with the idea of professionalism itself; and with the university, still the primary credentialing body and still the custodian of the doctoral enterprise’ (Lee, et al., 2000, p. 127).

Most but not all professional doctorates are research degrees, although there is wide variation in the amount of coursework: Maxwell and Shanahan (2001), for instance, in their study of professional doctorates in Australia and New Zealand found two thirds to be designated research degrees. However, universities differ in what constitutes a unit of coursework and whether particular units are considered to be part of the coursework or research component of the program (Trigwell, et al., 1997). Interestingly, the Council of Australian Deans and Directors of Graduate Studies (1999) recommended that research should constitute a minimum of one year of equivalent full time study (one third of the program), but in a later document identifying best practice in all doctoral programs, it clearly identifies research to be the ‘fundamental substance of a doctorate’ (Council of Australian Deans and Directors of Graduate Studies, 2005b, p. 3). Since the focus of this study is the higher degree by research, the discussion in this section is related only to those professional doctorates that are classified as research degrees, except where stated otherwise.

Developments in the professional doctorate identified as first and second generation doctorates (Lee, et al., 2000; Maxwell & Shanahan, 2001; Seddon, 2001) have been identified. Second generation doctorates are seen to be different to both the first generation doctorate and the PhD in terms of the latter both utilising predominantly Mode 1 knowledge; in contrast, Mode 2 knowledge is used in second generation doctorates, which incorporates the hybrid curriculum of university, profession and workplace mentioned above (Lee, et al., 2000). Seddon (2001) further identifies this shift as including
stronger emphasis on ‘human resource development’ and a move from the taught doctorate plus research to ‘hybridised social learning environments that provide supported research education’ (p. 311). In this, she identifies the key difference as knowledge required by educators for action rather than just knowledge.

The relationship between theory and Practice is at the heart of much discussion of the professional doctorate. In the early years of the professional doctorate, Brennan (1996) argued that they were valuable as a means of recreating this relationship by demanding a reconstruction of university research relationships with practitioners and thus bringing a change in their orientation to research training. Many professions have welcomed the professional doctorate for its ability to extend professional training, pointing to the failure of a purely research-based degree such as the PhD to do this (see, for instance, Bourner, Bareham, & Frost, 1999; Martin, 1996; McGuire, 1998).

However, there is a different type of benefit for practitioners who enrol in the professional doctorate: because it is oriented to Practice while still containing the research element, it allows work to be seen as a profession rather than an occupation. Within the nursing profession in Canada, for instance, Pearson (2002) found that advanced Practice nurses embark on doctoral study because it not only enhances the perception of nursing as a profession, it also increases the potential for a leadership role, allowing for a closer, more equal, professional relationship with doctors (Pearson, 2002). With the importance of evidence-based Practice in the health professions generally, the combination of research and coursework in the professional doctorate has also been found useful for investigating Practice-based issues (Rothstein, 2003).

The extent to which professional doctorates have forged links with the workplace, however, is contested. As far back as 1997, there was concern that, although university literature indicated the professional nature of the awards, the culture of academia was still more central than the culture of the professional (Maxwell & Shanahan, 1997). This issue along with other concerns was the subject of a major Australian Government funded study by McWilliam, et al. (2002). The study set out to identify whether professional doctorates brought a closer relationship between industries and the university. It identified and discussed the practices of professional doctorate programs and made policy recommendations for building on industry-focused outcomes. However, the study found little evidence that universities and industry were collaborating in a major way to support doctoral education. It seems that, although they are practitioner-oriented, they are generally not Practice-based. In her study of a professional doctorate program, Malfroy (2004) also found the workplace not to be an equal partner, the candidates finding there was ‘a mistrust by workplace staff towards the
university… and often an anti-intellectual environment’ (p. 70) in their workplaces. Instead of Lee et al.’s (2000) intersecting spheres of university, profession and workplace, Malfroy found the university to be the dominant theme, along with professional Practice, particularly in terms of leadership through research, and a subtle theme of professional change and transformation.

Further, in the case of one EdD program, enrolments dropped significantly, while those for PhD increased substantially. In this case it was found that the climate that fostered professional doctorates also produced a PhD that was better suited to the needs of the educational stakeholders and thus the professional doctorate became redundant (Allen, Smyth, & Wahlstrom, 2002). Neumann (2003) also found that there was ‘sufficient scope for “non traditional” PhDs, including those in fields such as the creative arts’ (p. 124) to obviate the need for a professional doctorate. She further found that there was ‘a generally acknowledged view’ (p. 129) that a professional doctorate was a second-rate degree not up to the international standing of the PhD, and that in many universities professional doctorate programs were diminishing or disappearing.

There are also other less positive issues associated with professional doctorates in terms of candidates’ preparedness for research. For instance, difficulties have been identified in professional doctorate programs designed as a research degree: while candidates drawn to a particular Doctor of Business Administration degree generally had a Masters degree, it was commonly by coursework (for example, the MBA) and they frequently had little expertise or experience in research methods and design (Meredith, 1998). Similarly, Evans (2001) points to Faculties and Schools of Education ‘bidding themselves down in order to maintain market share’ (p. 287), with the weakened MEd no longer providing the research training necessary for doctoral research. This issue appears to be widespread: for instance, following their study of professional doctorates in Australia and New Zealand, Maxwell and Shanahan (2001) express concern that what they consider to be benchmark entrance attributes of previous research experience and at least four years of professional Practice were found in only nine of 44 research professional doctorates.

The professional doctoral program is not the only doctoral program to have attempted to bring the university to the workplace. For instance, at Swinburne University of Technology, the work of more than 40 percent of research postgraduate candidates is in collaboration with an industry partner, and most have industry-based supervisors or second supervisors as well as academic supervisors (Swinburne University of Technology, 2002). Other innovative research degrees in science and technology have been established. For instance, since 1990 a number of Australian Cooperative Research Centres (CRSs) have been created which provide an integrated industry-based research
study program and aim to position PhD candidates towards careers in industry; as of 2004 there were around 70 CRCs based in about 50 locations around Australia (Harman, 2004). The programs often include professional development workshops and often the supervision is shared with industry partners. In a large study comparing CRC-based PhD candidates with those from traditional science-based departments, the former showed significantly higher levels of satisfaction on a range of indicators (Harman, 2004).

Other work-based doctoral programs exist which, while labelled PhDs, seem indistinguishable from the second generation of professional doctorates. In identifying that student and employer needs are not always supported by the nature and requirements of existing research degrees such as the traditional PhD or Masters, or the professional doctorate (with a first-generation structure of coursework plus thesis), RMIT outlined a framework for a range of different research degrees in 2000. Of particular interest here are the PhD degrees by project, which Usher (2002) argues are the logical development from professional doctorates given that there is no coursework and their entire focus is on Practice-based research. Although these degrees are not new to disciplines such as the creative arts, areas such as education have been more ‘traditional’, generally opting for the professional doctorate (EdD) when a close link with the teaching profession is desired. However, the then Faculty of Education, Language and Community Services at RMIT introduced its Masters and PhD Practice-based research degrees by project in which the aim was ‘to create a research and development capability within the workplace or community, produce a documented outcome from the project and develop applied research skills within the candidate’ (RMIT, 2003). These degrees mostly involve action research projects, the products of which, for instance, could resolve a workplace problem or contribute to enrichment of the community (RMIT, 2003).

Although one motivation for the development of the PhD (project) was to address the needs of a changing cohort of potential candidates, there is little doubt that it was also instigated to ensure that ‘the workplace becomes the site of research’ (Usher, 2002, p. 150). There is therefore an issue of whether this imperative can be seen as an imposition. Not all doctoral degrees in Australian universities (or even in the School of Education) have become ‘work-relevant’ and therefore the Government urge cannot be taken as a directive. However, it also cannot be argued that ‘what is valued and legitimate’ (Grenfell & James, 1998b, p. 169) in the Government’s neo-liberalist policies and within the knowledge economy is a closer relationship of education to ‘useful’ Practice. Bourdieu (1997/2000) argues that fields can be thought of as a continuum between autonomy and heteronomy, defined by the extent to which a field can ‘generate its own problems rather than receiving them in a ready-made fashion from outside’ (p. 112). Grenfell and James (2004) point out that change in
educational research methodology has arisen through ‘both an internal dynamic and, increasingly, external interventions’ (p. 511) and warn of the dangers of heteronomy where research standing outside of the scientific community might produce knowledge bases ‘of limited value in practice’ (p. 519).

Similar to the PhD (project) is the emergent generic professional doctorate (Boud & Tennant, 2006) which focuses on professional Practice outside the boundaries of professional groups. The generic professional doctorate can be situated alongside work-based programs such as RMIT’s PhD (project), at least in part because it ‘subverts the primacy of the written thesis as the dominant assessable outcome’ (Usher, 2002, cited in Boud & Tennant, 2006, p. 297). Boud and Tennant describe wide-ranging possible final products such as inclusion of non-academic material with ‘reflective, exegetical and integrative work of an academic nature’ (p. 296). This program would seem to be flexible enough to cater for any potential doctoral candidate, particularly those whose study does not easily fit into existing doctoral degrees. However, the challenges identified are substantial, particularly those epitomising the entrenched disciplinary and university cultures, and although this article has usefully added to the debate, the authors would have done well to wait for the forthcoming study of the first graduates from this program in order to round off the debate with some responses to the challenges.

Practice-based research doctoral degrees are therefore not without their problems and are not necessarily the panacea for all ills in doctoral study. A major issue is the degree to which industry and the professions have embraced and supported this type of doctoral research. Despite the obvious need for truly Practice-based doctoral research to be located in these sites of knowledge, Maxwell and Shanahan (2001) found that a quarter of those surveyed in their study of professional doctorates felt that the workplace was not central to their program. Further, they found that over 50 percent could not articulate a relationship with a professional body, and that almost no representative from a professional organisation had attended any of the three professional doctorate conferences held within the five years prior to their study. McWilliams et al.’s (2002) and Malfroy’s (2004) studies on professional doctorates have already been mentioned as finding little relationship to workplaces, but the latter study also confirms Maxwell and Shanahan’s findings: she found no guidance or involvement from professional organisations in the planning or teaching of the doctorates. However, it is not known whether the professions were actually asked to be involved and if so, in what context, and as Brennan, et al. (2002) argue, there may be few opportunities for either professional bodies or the workplace to be involved in decision-making processes in doctoral programs.
Incumbent upon this discussion, of course, is what exactly is meant by ‘professional’, ‘practitioner’, ‘work-based’ and even ‘applied’ research. Are these interchangeable? If not, what are their similarities and differences? Specific to this particular research, which terms describe the EdD, an acknowledged professional doctorate aimed at professional development in a professional context (RMIT, 2007b)? Which terms describe the PhD (project) with its aims of a tangible outcome in the workplace (RMIT, n.d.)? While it would arguably seem intuitive to define the research of the PhD (thesis) program as based on scholarship of the discipline (in this case, Education), that of the PhD (project) as Practice- or work-based, and the EdD program as professional, these are not discrete entities. Although Robson (2002) describes the practitioner-researcher as someone who works and who is at the same time involved with research that is of relevance to the job, much of the literature on professional doctorates talks of applied research that is specific to a profession or workplace (see for instance Brennan, et al., 2002). Further, as already discussed, even the more traditional PhDs by thesis can be linked to and produce tangible outcomes for the workplace. It is therefore possible in all doctoral degrees to research that which is about a profession at a semi-generic level or that which is completed inside a specific workplace; Boud and Tennant (2006), in fact, remind us of the significant overlap between the variety of doctoral programs and argues that ‘what they have in common is more important than their differences’ (p. 297). Apart from a variety of alternate labels for research with a focus on the workplace, there is also a tendency for authors to portray this kind of research in opposition to discipline-based research (Reeders, 2002); to this, Reeders points out that ‘both have aspects of swampy lowland and ivory towers’ (p. 2). Along with this unresolved issue are other tensions and contradictions which are now discussed.

### 2.7 Tensions and contradictions in new doctoral degrees

These new types of degrees bring their own contradictions and tensions. With more investment from industry, there is a need to ensure research remains independent. There is a need to be vigilant about the ethics of receiving research support from external sources (outside the university or Government). Whose responsibility will it be to ensure the research is independent? How much guidance/interference will we accept from ‘interested’ funding sources? Similarly, who will be the guardians of the quality of research? What if there is a conflict – if research meets or exceeds the expectations of the industry, but not the university supervisor (or there is doubt that it will meet the expectation of the examiner)? Also, as Rothblatt (2000) argues, ‘[t]he right to pursue knowledge implies the right for others to share it’ (p. 18), but what happens to the thesis or exegesis, or indeed the examination process if, for instance, a doctoral candidate’s industry research needs to remain confidential? Further tensions along these lines have been
identified in the hard applied sciences\(^8\), where industry partners’ expectations are that candidates will also work on activities not related to the doctoral study, and in the soft applied sciences, the candidate’s topic is often not closely associated with the supervisor’s expertise and therefore definition of the topic is often contentious (Neumann, 2003).

Issues surrounding the value and appropriateness of instrumental, Practice-based research degrees provide yet another tension (Maxwell, 2003). Although this issue has been around for some time (Gibbons, et al., 1994), the need for new Practice-based research education is seen, perhaps surprisingly, to be in conflict with the globalised knowledge economy. The problem is not that these degrees are potentially income generating or that they are based in industry. The tension comes from a discrepancy between what is perceived to be narrow research based on specific workplaces, and the ‘holistic understanding of systems thinking [and] inter-disciplinary research approaches critical to achieving a more comprehensive understanding of the complex reality currently facing the world system’ (Cogburn, 1999, Section 3). Despite its imperative for universities to provide more work-relevant research degrees, the Government, too, has reiterated its concerns about narrow, highly specialised research programs producing a lack of relevant useful generic skills for industry, with the resultant cultural mismatch between academic researchers and staff in industry (Kemp, 1999).

Further, Lincoln (1999) has argued that the technological revolution in the West was actually led by basic research rather than applied research, and cautions that although applied research can lead to short term profit, it does not lead to long term economic and technological success.

The question naturally arises as to what is legitimate knowledge in a doctoral program? What is it that doctoral graduates should be proficient in? On one hand, smooth transition between doctoral study and the workplace is seen as important; on the other, there is an academic requirement that doctoral research produces a new and original contribution to knowledge. Of course, the two are not necessarily mutually exclusive, but perhaps candidates should have some say in their needs: Cogburn (1999), seemingly to contradict what he said above, also advises us that academic institutions must be able to meet the varied needs of learners and of course some would argue that this is indeed happening with new forms of doctoral study. For instance, Seddon (2001) discusses an EdD program where rather than the ubiquitous original contribution to knowledge, the focus was to ‘extend

\(^8\) The idea of ‘hard’ and ‘soft’ sciences originated with Biglan (1973) and was developed by Becher (1989) to include the dimensions of ‘pure’ and ‘applied’. Becher categorises the physical sciences as ‘hard-pure’, pure social sciences as ‘soft-pure’, technologies such as engineering as ‘hard-applied’ and applied social sciences such as education as ‘soft-applied’.
educators’ capacities for learning and inquiry’ (p. 305). However, although she sees this as an example of provision of doctoral education that is responsive to current demands, she also warns of moving too far from the core purpose of a doctorate, arguing that any type of doctorate should produce ‘an original contribution to knowledge that is robust because it has been produced within “academic” knowledge production ethics’ (p. 331).

With the importance of industry and the professions in Lee et al’s (2000) triple-helix, there is therefore a question of what processes and sites of knowledge production fit into Seddon’s (2001) ‘academic’ knowledge production ethics. The theories of Boyer (1990) and Schon (1995), for instance, call for a rethinking of what counts as knowledge; Schon argues that Boyer’s new (at the time) forms of scholarship of discovery, integration, application and teaching must imply ‘a kind of action research with norms of its own which will conflict with the norms of technical rationality – the prevailing epistemology built into the research universities’ (p. 27). Similarly, Brennan et al. (2002) argue that professional doctorates ‘challenge the prestige of particular forms of cultural capital and the production of high status “intellectuals”’ (p. 79) and ask whether parity between this and the PhD can or should be sought. Candlin (2000) strongly argues from an art Practice perspective that parity between the conventional and Practice-based PhD should not be sought: ‘rather than making art Practice as scholarly as possible, the Practice-based PhD could be seen as an opportunity to re-think academic norms’ (p. 101). Echoing Seddon’s (1999) call for a ‘re-culturing’ of doctoral degrees (p. 4), Candlin believes that with the academy privileging theory over artwork by demanding academic study that is presented conventionally as a written thesis, it is missing the point that Practice-based PhDs are different to conventional PhDs. While this is true, as also is her gate-keeping accusations of keeping ‘a traditional image of academia in place’ (p. 101), it points to the crux of the debate: to what extent should the boundaries of doctoral study be opened, and what is the legitimacy of different forms of knowledge in relation to doctoral study, or as Seddon (2001) asks: What is doctoral in doctoral education?

There are other tensions produced by issues of ‘quality’ and ‘rigour’ of the ‘academic tradition’ in opposition to robustness of research credibility in work-based research, for instance, between institutions that may not endorse these new style research degrees and those that may. Neumann (2003) found that there were concerns about ‘maintaining acceptable standards’ (p. 132) in doctoral degrees, and until these new orientations have established some sort of benchmarks there can be pedagogical issues with supervisors who may be uncertain as to how to guide the candidate. Brennan (1998a), for instance, argues that university researchers ‘tend to be relatively unskilled in “insider” research and therefore may have problems in supervision of it’ (p. 83). Examiners, too, may have few
points of reference to guide them in their examination. Neumann (2003), for instance, cites a senior manager’s response that it is pointless for universities to stipulate attributes of what makes a good doctoral degree because examiners have their own perceptions. However, if these perceptions are not in sympathy with the ‘new’ epistemologies and knowledge of innovative degrees, their task is impossible. There are similar issues for candidates: from personal experience of completing a PhD (project) exploring the making of meaning in organisational change using forms of creative expression, Brearley (1999) speaks of a ‘palpable fear within academia’ (p. 3) working against any form of risk-taking or challenging of the status quo.

The debate, it seems, has never been far from that of the purposes of the university. For instance, Burgess (1997), speaking in the British context, identifies issues ripe for debate including the role of education versus training at the postgraduate level and academic versus vocational purposes of postgraduate education. Further, although Usher (2002) argues that the standard PhD will still have a place, he warns that with increased doctoral diversity ‘we need to know what we might be losing as well as what we might be gaining’ (p. 152). Seddon (2001) also warns of danger in the doctoral education shift to the private sector and the erosion of the doctoral degree if ‘developing extended learning and inquiring professionals overtakes the concern to make an original and robust contribution to knowledge’ (p. 328). She also makes a salient argument that academics are not doing enough to protect public knowledge and not promoting the value of public knowledge production and processes. The future of liberal arts doctoral education is certainly in jeopardy while universities attempt to meet the needs of industry-based candidates, their own survival needs and to fulfil the government neo-liberalist agenda of industry-based training. What happens to disciplines that do not fit the notion of Practice-based education, such as cultural studies and other branches of humanities-based disciplines? There is a real danger of doctoral degrees merely becoming training for industry, or in their diversity, becoming increasingly problematic for all stakeholders because there is no understanding of exactly what ‘the game’ is.

Another view, of course, is to understand the changing political environment and imperatives as providing a chance to reassess current doctoral practice and to see the benefits to candidates, professions and workplaces through professional doctorates and other Practice-based programs, alongside the conventional PhD. However, the doctoral candidates in Johnston and Murray’s (2004) study were very clear in their dislike for an ‘either/or positioning of the “old” and “new” forms of the PhD’, clearly preferring ‘a range of doctorates that would prepare them for dynamic career patterns’ (p. 33). Barnacle and Usher (2003) also remind us of the danger in seeing Practice-based and traditional research as a dichotomy. Their study of part-time HDR candidates, none of whom were
enrolled in professional doctorates but most of whom were working full-time as professionals, found a strong relationship between candidates’ work Practice and their research. Although they also found that candidates’ research was not often recognised in their workplaces and that workplace constraints often prohibited the actual location of their research within it, candidates found that the research informed their work ‘through disciplinary expertise and research knowledge and [gave] them confidence in, and a critical perspective on, what they do in the workplace’ (p. 353).

Other studies also point to the myth of a binary conceptualisation of PhD and professional doctorates. McWilliam et al. (2002) for instance, argue that differences were never the case and with the continued growth in all doctoral degrees it is even less so. Further, a study attempting to compare the features shared by PhDs with those of the professional doctorate in Britain found neither group to be homogeneous (Bourner, et al., 2001). Neumann’s (2003) major study, which involved interviews with doctoral candidates, supervisors and senior managers across six universities, concurs with this: although she found wide variation within all doctoral structures, none of these was ‘specifically based on contrasts between PhDs and professional doctorates’ (p. 132).

The extent, therefore, to which the research is Practice or professionally based, is not necessarily congruent with the type of doctoral program. Research from both professional doctorate and PhD candidates exists that primarily adds to academic disciplinary knowledge; research from both professional doctorate and PhD candidates exists that pays no more than ‘lip service’ to the profession; research exists from both professional doctorate and PhD candidates that is actually completed in the workplace by practitioner-researchers. It is important to note that the current study does not therefore take as a given that the experiences of the PhD (thesis) candidates will necessarily relate to academic research that extends disciplinary knowledge; similarly, there is no assumption of the extent to which the EdD and PhD (project) candidates’ research relates to their professions or workplaces. One of the motivations for the research is to look beyond these ‘convenient’ distinctions of each program to find deeper understandings of candidates’ experiences, both in the relationship to their Practice and in terms of their general doctoral experience. Literature regarding the latter is now discussed.

2.8 Issues in doctoral practice

The concept of postgraduate research as orderly and coherent study, involving young, mainly male, middle-class, full-time candidates with the purpose of being ‘apprenticed’ into academia has been widely contested. Although Mullins and Kiley (2002) found that experienced examiners of PhD
theses identified the goals of postgraduate research as either ‘the production of a thesis with given characteristics, or the development of the skills and attitudes necessary for the student to operate as an independent researcher’ (p. 378), both the process and products of doctoral study, along with diversity in student cohorts, have been the subject of much research and debate.

Central to this debate are the disputed conceptions of doctoral practice and research between stakeholders. McCormack (2004), for example, found tensions between individual candidates’ conceptions of research and those of the university and suggested that this marked difference should be identified as a potential factor affecting postgraduate completion rates. This was echoed by Neumann’s (2003) study in which senior managers argued for ‘safe research’ with manageable topics and shorter theses, although students’ associations were concerned that this would in effect be a ‘watering down of standards’ (p. 125). A danger was articulated that this type of research would affect the international standard of Australian doctoral research. Neumann’s study found further conflict in industry-funded research where there are different expectations of doctoral practice in industry and university, for instance, when doctoral candidates are expected to work on areas in industry not related to their research project. Along with these disputed conceptions is much literature detailing the nature and practices of candidates and supervisors, and the remaining section of this chapter is taken up with these issues in doctoral practice.

2.8.1 Student diversity

In an attempt to identify change in growth and extent of diversity in doctoral education including doctoral population, Pearson, Evans and Macauley (2008) found that despite the significant increase in numbers of doctoral candidates already discussed, the relative proportions of candidates in terms of age, gender and type of attendance had not changed significantly between 1996 and 2004. Although the common conception was of doctoral candidates as young, male and studying full-time, the researchers quote figures from the 1996 study (Pearson & Ford, 1997) showing only thirty-five percent to be under 30 years of age, 41 percent women, and 36 percent studying part-time. However, this early study did find that patterns of enrolments varied among the broad fields of study, with education having only 24% studying full-time and a larger percentage (70%) over 40 years of age. The only significant changes between the 1996 and the 2004 studies were a better balance between the two broad fields of study of Society and Culture and Natural and Physical Science with an increase of candidates in the former, as well as enrolments for women, which increased from 41 percent in 1996 to 49 percent in 2004 (Pearson, et al., 2008).
There has been a rise in part-time doctoral candidates from almost zero in the early 1970s (Evans & Pearson, 1999) to as many as 40 percent in 2000 (Evans, 2002). Finding consistency between 1996 and 2004, Pearson et al. (2008) confirm this increased cohort, identifying 60 percent of doctoral candidates in 2004 as full-time. The rise in numbers is explained by Evans (2002) as partly the availability of HDR part-time study in universities and the emergence of more professional or practitioner-oriented programs such as the professional doctorate, which are usually designed for those in employment and thus with part-time candidates in mind.

Watts (2008), however, warns that this cohort should not be seen as a unitary group. Arguing that supervisors need to adopt different strategies for individual part-time candidates, she points to the differing cohorts. Some begin and continue in their candidature in part-time mode, whereas others become part-time for a variety of reasons, for example, when they do not complete within the time-frame of full-time candidature. In this case, they may feel a range of emotions such as a sense of failure. Watts also points out that for those who work, psychological issues may arise, having to ‘switch from one mindset to another’ (p. 370), and that they are likely to miss out on support, given that most is not available in the evening, and the disconnection from the research culture can lead to feelings of isolation. For those who are candidates in a Professional Doctorate, however, there are benefits. McWilliam et al. (2002) argue that the coursework in such degrees can be an important transition to the literature and rigour of doctoral research.

Two studies motivated by the Government’s poor perception of HDRs aimed to explore the impact of part-time candidates: one on questions of quality and graduate attributes, the other on their research skills and findings. Barnacle and Usher (2003) found the part-time candidates in their study were motivated to enrol in a research degree in order to engage with ideas and have the ability to put new knowledge in the workplace, while the university provided critical distance from the workplace to enable reflection. A strong symbiotic relationship between research and the workplace was found, although not all workplace colleagues were supportive; the research was neither recognised nor understood in the workplaces of some candidates. While Barnacle and Usher’s research focuses on benefits to the candidate and workplace, Evans’ (2002) study focuses on benefits to the Government and university. Although he admits that withdrawal and non-completion rates are higher for part-time candidates, he points to evidence that part-time candidates complete more quickly than those who are full-time, a fact later confirmed by Rodwell and Neumann (2008). Other positive factors identified by Evans (2002) include economic benefits to the Government through lack of scholarships and income tax from part-time candidates who work. Further economic benefits to the institution are also cited: many candidates use the infrastructure of their home or workplace rather than those of the university.
Although the focus of these studies were on different aspects related to part-time candidates, they both argue that part-time candidates should be recognised for their significant contribution to workplace research.

Diversity is also seen in the increasing numbers of international students, particularly from Asia. In one decade, from 1990 until 2000, international student enrolments increased from 21,112 to 95,607 (Harman, 2003b). Although debate about English language standards abounds, there are other aspects including pedagogical issues and cross-cultural misunderstandings, both of which need to be resolved to ensure adequate supervisor/candidate relationships. Literature on these issues began at a time of increasing numbers of international students (see for instance Smawfield, 1989; Wilson, 1980; Zuber-Skerritt, 1988); however, given the continuing research (Andrade, 2006; Cadman, 2002; McClure, 2005; Wang & Li, 2008), the issues do not seem to have been resolved.

One such issue involves discrepancies in thesis writing pedagogy between what candidates with English as a second language (ESL) and their supervisors see as a problem. In a study of research candidates and their supervisors, Bitchener and Basturkmen (2006) found that while supervisors were concerned over candidates’ lack of understanding of structural and rhetorical conventions, candidates viewed their difficulties as only related to their English proficiency. However, this is in contrast to a study seeking to understand international ESL research candidates’ perceptions of their thesis writing needs in terms of major issues and pedagogical needs (Wang & Li, 2008), which found that some supervisors tended to focus on the candidates’ written language rather than the content or overall structure. The kind of feedback valued by candidates’, however, was on structure and content, some feeling that they could receive the support they needed in language development from the academic language and learning unit. Although this was a relatively small study, it points to the likelihood of many misunderstandings between candidates and supervisors. What is clearly needed is for supervisors to be aware that candidates may need support in a range of issues, not all of which might related to English language, and to provide a ‘safe’ environment for discussing this.

Assumptions are often made by lecturers and supervisors regarding presumed approaches to learning of Asian students, including HDR students, as tending to be conserving and reproductive, depending on surface learning strategies, rather than adopting a critical, questioning, deep learning approach, and therefore intrinsically deficit (Ballard & Clanchy, 1991; Ryan & Zuber-Skerritt, 1999; Volet & Renshaw, 1995). This attitude assumes homogeneity amongst the cohort of Asian international students and has been vehemently challenged (Biggs, 1996, 2003; Chambers & Volet, 1997). Biggs (1996) in particular has warned against generalising in this way, noting that all students, regardless of
country of origin, play both approaches at times. However, studies have shown that some cultural issues are apparent. Chen, Absalom and Holbrook (2003), for instance, found a mismatch in expectations in relationships between supervisors and Chinese candidates. Whereas the latter expected a personal distance but a professional closeness, the supervisor expected a type of personal collegiality, but professional independence and initiative. Hird (1997), however, warns that it is important for supervisors to understand the difference between cross-cultural issues and developmental factors and not make assumptions about the support candidates actually need.

Similarly, the English language issue is also often portrayed in simplistic terms, casting students/candidates as having a deficit, amid concern about falling standards. For example, in a study of academics’ perceptions of the issue, Bretag (2007) found all were concerned about what they perceived to be inadequate standards of English and most reported pressure to pass students and overlook plagiarism issues. She argues only for raising the English language test scores to better reflect native speaker competence. This is what Chanock (2003) calls an institutional perspective: attributing the problem to lack of skills in the student. However, the role of language in learning has been well-established (Vygotsky, 1998), and others see it from an educational perspective, where language development is one part of the academic acculturation process. A pedagogical approach which sees language within the context of the candidates’ research is more likely to achieve success (Cadman, 2002; Cargill, 2000; Cargill, Cadman, & McGowan, 2001).

2.8.2 Factors impacting on successful completion

A ‘taken for granted’ assumption backed up with some research is that women, part-time (Martin, MacLachlan, & Karmel, 2001) and international students (Hird, 1997) are less likely to succeed in doctoral study. However, a large study of the completion rates of 3,579 PhD candidates found few differences between gender, international or mature aged cohorts (Wright & Cochrane, 2000). The only differentiating factor found was between general disciplinary areas: confirming Seagram, Gould and Pyke’s (1998) study, those studying in science-based areas were more likely to submit than those in arts or humanities. They argue that what makes the difference is the larger investment required by ‘non-traditional’ candidates in terms of ‘money, time, and effort as well as the psychological factor referred to as “face”’ (p. 191). They suggest the greater amount of group work and supervision in the sciences compared to arts accounts for the disciplinary differences, and that because scientific research relates to objective phenomena, the candidate may be more able see their work as separate to their internal world, thus avoiding identity and self-esteem issues. Conversely, study in the arts may be more subjective, making the work ‘more intrinsically challenging to an individual’s psychological
equilibrium’ (p. 193). They argue for supervisors and support service provision to take account of psychological processes to enhance the possibilities of timely submission.

Attrition problems have been shown to be multifaceted (Evans, 2002; Golde & Dore, 2001; Lovitts, 2001). This is exemplified by Latona and Browne (2001), who argue that successful completion of postgraduate research relates to three broad factors. First, institutional and environmental factors: science-based candidates, who often find themselves supported within a team (confirming Wright & Cochrane’s study above), and those who feel a sense of belonging to a cohort are more likely to complete. Second, individual supervisory factors, including frequent supervisor/candidate meetings, appropriate and timely feedback, clear understanding of supervisor/candidate roles and responsibilities, and not changing the topic or supervisor. Third, student characteristics and cohorts; for instance, although they point to a lack of conclusive evidence that either age or gender affects submission, they do point to evidence that those who have a prior Honours degree or those who are in a science discipline area are more likely to submit in a more timely manner.

Similarly, McCormack’s (2005) longitudinal study on research degree students showed that those who failed to complete or who had taken a long time to complete their research experienced factors commonly discussed in the literature, such as isolation, supervision issues, crises in candidates’ lives and mismatch between candidates’ and institutional conceptions of postgraduate research. Although McCormack points to the literature identifying this failure being both attributed to and internalised by the candidate as their failure, her study shows that with some candidates there is ‘a storyline that reconstructs withdrawal or non-completion as a beginning rather than a failed ending’ (p. 234) and in each case, some positive personal transformation was evident.

Along with the psychological processes related to the research area mentioned by Wright and Cochrane (2000) above, personal traits of candidates also seem to play a major role in determining completion. For instance, pointing to the importance of personal attributes, Wright and Cochrane (2000) suggest that ‘those who struggle successfully against adversity are often possessed of remarkable motivation and commitment.’ (p. 192). Similarly, in attempting to understand how postgraduate candidates’ experiences relate to completion, Wright (2003) found that research candidates fell into two groups: those whose difficulties impeded progress or led to withdrawal, and those who, despite experiencing similar difficulties, managed to succeed through various means, such as self-determination, their ability to access support systems and their ability to negotiate personal or academic issues. Self-defeating behaviour of candidates such as procrastination and perfectionism has
also been discussed in terms of poor completion rates (Ahern & Manathunga, 2004; Latona & Browne, 2001; Manathunga, 2002; Martin, Marsh, Williamson, & Debus, 2003).

All of this resonates well with Bourdieu’s (1972/1977) concept of habitus, a set of largely unconscious dispositions developed early in a person’s life which are difficult to change and therefore influence life outcomes (discussed in Chapter Three). Although habitus can and does change as it integrates experiences, changes are limited because they are based on past experience. It seems, however, that one method of changing self-sabotaging behaviour such as procrastination, which assumes some change to the habitus, is cognitive-behaviour therapy. Kearns, Gardiner and Marshall (2008) have developed a program for this purpose and claim to have used this technique to successfully improve PhD candidates’ self-limiting behaviours such as perfectionism, procrastination and over-committing. They believe these self-sabotaging behaviours have ‘solid cognitive underpinnings’ (p. 81) that preclude the use of purely behavioural intervention, which fits well with the difficulty in changing habitus. The program involves short sessions over a long period of time where candidates identify patterns of behaviour, understand underlying attitudes and beliefs and set measurable goals. Participants completed questionnaires between six and eighteen months following the program and evidence is clear that this program changed the behaviour of the candidates and enhanced their ability to complete on time.

The timeliness of HDR completion rates is also an important issue for Australian universities given the Australian Government’s funding structure. The research by Rodwell and Neumann (2008) focused on the timeliness of doctoral completions, and aimed to develop key indicators and a model for resource placement to improve the likelihood of future timely completions. It used data from the Graduate Destinations Survey for doctoral graduates from 2000 - 2005 from an Australian university. Variables analysed were those commonly available at the time of enrolment: gender, age, ESL and previous qualification of candidates, as well as field of study, attendance and mode. Results show the type of attendance to be the most important factor for completion: part-time candidates were much more likely to complete in a timely way than those studying full-time. These results were somewhat surprising given Martin, MacLachlan and Karmel’s (2001) findings that part-time candidates were less likely to complete. The difference was great enough to warrant a separate analysis of the other variables for both part-time and full-time candidates. The results of these analyses showed that the key predictors of timely completion for full-time and part-time candidates were very similar. In both cases, the field of study and whether the student was from an English-speaking background (ESB) were predictors. There was a consistent positive finding that both full-time and part-time candidates in the life sciences completed in a timelier manner and a negative result for part-time candidates.
studying languages, humanities and law. Rodwell and Neumann (2008) point out that these findings generally suggest that candidates from the sciences are more likely to submit in a timely manner, which adds to Wright and Cochrane’s (2000) findings that the field of study has an impact on completion rates, with those in the sciences more likely to complete. For full-time candidates a further predictor of timely completion was residency: whether the candidate was local or international. Australian Government student visa regulations incorporate strict degree completion time-lines for international students; residency was therefore not relevant for part-time candidates.

2.8.3 Writing issues

Writing a thesis is arguably the longest and most intense piece of writing that most doctoral candidates will grapple with, and includes many layers of difficulty. Issues of writing style and structure, the higher levels required of analysis, synthesis and critique, the need to sustain a clear and coherent argument, and issues of pedagogy are joint issues for candidates and supervisors. Added to this, are the specific issues of ESL candidates, the writing of exegeses in practitioner project-based doctorates and, of course, the knowledge that it will be either entirely or largely what decides whether candidates pass or fail. Research is dependent on high-level writing skills (Aitchison & Lee, 2006) and examiners look for critical, well-argued theses written in an appropriate style (Holbrook, Bourke, Lovatt, & Dally, 2004).

Although there are many self-help texts on thesis writing aimed at HDR candidates, their use is limited, being predicated on an assumed homogeneity of thesis structure. Many studies cite the need for direct individual guidance on thesis writing. Nelson and San Miguel (2000) as well as Heath (2002) found candidates both needed and appreciated the attention to specific issues of writing. However, this has not always been forthcoming. Aitchison and Lee (2006), for instance, identified a lack of systematic approach to addressing writing issues, leading to dilemmas and confusion among HDR candidates. Further, reflecting the perception of power imbalance in the relationship, candidates can find it difficult to ask for support. Manathunga (2005), for instance, found many research candidates feared their supervisors would assume they were incompetent because they needed support, and were loathe to seek help.

There is much literature not only explicating academic writing generally, but specifically research writing. Much of this uses applied literacies or applied linguistics approaches (Bazerman, 1987, 1988; Parry, 1998; Starfield, 2003; Swales, 1990; Swales & Feak, 1994), explicating and teaching form, function and movements through academic texts such as theses. However, although this literature is designed to provide both practical and theoretical understanding, it seems that the audience is
predominantly academic language and learning advisers rather than supervisors, who Murray (2005) argues are generally not aware of it, although those who are aware of it find it a useful pedagogical tool.

With the new forms of doctoral programs, particularly project-based workplace research, come possible alternative forms of writing. The ‘traditional’ form of a doctoral thesis of Introduction, Literature Review, Methodology, Results, Discussion and Conclusion (Perry, 1998) has now been contested. A cursory glance through a database of Australasian HDR theses (Council of Australian University Librarians, 2008) shows that although the traditional form is still dominant, particularly in areas of science, many different configurations exist, for example, personal narratives written in the first person (Lewis, 2000).

Central to the changes in location of research are issues of identity and competing fields of study (Bourdieu, 1972/1977). Theorists in the field of academic writing have understood the practice to be socially situated and concerned with issues of writer identity (Berkenkotter & Huckin, 1995; Ivanic, 1998; Lea & Street, 1998; Saljo, 1996). Ivanic (1998) identifies student writing as sites of identity conflict as students struggle with the dominant academic discourses. Berkenkotter and Huckin (1995) argue that particular written genres, (for example, PhD theses in particular disciplines) both represent and construct position and membership and thus the audience is central to any form of writing (Nelson & San Miguel, 2000).

But what of research that is located within the workplace, as in the case of most PhD (project) candidates, or more generally within the professions? Maxwell (2002) argues that Professional Doctorate researchers are members of a number of discourse communities (akin to Bourdieu’s ‘fields’), and although they should position themselves as an authoritative voice in the professional field, he acknowledges that this is likely to be challenged; there is clearly a potential problem for candidates if the discourse of the research is other than that expected by the examiners. Although Mullins and Kiley (2002) argue that ‘in choosing examiners, people don’t choose examiners who will have all their buttons pushed’ (p. 377), examiners are usually members of a general discipline-based academic community and may not be privileged members of the particular discourse community of the research, such as a particular work environment in which practitioner research is based. Similarly, in arts-based research, exegeses need to be both ‘a vehicle for validating the process of studio enquiry and elaborating the value of its outcomes’ (Barrett, 2007, p. 160). This Practice/theory divide is further problematised by Perry (2007) who argues that creative work could be recognised as valid research within itself, without requiring an exegesis. Given the increasing move towards Practice-
based and arts-based research there is clearly a need for more discussion in particular disciplinary discourse sites (particularly among those who are called upon to examine) around what writing forms and styles are acceptable, which will need to include a redefinition of what is in the sciences and some other disciplines, called ‘rigour’.

2.8.4 Pedagogical and supervisory issues

Supervision practices have been well-researched from a variety of perspectives. These include practically-oriented issues such as various styles and modes of supervision as well as practical strategies and tips. There is also an important body of work that seeks to theorise supervisory pedagogical practice and personal dynamics of the supervisor-candidate relationship. These are now discussed.

2.8.4.1 The practice of supervision

The literature on supervision practices shows a wide continuum of styles from more of a pastoral role, providing motivation and personal support to a more direct style with clear goals and targets (Grant, 2005). It would seem that within this tension resides the tension between too much independence for the candidate and too much dependence, respectively. One such study that advocates unproblematically for a direct ‘hands-on’ interventionist approach is a major national multidisciplinary study by Sinclair (2004), who argues that this approach generally results in timely completions because many candidates are lacking in the competencies that are prerequisites to successfully completing the doctorate. This functional approach, however, was found to be too narrow by Lee (2008), who interviewed supervisors from a range of disciplines and found the project management approach was no longer favoured by many. Other approaches included enculturation (encouraging candidates to become members of the disciplinary community), critical thinking, emancipation (encouraging candidates’ self-development), and developing a quality relationship where candidates are cared for and inspired.

Supervision has often been framed in terms of a master/apprentice relationship with the inherent issues of power and authority. Franklin (1999) points to this unfair, very private relationship, underpinned by the candidate’s knowledge that he or she must produce an original contribution to knowledge. This, Franklin (1999) argues, ‘leaves the student floundering between the irreconcilable poles of pupil and independent researcher’ (p. 9). Supervision has also been constructed as ‘teaching’. Some time ago, Connell (1985) argued that PhD supervision was the most advanced level of teaching, but that it was rarely acknowledged. More recently this was also found by Manathunga (2005). Supervisors in her study, all of whom had received awards for supervision, constructed their actions
of showing candidates how to complete their research and write their theses, and providing practical strategies along the way, as teaching activity. In a similar vein, Reidy and Green (2005) constructed their candidate/supervisor relationship using the metaphor of coaching, working through a series of moves from ‘pushing’ to ‘encouragement and affirmation’ (p. 55). Ferman (2002) also argues that supervision is a sophisticated type of teaching; however, she points out that very few academics have formal training in teaching, and that it is possible to have supervisors who have never taught in the tertiary area. She argues for sustained training opportunities in teaching and explicit mentoring approaches. Constructing supervision as teaching in the current climate, however, needs to be contested; in Practice-based or professional doctoral programs the idea that the supervisor is more knowledgeable in all aspects of research is inappropriate because candidates are often older and hold more senior positions in their workplace than their supervisors (Brennan, 1998a).

Others, for instance, Johnson, Lee and Green (2000), argue against any sort of master or teacher relationship to candidates. Drawing on the work of Gibbons et al. (1994), they point to supervisory relationships as being underpinned by ideals of collaboration, interdependence of human relations and appreciation of others’ skills and capacities. Some studies adopt a more critical perspective. Smith (2001), in acknowledging that supervision is not ‘a politically innocent practice’ (p. 38), argues for a critical pedagogy of supervision that can expose the ‘injustices and inequities in current thinking, practices, and organisational arrangements’ (p. 39). Such a pedagogy would include an understanding of relations between teaching, learning and knowledge production, the power relations that influence learning, assumptions and values that inform practice and the organisational culture in which supervision occurs. The problem with that is, as Doecke and Seddon (2002) argue: ‘the space of research education is still largely owned by academics, and this permits “us” – the “we” of the academy – to fill that space with “our” preferred content’ (p. 95).

Moriarty, Danaher and Danaher (2008) conceptualised the relationship between candidate and supervisor in terms of dependence, interdependence and independence as fluid rather than progressive, with a candidate’s dependence on the supervisor fluctuating through a variety of candidate and supervisor activities and situations. However, they strongly argue that in all these circumstances the ‘common denominator…is a dialogical pedagogy that give central place to a supervisor-postgraduate student relationship based on and lived through reciprocal regard and trust’ (p. 435). They further argue that these different types of co-dependencies provide an opportunity for a dialogical pedagogy of postgraduate supervision based on Freire’s (1972) understanding of students and teachers working together to form knowledge. They also point out that this ‘reciprocal regard and trust’ (p. 435) of an autonomous field of scholarship is endangered by heteronomous interests, which
favour the apprenticeship model with its ‘asymmetrical power relationship between student and supervisor’ (p. 438).

Ultimately, supervision is a personal relationship. It would seem that with increased diversity among candidates, supervisors and doctoral programs, it is important not to be overly prescriptive, but to negotiate an ideal approach. Malfroy and Webb (2000) pointed out the potential lack of congruence between candidates’ needs and the supervisory style and argue for processes within a framework of good practice to be put in place for matching candidate and supervisor. Arguably, however, the diversity could encourage new understandings about supervisor pedagogy. Malfroy (2005), McWilliam (2004) and Pearson (2005b) have acknowledged that the traditional model of one-to-one supervision with one or two supervisors is often no longer appropriate. There is need to view supervisory practices in a new light and to consider innovative new approaches to supervision that are more flexible (Brennan, 1998b) and negotiated (Lee, 1997).

Although the one-to-one supervisory relationship is still the most common, alternative supervisory relationships has existed for some time. Conrad, Perry and Zuber-Skerritt (1992), for instance, discussed committee supervision and workshop activities in which candidates shared their experiences with and learned from other candidates. Similarly, Neumann’s (2003) study found four supervisory models in practice: the traditional individual student-supervisor model, small to medium-sized team or group supervision, large research groups or centres, and supervisory panels. Similarly, in an effort to capture a community of practice (Lave & Wenger, 1991), Dysthe, Samara and Westrheim (2006) describe an alternative supervisory practice consisting of a three-pronged approach: supervision groups of two to three supervisors and their candidates; colloquia with the same candidates but not supervisors; and individual supervision. The colloquia became a safe place for candidates to exchange ideas and experiences, both research-based and personal, and assisted them to sort out and filter issues before the group and individual meetings with their supervisors. The supervision groups aided in candidates’ disciplinary enculturation, assisting them to become full members in the community of practice, moving from the periphery to a central position, while the individual sessions ensured quality of their theses.

New forms of Practice-based doctoral research which demand new academic cultural practices have produced new difficulties. With the aim of filling a perceived gap in research on supervisory relationships in Practice-based research, Hodges, Malfroy and Vaughan (2006) examined four case studies of supervision of workplace research. They identify a number of challenges to supervision related to the tension between the workplace and the university. First, integration between workplace
and academic requirements was an issue: recognition of academic achievement by both the workplace and the candidate cannot be taken as a given. Second, there are difficulties in maintaining a balance between a flexible and collaborative relationship with a candidate on one hand while addressing institutional responsibilities on the other; similarly, there are issues in ensuring candidates develop a balance between being deeply involved with the research and the need to remain disinterested. As with Reidy and Green (2005), the authors of this study argue for a coaching approach. However, the rationale in this case is that, although the supervisor should understand the context and research skills needed, he or she is likely not to have expertise in the workplace research site; a coaching approach better allows for questions and practices to be challenged.

Other studies have also found the degree to which supervisors have the skills for workplace supervision to be an issue. Reeder (2002), points to supervisors of candidates in more traditional thesis-based programs needing disciplinary expertise, whereas discipline boundaries are often not respected in Practice-based research. Candidates in the latter are often more expert in their workplace, the site of the research, making flexible forms of supervision such as bringing in experts in relevant areas to assist. Boud and Tennant (2006), for instance, found the set of skills needed to guide candidates in workplace research to be at odds with those found in many doctoral supervisors. They argue that a reframing of how supervisors see their practices is needed and that skills in learning consultancy, addressing the relationship between work and context, and an acceptance of transdisciplinarity, among others, need to be acquired. Given that candidates do not fit into a homogenous mould but show great diversity in terms of age, first language status, type of enrolment, employment status, family situation and residency status, supervisory practice clearly needs to be more flexible and responsive to candidates’ needs.

This has been necessarily a small selection of the abundant literature on supervisory practices. However, since Green and Lee (1995) pointed to supervision as ‘radically undertheorised’ (p. 40), arguing for a ‘more explicitly theoretical stance’ (p. 40), there has been a growing body of literature which seeks to understand the pedagogy of supervision in this way. Some of these studies seek to change practice on the basis of theorising, and others aim to further develop the theory. These are now discussed.

2.8.4.2 Theorising pedagogical practice

McAlpine and Norton (2006) argue that ‘if doctoral education is to be seriously examined and possibly changed, this can best be achieved if we think and act based on an integrated view of the factors influencing student experience of the doctorate’ (p. 5). They produced a heuristic identifying
what they believe are the contexts influencing retention and completion of doctorates. This has at its centre, the department and disciplinary context, which constrains or enhances the supervisor-student experience. This is set within the institutional context which constrains or enhances departmental policies and practices. This is all set within the societal – supra-societal context which constrains or enhances post-secondary policies and practices. However, although this has its use in terms of reminding researchers that doctoral study is done within broader contexts, it does nothing to address candidates’ relationships as they experience their study. They argue that doctoral candidates’ voices are the least heard in research, but their simplistic heuristic does nothing to address this.

A quite different and more useful way of understanding the relational dimensions of supervisory practice is seen in the study by McMorland, Carroll, Copas and Pringle (2003). Using peer partnership inquiry methods with focussed group and individual reflection, the project involved creating a space in which to tell their personal stories. They met regularly, where they critiqued their practices and looked at multiple subjectivities. Changes in the supervisors’ practice included a rethinking about the relational process of supervision and a greater understanding of how academic conversational development can strengthen the emergence of candidates’ ideas.

Other studies attempting to understand and theorise postgraduate pedagogy focus more on ‘the lived, experiential relations of postgraduate research and training’ (Green & Lee, 1995, p. 44). Green (2005) is interested in the social formation of identity and, while acknowledging the volume of research on supervisory pedagogy, for him, the ‘significance of subjectivity and the unconscious’ (p.157) is ‘unfinished business’ (p. 154). He understands the practice of supervision to be both embodied and situated and believes that supervision and subjectivity must be brought together. He humorously sees the academic community as a ‘field of practice and identity that renews itself by eating its young’ (p. 152). He sees supervisors as being endowed with symbolic power, and doctoral pedagogy ‘as much about the production of identity, then, as it is the production of knowledge’ (p. 152, emphasis in original). His central argument is that doctoral research education ‘involves a particular relationship between the practice of supervision and the production of subjectivity’ (p. 161), and suggests that ‘subjectivity and supervision must be thought critically, reconceptualised so as to take into account important questions of power and desire, discourse and the symbolic, pedagogy and (ir)rationality, the psyche and the social, and the dynamics of interpellation and performativity’ ( p. 161).

An article by Lee and Williams (1999) seeking to understand the role of the emotions in doctoral experience, particularly trauma and distress, entitled ‘Forged in Fire’: Narratives of Trauma in PhD Supervision Pedagogy drew responses from many commentators. The authors argue for the need to
recognise the irrationality and emotion in the doctoral process, but rather than construing emotional distress as a negative element, they argue that it is ‘both a necessary condition and an effect of the production of the subject of doctoral study – the licensed independent scholar’ (p. 8). This rational, autonomous scholar is therefore ‘predicated upon both the production and the disavowal of the “irrational” and the emotions’ (p. 8). Using the memory work methodological framework, they interviewed six senior academics in an attempt to understand the emotional elements of their experiences as doctoral candidates, then academics and supervisors, and the relationship between these. The academics’ experiences included ‘neglect, abandonment and indifference’ (p. 17) but paradoxically that led to the self-reliance that produced the masculine, autonomous self. Lee and Williams (1999) argue that supervisors need to recognise and work with the irrationality and emotion.

Both Yates (1999) and Barraket and Brown (1999) agree with Lee and Williams (1999) that doctoral study is a traumatic, emotional process. Yates is particularly impressed with the methodology, and the understanding that the problems are inherent in the task, not the candidates or supervisors. However, she disputes their claim that the PhD is coded as a male task, arguing that they ‘overessentialise women’s epistemology and desires’ (p. 183). Barraket and Brown (1999) also feel there is too great a focus on gendered conditions, pointing out that gender is dealt with separate from other subjectivities such as class, race and sexual identity, which operate simultaneously. Further, they argue that given the participants in Lee and Williams’ study were all senior and based their practice on the ‘Oxbridge’ model (p. 174), the article denies other voices: they feel that newer supervisors may tell a different story.

A more practical, rather than psychoanalytical, view is seen in many responses to the article. For instance, although Pearson (1999b) values the recasting by Lee and Williams (1999) of a model of trauma as a sign of weakness into a model of emotional experience, she focuses on the need for a blatantly pragmatic approach of understanding the practices necessary for producing doctoral researchers, thus effectively de-problematising them. She also acknowledges that Lee and Williams (1999) ‘countered the tendency to rely on bureaucratic approaches to improvement’ (p. 186). This is a similar approach taken by McWilliam and Hatcher (1999). They argue that emotion is part of the management rhetoric which is driving university policy, pointing out that the current management and leadership texts argue for a balance of the rational and the emotional. As such, ironically, emotions are foregrounded and therefore part of the improvement imperative that Lee and Williams (1999) question. McWilliam and Hatcher (1999) further warn that the ‘lack of an appropriate sort of irrationality’ (p. 212) is likely to be treated as a skills deficit to be remediated by staff developers.
Similarly, both Pringle (1999) and Corcoran (1999) acknowledge that emotion may be essential to the process, but both also have a more cognitive, practical perspective, pointing out that the relationship will always be one of power because the work of the supervisor is to criticise, but it need not be one of frustration. Vehemently criticising Lee and Williams (1999) in a deeply sarcastic tone, Saunders (1999) argues that important and pressing practical matters and issues of policy have been disregarded: he suspects that ‘they go so deep into the psyche as to detach themselves from today’s institutional practices’ (p. 210).

Green (2005) finds his ‘post-humanist concept of social subjectivity’ (p.153) crucial to understanding the supervisory relationship, and it is certainly a move in a more productive direction to the constrained objectivity of dot-pointed lists of strategies for dealing with difficult candidates. Owler (1999) agrees, arguing that the intensity of the supervisory relationship shows that more is involved than merely transferring knowledge from supervisor to candidate. She understands individuals to have ‘complex investments in the relationship’ (p. 132). However, agents (supervisors and candidates) must negotiate their activities within a rule-dominated field, in which induction into the discourse community of their discipline (the game) is often a prerequisite for favourable examination. Further, Firth and Martens (2008) argue that instead of ‘the dialectical reconciliation of rationality and emotion’ (p. 287), supervisors need to engage in ‘explicit discussion of the processes of researching, time management and writing which characterise PhD candidature as part of what the supervisor teaches’ (p. 280, emphasis in original). The debate between the inherently non-compatible approaches of the practical and theoretical seems set to continue for some time.

2.8.5 Doctoral candidates’ experiences

The previous discussion related to a range of issues surrounding doctoral study and all are important in understanding the nature of such study. However, many of these studies have a limited focus on understanding the actual experience of doctoral candidates from their perspective, such as, for instance: how they feel about their supervision and more generally about their studies; what their self-perceptions are as doctoral candidates; how they grapple with concepts and procedures as new researchers; and the impact of doctoral studies on their personal and professional lives. These and similar issues are now discussed.

As a response to the Australian Government White Paper Knowledge and Innovation (Kemp, 1999) which cited supervision problems and poor completion rates by candidates, the Australian Government funded a major project by Neumann (2003): The Doctoral Education Experience:
Diversity and Complexity. The project aimed to close an acknowledged gap in understanding of candidates’ perspectives on their doctoral education experiences. Neumann surveyed six Australian universities, interviewing 130 doctoral stakeholders, including candidates (two-thirds of the total), supervisors and other staff. However, given the stated aims of an ‘intensive exploration of qualitative issues associated with students’ educational experiences and perceptions’ (p. 1), the study is somewhat limited. Although she found that the majority of candidates had positive experiences and that there were power differentials inherent in relationships between candidates and their supervisors, the findings mostly focused on issues such as disciplinary differences and institutional factors. There is very little attempt to understand candidates’ struggles from a more personal aspect.

2.8.5.1 Candidates’ satisfaction with their doctoral study

Information regarding HDR graduates’ satisfaction with their doctoral experience is garnered annually through the Postgraduate Research Experience Questionnaire (PREQ). It is a national survey administered by Graduate Careers Australia aimed at all research degree graduates (i.e. PhD, Professional Doctorate and Masters by Research) who have completed the requirements for their degree. Apart from demographic and graduate employment questions, it aims to assess graduates’ satisfaction with their research degree experience under six categories using a five-point Likert scale ranging from ‘strongly disagree’ through to ‘strongly agree’. The PREQ responses for 2006 (Graduate Careers Australia, 2007) are shown in Table 2.1.

Table 2.1 Postgraduate Research Experience Questionnaire, 2006: Comparison of national and RMIT graduate satisfaction ratings

<table>
<thead>
<tr>
<th>Category</th>
<th>Nationally *</th>
<th>RMIT #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>6,532</td>
<td>206</td>
</tr>
<tr>
<td>Valid response rate</td>
<td>49.8% (n=3,253)</td>
<td>48.5% (n=100)</td>
</tr>
<tr>
<td>Supervision</td>
<td>76%</td>
<td>80%</td>
</tr>
<tr>
<td>Intellectual climate</td>
<td>63%</td>
<td>54%</td>
</tr>
<tr>
<td>Skill development</td>
<td>91%</td>
<td>96%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>73%</td>
<td>68%</td>
</tr>
<tr>
<td>Thesis examination</td>
<td>80%</td>
<td>77%</td>
</tr>
<tr>
<td>Goals and expectations</td>
<td>91%</td>
<td>88%</td>
</tr>
<tr>
<td>Overall satisfaction</td>
<td>85%</td>
<td>87%</td>
</tr>
</tbody>
</table>

* Graduate Careers Australia, 2007
# RMIT, 2007b
Although these figures point to a high level of satisfaction both nationally and at RMIT specifically, it is important to note limitations in the instrument (Graduate Careers Australia, 2007). It does not cover all dimensions of graduates’ study experience, data is based on only those who have graduated and there may be bias caused by the substantial survey non-response. It is also important in the context of the present study to note that these figures include not only doctoral graduates, but also Masters by Research graduates.

Other studies have also confirmed the general rate of student satisfaction and satisfaction with supervisors specifically. Neumann’s (2003) large study found a high degree of candidate satisfaction (with only 17 percent dissatisfied or very dissatisfied) and similar results were found by Heath (2002); in his study of 355 graduates in one Australian university, 85 percent were satisfied with their supervision. However, these are at odds with a further study by Harman (2003a) in which 1531 candidates from two Australian universities responded to a questionnaire. In this study, the rating for Satisfactory/Very satisfactory for quality and effectiveness of the supervisor was 61.6 percent and supervisor competence in the research area higher at 71.7 percent. Furthermore, the level of overall experience rated only 56.9 percent, (Harman, 2003a), somewhat lower than the rating of 85 percent in the 2007 PREQ, above. A likely reason for this is the different stages of candidature. Whereas Heath’s (2002) respondents were all graduates, perhaps forgetting much of the negative aspects of their study because it was all behind them, Harman’s (2003a) were all currently enrolled candidates, living the experience of doctoral study. This doesn’t explain Neumann’s (2003) study, however. Candidates in her study were almost all currently enrolled (apart from a few who had recently submitted) and at different stages in their enrolment; 50 percent were in the middle stages of candidature. The difference may be in the methodology. Neumann’s study was based on interviews, where candidates may find it more difficult to discuss negative elements of their research. These are, of course, important considerations in the context of the present study.

2.8.5.2 Candidates’ difficulties in their doctoral study

The transition to a doctoral program is problematic for many candidates. Although it is common (and often mandated) for candidates to have an honours degree or a research Masters degree, others have minimal experience with research projects, if at all, and may find the intensity, length and required stamina daunting. Further, it has often been some time since the doctoral candidate studied; this is particularly the case in the discipline of Education, where candidates have often taught for many years. Supervisors can fail to notice the background of their candidates, and overlook gaps in their confidence and abilities, and making assumptions about their ability to work independently (Sambrook, Stewart, & Roberts, 2008). This lack of congruity and understanding of candidates’ needs
can be daunting for the candidate. For instance, doctoral candidates in a UK study made clear the importance in terms of study success of supervisors taking account of individual differences in terms of coming straight from a Bachelor degree or having Practice-based experience (Johnston & Murray, 2004).

Although Neumann (2003) found that the majority of doctoral candidates favoured a supervision arrangement that encouraged peer interaction, this is not the reality for most candidates, and social isolation has been identified as a determining factor in doctoral candidate success (Gardner, 2008). Much research has shown that social isolation and lack of a sense of learning community is a very real problem for doctoral candidates. Johnston and Broda (1996), for instance, found in research on mostly part-time doctoral candidates in Education, that candidates felt they were ‘moving blindly through a process of which there are many expectations but few instructions or guides’ (p. 279) and felt an overwhelming sense of isolation. Similarly, Conrad’s (2003) study of postgraduate candidates’ understanding of effective supervision related to the intellectual and social climate of students’ research communities.

In response to this isolation and marginalisation, Martin, Drage, Sillitoe and Clingin (2006) discuss the development of a community of practice underpinned by Lave and Wenger’s (1991) model of learning. In this, the expert and novice interact to allow the novice’s legitimate peripheral participation within a community of practice, leading gradually to becoming a recognised, full member of the community. In these communities, the relationship between identity, knowing and social membership is important, as is the importance of talk and discourse. Martin et al’s program included a series of seminars for both candidates and supervisors, scaffolded in order to cater for those on the periphery and those close to the centre of the research community of practice. However, a community of practice can only go so far because, as Crossouard (2008) argues, it glosses over issues of power relations, which many commentators point out, are unavoidable. As an example, Manathunga (2005) found candidates in fear of asking supervisors for assistance with aspects of their research and writing because they did not want to appear incompetent.

The online environment has also been identified as a site where communities can develop. Crossouard (2008), for instance, found that the combination of a discrete tutorial presence, formative assessment, and discussion forum activities which help candidates develop progressively can produce peer learning networks while maintaining some academic authority. Further, some candidates used the online environment to support social relations that they felt were also useful in their learning.
Ingleton and Cadman (2002) explored the social and emotional factors that enabled international HDR students to act with confidence as learners. In the candidates’ home country, their self-identity as successful learners was marked by family, teachers and professionals, as well as belief in their ability as learners. However in their new environment of postgraduate research, they found ‘no familiar measures of success and no immediate sources of validation’ (p. 106). The researchers used memory work, where candidates wrote third-person narratives of an incident that made them believe they could succeed academically. These narratives were transcribed and discussed in a group. Ingleton and Cadman (2002) found that by reflecting on their experiences and analysing them in a group, in other words, through moving their voices into the public domain through the group, candidates were to some extent able to overcome the socialisation issues that led to their silence. Although this study focused on international students, the researchers more broadly point to support provided through interpersonal experiences, along with external indications of success, as essential in the building of academic self-identity. These are surely also important factors in developing a research identity in local candidates who do not have a prior research Masters degree, given their unfamiliar learning environment. Arguably, self-identity as a researcher requires candidates to engage in social transformation and develop social and cultural capital (Bourdieu, 1972/1977) in their field of doctoral study, they need to be part of collegial groups of doctoral candidates and supervisors (Wisker & Robinson, 2006). This provides opportunities to debate, challenge and argue, which all constitute an expert researcher.

2.8.5.3 Situating the current study within the literature

Although there is abundant literature on the doctoral degree and practice, many gaps are apparent, some of which the present research seeks to fill. Much of the literature focuses on candidates’ issues in terms of how they relate to supervisory practice or, more broadly, their effect on Government or university imperatives. This study, however, aims to understand candidates’ experiences from a more personal perspective. Johnston and Murray (2004) along with McAlpine and Norton (2006) all point to their concern at the relative silence of candidates’ voices in debates around doctoral practice; candidates’ voices are the least heard (Golde, 2000).

Further, the study seeks to provide deeper insights into some of the complexities inherent in doctoral candidature. Apart from Neumann’s (2003) study, the literature tends to focus on specific elements of candidate experience. The present study has more holistic aims, seeking candidates’ experience in terms of their norms and practices, needs and expectations, and their perspective of research and Practice. It aims for ‘a reconceptualisation of doctoral candidature as research and as work […], one
that recognises the candidature as a form of knowledge-producing work contributing a complex mix of personal, social and economic benefits’ (Pearson, Evans, & Macauley, 2004, p. 352).

Although traditional and professional doctoral programs have been widely researched, very little has been published on doctoral programs with a more Practice-based focus. Where this exists, it invariably relates to project-based research degrees in the performing arts; this type of degree in the discipline of education is still rare. Added to this is the opportunity to compare candidates’ perceptions of the cultures of three different doctoral programs in one learning environment. Bearing in mind warnings of seeing heterogeneity between or within ‘types’ of doctoral programs where it does not exist, these three doctoral programs are seemingly aimed at ‘traditional’ research, professional research and Practice-based research, and this allows the present study to add to the debate on the ‘mix’ within doctoral study of professional Practice, the workplace and the university (Lee, et al., 2000; Malfroy, 2004).

The research also seeks to rectify a gap in empirical studies (other than those conducted in France) addressing higher education by employing Bourdieu’s conceptual framework (Maton, 2005; Naidoo, 2003, 2004). Maton (2005), for instance, argues that ‘few areas of study have greater need of the kind of theoretically sophisticated, empirically applicable approach offered by Bourdieu’ (p. 688). The gap is part of what Deem (2004) and Naidoo (2003) see as a general lack of development in the sociology of education. Maton (2005) points to a paradox in that ‘higher education is one of the most discussed but least analysed object of study in higher education’ (p. 688), arguing that an advantage of Bourdieu’s theory of practice (Bourdieu, 1972/1977, 1980/1990) is that higher education can actually be seen as an object of study. Much of the literature relating to doctoral study focuses on either the structures involved (for example, government and university governance issues or various degree program structures) or on the candidates’ issues. Bourdieu’s approach, however, brings together the subjective agency of the candidates as they interact with the objective structures inherent in the three doctoral degrees, providing the capacity to add critical insights from a perspective thus far missing from the literature. It has the potential to add to the theory of the disciplines of education itself and also the sociology of education, as well as providing practical recommendations to improve doctoral candidates’ experiences.

2.9 Concluding comments

By way of providing a context for the present study, this chapter has provided an overview of the history and development of the doctoral degree in Australia. The effects of the knowledge economy
has included changing values, purposes and structures of doctoral programs, all of which have been
discussed within a changing, Government-led context with its clear focus on research in industry and
the workplace. The field of doctoral study in some respects seems to have radically changed,
morphing into a variety of forms and functions for increasingly diverse stakeholders with their
diverse motivations.

The literature on candidates’ doctoral experiences has included both ends of a wide spectrum;
candidates have sometimes suffered greatly, sometimes rejoiced in their supervisor relationships.
However, although there has been debate and critique of aspects of doctoral study, attrition among
doctoral candidates has not changed and many of the same supervisory practices have survived, for
better or worse. The collective habitus and cultural capital of proponents of the master/apprentice
model seem to have ensured the reproduction of these supervisory practices, with lack of training
allowing poor practices to continue unabated. However, as with all debates, there are many examples
of exemplary innovative supervision practices adapting to the needs of candidates in professional and
practitioner-based doctoral degrees.

The many tensions and contradictions inherent in doctoral study are also seen in the literature:
tensions between ideas of social construction of identities and practicalities leading to timely
submission; between candidates’ need for direction and their need for independence; between
supervision pedagogy as pastoral care and as teaching practice. Although the literature is abundant,
the changing role of the university, continued interest and diversity in terms of stakeholders and
doctoral programs means these tensions are unlikely to be resolved soon. The present study seeks to
add to the debate while providing some new insights into doctoral candidates’ experiences,
particularly through a Boudieuian analysis.
Chapter 3

Bourdieu’s Theory of Practice and the Intersecting Fields of Doctoral Study

3.1 Introduction

As the central analytical framework to this study, Bourdieu’s theory of practice is now outlined. This includes his concepts of habitus, field and capital and the relationship between these. Criticism of Bourdieu’s ideas and an indication of the application of his framework by others is also discussed. Fields, in particular, are important as explanations of social practices and can be seen as arenas where agents with various amounts of various types of capital interact. Given this centrality, the fields and subfields relevant to doctoral study are then analysed through discussion of the hierarchies of universities, knowledge modes and disciplines, and the cross-field effects of competing fields of power.

3.2 Bourdieu’s analytical framework

Bourdieu (Bourdieu & Wacquant, 1992b) argues that bureaucracy, institutions and individuals are differently positioned within a field and that it is important to analyse a field through the following ‘three necessary and internally connected moments’ (p. 104-107):

1. Analyse the relation between a particular field and the broader ‘fields of power’
2. Map the relations between agents in terms of the ‘field of positions’
3. Analyse the habitus of agents in terms of the ‘field of stances’.

The first level equates to the relationship between education and ‘the political and economic systems of society…in terms of…what is valued and legitimate’ (Grenfell & James, 1998b, p. 169) which, in the present study, relates to the Australian Government’s regulations and expectations regarding the production of doctoral degrees. The second level is represented by the multiple fields in which individuals move simultaneously, each having ‘specific legitimate terms of governance’ (Grenfell & James, 1998b, p. 169). Fields relevant to this study include, for instance, the tertiary sector generally, and more specifically, research degrees, the University, the School, the three doctoral programs within the School, and candidates’ various professional or industrial workplaces. Level three includes the stances of agents (candidates, supervisors and others) in the doctoral field, as seen in their habitus,
which Bourdieu identifies as a person’s ‘set of dispositions which generates practices and perceptions’ (Bourdieu, 1993, p. 5) and which shows itself as ‘spontaneity without consciousness or will’ (Bourdieu, 1980/1990, p. 56).

Habitus, however, needs to be seen in a relational context in which its ‘meaningfulness is determined not by the characteristic properties, attributes, or essences of the thing itself, but rather with reference to the field of objects, practices, or activities within which they are embedded’ (Mohr, 2000, p. 1). For Bourdieu (1972/1977, p. 72), the ‘modus operandi’ – the process – is more important than the ‘opus operatum’ – the finished product. Further, the competence of the agents and their authority or legitimacy within the field of study must be investigated in the data analysis. Thus, the fields of study are always related to the habitus and its capital, mediating between habitus and practice. Discussion now focuses on the key concepts of Bourdieu’s theory of practice and how they were used throughout the analysis of this study.

3.3 Bourdieu’s key concepts

Bourdieu’s epistemological break, which originated in reflections on his anthropological work in Algeria, is at the core of his theory of practice. To Bourdieu, subjectivism ‘fails to grasp the social ground that shapes consciousness, while objectivism…[fails] to recognize that social reality is to some extent shaped by the conceptions and representations that individuals make of the social world’ (Bourdieu, 1993, p. 4). His ‘third way’ involves the concept of habitus and the interconnected concepts of field and capital, which provides the basis for a reflexive sociology.

There is ‘no formula for pursuing Bourdieu’s procedures. There are no routines or standardized instruments of enquiry’ (Robbins, 1998, p. 52). However, in order to understand the practices of the individuals and the context in which they occur, Bourdieu uses the core concepts of habitus, field and capital. Further, although in its integrated complexity, Bourdieu’s theory of practice ‘resists a simple ordering of the priority of [these] concepts or themes’ (Calhoun, LiPuma, & Postone, 1993, p. 12), they are now briefly discussed, followed by an exposition of how they are integrated to form his theory of practice.

3.3.1 Habitus

The habitus is a general disposition that generates practices, perceptions and attitudes that are largely unconscious that predispose people to act in certain ways: to have a ‘feel for the game’ (Bourdieu, 1980/1990, p. 63). In other words, it is a product of our social conditioning through which we classify...
the world, coming mainly from our early socialization in the family but changing according to life
texperiences. As it integrates past experiences, it ‘functions at every moment as a *matrix of perception, appreciation, and actions*’ (Bourdieu, 1972/1977, p. 82, emphasis in original). An individual’s ‘social divisions and mental schemata are structurally homologous because they are *genetically linked*; the latter are nothing other than the embodiment of the former’ (Wacquant, 1992, p. 13, emphasis in original). Therefore, the personal, subjective conceptions of a person are actually socialised, with habitus becoming ‘socialized subjectivity’ (Bourdieu & Wacquant, 1992b, p. 126). It is important to note that habitus is not just formed from perceptions and mental attitudes; it also includes what Bourdieu calls the ‘body hexis’ (1972/1977) which are the physical dispositions of how a person walks, talks, dresses and other outward characteristics as they engage in particular fields.

Habitus develops through life by adjusting to the various fields, producing a cultural trajectory in the individual. Conversely, it also influences life outcomes because the changes are biased in favour of our past experiences, limiting the possibilities to those viable for the social context of that person. The habitus can be seen as ‘structured structures predisposed to function as structuring structures’ (Bourdieu, 1980/1990, p. 53). Because the past conditions (the internalisation of external structures) that have shaped a habitus tends to determine practice, the habitus tends to reproduce social structures rather than be transformative (Bourdieu, 1980/1990). For example, it is statistically more likely that children raised in a music-oriented family will develop their own love of music along with all the associated skills, which forms part of the ‘structured structures’ of their habitus. If this person continues in later life as a musician, the practice will be actively reproduced (structuring the structure). Similarly, if an individual’s parents went to university, it is more likely that that person will also attend. Many doctoral candidates, having prior degrees, are likely to come from such families. However, the extent to which this assists the doctoral candidate to have a ‘feel for the game’ of doctoral *research* study is a question to be answered in the present study. Similarly, because a number of candidates interviewed have been practicing teachers for many years, their habitus has likely adapted to these fields. It is interesting, therefore, to see how this may impede or further adapt to doctoral study.

### 3.3.2 Field

The field is ‘a network, or configuration, of objective [social] relations between positions’ (Bourdieu & Wacquant, 1992a, p. 97) and a site of struggle for power between the agents who inhabit it. By power, Bourdieu means those who have the defining capital in that particular field, and who determine the boundaries and who may legitimately enter. He uses the metaphor of a market in which...
there are ‘stakes which are struggled over and regulated by a relationship between supply and demand’ (Bourdieu, 1980/1990, p. 59). Fields are not fixed entities: the boundaries of fields are imprecise and shifting, and fields can be located within other hierarchically structured sets of fields as is the case in this study (see Figure 3.1). The field of main interest is the field of doctoral study in the School of Education. However, this must be seen within the whole School, the University and the overarching field of the Australian Government. Further discussion of conflict in the fields as they relate to the present study is seen later in this chapter.

3.3.3 Capital

Bourdieu identifies capital as all goods, whether material or symbolic, ‘that present themselves as rare and worthy of being sought after in a particular social formation’ (1972/1977, p. 178, emphasis in original). The ability to mobilise capital provides power. However, his understanding of power within society is based not only on economic capital (the wealth or other goods that an individual possesses), but also on cultural, social and symbolic capital. Further, Bourdieu argues that, to varying degrees, it is possible to convert one type of capital into another. For instance, if individuals increase their wealth (economic capital) they may begin to move in a new circle of useful acquaintances (social capital); if they increase their cultural capital through academic achievements, they may also increase their economic capital through higher paid employment. Understanding the culture of doctoral study from the candidate’s perspectives, means understanding the constructions of their identities as doctoral students as they negotiate and build various amounts of various capitals.

Cultural capital is the knowledge of particular forms of cultural expression which signifies the cultural competence of a person. It is realised by the relationship between education and the family (Bourdieu, 1980/1990). To demonstrate cultural capital requires activities that indicate the ‘legitimate disposition that is acquired by frequent contact with a particular class of works, namely, the literary and philosophical works recognized by the academic canon’ (Wacquant, 1992, p. 26). This is important in the development of academic capital, which is ‘the guaranteed product of the combined effects of cultural transmission by the family and cultural transmission by the school (the efficiency of which depends on the amount of cultural capital directly inherited from the family)’ (Bourdieu, 1979/1984, p. 23). Cultural capital can be embodied (as part of our habitus), objectified (for instance, through a collection of art or books), or institutionalised (knowledge about the education system). The latter is based on educational qualifications, which Bourdieu (1972/1977, p. 187) considers vital to this type of capital: ‘academic qualifications are to cultural capital what money is to economic capital’.

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Bourdieu points out that cultural capital is linked to educational success, with educational institutions privileging the social and cultural capital that students bring with them; the more cultural capital, the more the likelihood of educational success (Bourdieu, 1993). This cultural capital, argues Bourdieu, is largely transparent and taken for granted. In the process, education institutions ‘endorse and normalize particular types of knowledge, ways of speaking, styles, meanings, dispositions and worldviews’ (Margolis, Soldatenko, Acker, & Gair, 2001, p. 13). Although cultural capital can be acquired through schooling, even when individuals are successful at this, there remains a crucial status difference between these ‘autodidacts’ and those born into the dominant habitus (Bourdieu, 1979/1984). Autodidacts are ‘too [anxious and serious] to escape the permanent fear of ignorance or blunders, or to side-step tests by responding with the indifference of those who are not competing or the …detachment of those who feel entitled to confess their lacunae’ (Bourdieu, 1979/1984, p. 330). Further, Bourdieu (1984/1988) makes the distinction between the more prestigious scientific capital (based on research) and academic capital, which is concerned with academic networking and teaching. Pertinent to this study, Deem and Lucas (2006) found that academics from the field of Education generally have a different habitus compared with those in non-vocational fields, with incoming former schoolteachers possessing more academic capital than scientific capital.

Social capital includes valuable exchange-based social relationships and networks of significant people upon which an individual can draw. It is the resources that accumulate in an individual or group through developing ‘a durable network of more or less institutionalised relationships of mutual acquaintance and recognition’ (Bourdieu & Wacquant, 1992b, p. 119). In other words, the degree to which doctoral candidates build up their social capital in the doctoral field depends on their ability to network with the socially powerful agents of this field. This can be particularly important in the life of a doctoral candidate who needs to source methodological or other information beyond their supervisor’s expertise: a mark of independence in candidates is the development of social capital by seeking out useful contacts within the doctoral field other than their supervisors.

Economic, cultural and social capital can be either material or symbolic, the latter being either of these capitals in their socially recognized and legitimized form (Fuchs, 2003). Symbolic capital is a ‘capital of honour and prestige’ (Bourdieu, 1972/1977, p. 179). Relying on publicity, reputation and appreciation, an individual with symbolic capital, more than any other form of capital, is recognised as having power and prestige by the social agents of a particular field. In the broad field of higher education, symbolic capital can most readily be seen in titles, for instance, Vice Chancellor, Professor, Associate Professor, and of course Doctor. The position of doctoral candidates with
regard to symbolic capital is interesting. Many have risen to senior ranks in their workplaces and are likely, therefore, to have built up much symbolic capital in those fields (and arguably aim to develop more by completing their doctorate). In the field of doctoral studies, however, the short time they are in this field combined with the differential power relations between candidates and their supervisors (even within particularly egalitarian pedagogical relationships) preclude the possibility of developing a great deal of symbolic capital. It has been suggested that the symbolic form of cultural capital plays an important role in the construction of learner identities and that there is a relationship between the type of cultural capital displayed by students and their involvement in either productive or non-productive interactions with teachers (Black, 2004). The degree to which doctoral candidates feel inclusion or exclusion in the field is thus of interest in this study.

3.4 An integrated perspective

Although Bourdieu’s central concepts have been discussed separately, they must be seen as parts of an integrated whole. To capture the dynamic relationship between structure and agency, Bourdieu sees fields occupied by agents whose positions in the field are determined by the relative amount of particular types of capital; in fact capital ‘does not exist and function except in relation to a field’ (Bourdieu & Wacquant, 1992b, p. 101). Neither the habitus of the agents (who make strategic choices) nor the objective social structures (which limit the options) are independent entities, one being embedded in the other (Mahar, Harker, & Wilkes, 1990). Further, the dispositions of the agents (their habitus) not only generate the possibilities for action in any given field, but also govern the extent to which agents recognise the field in the first place (the practice). As a way of explaining social practice, Bourdieu summarises the relation between his major concepts through a generative formula:

$$(\text{Habitus} \times \text{Capital}) + \text{Field} = \text{Practice}$$  
(Bourdieu, 1979/1984, p. 101)

Although Mahar, et al. (1990, p. 7) point out that this formula is not to be used as some sort of universal or ‘deified solution to analysis’, it succinctly encapsulates the interconnectedness of Bourdieu’s concepts: habitus cannot be directly observed or understood except through the concept of capital; however, there is no capital without its embodiment in agents’ habitus and which defines the agents’ positions in particular social fields and results in practice.

Bourdieu frequently explicates his theory of practice with an analogy of a game (Bourdieu, 1991, 1998; Bourdieu & Wacquant, 1992b), where serious players come together within a particular field. The field includes the rules, conventions and rituals of the game (which can be debated and changed), and its structure influences the behaviour of the agents playing the game, with each person struggling
for positions of power by competing for the various types of capital that are seen as desirable in any particular game (but which are sometimes debated and changed). Further, the practice of individuals in the game are shaped by both their habitus and the nature of the particular field in terms of what they consciously choose to do (for instance, a conscious acceptance of the explicit rules) and their ‘natural’ ability and implicit understanding of the ‘unwritten rules’. In other words, the game can only operate if the players are ‘socially predisposed to behave as responsible agents…’ within it (Bourdieu & Wacquant, 1992b, p. 103), but who also have a ‘feel for the game’ through their habitus, which is best achieved by being born into the game (Bourdieu, 1980/1990, p. 63).

In the cultural field of doctoral study, this ‘game’ plays out as follows. The field includes the rules and rituals of doctoral study, and produces and authorises the discourses and activities (Webb, Schirato, & Danaher, 2003) of research training and thesis writing. These field elements are dynamic and ever-changing, with the source of that change coming from within the field itself or responding to outside sources (Grenfell & James, 2004). The latter include regulations imposed by the Government (for example, what constitutes doctoral study in terms of time limits in which to complete the degree and the relative amount of research to coursework); University rules (for instance, those relating to enrolment procedures and formatting of theses); and rules within the School of Education (such as procedures for first and second review). Changes coming from within the field include new doctoral degrees being established or disbanded, such as changing the Doctor of Education from a coursework to a research degree and the development of the Doctor of Philosophy by Project. The main players in this ‘game’ are the supervisors and candidates. Although supervisors may struggle for cultural and symbolic capital as agents who value each of these programs relative to the others, given their qualifications (and substantial experience by most), one would expect them to have a reasonable ‘feel for the game’. However, this may not be true for all candidates. They are often from diverse backgrounds in terms of culture, past educational experience and employment and therefore possibly constrained by their habitus, resulting in limited agency and considerable struggle to adjust to the field of doctoral study.

3.5 Criticism of and engagement with Bourdieu’s theory of practice

There has been some criticism of Bourdieu’s theory of practice, the most important of which involves the seemingly deterministic nature of his concept of habitus. Giroux (1982), for instance believes it to be ‘a conceptual straitjacket that provides no room for modification or escape’ (p. 7). Similarly, Jenkins (1982, 1992), charging Bourdieu with determinism, points to the inherent reductionism in his theory: the habitus generates practices which reflect the objective social structure that begat the
habitus. To these charges, Bourdieu (1980/1990) points out that the habitus merely *disposes* actors to do certain things. Secondly, habitus works in relation to a field, in which changes can cause different reactions in the habitus (if the classically trained musician finds herself in a rock band, for instance). In this way, habitus contributes to the structure of a field, and the field contributes to modify the actions of agents within that field. Bourdieu’s concept of field has also drawn some criticism in terms of leading to a ‘paint-by-numbers’ approach leading to researchers believing they have all the answers to a social problem once the positions and values of the field have been identified (Webb, et al., 2003). However, Webb et al. point out that, rather than a real space, Bourdieu’s field is ‘a metaphor for a social site where people and institutions engage in particular activities’ (p. 68). Other criticisms relate to the non-transferability of Bourdieu’s research on the French education system to other countries. This is refuted by both Deer (2003) and Robbins (2004) who both trace the development of Bourdieu’s sociology of education, the former in terms of the evolution of the higher education sectors in France and Britain and the latter in terms of policy development in each country. Both found Bourdieu’s concepts to be transferable outside of France.

Although Robbins (2004) and Naidoo (2004) argue that Bourdieu’s theories have not commanded the attention outside France that they deserve, there is a wide body of research on education practices and sociology from various countries to which Bourdieu’s theory of practice has been applied (Aschaffenburg & Maas, 1997; Grenfell & James, 1998a, 2004; Maton, 2005; Mills & Gale, 2005; Nash, 1999; Reay, 2004). Further, it has been argued that it is in educational research that his ideas have likely had the greatest impact (Grenfell & James, 1998a), and that using Bourdieu’s concepts to bring attention to the processes of the field of education research offers ‘insights and understanding not readily visible in other approaches’ (Grenfell & James, 1998a, p. 2). His own studies on aspects of education include *Homo Academicus* (1984/1988) and *Pascalian Meditations* (1997/2000) and with Passeron, *Reproduction in Education, Society and Culture* (1970/1990). Research into cultural practices in higher education using Bourdieu’s theory of practice include research into the teaching cultures of Education Departments (Deem & Lucas, 2006) which found academic habitus to be shaped by gender and professional background; research into institutional strategies during political instability (Naidoo, 2004) which found Bourdieu’s theory capable of transcending the simplistic conceptions of previous research; and, more pertinent to the present study, research into undergraduate students’ and tutors’ experiences using Bourdieu’s theory as ‘a dynamic and relational approach’ was able to see ‘a degree of interdependence which conventional conceptions obscure’ (James, 1998, p. 120). Furthermore, in arguing their case for researchers to draw on the work of Bourdieu, Mills and Gale (2005) discuss how researchers find and produce knowledge using his
approach. They found that rather than the current focus of attributing student outcomes to the degree to which students apply themselves to their studies, a Bourdieuan focus was important in terms of understanding how social systems really work. James and Bloomer (2001) in their study of the cultures of learning in Further Education also point to Bourdieu’s theory-as-method particularly as allowing attention to ‘culture’ within new understandings of learning, another important reason to incorporate a Bourdieuan analysis.

3.6 Analysis of fields relating to doctoral study

As already discussed, the boundaries of fields can be fluid rather than fixed but they are also determined by their own logic. Within fields, a hierarchy of distinction is produced and reproduced, valued forms of capital are produced and certain dispositions are advantaged and (re)produced. Fields are not, however, like separate bricks in a wall. They tend to overlap or can be seen as subfields of larger fields, as Figure 3.1 shows. Bourdieu argued that higher education could be thought of as a field or a subfield of the broader field of education. However, the field of higher education in large part answers to, and therefore can be seen as a subfield of, the Australian Government. In the present study, each of the three doctoral programs can be thought of as small fields in their own right, or as subfields of the School of Education. This in turn can be thought of as a subfield of RMIT. Similarly, the three doctoral programs can be seen as subfields of the field of research programs generally, and workplaces can intersect any one of these fields/subfields. It is important to note that in this hierarchy of fields, the autonomy of fields and subfields can be jeopardised by other fields, producing effects which Rawolle (2005) calls ‘cross-field effects’. The cross-field effects of the broader fields of power on the higher education field are discussed later in this chapter; however, in understanding the hierarchy of these fields in relation to this study, it is important to first discuss the hierarchies of universities and their disciplines and types of knowledge.

3.6.1 University hierarchy

The field of higher education in Australia is characterised by a hierarchy of universities in terms of providing relative competitive advantage for students in employment, income, prestige and social standing (Marginson, 1997a), equating, in Boudieuan terms, to economic, social, cultural and symbolic capital. In commenting on a decade of market competition within the higher education sector, Marginson (1997a) argues that when the Australian Government introduced the Unified
Figure 3.1 Intersecting fields of doctoral education at RMIT
National System in 1987 (see footnote on page 15), the resultant universities of each state became defined as ‘Sandstone’, ‘Wannabe Sandstones’, ‘Utechs’, and ‘New Universities’. He categorises the Sandstone universities as embodying academic values and claiming ‘leadership on research, the academic disciplines and professional training’ (p. 10); the Wannabe Sandstones as claiming the same social prestige but with ‘less plausibility and conviction’ (p. 10); the Utechs, universities of technology formed from the large CAEs, as having strong reputations in technology, applied research in industry and in business training; and the New Universities, being largely formed from smaller CAEs, as emphasising ‘teaching quality, customer friendliness and regional factors’ (p. 10).

Although these reforms were meant to improve efficiency and responsiveness, Marginson pointed out ten years later that the ensuing culture of competition had in fact highlighted the importance of the positional element, the symbolic value, rather than improve the quality of teaching and learning. He argued that, while the Sandstone universities strengthened their prestigious position and the Utechs marginally improved with their capacity to draw income from industry, both the Wannabe Sandstones and the New Universities lost ground. This grouping of universities is not only still current (Marginson later changed the name of ‘Wannabe Sandstone’ to ‘Gumtree’ and moved the University of Tasmania from Sandstone to Gumtree), but, with some modifications, it has been solidified in the development of four university groups (Australian Education Network, 2009): the Group of Eight (go8), the Australian Technology Network (ATN), Innovative Research Universities Australia (IRU Australia) and New Generation Universities (NGU). Table 3.1 shows that the member universities are the same or similar to Marginson’s (2004) listing.

The elite nature of the Sandstone universities comes from their globally competitive research capacity and high value degrees. Marginson (2005) argues that elite universities reproduce themselves via a ‘charmed circle’ (p. 6): students and academic staff are attracted by their research standing, which results in further resources for research. Sandstone research is typically the Mode 1 knowledge favoured by the grant-bearing institutions. Conversely, universities of technology such as RMIT are oriented towards ‘practical’ Mode 2 knowledge, and as Marginson (2004) indicates, rate third out of the four groups in the hierarchy stakes. He used the competitive Institutional Grants Scheme (allocated on the basis of research performance) as an indicator of position and prestige which shows that in 2003 Sandstone universities received more than double the amount given to Gumtree universities, followed by Unitechs, then New Universities; the lowest funded Sandstone university, Adelaide, received $15.3 million while RMIT received only $4.5 million.
Table 3.1  University groupings

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<th>Gumtrees *</th>
<th>IRU #</th>
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* Marginson, 2004
# Australian Education Network, 2009

3.6.2  Knowledge hierarchy

As discussed in Chapter Two, the global knowledge economy has instigated a general shift in the way in which higher education, private industry and scientific and technical knowledge function together. This has been conceptualised as a shift from Mode 1 knowledge to Mode 2 (Gibbons, et al., 1994), bolstered by the triple helix of university, industry and government with the purpose of stimulating knowledge-based economic development. Agents in institutions, in attempting to meet these policy demands for industry-focused knowledge production, have duly developed professional doctorates, and more recently Practice-based doctoral degrees which encourage Mode 2 research to a greater extent. This is seen, for instance, in the School of Education’s decision to abandon the EdD in favour of the PhD by project. The agents in this field of education followed other disciplines in this technical university and in many other ATN universities: they have addressed the imperatives of the government and aimed to produce knowledge important to the economic field, and as a university of technology, RMIT was potentially amenable to these changes.
Ironically, however, in order to advance their position as institutions in the field of higher education and other fields, universities must also promote Mode 1 knowledge. Although mindful of the need to see Mode 1 and 2 knowledges as potentially complementary and not necessarily dichotomous (see Chapter Two), at a national level Mode 1 research still appears to be more highly valued than Mode 2. The cornerstone of the university is still the discipline; universities are structured by disciplines, and recruitment and promotion within disciplines is controlled by those with the cultural and social capital in the disciplinary fields. Disciplines are self-defined and self-sustained: what is researched and how it is researched is determined by disciplinary peers, particularly through the key peer-reviewed journals of each discipline. For instance, the Excellence in Research for Australia (ERA) best practice principles developed by the Australian Research Council states that ‘ERA is a disciplinary research assessment exercise. As such, interdisciplinary research will be disaggregated to its disciplinary components’ (Australian Research Council, 2008, p. 3); this disciplinary focus places valued research firmly in Mode 1. Further, Usher and Solomon (1998) point out that the dominant modes of dissemination giving authority to Mode 1 knowledge are books, refereed journal papers and conference presentations, not informal on-line postings or other types of mediated communication typical of Mode 2 knowledge. The former activities are, of course, the standard activities of university researchers and bring rewards in the form of government research grants; however, those completing Mode 2 research find themselves having to rewrite their research into a recognisable Mode 1 form (Usher & Solomon, 1998). Thus, despite government and global rhetoric of the importance of applied Mode 2 knowledge, there is a clear hierarchy of knowledge: what is valued is a Mode 1 intellectual climate, and the focus of research is likely to continue to be Mode 1 (Muller, 2000).

3.6.3 Disciplinary hierarchy

There is a further hierarchy that points to the limited ability of agents in the School of Education field to help RMIT play its game. In the field of higher education not all disciplines are equal; there is a generally agreed upon hierarchy of symbolic capital with education having the least amount of prestige. In discussing the intellectual ‘pecking order’, Duderstadt (2000), for instance, argues that ‘the more abstract and detached a discipline from “the real world”, the higher its prestige’ (p. 123). Although arguing against this ‘culture of academic snobbery’ (p. 123), he points to a pervasive hierarchy with mathematics and philosophy at the top and education clearly at the bottom. Similarly, Cole and Knowles (2004), while not referring specifically to a hierarchy of disciplines, point to a startling array of commentators who denigrate teacher education and strongly question its place in a university. In a somewhat different manner, Ladwig (1996) points to the high status of scientific and
technical knowledge compared to education. With the aim of improving the education field’s persuasiveness, he analyses educational research as a social field. He points to the extremely productive nature of radical sociologies of education and the prolific literature on this, and asks how this subfield can still remain marginal to the broader field of educational research. In arguing that the distinctions between radical and mainstream educational research are no longer viable, he suggests that in order to strengthen the field of education, radical sociology should adopt conventional scientific tenets and widen the choice of research methods. Therefore, by taking doxic (tacit and undisputed) practices from both the radical and conventional educational subfields into the realm of orthodoxy (awareness of the possibility of different beliefs) and heterodoxy (dissension), Ladwig would be putting in place a process that Bourdieu (1972/1977) would argue enables practice to change within a field.

3.6.4 Cross-field effects

From the discussion above it is clear that the field of higher education not only has its own subfields, but is also set within or intersected by more powerful fields. The imposition of the economic and government fields on the field of doctoral study show some important cross-field effects. Lingard, Rawolle and Taylor (2005) argue for a widening of Bourdieu’s concepts to include cross-field effects and suggest that this is ‘specifically useful to educational policy studies, where the effects of policy processes in bureaucracies – in the form of texts, statistics and practices – are intended to have impacts beyond the educational policy field...’ (p. 769). A salient cross-field effect of the knowledge economy, of course, is the imposition of government fields on the field of higher education, where universities are now seen as producers of workers for the new industry-university alliance. This led to the development of work-relevant doctoral programs such as the PhD by project at RMIT, and although the University was happy to accommodate this, the School of Education was faced with losing its field autonomy.

3.7 Concluding comments

Boudieu’s theory of practice with its key concepts of habitus, field and capital have been explicated in this chapter, along with a discussion of hierarchies of power in the field of higher education. Relations of power are seen in the subfields (themselves hierarchical) and in the intersection of the fields of industry and government on the field of higher education. Although RMIT’s School of Education followed the call for applied research from government and industry with the support of the University and developed a doctoral degree tailored to this, it exists in a system that recognises
Mode 1 knowledge as supreme; there is pressure to conform to the discipline-based Mode 1 knowledge from the very source that demanded more applied research: the government. Because RMIT must compete with the sandstones and gumtree universities for limited government resources by playing the Mode 1 ‘game’, Mode 2 knowledge is also discouraged both professionally and institutionally. In this power hierarchy of giants, the School of Education is positioned at the bottom, powerless to effect major change.
Chapter 4

Theoretical Framework and Research Design

4.1 Introduction

In order to understand how candidates perceive the respective cultures of the PhD (thesis), PhD (project) and EdD programs in the School of Education, RMIT, an approach was required that not only looked at the structures of such programs, but also took into account the social context. A qualitative approach was therefore adopted, being a ‘situated activity that locates the observer in the world’ (Denzin & Lincoln, 2000, p. 3). Erickson (1986) claims the essential characteristic of qualitative research is the centrality of interpretation, and it is this nature that allows the researcher to capture a holistic understanding of the individual perceptions and feelings of the participants, not just their opinions.

In all research, the underlying assumptions about what constitutes ‘valid’ research and which research methods are appropriate to the research questions must be addressed. Crotty (1998) describes a useful representation of how theory and practice fit together in research by discussing the four elements which are basic to the research process: epistemology, theoretical perspective, methodology and methods (data-gathering techniques). This is not merely a list, but a hierarchy: the type of epistemology adopted dictates what theoretical perspectives are possible, which further dictates what methodologies and, therefore, what methods are more appropriate. In reality, however, Crotty (1998) points out that researchers often begin with the problem, issue or question, decide how to address these and then identify the theoretical framework and epistemology that is implicit in the research.

This study is underpinned by a specific social constructionist epistemology, adopting a critical theory approach where socially constructed reality is ‘shaped by social, political, cultural, economic, ethnic and gender values, crystallized over time’ (Lincoln & Guba, 2000, p. 165). The epistemological and methodological approaches draw on Bourdieu’s ‘theory of practice’ and concepts of habitus, field and capital (Bourdieu, 1972/1977; 1984/1988; 1980/1990; 1991, 1992, 1993; Bourdieu & Wacquant, 1992a). A nested multiple case study method (Yin, 1994) was used in which the three doctoral programs formed cases within the larger case of doctoral studies within the School of Education, RMIT. Within the case study approach, semi-structured interviews with mostly open-ended questions
were used with doctoral candidates and, to a lesser extent, supervisors. Details of how these elements are represented in this research are discussed in the following sections.

4.2 Epistemological underpinning

While there is consensus on the definition of the general concept of epistemology (the theory of how we know what we know), this is highly contested in terms of the types of epistemologies. An analysis of research texts reveals many ways of naming and grouping ‘epistemologies’, which include rationalism, empiricism, objectivism, subjectivism, realism, constructivism, constructionism, idealism and phenomenalism. This creates problems in that some terms used in different texts appear to be synonymous, many texts merely provide a choice between the extremes of objectivism and subjectivism, and there seems to be a blurring of the boundaries between Crotty’s (1998) helpful distinction between epistemology and theoretical perspectives. Crotty’s understanding of epistemologies, in fact, provides a comprehensive view of the different ways in which we understand knowledge, and a means of avoiding the polarized view. He categorises epistemologies into three general types: objectivism, which views the existence of things as meaningful entities ‘independent of consciousness and experience’ (p. 5), subjectivism, in which ‘meaning is imposed on the object by the subject’ (p. 9) and constructionism, in which meaning is constructed through our engagement with the world.

Thomas (1993) argues for the importance of confronting and resolving conflicts between the norms of objectivity and value-laden research; in this vein it is important to note that this qualitative research sought to understand the perceptions of doctoral candidates and supervisors of doctoral programs, so it is not value-free as quantitative research may contend to be. Further, as Bourdieu (1980/1990) argues, objectivism ‘introduces a radical discontinuity between theoretical knowledge and practical knowledge’ (p. 26) and although Bourdieu admits the existence of objective structures, he argues that a purely objectivist account of structures ‘cannot explain the genesis of structures’ (Swartz, 1997, p. 59). Because Bourdieu’s theories are poststructuralist (Calhoun, et al., 1993; Webb, et al., 2003), they would seem to be a better ‘fit’ with Crotty’s understanding of subjectivist epistemology, particularly given that poststructuralism and postmodernism share many characteristics epistemologically (Agger, 1991). However, despite Bourdieu himself suggesting that subjectivism is useful in terms of drawing attention to the ways in which individuals negotiate attempts by institutions and bureaucracies to tell them how to behave (Webb, et al., 2003), because his methodology involves both agents and structures, it would be reasonable to believe that it is underpinned by a constructionist epistemology.
Crotty identifies constructionist epistemology as that in which all knowledge, and therefore all meaningful reality as such, is ‘contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context’ (Crotty, 1998, p. 42, emphasis added). Although this seems to resonate well with Bourdieu’s aim to make possible ‘a science of the dialectical relations between the objective structures…and the structured dispositions within which those structures are actualized’ (Bourdieu, 1972/1977, p. 3), the two approaches are different. One of Bourdieu’s major achievements is his epistemological break, effectively transcending subjectivism and objectivism but maintaining their usefulness. He points to the inseparability of apparently ‘fixed’ objective structures which are created and reproduced, and seemingly voluntary subjective actions that are shaped by and depend on objective conditions (Bourdieu, 1980/1990). Therefore, rather than meanings being constructed in and out of interaction between agents and structures (as in Crotty’s and other views of constructionism) Bourdieu’s understanding is that meaning is constructed by both at the same time – a dialectic relationship between structure and agency. His epistemic position is therefore that knowledge is not a commodity, but performance: ‘an epistemological and methodological third way’ (Grenfell & James, 1998a, p. 2), but different to Crotty’s and others’ third alternative. It is this epistemological position that underpins this study.

4.3 Theoretical perspective

This study has a critical theoretical perspective, which seeks to understand the relationship of culture to social structures (Carspecken, 1996) and reflect on the doctoral candidates’ experiences in order to look beyond the taken-for-granted assumptions. It is an approach in which reality is both out there and in people’s minds, complex and full of contradictions (Sarantakos, 1998). Kincheloe and McLaren (2000) identify the following basic assumptions that underpin critical inquiry, and therefore this research:

- ‘that facts can never be isolated from the domain of values or removed from ideological inscription;’
- ‘that language is central to the formation of subjectivities, (conscious and unconscious awareness);’
- ‘that certain groups in any society are privileged over others and […] the oppression that characterizes contemporary societies is most forcefully reproduced when subordinates accept their social status as natural, necessary or inevitable;’
‘that mainstream research practices are generally implicated, although most often unwittingly, implicated in the reproduction of systems of class, race and gender oppression’ (p. 139-140).

This critical orientation sits well with Bourdieu’s focus on social struggle in terms of how agents position themselves and are positioned, thereby illuminating the relationship between power and culture (Crotty, 1998). Bourdieu (1972/1977) points to cultural meanings as emanating from institutions of power, which construct, legitimise and limit our choices. What appears to us as self-evident and beyond choice ‘has quite often been the stake of struggles… between dominant and dominated groups’ (Bourdieu, 1998, p. 56). He terms this power ‘symbolic’ because it relies on shared beliefs, and ‘violent’ because it appropriates preferred meanings and represses alternatives (Bourdieu, 1991). This is evidenced in his well-known critical stance on education institutions as places in which specific cultures are transmitted to students and thereby reproduced. He argues that in these institutions the dominant culture includes those who have large amounts of cultural capital; education favours this dominant culture and both legitimises and reproduces it, while the culture of those who possess little cultural capital is devalued and redundant. This is highly relevant to the current study in terms of understanding the conditions which shaped, determined and limited candidates’ and supervisors’ actions. In understanding to what level the program met the needs and expectations of the candidates, a critical perspective was useful in gaining insight into the complex cultural, social and political context of their studies.

A Bourdieuan analysis necessarily requires the application of a ‘reflexive sociology’, where ‘the epistemic assumptions of the field’ (Bourdieu & Wacquant, 1992b, p. 65) and, to a lesser extent, the personal assumptions and beliefs of the researcher are checked in order to minimise bias. In line with Bourdieu, Thomas (1993) warns that general research ‘seldom reveals the perspective of research subjects on the researcher’ (p. 3) and assumes the status quo, affirming assumed meanings. He argues that, as part of a critical stance, these commonsense beliefs should be questioned for ‘hidden agendas, power centres, and assumptions that inhibit, repress and constrain’ (Thomas, 1993, p. 3). Further, researchers should also look to the motivation for their research. This researcher therefore acknowledges her interest in this research. Her professional insights as an academic adviser supporting many research candidates over the years have had significant impact on the development of this research. As candidates have grappled with their writing issues, supervisor relationships and ability to maintain their momentum, the ease or otherwise with which they gained the confidence and independence to flourish in their trajectory toward completion of their study provided the initial motivation for the study. The researcher has attempted to recognise her biases inherent in the values
and assumptions of her position within the research and the field within which the research sits. However, the difficulty in achieving this has been well-documented by Bourdieu (1979/1984; 1980/1990; Bourdieu & Wacquant, 1992a), as has the greater difficulty of preventing an ‘intellectualist bias’ where the world is viewed as ‘a set of significations to be interpreted rather than as concrete problems to be solved practically’ (Bourdieu & Wacquant, 1992a, p. 39).

4.4 Methodology

As seen in Chapter Three, Bourdieu’s (1972/1977; 1984/1988; 1992) theory of practice is ‘both a philosophical perspective and practical methodology’ (Grenfell & James, 1998a, p. 1) and, despite having pointed out the difficulties in separating these, it is important to state the methodological stance in this study. Crotty (1998) states that a methodology is the ‘strategy, plan of action, process or design lying behind the choice and use of particular methods…’ (p. 3). Bourdieu’s epistemological break permits a dialectical methodology: a ‘science of the dialectical relations between the objective structures to which the objectivist mode of knowledge gives access and the structured dispositions within which those structures are actualised and which tend to reproduce them’ (Bourdieu, 1972/1977, p. 4). This allows for the individual (in this case, the doctoral candidates and supervisors) and the structures of society (the field of higher education generally, and the subfield of doctoral education in the School of Education) to be viewed through one critical lens.

Bourdieu’s research has involved a number of different methods, including statistical analysis, but his intention has always been to disclose ‘relations which would not have otherwise been considered’ (Bourdieu, Passeron & De Saint Martin, 1965/1994), and it is this way of critiquing that comes from his theory of practice ‘that leads to a certain way of doing things and of thinking’ (Grenfell & James, 1998a, p. 173). As seen in the previous chapter, it is Bourdieu’s ‘way of doing things’ that provides the analytical framework for the present study, although in true Bourdieuan style, the ‘methodology’ is often synonymous with the ‘method’.

4.5 Method

Case studies have been identified as useful for gaining ‘in-depth understanding replete with meaning for the subject, focusing on process rather than outcome, on discovery rather than confirmation’ (Burns, 1997, p. 365). It is useful ‘whether the unit of analysis is an individual, program,
organization, or community’ (Patton, 1990, p. 99) in which the researcher can be considered to be a biographer focused on a phase or segment of a person’s life (Stake, 1995). The case study method was chosen because of its ability to capture the complexity of the case and because it allows for the importance of the context (Stake, 1994). It was therefore thought to be appropriate in the present study given that the research questions sought to discover the culture experienced by the candidates as they worked through the process of their doctoral studies, a complex process for most, in which contextual elements of regulation, personal life and the workplace play an important role.

The strengths of the case study method include the ability to achieve a rich, thick description and analysis of the phenomenon under study and the likelihood of it playing an important role in advancing a field’s knowledge base (Merriam, 1998). Burns (1997) also points out that a case study ‘is the preferred strategy when “how”, “who”, “why” or “what” questions are being asked’ (p. 365); in the current study, each research question fits the how or what category. Further, Grenfell and James (1998b) argue that case studies are an excellent choice to research in a Bourdieuan way, given that ‘individuals indicate particular habitus constituents,….are always positioned in some field or other…and there is the possibility of researching the interaction between habitus and field in empirical terms’ (p. 173).

A case study is ‘a phenomenon of some sort occurring in a bounded context’ (Huberman & Miles, 1994, p. 440), which means that limits are created around the object of study, which could, for instance, be an individual, a group, a school or a community (Merriam, 1998). This study uses a nested, multiple-case research design (Yin, 1993, 1994, 2009). The multiple cases consist of each of the PhD (thesis), PhD (project) and EdD doctoral programs, which are nested within the bounded context of doctoral study in the School of Education. This is shown graphically in Figure 4.1 (page 86). Miles and Huberman (1994) argue that multiple case studies offer ‘a deeper understanding of the processes and outcomes of cases’ (p. 26). This was considered to be particularly useful in understanding the culture of doctoral studies in RMIT’s School of Education given that case studies are useful for obtaining ‘the descriptions and interpretations of others [where]…researchers take pride in discovering and portraying multiple views of the case’ (Stake, 1995, p. 64), and because it allowed for comparison across cases (Yin, 1993, 1994, 2009).
Analysis within three case studies (subfields)

Major case bounded by the general field of doctoral programs in the School of Education

Bourdieu’s theory of practice (1972/1977) was applied throughout the analysis

Legend:  
- Candidates
- Supervisors

Figure 4.1  Nested case study design incorporating individual case and cross-case analyses
The data in this multiple-case study came from semi-structured, in-depth, face-to-face interviews. This was considered to be an appropriate technique for understanding the respective cultures of the doctoral programs because it was designed to uncover the thoughts, perceptions and feelings experienced by informants’ (Minichiello, Aroni, Timewell, & Alexander, 1995, p. 10) and ‘the content focuses on the crucial issues of the study…[permitting]…a more valid response from the informant’s perception of reality’ (Burns, 1997, p. 330). It is, as Stake (1995) identifies, ‘the main road to multiple realities’ (p. 64). This is an important issue given that the main research question sought an understanding of a variety of participants in the respective cultures of the three doctoral programs. A guiding set of mostly open-ended interview questions were developed (Appendices 1 and 2), which were focused enough to provide a framework for the interview but broad enough to allow for freedom and flexibility to probe for details, discuss issues more fully, or explore related areas outside the direct scope of the questions. They also provided the opportunity to obtain feedback and confirmation of the researcher’s interpretation of the participants’ discussions. Effective interviewing strategies outlined by (Minichiello, et al., 1995) such as identifying the structure, establishing rapport, probing, cross-checking and active listening were followed.

4.5.1 The sample

Purposive, non-probability sampling was used, since the goal was to attain a sample from which the researcher ‘can learn a great deal about issues of central importance to the purpose of the research’ (Patton, 1990, p. 169). It was important to select an appropriate sample to ensure ‘efficient and effective saturation of categories’ (Morse, Barrett, Mayan, Olson, & Spiers, 2002, p. 12), and to this end, to ensure information-rich cases, intensity sampling, which consists of information-rich cases manifesting the phenomenon of interest intensely (Patton, 1990), and criterion sampling, where participants all meet some predetermined criterion (Patton, 1990), were used. This was done by selecting only those doctoral candidates who were in their final two years of study or who had submitted within the past year and who therefore could be assumed to have more informed knowledge of the culture of their program. Supervisors from each program were interviewed in order to enrich the candidates’ data. Because many supervisors work with candidates in more than one doctoral program in the School of Education, they were asked to nominate to which research program they would respond (although the researcher capitalised on the fact that some had experience of more than one program and asked some comparative questions at the end of the interviews).

In all, the sample consisted of twenty-three participants (see Table 4.1). The relatively small number of participants was chosen to enable an in-depth approach to the research while still allowing for
comparison and contrast. Patton (1990) argues that meaning and insights generated from qualitative inquiry have less to do with sample size than the information-richness of the cases selected, and that sample size should take into account realistic considerations of resource availability. Similarly, Yin (1994) argues that as little as six to ten cases may be sufficient. Further, in attempting to cover all aspects of the culture of doctoral study, the question schedule was expected to yield ample data, and because the study was a nested, multiple-case study, there was the added complexity and depth of both within-case and cross-case analyses.

Table 4.1  The sample

<table>
<thead>
<tr>
<th></th>
<th>PhD (thesis)</th>
<th></th>
<th>PhD (project)</th>
<th></th>
<th>EdD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidates</td>
<td>Female</td>
<td>Male</td>
<td>Total</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Supervisors</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sub-total</td>
<td>8</td>
<td>8</td>
<td>16</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td></td>
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</tr>
</tbody>
</table>

4.5.2 The interview schedules

The interview schedules (Appendices 1 and 2) for the candidates and supervisors contained mostly open-ended questions, which allowed participants to ‘respond in their own terms’ (Patton, 1990, p. 295). However, to provide focal points for participants and for ease of coding (Patton, 1990; Robson, 2002), questions were structured under categories identified through the literature and in the researcher’s prior understanding of the issues as both a learning adviser and someone who was going through the process herself. For the candidates, these categories included general data; research issues; questions specifically about their program, which were further broken down into career and workplace issues, study issues and personal issues; thesis issues; and pedagogical issues (for instance, their supervisor relationship). For the supervisors, questions were divided into program issues and pedagogical issues. In order to capture any information outside of these categories, the final question asked for further comments.

A few closed questions were asked at the beginning of the interview to obtain demographic data as contextual information in order to more fully understand some of the issues and thus provide extra depth to the analysis. Contextual information is considered important in terms of preventing the transcripts becoming decontextualised conversations (Kvale, 1996). For instance, it is useful to know
whether a candidate who has experienced difficulties in balancing doctoral study with other aspects of life is a full or part-time candidate.

The guiding questions were further developed and content validity addressed through assessment by colleagues and trialling with two doctoral candidates who were not part of the major research. Based on feedback from this process, questions were revised slightly. For example, many found it difficult to answer the question: *What do you think of when you hear the word ‘research’?* so this was changed to *What does it mean to be a researcher?*

Although the open-ended questions were set as part of the schedule, discussion of a particular question often moved to other related issues, in which case participants were questioned further about this and the discussion was allowed to come to a natural end. If these issues were not covered by later questions, they were added to the interview schedule for later participants. For example, when asked: *What skills have you developed?* one of the participants included information about skills she had already developed prior to her doctoral studies. Another participant discussed how useful these skills might be in the future. Two extra questions were then added for the following participants: *What skills did you have before beginning your doctoral studies?* and *How will you use these skills in the future?*

### 4.5.3 The interview procedure

Doctoral candidates who satisfied the criteria (outlined in 3.5.1) were invited to show an expression of interest in being involved in the research program through an email. This included the title of the research, briefly explained its nature and identified what was asked of the participants. It was written by the researcher but initially sent by the administration officer for postgraduate research programs at the School of Education at RMIT, who was in a position to know which candidates satisfied the criteria. The administration officer has a legitimate right under the 2002 Privacy Laws to contact students. Once the candidates freely contacted the researcher and consented to participate, the researcher could then contact them directly. A plain language statement of the nature of the research was attached to the email (see Appendix 3 for the email content and Appendix 4 for the Plain Language Statement).

Potential supervisor participants were recruited through an email (Appendix 5) sent in the same manner as above to all senior doctoral supervisors in the School of Education inviting them to show an expression of interest in being involved in the research program. A plain language statement was also attached to the email (Appendix 6). The School of Education is not a large school, so all those
who agreed to participate on the basis of the email were accepted. However, following the initial contact, insufficient numbers of participants responded so a further invitation was emailed six months later which was more successful. Because more doctoral supervisors than were required responded, those who had the greatest length of doctoral supervision experience in the specific programs/modes were chosen.

Participants were all contacted and a time and place of their choosing for the semi-structured, in-depth, face-to-face interviews was agreed to. Locations were variously in their own home, at their office, at a café or at the researcher’s RMIT office. When contacted, the participants were each given the option to either complete the interview in one session or divide it into two sessions. No participant took up the latter option at that time. However, because the questions were mostly open-ended, it was difficult to predict how long the interviews would last. In fact, they ranged in duration from 1 hour and 25 minutes to 2 hours and 45 minutes, with an average of 1 hour and 50 minutes. The Plain Language Statement (Appendix 4) stated that the interviews were envisaged to take around an hour and a half, so when some of the earlier participants talked at much greater length than expected, this was explained to the following participants and the option to have two shorter sessions was offered again; they were also informed that they were free to cut the interview short at any time. Four participants took up the option of meeting a second time and none cut short the interview.

At the interviews, the participants were thanked for agreeing to participate, handed another copy of the Plain Language Statement and invited to read it and to sign the official RMIT Design and Social Context (DSC) Portfolio Human Research Ethics Sub-Committee consent form (Appendix 7). They were also asked to give verbal consent for the interviews to be audio-taped, allowing verbatim recording which aided accuracy of transcription of the interviews. They were reminded that anonymity would be preserved and asked if they had any questions about the research or their part in it. The interviews were conducted in a friendly, non-threatening, conversational manner. As mentioned, these were semi-structured interviews, so a set of guiding, mostly open-ended questions was used. However, with the awareness that common sense understandings cannot be taken for granted, opportunities to probe responses were often taken (Minichiello, et al., 1995). The interviews, therefore, did not always follow the question guide.

At the end of each interview, the participants were asked if they were happy to be contacted by email if there were any follow up questions, or if the researcher wished to confirm some data. None had any objections to this. When the interview ended, participants were asked how they felt about the

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9 The DSC Portfolio changed its name to the College of DSC in November, 2008.
interview and if they had any questions or concerns. No concerns were raised in any of the interviews, and the participants were then thanked for their participation.

Transcripts of all interviews, more than 600 pages in all, were typed up by the researcher, which allowed for deep immersion in the data (Patton, 2002), and the resultant familiarity and prior insights enabled the coding and analysis to proceed more smoothly. The transcripts were then read while listening to the audio recordings again to check for accuracy in terms of the content and pauses and emphases in speech. Because of poor audio quality, on two occasions the researcher contacted the participants by email to check their responses to a few questions. These were given willingly.

To preserve anonymity, participants were each allocated a pseudonym. In order to distinguish supervisors from candidates in the case study chapters, the former were given pseudonyms followed by (S). In the cross-case analysis, participants’ pseudonyms were used, with the type of doctoral program and identification as candidate (C) or supervisor (S) in brackets, for example: Sally (project, C); Tina (thesis, S).

**4.5.4 Data analysis from interviews**

Because this is a nested case study involving both within-case and cross-case analyses, each participant was viewed as a separate case, but then were compared and contrasted with other participants in the same doctoral program (Yin, 1994). Each doctoral program was then compared and contrasted with the other programs. The within-case analyses of each doctoral program produced insight into the issues and development of themes within the program. The main focus for the study, however, was on a cross-case analysis between each of the three doctoral programs; Patton (1990) particularly recommends cross-case analyses as a useful approach to take where standardised open-ended interviews are used (as in this study) so that the interview guide can be used as a descriptive framework. These generated the development and comparison of major themes, although, as Miles and Huberman (1994) point out, superficial summarising across variables is of little use; the aim is to understand ‘the complex configuration of process within each case…[and look for] patterning of variables that transcend particular cases (Miles & Huberman, 1994, p. 206).

In analysing the data from interviews, the following process was followed. First, each transcript was reorganised and underwent a certain amount of ‘data reduction’ which Miles and Huberman (1994) argue is an important part of the analysis involving analytical choices of which data. Patton (1980) advises that in order to produce a ‘complete but manageable’ case record, ‘information is edited, redundancies are sorted out, parts are fitted together, and the case record is organised for ready
access...topically’ (p. 313). In this case, some data were excluded on the basis that they were not relevant to the research questions, and sections of some respondents’ answers were moved to more appropriate questions (where the participants had ‘meandered’ in their responses to cover questions that would have been asked later, or gave further insight into earlier questions). Further, with a close reading of the transcripts, it seemed that some questions needed to be conflated. For instance replies to the question: ‘How do you cope with the workload in your study?’ became indistinguishable from those to the question: ‘Are there any problems in fitting this study into your work, family and social life?’ Similarly, the question: ‘Why are you doing a research degree?’ generated the same or similar responses to ‘What do you hope to get out of your research degree?’

Attention was then given to the research question and sub-questions in order to keep the researcher focused amid the enormous amount of data. Miles and Huberman (1994) argue that ‘if you don’t know what matters more, everything matters […] Conceptual frameworks and research questions are the best defense against overload’ (p. 55). During the interviewing and transcribing periods, the interview questions became second nature to the researcher and, although this was a useful framework throughout all stages of the research, it was important that these questions did not become a more dominant focus than the research questions. The interview questions for both candidates and supervisors were originally ordered according to a natural logic from the respondents’ perspective (see Appendices 1 and 2) rather than according to the research questions, so they were reordered where necessary and distributed according to the main categories in the first three research sub-questions:

- The norms and practices of candidates
- Candidates’ needs and expectations
- Candidates’ notions of research and Practice.

This proved somewhat difficult because ‘needs and expectations’ and ‘notions of research and Practice’ can be read as sub-sets of ‘norms and practices’. For this reason, only data that clearly elaborated on the candidates’ needs and whether these were being met were redistributed to research sub-question two, and data that specifically and exclusively elaborated on candidates’ notions of research and Practice were redistributed to research sub-question three. All other data were discussed under sub-question one.

Several interview questions and responses for both candidates and supervisors were combined by clustering into a series of conceptual groupings so that meaning could be generated more easily (Miles & Huberman, 1994). Data from the interview questions for each respondent was then reduced by summarising in words or phrases, looking for ‘general variables underlying many specifics’ (Miles
These were tabulated in conceptually clustered matrices (Miles & Huberman, 1994) for each of the first three research sub-questions in each doctoral program (see Appendix 9 for all case study matrices). However, it was found that the copious data needed to be further reduced and ‘analytic choices’ were made in order to sharpen and focus the data (Miles & Huberman, 1994, p. 11). Summarised concept clusters were developed under each research sub-question (Table 4.2) and summarised matrices are located at appropriate points in the case studies.

### Table 4.2 Summarised concept clusters developed from candidates’ interview questions

<table>
<thead>
<tr>
<th>Research sub-question 1 (Norms and practices)</th>
<th>Research sub-question 2 (Needs and expectations)</th>
<th>Research sub-question 3 (Notions of research and Practice)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural relationship to academic field</td>
<td>Program choice</td>
<td>Topic area</td>
</tr>
<tr>
<td>Support through learning community</td>
<td>Met needs or not</td>
<td>Situated within current knowledge</td>
</tr>
<tr>
<td>How often on campus</td>
<td>Positive aspects</td>
<td>Motivation for and purpose of research</td>
</tr>
<tr>
<td>General experiences</td>
<td>Negative aspects</td>
<td>Candidates’ practice as researchers</td>
</tr>
<tr>
<td>Felt like dropping out?</td>
<td>Supervisor relationship</td>
<td>Importance of applied research</td>
</tr>
<tr>
<td>General learning</td>
<td>Other support</td>
<td>Relationship of research to applied field</td>
</tr>
<tr>
<td>Independent Learner?</td>
<td>Personal gain</td>
<td>Use of research in the workplace</td>
</tr>
<tr>
<td>Workload</td>
<td>Changed self-perception?</td>
<td>Any issues related to workplace research?</td>
</tr>
<tr>
<td>Thesis/exegesis issues</td>
<td>See yourself as a researcher?</td>
<td></td>
</tr>
</tbody>
</table>

Using the matrices as a guide, the analysis of each case study was written up; at this stage, attention was given to Bourdieu’s theory and conceptualisations as appropriate in order to provide a deeper understanding of the candidates’ experiences. Quotes from candidates and supervisors were used where appropriate in order to hear the ‘voice’ of each respondent, and for greater readability they were used in the context of the researcher’s sentence, identified by italics rather than typed in separate lines.

The within-case matrices and written analyses were then used to assist in the cross-case analysis between each doctoral program, which attempted to answer the main research question:

- How do candidates perceive the respective cultures of traditional, Practice-based and professional doctoral education programs?

In order to answer this question, further matrices were developed to assist in identifying and comparing meta-level themes and discussion through addressing the first three sub-questions:
- How do the norms and practices of candidates in each model differ?
- To what extent does each program meet candidates’ needs and expectations?
- What are the differences in notions of research and Practice in each program?

Finally, the discussion focused on answering the remaining research sub-question:
- What can we learn from answers to these questions in terms of supervision pedagogy and learning support?

A model of best practice was produced by way of a series of recommendations.

Throughout this process, the conceptually clustered matrices were found to be particularly useful in this study for each of the reasons outlined by Miles and Huberman (1994):

We need a format that (a) allows an initial comparison between responses and between informants on one sheet, (b) allows an initial comparison between responses and between informants, (c) lets you see how the data can be analysed further (e.g., repartitioned or clustered), (d) for multicase studies, lends itself easily to cross-case analysis and will not have to be redone, and (e) for multi-case studies, provides some preliminary standardization – a set of content-analytic themes that all case analysts will be using (p. 129).

Throughout the entire process from transcription of the material to the final categorising, substantial memoing took place, where notes reflecting insights, interpretations, relationships and ideas in the data were recorded as they occurred. This was a ‘useful and powerful sense-making tool’ (Miles & Huberman, 1994, p. 72). Data reduction categories were also discussed fully with the senior supervisor and a colleague of the researcher who had an in-depth understanding of the research, in order to control for bias in the analysis and interpretation (Burns, 1997).

### 4.6 Research rigour

Many qualitative researchers such as Janesick (1994) and Lincoln and Guba (1985) argue that we need to reconceptualise the issue of rigour, replacing the criteria traditionally used in quantitative research: in effect, redefining the ‘usual canons of “good science”’…in order to fit the realities of qualitative research’ (Strauss & Corbin, 1990, p. 250). However, quality in qualitative research is still an issue and answers must be found to Lincoln and Guba’s (1985) question: ‘How can an inquirer persuade his or her audience that the research findings of an inquiry are worth paying attention to?’ (p. 290). Lincoln and Guba (1985) argue that in qualitative studies, ‘trustworthiness’ is a more useful term to replace the usual tests of rigour in quantitative studies. In this, they replace the four conventional criteria of quantitative research with credibility, transferability, dependability and confirmability, all of which are now briefly discussed in relation to the present research.
The study aimed to maintain credibility through peer debriefing and referential adequacy (Lincoln & Guba, 1985). The credibility of responses to the open-ended in-depth interviews was also likely to be enhanced by the assumed importance of the topic to the participants since we can assume ‘more valid responses from individuals who are interested in the topic and/or are informed about it’ (Burns, 1997). Although Lincoln and Guba (1985) argue that no true generalisation is possible in qualitative research, Bourdieu (1972/1977) and Giddens (1991) believe that generalisations can be drawn from underlying themes and structures which go beyond individual agents. Further, Yin (1994) points out that multiple cases can strengthen the results by replicating the pattern-matching, thus increasing the strength of the theory. In this research, some common elements and themes emerged within each doctoral program, strengthening the likelihood of transferability to others in those programs by ‘increasing understanding through the naturalist generalisation the readers do themselves’ (Burns, 1997, p. 381). Research dependability is addressed through providing sufficient details of the research procedure to allow for replication. Further, matrices were used in the data analysis, which Miles and Huberman (1994) argue assist the development of a chain of evidence linking the initial research questions to the data collection, to the analysis, to drawing of conclusions. This audit trail was also useful in addressing confirmability, along with the level of critical reflexivity necessary in this study. Being in the same situation as the candidates, the researcher already had a grasp of some of the issues and could empathise. However, this had the potential to produce some difficulty in distancing the researcher’s prejudices, experiences and orientations in the analysis, and as Creswell (1998) argues, it will have inevitably shaped the interpretation and approach to the study in some way. The researcher attempted to minimise this throughout the coding and analysis and in line with Bourdieu’s methodology (Bourdieu & Wacquant, 1992b), engaged in critical reflexivity by actively engaging in self-reflection about possible predispositions and biases.

Interestingly, the seemingly paradoxical argument by Lincoln (1990) that both shared meaning and contradictory information enhance an insightful and trustworthy approach rang true in this study. Given the understanding that all doctoral candidates were undergoing (or had just completed) doctoral research, it might be expected that many will share some similar experiences. However, it is also interesting to see what differences there might be in the experiences, for instance, between part-time and full-time candidates. Another question of interest is to see if those enrolled in the same doctoral program have some similar experiences to each other, but different to those enrolled in other programs.
4.7 Ethical issues

The research had approval from the RMIT DSC Portfolio Human Research Ethics Sub-Committee and was classified Level 2 as it was considered to produce only minimal risk to the participants. However, the School of Education doctoral programs are small in number and one participant was supervised by the same person as the researcher and expressed some concern because part of the interview related to the supervisor-candidate relationship. One other participant expressed some slight concern because she was aware of a close personal friendship between her supervisor and the researcher’s. Because both participants expressed an interest in being part of the study, these issues called into question the integrity of the research and so a solution was needed. It was decided that the identity of all participants would remain anonymous to the researcher’s supervisors, a solution with which the participants were comfortable and the supervisors agreed was essential. This put greater pressure on the researcher, however, to ensure participants could not be identified in the discussion and analysis.

The potential for loss of anonymity of all participants in fact became a more general issue and a major element of concern to the researcher throughout the data coding and writing up of the results and discussion. For instance, research topics could never be discussed in relation to specific candidates’ feelings and insights about these because it would have identified candidates to any staff in the School of Education who might read this thesis. Instead, where there were interesting and valuable insights, they were discussed without the candidates’ codes and with no specific elements that could identify them. Similarly, where supervisors work with particular, identifiable cohorts of students, the specific nature of this cohort was not mentioned.

The risk also involved a slight potential psychological risk to the postgraduate candidates who were interviewed. The act of responding to questions and discussing elements of difficulty in their doctoral studies may have compounded these difficulties; however, if a participant were to become distressed or unhappy in any way, the interview sessions would have ceased immediately. All participants were advised of this, and reminded that they may withdraw from the research process at any time. They were also informed that if they felt they were not able, or wished not to respond, to particular questions, they could ask the researcher to move on to the next question. This was another reason for choosing candidates who had almost completed their study.

Similarly, steps were taken to ensure that no candidate was in a dependent relationship with the researcher. Although the researcher worked as an academic learning adviser in the same university, no doctoral candidate selected for the study had had contact with the investigator in this role, either
before the study commenced or during the study. To ensure this, during the time before and during the data collection, the investigator neither taught nor advised any doctoral candidate in the School of Education, RMIT. Further, no information from participants was passed to other participants (even anonymously), including from doctoral candidates to supervisors or vice versa. Although, being part of the School of Education, the investigator often had contact with the supervisors who took part in the study, this was only as a colleague and was neither considered a psychological risk to them nor seen as a risk to the study’s integrity.

4.8 Summary

The epistemological stance and theoretical perspectives that underpin this study have been discussed in this chapter along with discussion of how they relate to Bourdieu’s ideas. Details of the case study method used in this study have also been provided. In particular, it has been argued that Bourdieu’s approach to understanding the complex interdependent and interrelated relations between people and institutions is an effective framework for this study given that it viewed the doctoral program in all its modes as social practice in which candidates and supervisors act within particular social and political contexts. His concepts of habitus and the type and amount of capital embodied in particular agents in the field of doctoral studies in the School of Education were found to be useful in understanding the degree to which candidates’ social relationships either impeded or allowed for their practice to develop.

The following chapter marks the beginning of the analysis and discussion sections of the thesis. This begins with the individual case studies of the PhD (thesis), the PhD (project) and the EdD programs (Chapters Five, Six and Seven). This is followed by the cross-case analysis (Chapter Eight) and the conclusions and recommendations (Chapter Nine).
Chapter 5

Case Study One: The PhD (Thesis) Program

5.1 Introduction

The purpose of this chapter is to develop a comprehensive understanding of the PhD (thesis) candidates’ experiences of the program. Transcript data from the semi-structured interviews of candidates are described and analysed, augmented by data from supervisors in this program. The chapter begins with a description of the field of PhD (thesis) in the School of Education, and a description of the candidates who were part of this study. The structure of the remainder of the chapter is guided by the key elements from the first three research sub-questions:

- What are the norms and practices of candidates in the PhD (thesis) program?
- To what extent does the PhD (thesis) program meet the needs and expectations of the candidates?
- What are the candidates’ notions of research and Practice in the PhD (thesis) program?

Discussion is shaped by an attempt to understand the candidates’ actions and motivations through Bourdieu’s theory of practice (Bourdieu, 1972/1977; Bourdieu & Passeron, 1990; Bourdieu & Wacquant, 1992a).

5.2 Contextualising the field and candidates of the PhD (thesis) program

The PhD (thesis) is a long-standing program in the School of Education (and its various iterations under previous University restructures). Until 1997 when the EdD was offered, it was the only doctoral program in the School. The aim of a PhD (thesis) as stated by the School is:

…to prepare graduates to be highly qualified researchers in their area of selected specialization […] The program is undertaken in order to generate new knowledge in a particular field, to enhance ability, understanding and diversity of experience, to develop the potential for research and to enhance career prospects (RMIT, n.d.).

The University states that a thesis is a proposition maintained by argument which should be: ‘logical, systemic and orderly; [and] linear and proceed through inference where one part of the argument leads to the next and so on’ (RMIT, 2007c, p. 34). The only coursework involved is a compulsory research methodology unit (unless already completed). Candidates also must produce a written and
Bourdieu and Wacquant (1992b) argue that to analyse the field, it must be done at three levels: in terms of the field of power, the objective structures of relations between the agents’ positions, and the habitus of agents. The field of power is in reality a hierarchy. At the top are the Australian Government’s policies that dictate, among many other regulations, university research funding structures and maximum length of candidature, and more recently, the type of research it expects from universities. The University also has its regulations, such as maximum thesis length and examination processes, and within this, the School has its internal regulations for processes and procedures, such as the confirmation of candidature process. The second level of field analysis involves the understanding that education is made up of fields within the field, ‘a series of institutions and agents, each of which can be defined in terms of their position in the field as a whole’ (Grenfell & James, 1998b, p. 169). In the current study, this relates particularly to the three doctoral subfields; in the present chapter the PhD (thesis) involves the agents who represent various positions in the subfield dependent on the relevant amount of cultural and symbolic capital. These include supervisors, candidates, examiners, the research office coordinator (who in 2008 came to be titled the Director of Research and Innovation) and the administration officer. The third level of analysis involves the habitus of these agents, and in the present study these are restricted predominantly to the candidates and to a lesser extent, the supervisors who were interviewed. The remainder of this case study involves second and third levels of analysis; there is further discussion of the first level in the cross-case analysis in Chapter Eight.

While all six PhD (thesis) candidates had prior Masters degrees, only one had completed a Masters by research, the others having experienced a minimum of research experience. Further, it had been more than ten years since two of the candidates had completed any formal university qualifications. Given all of this, and understanding that the process, pedagogy and outcomes of a research degree are markedly different to coursework, there is an expectation that the candidates will bring varying amounts of cultural capital to the research field at the beginning of their study. As candidates were close to the completion of their doctoral degree there is a further assumption that this will have developed, to the degree that their habitus has either enabled or constrained this.

Although candidates were motivated to study for a variety of reasons, John, Helen and Julie could be considered to be mid to late career researchers, hoping their PhD might be useful in their current careers. Neither John nor Julie was working at the time of interview, both having taken leave from
their regular workplaces. Both Trang and Sunee were early career researchers, both hoping to use their PhD as a platform to a career, while Anne was semi-retired. Further demographic and contextual data of the PhD (thesis) candidates are seen in Table 5.1. The two PhD (thesis) supervisors interviewed have the pseudonyms Tina and Todd.

### Table 5.1 Demographic and contextual data of PhD (thesis) candidates

<table>
<thead>
<tr>
<th></th>
<th>Anne</th>
<th>John</th>
<th>Helen</th>
<th>Julie</th>
<th>Trang</th>
<th>Sunee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male/Female</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
</tr>
<tr>
<td>Age group</td>
<td>70-74</td>
<td>45-49</td>
<td>50-54</td>
<td>50-54</td>
<td>30-34</td>
<td>40-44</td>
</tr>
<tr>
<td>Studying:</td>
<td>Full-time</td>
<td>Part-time</td>
<td>Part-time</td>
<td>Full-time</td>
<td>Full-time</td>
<td>Full-time</td>
</tr>
<tr>
<td>Working:</td>
<td>Full-time</td>
<td>Part-time</td>
<td>No</td>
<td>Full-time</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Occupation</td>
<td>Training consultant</td>
<td>Lecturer</td>
<td>Primary teacher</td>
<td>Lecturer</td>
<td>Lecturer</td>
<td>Administrator</td>
</tr>
<tr>
<td>Prior Masters? (C = Coursework, R = Research)</td>
<td>Yes (C)</td>
<td>Yes (C)</td>
<td>Yes (C)</td>
<td>Yes (R)</td>
<td>Yes (C)</td>
<td>Yes (C)</td>
</tr>
<tr>
<td>Funded research place?</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Changed 1st supervisor?</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Has 2nd supervisor?</td>
<td>No</td>
<td>Yes</td>
<td>Yes*</td>
<td>Yes*</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

* Does not currently meet with 2nd supervisor – supervisor will be brought in as ‘fresh eyes’ when the thesis been completed.

### 5.3 The norms and practices of candidates in the PhD (thesis) program

This section describes and analyses findings from candidates in the PhD (thesis) program relating to the norms and practices experienced in their studies. Responses to this sub-question are summarised in Table 5.2 below, but more complete results can be found in Appendix 9, Matrix 1.1.
Table 5.2  Summary of PhD (thesis) candidates’ responses to sub-question one:  
*How do the norms and practices of candidates differ?*

<table>
<thead>
<tr>
<th>Summarised categories</th>
<th>Anne</th>
<th>John</th>
<th>Helen</th>
<th>Julie</th>
<th>Trang</th>
<th>Sunee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural relationship to academic field</td>
<td>Moderate</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Is there a learning community?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Study on campus?</td>
<td>Very seldom</td>
<td>Very seldom</td>
<td>Very seldom</td>
<td>Very seldom</td>
<td>Every day</td>
<td>Every day</td>
</tr>
<tr>
<td>General program experiences</td>
<td>Positive: <em>Good supervision</em></td>
<td>Negative: <em>Lack of information</em> <em>Poor supervision</em></td>
<td>Positive: <em>Good supervision</em></td>
<td>Negative: <em>Lonely</em> <em>Mixed supervision</em></td>
<td>Positive: <em>Pride as PhD student and research</em></td>
<td>Positive: <em>Good supervision</em></td>
</tr>
<tr>
<td>Felt like dropping out?</td>
<td>No (personal pride - has something to prove)</td>
<td>No (spent too much money to give up)</td>
<td>Yes (but prevented by personal &amp; family pride)</td>
<td>No (always completes things)</td>
<td>Yes (but prevented by family pride)</td>
<td>Yes (but couldn’t give up the opportunity)</td>
</tr>
<tr>
<td>General learning</td>
<td><em>Knowledge about research</em> <em>Knowledge about topic</em></td>
<td>Don’t know</td>
<td><em>Professional development skills</em> <em>Knowledge about research</em></td>
<td>Knowledge about research</td>
<td>Knowledge about research</td>
<td>Personal development</td>
</tr>
<tr>
<td>Independent learner?</td>
<td>Yes – no problems</td>
<td>Yes – with problems</td>
<td>Yes – with problems</td>
<td>Yes – with problems</td>
<td>Yes – no problems</td>
<td>Yes – with problems</td>
</tr>
<tr>
<td>Workload / Managing time</td>
<td>No problems (Worked part-time)</td>
<td>No problems (Did not work)</td>
<td>Very difficult (Worked full-time)</td>
<td>No problems (Did not work)</td>
<td>Few problems (Did not work)</td>
<td>Few problems (Did not work)</td>
</tr>
<tr>
<td>Thesis issues</td>
<td>Writing style</td>
<td>Structure</td>
<td>Methodology</td>
<td>None</td>
<td>Structure</td>
<td>Structure and English</td>
</tr>
</tbody>
</table>

5.3.1  **Cultural relationship to the academic field**

In order to get a feel for the amount of inherited and developed cultural capital, candidates were asked if they had been encouraged or expected to attend university by their parents, and if they had published academic articles before their PhD study. Based on their responses, they were rated as having a high, moderate or low relationship to the academic field. Although all had prior academic degrees and had almost reached the end of their doctoral studies, the extent to which one has a predisposition for understanding the ‘rules of the game’ (their habitus) is learned through the family
environment and is difficult and slow to change (Bourdieu, 1983/1986). Members of a particular class habitus are products of the same objective conditions and have mastery of a common code (Bourdieu, 1980/1990); they are born into the dominant habitus of a field. Merely gaining a degree therefore does not guarantee a feeling of belonging to the field of doctoral study or even the general field of academia. For instance, Helen was the only one in her family to go to university, and although she was proud of her academic accomplishments: …the desires of my extended family rest on me and I’ll use ‘doctor’ with pride, when asked if she had published anything, she still showed a predisposition that did not include self-identification as an academic: You don’t do that sort of thing when you’re a teacher. Although an acknowledgement that doctoral students were encouraged to publish showed an understanding of the ‘game’, in expressing that she had a lingering doubt that her work was not good enough showed a habitus not highly endowed with cultural capital.

Conversely, John, Trang and Sunee came from families where parents and siblings had a university education and for all, there were family expectations that they would follow. The extent to which they had an affinity with the academic field is seen in their past employment as university lecturers and all had produced scholarly publications. To further show she understood the norms and expectations of the field, Trang felt she needed to make the time to publish more: to be a real researcher…and to open more doors to your future. Despite family pressure, it was some years before Sunee began her university studies. However, she completed her Bachelor degree, Masters degree and moved to her doctoral studies in quick succession. Showing strategic understanding of the academic field in her home country, she felt that the paper she was preparing from her PhD research would have substantial value: …coming from Australia, it means it has a certain level of international acceptance.

Habitus can adapt, however: both Anne and Julie are examples of being the first in their family to attend university, yet both have accrued some cultural capital in the academic field through having worked as lecturers. Julie was also the only PhD (thesis) respondent to have completed a Masters by research and she felt that to be an important requirement to understanding the ‘game’ of PhD research. Despite Anne’s academic employment background and having written journal articles and conference papers, however, she still did not perceive of herself as having a large amount of cultural capital; she thought of her academic career as being mostly of an administrative and practical nature and spoke several times of her failure at an early attempt at a Masters degree, and, in fact, even seemed to misunderstand the nature of the field in her belief that she had not written a scholarly text because she had not written an academic book.
5.3.2  **Experience of a learning community**

Only two PhD (thesis) candidates felt themselves to be part of a learning community or research community, arguably because, unlike the other respondents, both studied on campus each day. Trang and Sunee, for example, studied with other research candidates from the School in the postgraduate study room and felt supported enough by them to feel part of both a research culture and a community of learning. In this collective habitus of mostly full-time candidates with few other commitments in their lives, Trang pointed to the benefits of studying with other research candidates who could support each other in research matters and comfort each other when under pressure. Similarly, Sunee felt that this helped her to feel connected to the School community.

Although some of the other candidates perceived the existence of both a research culture and a community of learning, they did not feel part of either. Although Anne did participate in some research workshops, her perception of not belonging to an academic environment was apparent: *…if you compared me to the normal full-time research student, I’m not part of that.* Both John and Julie were concerned at the lack of community, and although John admitted that the School was attempting to address this through the biannual research conferences, both believed there should have been more opportunities to discuss research informally. Both felt this needed to have some structure, however; as John argued: *…a bag of chips and a cheap bottle of wine does not a reception make; what’s needed is the chance to understand the process and talk to other supervisors and students informally so you feel part of it.* Julie suggested a group buddy system where new candidates could join self-support groups, but in qualifying that by saying that it would have to be useful for her to give up time, she flagged an ambivalence in common with most candidates, particularly women.

The lack of a learning community for candidates was also acknowledged by both PhD (thesis) supervisors and identified as detrimental to candidates’ practice. Todd (S) felt that the lack of any organised research centre or focus meant that candidates were greatly disadvantaged in having no opportunities to discuss their research with other researchers in the School. Similarly, Tina (S) felt that the small staff room at the Bundoora Campus was intimidating and unwelcoming to research students. She pointed to a large and vibrant staff room at her previous workplace where doctoral candidates attended regularly and mixed easily with staff, leading to much reciprocal learning.

However, as mooted above, this is a complex issue and one not easily solved. Unlike Trang and Sunee, all of the other PhD (thesis) candidates studied at home and were seldom on campus. For them, other aspects of life such as family and work commitments competed with their study time. In the discipline of Education, many PhD candidates are mid to late career researchers (Barnacle &
Usher, 2003; Gill, 1999) and are of an age when family issues are often most prominent. Helen, for instance, has teenage children and aging parents. While such candidates keenly felt loneliness and a sense of isolation particularly, as Helen pointed out, when they knew there was every opportunity for postgrad students to be part of the seminars and meetings that are emailed all the time, time constraints precluded them from attending. Helen felt that she had allowed herself to feel the sense of isolation: I’m not blaming anyone else for that…I’ve sort of partitioned myself off from anything that could distract me – I have little time left now. Both study location and lack of time are seen to conspire against a learning community for many PhD (thesis) candidates.

5.3.3 General program experiences

In looking back from the beginning of their study, a theme of personal or intellectual change emerged. For instance, Sunee’s initial response to the question of what it was like to study in the program was Torture! However, she elaborated on this: …it’s like having a baby – to have a baby is very difficult, like torture…but although it starts like just having an idea [laughs]…it grows and in the end it produces something good. Similarly Trang showed a maturing attitude to PhD study. Showing that she appreciated the substantial amount of educational capital that a PhD could provide her in the appropriate field, initially she was excited and proud to have the opportunity to become a PhD student because it was not something everyone could do. However, she came to feel more responsibility and pride for the actual research rather than for herself. Although neither John nor Julie found their experiences to be generally positive, both felt there were positive aspects because earlier issues with poor supervision had largely been resolved. However, John still felt a disenfranchisement with the University (…it’s been called a fragmented giant and that seems to be what it is) and the School because of lack of information. He felt he was stumbling in the dark and found the process challenging in unnecessary ways.

Although three candidates had seriously considered discontinuing their studies, personal and family pride played a large part in both preventing this and as a reason why others did not consider withdrawing. Interestingly, both Anne and Helen, the only two to have seemingly moderate or low levels of cultural capital in this field, cited personal pride as a reason for maintaining their study; for both it was the need to prove themselves capable which seems indicative of a strategic and reflexive urge to develop their habitus. This concurs with one of the supervisors who felt the major benefit of this doctoral mode to be a testing of candidates’ persistence and pride at their accomplishment (Tina, S).
Family pride was also seen as important for Trang and Helen but for different reasons; Trang’s family had a substantial amount of educational capital and the expectations of her family for her to achieve at doctoral level were high. She felt that her humiliation would have been untenable had she withdrawn. Helen’s relationship with her family was somewhat different; there were three occasions when she very nearly withdrew but her son supported her through this and she felt strongly that her gratitude could best be shown by successful completion.

5.3.4 Learning and the development of skills

Four of the six candidates felt they had learned a substantial amount about the nature of research, particularly from grappling with methodological elements such as rigour and theoretical framing. Personal and professional development were other gains identified. Sunee, for instance, understood the effect of her habitus as an enabling strategy in her study by reflecting on her extreme persistence and dedication that she did not think she possessed. In a similar way, Helen had developed a new confidence in her leadership abilities in her workplace and was able to implement both a greater focus on detail in curriculum development and new referencing standards for her staff, having been reminded of the importance through her doctoral study. This new ability to focus on detail had also assisted her in building a case at a conciliation and arbitration hearing, and thus now seems to have become part of her general disposition.

The ambiguity and ambivalence of independent learning was an interesting issue to emerge. Although all candidates saw the importance of independent learning skills in their studies, and all saw themselves as having these skills, the issue had caused problems for some. For instance, when John’s supervisor told him that he should be listening and following rather than taking the initiative, he felt bitter and powerless because all his confidence in his independent learning ability was quashed. He believed his research was set back considerably because this was not discussed at the beginning: I should have been told that it was all about a relationship, not about what I’m about to learn. Others showed awareness of the unequal amounts of cultural and symbolic capital in the supervisory relationship. Helen, for example, understood the importance of independent learning, but having little confidence in her ability to research she valued her supervisor’s feedback as of at least equal importance. Other candidates had similar responses, pointing to the obvious need for supervisory support, and all expressed difficulty in getting a balance between doing too much independent work that may need to be redone and becoming a ‘pest’ to supervisors and risking damage to the relationship. This ambivalence was echoed in the different views of the two PhD (thesis) supervisors interviewed. Todd (S) for instance, had a very clear view that his candidates should show
independence: If they ask me what I want them to do, I say that’s the wrong question: they have to say what they need and then I’ll ask them what assistance they need from me. However, Tina (S) felt her role to be more facilitative: I give them examples of good critical writing…and am proactive in providing directions and brick walls as necessary. However, she also worried about the issue of power in the relationship: There is implicit power through knowledge and one has to be careful – I don’t want to misuse power.

5.3.5 Workload issues

Not surprisingly, candidates who had fewer work commitments and had regular study habits showed fewer problems with managing the workload. Helen was the only candidate who worked full-time and the only candidate who cited major issues with workload. She was in a senior position in her workplace, necessitating evening and weekend work, and even when she managed to find some time then, she had difficulty moving from work to study. Further, as a single parent she was:…always conscious of the fact that the children’s father wasn’t there, and there’s always that bit of guilt there and you spend time trying to keep the family atmosphere. Her parents were ageing and having no siblings, the responsibility of caring for them fell to her. Her supervisor suggested she take leave from work but she was the sole source of family income. Other than withdrawing from her studies, she was powerless to resolve this. However, although she came close to withdrawing several times, she was trapped by her habitus: she was a high achiever with high expectations of herself, and needed to consolidate this by proving she was capable. She had managed to keep herself in the program by using holiday leave, including all of her long service leave, and although she did not regret this, she was bitter about the lack of support: I would have liked a little financial support from the government or the university – you know, sometimes it would have been nice if they looked beyond the superficiality of mere enrolment numbers.

Both Trang and Sunee felt that their struggle with English meant they had to spend many more hours studying than do native speakers. Sunee particularly found thinking in English time-consuming. However, because they studied on campus every day (unlike the other candidates), it is also reasonable to believe that their organised study routine and informal mentoring by other doctoral candidates (most of whom had English as a second language) in the postgraduate study room led to more consistent study.
5.3.6 The thesis

Although most candidates had some difficulty with their theses, their supervisors all ensured they were explicitly aware of the importance of obeying the ‘rules of the game’ in terms of examiners’ expectations. This caused some issues with John, who had begun to write it as a book; he argued that he had seen theses in alternative formats that had been passed by examiners and felt that his research would have been more readable in book format. He felt compromised and powerless: *I’m angry not at my supervisor, but at the system that can stifle your creativity.* In fact, all candidates’ theses except Julie’s were either traditional\(^\text{10}\) or semi-traditional in structure; although the first part of Julie’s thesis was traditional, she found that her particular methodology gave her more scope and she was confident enough to look at possible alternative representations for the last half.

All candidates felt somewhat overwhelmed at the enormous task of writing the thesis, and for three, despite having the chapters mapped out, there was difficulty with structure within these. They found it difficult to keep track of the purpose of what they were writing and how it related to other elements in the particular chapter, feeling, as Trang put it, as though *it was all going to unravel and it would mean nothing.* Other candidates had difficulty with their writing style or grammar. For instance, Anne felt that her writing was not as precise as it could be and that it was *too apologetic.* Her habitus clearly showed a lack of confidence seemingly related to her failure at an early attempt at her Masters degree and a referee report criticising her writing style some time ago. Similarly, Sunee had little confidence in her English language skills which she found contributed to her need for much more time to write. The one candidate who cited no major issues with her thesis, Julie, did admit that writing was difficult, but believed that, after all, *in a PhD, it shouldn’t be easy.*

Despite the limited number of supervisor respondents (two), it is clear that there is no consistent supervisory approach to writing assistance in the School of Education. Given the difficulties expressed by the candidates, it raises the question of what is the role of supervisors in regard to writing assistance. Todd (S) clearly does not see this as part of his supervisory duties. Although he alerts candidates to their poor writing, he offers little assistance: *They have to go and fix the writing; if they can’t do it themselves, and as PhD students they should be able to, then they have to go to the*

\(^{10}\) ‘Traditional’ here is taken to mean the thesis structure common to the hard sciences and also still used extensively in other disciplines, including education (Paltridge, 2002). This structure has the form of: Introduction, Literature Review, Methodology, Results/analysis, Discussion, Conclusion/recommendations. Of course there are many small variations on this, such as re-ordering the methodology and literature review, and various combinations of results/analysis/discussion. Variations such as these are taken to be ‘semi-traditional’ in this discussion. However, it is acknowledged that with newer epistemologies and methodologies, radically different thesis structures exist, which here are described as ‘non-traditional’.
Learning Skills Unit. However, although Tina (S) also felt that PhD candidates should ideally have the ability to write well (but admits that many do not have the necessary critical, analytical writing skills because these have not been required in their teacher training background) she does feel that it is a supervisor’s role to teach this: *I think you have to be very explicit. I show them examples and tell them this is the type of writing that’s required at this level and get them to write a critical appreciation of an article and we go through this together.*

All but one candidate acknowledged limited readership for their theses, with Helen musing: *...that’s a lot of work for not much return!* John hoped for greater readership, aiming to reshape his thesis back into a book for distribution to educational institutions. Anne, Julie and Sunee felt that published papers would provide more sensible access. Sunee also understood the importance in terms of a career advantage of being published in academic journals that are read by academics in her country.

### 5.3.7 Summary

The key factor emerging in this section is the lack of perceived support through a learning community. Candidates other than those studying on campus each day felt extremely disenfranchised. It is also clear that candidates’ experiences are not necessarily related to the extent to which their habitus embodies cultural capital; other predispositions such as determination seem to play at least an equal role in candidates citing positive experiences of the program. However, when it came to writing their theses, the opposite was true; although most candidates seemed very aware of the ‘rules of the game’, they still struggled with both the enormity of the task and with particular aspects of it.

### 5.4  The extent to which the PhD (thesis) program met the candidates’ needs and expectations

This section describes and analyses findings from candidates in the PhD (thesis) program in terms of the degree to which the program met their needs and expectations. It includes discussion on program choice, positive and negative aspects of candidates’ experiences, pedagogical issues, assistance from other than their supervisors, and personal issues. As with the previous section, it begins with a summarised table of responses (Table 5.3); more complete results can be found in Appendix 9, Matrix 1.2.
Table 5.3  Summary of PhD (thesis) candidates’ responses to sub-question two:  
*To what extent does the program meet candidates’ needs and expectations?*

<table>
<thead>
<tr>
<th>Summarised categories</th>
<th>Anne</th>
<th>John</th>
<th>Helen</th>
<th>Julie</th>
<th>Trang</th>
<th>Sunee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program choice</td>
<td>Others not appropriate</td>
<td>- Didn’t want coursework (Didn’t know about proj)</td>
<td>- Proj. not appropriate</td>
<td>- Status weren’t appropriate</td>
<td>- Status</td>
<td>- Proj. not appropriate</td>
</tr>
<tr>
<td>Met needs?</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Partially</td>
<td>Yes</td>
<td>Partially</td>
</tr>
<tr>
<td>Positives</td>
<td>- Research capability - Knowledge of topic</td>
<td>- New ways of thinking</td>
<td>- Personal development</td>
<td>- Personal development</td>
<td>- Personal development</td>
<td>- Personal development</td>
</tr>
<tr>
<td>Negatives</td>
<td>- Conference funding lack</td>
<td>- Loneliness</td>
<td>- Lack of professional support</td>
<td>- Loneliness</td>
<td>- Lack of professional guidelines</td>
<td>- Writing difficulties</td>
</tr>
<tr>
<td>Supervisor relationship</td>
<td>Constructive - Guiding, not too critical</td>
<td>- No guidance, very critical</td>
<td>- Goals/standards not discussed</td>
<td>- Goals/standards not discussed</td>
<td>- Goals/standards not discussed</td>
<td>- Goals/standards not discussed</td>
</tr>
<tr>
<td>Other support used</td>
<td>- Software training</td>
<td>- Research forums</td>
<td>- Other academics</td>
<td>- Software training</td>
<td>- Research forums</td>
<td>- Other academics</td>
</tr>
<tr>
<td>Personal gain</td>
<td>Satisfaction</td>
<td>Satisfaction &amp; Personal growth</td>
<td>Satisfaction &amp; pride</td>
<td>Personal growth</td>
<td>Pride</td>
<td>Personal growth</td>
</tr>
<tr>
<td>Changed self-perception</td>
<td>Yes (not a failure)</td>
<td>Yes (can deal with adversity)</td>
<td>Yes (confidence)</td>
<td>No</td>
<td>Yes (moved to high level)</td>
<td>Yes (confidence)</td>
</tr>
<tr>
<td>Others’ perception?</td>
<td>No</td>
<td>No</td>
<td>Yes (family proud)</td>
<td>No</td>
<td>Yes (family proud)</td>
<td>Yes (family proud)</td>
</tr>
<tr>
<td>See yourself as researcher?</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### 5.4.1 Program choice

The perceived difference in potential for each of the programs to create educational and symbolic capital was a factor in the program choices of three candidates. Both Trang and Sunee, for instance, felt that the PhD had more credibility in their respective home countries, although Sunee might have considered the EdD had she known about it because the smaller thesis may have been easier to
accomplish, given her English language difficulties. Julie’s arguments were contrary to this: she felt that work at doctoral level: *ought to be bloody hard whichever way you go.* This was in response to an encounter she had with PhD (project) candidates who perceived it as easier than the straight thesis. She felt that neither the PhD (project) nor the EdD were equal to the PhD (thesis): *Oh, look, I’m a confessed snob. In fact it makes me angry to think students in coursework as part of an EdD are given* [strong emphasis] *the stuff and they just respond to it; to me, at doctoral level, you should be asking your own questions.* Other candidates’ choices were made on the basis of appropriateness for their type of research, with exception of John who did not know about the PhD (project).

The two supervisors had somewhat different perceptions to each other of the relative rigour in each program. While Todd (S) felt that all programs involved an appropriate degree of rigour, Tina (S) had reservations about the PhD (project). Although qualifying her comments because she had not supervised a PhD (project), she felt those she had observed to be too instrumental and formulaic and that rigour was difficult to obtain because of a lack of shared groundedness: *They’re all having to put down their own little root; there’s no common connection to the common root, like a tree.* Further, she felt that unlike the EdD and the PhD (thesis), it is not well-recognised and there are no guiding standards. Todd (S), however, felt that all programs involved an appropriate degree of rigour, although he felt there could be a difference in impact because of a perceived pecking order by the public (as, indeed, was the case with Julie above).

### 5.4.2 Positive and negative aspects of the program

Although the PhD (thesis) program generally met the needs of five of the six candidates, interestingly, Anne was the only candidate to cite new insights from research as a positive aspect of the program, all others perceiving personal perspectives. Helen, for instance, reflected on what seemed to be an enhanced habitus that has enabled her to develop both cultural and symbolic capital in her workplace. She found that having nearly completed her PhD had given her the confidence to present at school zone seminars. Although she had previously felt intimidated by others who had the knowledge, she now felt herself to be at least equal to them and to speak with a degree of authority. Similarly, Julie became aware of how resilient she was: *…it’s just knowing you can teach yourself; knowing that you can hit rock bottom as I did and not go under...knowing that you can face anything and see it through.* Sunee also found that the responsibility she felt at undertaking such an enormous task had forced her to become stronger and more independent.

A sense of disenfranchisement and extreme loneliness were negative elements of the program cited by most candidates. John, Helen, Julie and Sunee felt a painful awareness of their lack of cultural and
social capital; they felt there was little guidance provided both at the beginning of their candidature or throughout it, and, as discussed, they missed any support that a learning community could have provided. John, for instance, found that his (mis)understanding of the nature of research and the thesis caused a substantial loss of time, energy, money and morale. Clearly, both he and his supervisor needed to shoulder some of this responsibility, but he felt the need for accurate presentation of the requirements at the start of the program: *To just say “Read this procedural manual” isn’t good enough.* Julie’s feelings of disempowerment were particularly traumatic when, towards the beginning of her candidature she sought the feedback on her research proposal from an expert in her chosen methodology from outside of RMIT, to be told that it was totally inadequate. This had a profound effect: *I felt absolutely, totally diminished as a researcher, as a learner, as a student…and went back to my hotel and cried.* She felt that, given that research methodology was an integral part of candidates’ research, a more professionally responsible approach by the University or School would have been to set up programs for particular methodologies rather than having to study a number of different methodologies. Helen was explicitly aware of her lack of cultural or social capital in the field: *…the culture is very different - sometimes you’re not talking the same language. Sometimes people working in the universities all the time, they don’t understand the things we don’t know.* However, although it caused her some difficulties, she showed a clear understanding that her habitus would get her through: *…it wasn’t a huge problem because I had a sense that I’d get through it because I’ve been successful before.*

### 5.4.3 Pedagogical issues

Not surprisingly, constructive guidance and feedback was cited by most candidates (four of the six) as a key element in supervisor support. Most also felt that the level of criticism was well-matched to their needs. However, although two felt that the goals and standards of the program had been identified, this was not the case for others, producing some difficulties. For instance, both John and Julie were provided with inaccurate information regarding standards. For Julie it was: *…like being a kite – you’re buffeted around in different directions and you need something that connects you to the earth.* Others felt there were assumptions made by their supervisors about how much they knew. Sunee felt the need for explicit information at the beginning of the program: *I didn’t know what I didn’t know.* Although she was very satisfied with her supervisor’s support, she asked: *…how could he know what it was that I didn’t know?* There was also no explicit discussion about relevant roles and expectations of supervisors and candidates and most felt they would have benefited from discussion at the beginning of their studies.
Of the two candidates who did not rate their supervisory relationship favourably, John had recently changed supervisors and Julie’s relationship had recently become workable. However both had experienced some trauma of an intensity discussed by Lee and Williams (1999). John felt totally unprepared to meet the requirements of the degree and firmly believed it was the supervisors’ role to prepare the student for what they’re doing in a practical way, not just an intellectual way. He felt the lasting effects: …you feel a loss of the integrity of your studies and your own integrity and it takes enormous reserves to come back and say ‘No. I’m going to go on with this’. Adding to this, he also saw the irony in his original supervisor’s attitude, being in a School of Education: …you know, a supervisor is a privileged teacher supposedly functioning at the highest level and being a teacher is about giving acceptance and belief in yourself, and if you don’t give me encouragement, I can only fail.

Julie felt acutely the lack of professional support in the early months of her research. She found her supervisor personally supportive but professionally unsupportive. She had come to PhD studies with a habitus attuned to academic success, having worked in an academic environment and having recently completed her Masters by research: I knew I was capable of learning what I had to learn and I wanted to do my PhD efficiently and the smart way; however, she found she did not know what she needed to know, and neither did her supervisor. The inability of her supervisor to provide adequate support meant that she had to build knowledge of her methodology herself by reading key texts and other theses. She kept reading until she had sufficient to understand the nature of her research. In fact, she felt that her difficulty may have produced some benefit: …I think she’s a great supervisor when the student is in the driving seat, and I think that in the long run, maybe I’m a better researcher because of it. One of many traumatic episodes for Julie was her First Review. The information given by her supervisor was misleading: It’s nothing to worry about; it’s very informal and they just sit around and chat. However, she arrived to find that others had prepared PowerPoint presentations and that it was highly formal. She was totally unprepared to talk about her proposal at this level and, given her predisposition for academic success, still feels embarrassed at how unprofessional her presentation was.

The degree to which supervisor-candidate relationships develop into personal relationships presented itself as a potential problem. Three candidates found that the relationship developed into a more personal one and this presented some problems for two. For instance, John, together with his family, was invited to his supervisor’s home for Christmas, even exchanging Christmas gifts, but as the relationship deteriorated, it became an embarrassing relationship for both parties. For Trang, it became a cultural issue. She appreciated that her supervisor was interested in her as a person, and not
just the research, but she felt a little uncomfortable and did not encourage it: …it’s very difficult because in our culture; we can’t easily talk to people about our personal life, not even with our parents. In both of these cases, the attempt by supervisors to develop personal relationships provided an opportunity for the candidates to build social capital; this could have provided the candidates with a socially powerful network, potentially useful following completion of their PhDs. However, both John’s and Trang’s agency within the field of doctoral study limited their ability to take up this offer of increased capital: John’s symbolic capital had been reduced and Trang’s habitus made it impossible to make this strategic choice.

5.4.4 Assistance other than from supervisors

All candidates sought assistance from services provided by RMIT. All used the library and learned a variety of software packages, for instance, NVivo and EndNote. Both Trang and Sunee had used the Learning Skills Unit extensively for language and academic writing support and also had attended this Unit’s workshops on various aspects of thesis writing and had found both services to be helpful: …I was in need of this service in an intensive way and could take advantage of it at the times I needed it – it was a very useful service (Sunee). Both supervisors also often referred students to the Learning Skills Unit as well as the Counselling service.

Some problems relating to assistance from RMIT services emerged, however. For instance, a general failing with most service provision within the University was pointed out by Helen: most workshops and individual assistance are timetabled during week-days, but most candidates at this School work and are unable to attend. Further, although candidates are advised of these workshops through the regular University student email bulletin, only one of the supervisors had heard of the Research Office postgraduate workshops and neither had details of their current content or availability. However, two candidates pointed out their disappointment in these workshops. Julie felt they were an absolute waste of time. In an attempt to feel part of a research community she had kept attending, but felt that what was needed was: …something less patronising and far more pragmatic. There was also an unmet need identified by both Helen and Tina (S) for advanced word processing workshops such as inserting tables and generating contents pages. Interestingly, only one candidate and one supervisor knew of the existence of the University’s Minimum Resources Policy for research students, despite the Policy’s statement that ‘Schools shall provide candidates, at the commencement of their programs, with documented advice of the minimum resources available to them’ (RMIT, 2007c, p. 75).

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11 Note that the Learning Skills Unit at RMIT is now known as the Study and Learning Centre
Five of the six candidates also sought support from people other than their supervisors or RMIT services. Three sought assistance from other academics, two from outside RMIT. For John, this became particularly important; devoid of cultural and symbolic capital in his previous subfield, his only strategic choice was to move outside of this and into a new doctoral subfield: “because of my first [original] supervisor’s disregard for my research and for my own self-worth, I had to try to find people who saw the value in the research. He had also discussed his research with his sister and a friend, both of whom had been through the doctoral process. Julie also found discussion with two ‘critical friends’ was essential for her progress.

5.4.5 Personal issues

Although only two candidates expected to gain personal growth from completing the degree, four identified that they had actually gained it. In reflecting on their sense of self, they tapped into some predispositions that had assisted or hindered them, as well as appreciating how their habitus had developed. For Julie, the personal growth that she both expected and gained was bound up with knowing she had reached the pinnacle of academic study: “I made it to here, from being a mature age student doing a Bachelors degree.” Although Anne had yet to complete her PhD, what she had gained the most personally was her knowledge that she was capable of completing it, despite her poor regard of herself as a researcher. Although successful in her second attempt at her Masters, her past academic failures have left her with ongoing doubts: “I’m sure I don’t have the degree of focus that is necessary for someone to be a really good researcher.” Similarly, John now understood that he could handle adversity in more productive ways than he had in the past, while Trang felt that she had: “...moved to a different level – higher and better. Personal growth was also cited by Tina (S) as one of the key benefits of this doctoral mode: “...it’s a test of their persistence and...their passion. There’s a tremendous sense of pride and accomplishment that they can do it. They go on a journey and they definitely emerge a different person at the other end.”

All candidates perceived themselves to be researchers except Anne and Helen. Anne, in fact, doubted her ability to be a researcher because her research has: a fair amount of practical application and is not based on looking at theoretical aspects or scientific research. She clearly does not see applied research as ‘real’ research. Similarly, although Helen did not see herself as a researcher, she readily extends the use of research strategies into ‘real life’. Julie had perceived herself to be a researcher since her Masters: “I cut my teeth on my Masters – it helped me to say ‘Yes, I’m a researcher’.

However, she saw herself as a researcher not just in academic terms, but in a general sense: “I’m capable of researching what I need to, whether it’s a recipe or what type of bed to buy. In line with
Trang’s statement above, John also felt as a researcher he had: *moved to the next level up – a deeper level of thinking about your work Practice.*

Although Helen and Trang felt that their families would be proud of them, only Sunee believed the added educational capital of a PhD might change the perception of others. She felt herself to be *slightly out of the norm as opposed to other Asian people,* being a more creative person rather than the norm of being goal-orientated, and having a personality that was *a bit strong for an Asian woman.* She felt that her PhD would ameliorate this to an extent in her home country.

5.4.6 Summary

Of note in this section is the overwhelming perception of lack of guidance from the School and supervisors. Despite a positive relationship with their supervisors and general satisfaction with the program, the feelings of disenfranchisement because of the perceived lack of learning community persist, this time in the form of a lack of information. This is both interesting and alarming given that these candidates are all in their final year of candidature. Partly offsetting this, however, is the clear development of candidates’ habitus through their doctoral studies, resulting in improved self-perceptions as determined and capable researchers.

A further interesting aspect is the greater perception of symbolic capital generated by the PhD (thesis) compared to the other doctoral modes for some candidates. However, it is not clear exactly how much knowledge candidates had of the other doctoral programs, and given that the EdD was being ‘rested’ in the years soon after some full-time candidates would have enrolled, this may not have been promoted to them.

5.5 PhD (thesis) candidates’ notions of research and Practice

This section describes findings from candidates in the PhD (thesis) program in terms of their notions of research and Practice. This was thought important given the focus on potential differences between traditional, Practice-based and professional doctoral education. Research is discussed from the perspectives of candidates’ topics and where they sit within prior research contexts (that is, whether the research is essentially localised or located within broad, international literature), their motivation for embarking on a doctoral research degree and their research practice. Notions of Practice are discussed in terms of the candidates’ beliefs related to applied research and the relationship of their doctoral research to an applied field. These are summarised in Table 5.4, but more complete results can be found in Appendix 9, Matrix 1.3.
Table 5.4  Summary of PhD (thesis) candidates’ responses to sub-question three:
*What are the differences in notions of research and Practice?*

<table>
<thead>
<tr>
<th>Summarised categories</th>
<th>Anne</th>
<th>John</th>
<th>Helen</th>
<th>Julie</th>
<th>Trang</th>
<th>Sunee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic area</td>
<td>VET</td>
<td>Higher Ed.</td>
<td>Schools</td>
<td>Schools</td>
<td>Schools</td>
<td>Business</td>
</tr>
<tr>
<td>How situated within body of knowledge</td>
<td>Localised</td>
<td>International</td>
<td>International</td>
<td>International</td>
<td>International</td>
<td>International</td>
</tr>
<tr>
<td>Motivation for research deg.</td>
<td>- Personal satisfaction - Topic interest</td>
<td>- Personal satisfaction - Topic interest - Career</td>
<td>- Personal satisfaction - Topic interest - Career</td>
<td>- Personal satisfaction - Topic interest - Career</td>
<td>- Personal satisfaction - Topic interest - Career</td>
<td>- Personal satisfaction - Topic interest</td>
</tr>
<tr>
<td>Aiming for excellence?</td>
<td>Yes</td>
<td>Yes, but limitations</td>
<td>Yes</td>
<td>Yes, but limitations</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Must research be applied?</td>
<td>Essential</td>
<td>Useful in some way</td>
<td>Essential</td>
<td>Useful in some way</td>
<td>Not essential</td>
<td>Essential</td>
</tr>
<tr>
<td>Relationship of research to an applied field</td>
<td>Broad connection</td>
<td>In specific workplace &amp; broad connection</td>
<td>In specific workplace</td>
<td>Broad connection</td>
<td>Broad connection to potential workplace</td>
<td>Broad connection to potential workplace</td>
</tr>
<tr>
<td>Knowledge to be used in your workplace?</td>
<td>Not useful</td>
<td>Yes, in specific way (validation)</td>
<td>Yes, in general way (skilled practitioner)</td>
<td>Yes, in general way (skilled practitioner)</td>
<td>Not useful</td>
<td>Hopes it will be useful (give an edge)</td>
</tr>
<tr>
<td>Any issues?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

5.5.1  **Research topics and their location within current knowledge**

Although the research topics of PhD (thesis) respondents were all related to an education environment, some were very loosely based. Further, in terms of locating their research within the literature, all except one was broadly based on international and national research. Anne’s research, however, was based predominantly on research and data from the National Centre for Vocational Education Research, reflecting the localised nature of her research.

There were interesting relationships cited between some candidates and the literature. Julie, for example, had a personal slant on the literature, thinking of *the people behind the bits of data on the shelves*, whereas Sunee used the literature to find a method for her research in order *to be safe and be accepted by academics*. Because her research was at the cusp of social science, aesthetics and economics, she also pointed to having difficulty in bringing convincing arguments to each area and in getting an acceptable balance between each, which showed her understanding of disciplinary differences (Becher & Trowler, 2001) and the expectations of academia.
5.5.2 Motivation for and purpose of research

Multiple factors, including improved career prospects, personal satisfaction and interest in their research questions, provided the motivation for PhD (thesis) respondents to embark on their research degrees. All except Anne had begun their studies with the aim of improving their career outlook, although for Helen and Julie, this became a lesser motivation than personal satisfaction and interest in the topic. At the beginning of her study, Helen believed that the degree may have led to promotion as school principal, but near the end of her study she was not hopeful that it would help, and in fact, no longer cared about it: the passion she felt for her topic had become a more important motivator. Although Julie admitted that a PhD is a highly desired qualification, if not mandatory in academic circles and more credibility in the private sector, she also felt that it would give her confidence to believe that she was capable of taking on a wider range of work choices than she would have considered previously. The only candidate not to cite career as a motivator, Anne, would have done so had she not been close to retirement.

Four respondents cited both personal satisfaction and interest in the research topic as motivation, and in two of these cases, the research topic became merged with personal satisfaction. For John, a passion for finding answers to his research question has become a personal quest. He saw a PhD as a way to educate himself in the things he’s always wanted to know: to have canonical knowledge of Western traditions – joining the tradition of philosophy and ideas. A further motivation for him was his aim to use this knowledge for professional development in his teaching area. Similarly, the motivations of Julie were both personal satisfaction and the challenge. She uses the metaphor of climbing a mountain – completing Masters is going half-way up, but of course, you want to go to the top of the lookout and say ‘I’m absolutely knackered, but I have a guide and I have got there; and this is as far as I can go’. However, although she was hoping to get some personal transformation out of the research, she does not see this as a selfish response; rather, she sees the value of who she has become as a result of her research in her interactions with others. In this, she sees that doing the PhD is one little contribution [to living] better as a global village. She’s therefore passionate about her topic because it’s reflected in the way we live in the world.

Two other respondents reported a more divided motivation between their topic and personal satisfaction. For instance, although Anne cited her worthwhile topic as a key motivation, she also had several personal reasons. She had worked as a lecturer many years ago but did not complete a PhD: I was bringing up three kids and there’s my husband. Further, she failed her first attempt at a Masters degree, and, despite having successfully completed a Masters degree some years later, felt the need to
prove to herself that she was capable of doing it because of that background of failing something. The personal motivations of Helen include having a sense of achievement and also pride in her children being able to call her ‘Doctor’. However, she’s also passionate about her topic because she sees this as a personal validation of pedagogical Practices she has endorsed for many years.

These motivations accord with the views of the supervisors: both felt that passion for the research topic was an important motivation for most of their candidates and, although both Todd (S) and Tina (S) felt that the title may help with career prospects, Todd understood that this was not automatic and Tina admitted that education in schools doesn’t recognise PhDs and that most candidates in this School are not looking for academic positions.

5.5.3 Candidates’ practice as researchers

All respondents except one stated that they were still aiming for excellence, but two of these cited difficulties in achieving this. John, for instance, identified limitations of time and the limitation of the thesis (in fact, the limitation of the PhD program itself) because his range of discovery is quite wide and he had been told by his supervisor that it was not focused and had no core. He had a somewhat paradoxical belief given his determination to come out with a PhD, that the PhD (thesis) program required too narrow a focus, where the limitation of the final thesis limits the range of discovery. He criticised most PhDs for their lack of usefulness: …they focus too specifically on a single piece of the puzzle, and so what they’ve done is something that is dusting shelves. I want something that is useful. At the time of the interview, he had just changed supervisors and some of these issues had been resolved; however, this occurred at a late stage in his candidature and, although he was still aiming for excellence, he had no doubt that it would not be the best he could have achieved. Two compounding factors in his attitude toward his research related to a lack of understanding of the ‘rules of the game’, particularly in the discipline of Education. He had attempted to invent his own methodology linking historical and philosophic research with empirical data, which created a considerable amount of frustration and stress when his supervisor disallowed this type of knowledge. However, he found a lecturer in another school of the university who had an affinity with the nature and methodology of his research and was prepared to be his supervisor, providing a clear example of some research practices having power and legitimacy conferred on them in some disciplines while being relegated to marginal status in others; cultural and symbolic capital in the supervisory relationship do not necessarily transfer across disciplinary fields. An ethics constriction which precluded him from conducting his research from the students’ perspective seems also to have played a part in John’s difficulties, producing a certain amount of frustration and anger: They let you into the
Despite still aiming for excellence and being passionate about her research, a similar limitation in Julie’s research led to her belief that it was not possible to achieve the level of excellence that she had originally envisaged. Rather than a limitation based on ethics, in this case the saturation of school-based research provided difficulty in finding schools willing to provide access to a researcher, and therefore finding enough participants: …schools are so overwhelmed by professional organisations wanting to do research, that research students are just not getting much of a look in at all.

The only candidate not to be aiming for excellence was Trang, who was aiming to finish it as fast as possible because of family commitments and a need to get on with the rest of [her] life. This is a likely reflection of her lack of passion or even interest in her research topic: …it just came from my Masters but I don’t really care much about it and I’m not going to use it – I just want the PhD.

5.5.4 Relationship of doctoral research to an applied field

Although all but one candidate felt that it was important for any research they conducted to be applied research, their studies were related to their workplace in varying degrees. The research of all but two candidates related to their workplaces only in a broad way. The research of Helen and John, however, was completed within their specific workplaces. For Helen there were two reasons for this: the demands on her time of teaching meant that conducting it in the workplace helped to an extent, and she strongly believed that her research would have an impact on children’s learning. However, when asked if she would use the knowledge from her research in her workplace, she said that although she would like to think it might have an impact, she doubted it: …it’s to do with power plays - there’s a culture out there [in the primary schools]. It’s alright to have a BEd and maybe a Masters, but a PhD…I mean, who do you think you are? So I very rarely talk about it. In illuminating Bourdieu’s understanding of the lack of transferability to different fields of capitals such as cultural (including some educational capital) and symbolic capital, the only way she could see her research being used is in refining her own Practice in the classroom. This is particularly interesting, given the earlier discussion of her habitus having changed to the extent that she was now able to speak with a degree of authority she had not had previously. It seems that the collective habitus of her workplace has acted as a ‘gate-keeper’, not only preventing particular types of cultural and symbolic capital from being recognised in this field, but actively denouncing it.
John’s reason for locating his research in his workplace was as a way of defining and validating what he already knew to be true and to produce a model to be used for professional development for which he was also hoping for a broader audience to avoid what he described as: a PhD with a narrow focus that would end up pretty useless. He was angered over having been told to narrow his focus and that a professional development model was not an appropriate outcome for PhD research. This perhaps shows the dangerous serendipitous nature of the supervisory relationship and the importance of matching candidates to appropriate supervisors: the PhD (project) may well have been able to satisfy John’s research aims, had he known about it.

Although Anne and Trang did not see any use for their research, others perceived a general usefulness in their actual or potential workplaces. Sunee felt that one of the strengths of her research was that it was highly applicable in the field, and hoped to find employment on that basis. Julie felt her research to be: highly transferable, lending itself to any workplace…whether it’s in one classroom or it’s on a global scale. She hoped that her research would enable others to look at their professional Practice in a different way…to re-examine and reflect on their work…as a possible means of restructuring curriculum. Potential stakeholders not surprisingly included students, educators and educational institutions in all cases except for Sunee, whose research was not closely related to education. Only two candidates saw themselves as stakeholders: Julie, because it had a significant impact on the way she thought about the world, and Sunee, who also saw her family as stakeholders. These both also saw their supervisors as stakeholders.

5.5.5 Summary

Given this study is situated within a School of Education, there were some unsurprising findings related to research: the topics (except for one) were situated within educational environments and there was a generally-held constructionist epistemological belief. Of more interest, perhaps, is that development of cultural and symbolic capital for career promotion was not the sole aim for PhD (thesis) candidates: personal satisfaction and intrinsic interest in the research topic were equal to career opportunities as motivators for these candidates. In general, however, those who were more interested in career opportunities were also more likely to think of themselves as researchers, aiming for development of the more prestigious ‘scientific capital’ rather than general academic capital (Bourdieu, 1984/1988).

Because RMIT is marketed as a ‘real-world’ university, and because the discipline of Education is specific to a profession, there is an expectation that all research by PhD (thesis) candidates will be ‘applied’ research in some way. Although this was the case, it is interesting to note that, although
nearly all candidates felt the importance of their research to be applied, only one candidate’s research was both focused on a specific workplace and expected to be useful by the researcher within this workplace, most appearing to involve Mode 1 knowledge. Further, ironically in this case, this researcher’s aim was actually to broaden its application.

5.6 Concluding comments

Candidates clearly did not see their doctorate in terms of social advancement outside of the university, despite a more elite status of the PhD (thesis) over the other doctoral degrees perceived by some. Intrinsic interests such as personal growth and the satisfaction of having completed their degree were cited as gains from the program, and personal development cited as a positive aspect of the program. Further, along with external interests such as career advancement, all but one candidate cited personal satisfaction as a motivation for enrolling.

Although there is little status given for the PhD in many workplaces outside of academia, including the school education system which is the workplace of many of this School’s candidates, some candidates did build cultural capital in their workplace fields by development of their habitus through personal growth. Their doctoral studies enabled them to develop the skills, ways of thinking, approach and confidence to become more strategic agents in their workplaces.

The program at least partially met the candidates’ needs, and those who experienced some negative aspects found ways of coping, their habitus enabling strategies which ensured a trajectory towards completion of their doctoral studies. For instance, Julie’s disposition was one of extreme resilience and she showed great determination to learn about her methodology herself. She was able to be philosophical about it: …that which doesn’t kill you makes you stronger, and was able to build a functional, although not perfect, relationship with her supervisor. Helen was brought up to be a high achiever and this disposition kept her in the program despite the many concerns in her life. However, habitus can be constraining as well as enabling. John had a history of not coping with adversity, and instead of taking control, his solution was to look elsewhere for a supervisor to ensure he did not slide into the self-abuse of an earlier time when things did not go well for him.

Other common themes to emerge from PhD (thesis) candidates include loneliness, disenfranchisement and a lack of accessible and useful information: all candidates cited either the lack of a learning culture or the lack of an adequate induction program or both. This is played out in the comments from many candidates regarding supervisors’ ignorance of the ‘gaps’ in candidates’
understanding of the culture, procedures and expectations of a PhD (thesis). Although the School is attempting to address the inadequacies of the induction program, clearly there should be more understanding of the diversity of candidates’ habitus and more opportunities for candidates to develop social and cultural capital by supervisors and School management.
Chapter 6

Case Study Two: The PhD (Project) Program

6.1 Introduction

This chapter aims to provide a comprehensive understanding of candidates in the PhD (project) program. As in the previous chapter, the transcript data from the semi-structured interviews of candidates are described and analysed and augmented by data from supervisors in this program. The chapter begins with a description of the field of the PhD (project) in the School of Education and a description of the candidates who were part of this study. The remainder of the chapter is structured through key elements from the first three research sub-questions (see Section 5.1). Responses are once again discussed with the aim of understanding candidates’ actions and motivations through Bourdieu’s theory of practice (Bourdieu, 1972/1977; Bourdieu & Passeron, 1990; Bourdieu & Wacquant, 1992a).

6.2 Contextualising the field and candidates of the PhD (project) program

The PhD (project) was developed in the School of Education in 2000 within a climate of changing nature and demands of potential candidates and falling enrolments in the PhD (thesis) program (Reeders, 2002), underpinned by the Australian Government agenda for more ‘work-ready’ doctoral graduates. The stated aim of the program is ‘to create a research and development capability within the organisation, produce a tangible outcome from the project in the workplace and develop applied research skills within the participant’ (RMIT, n.d.). Projects are expected to be workplace based or part of an industry partnership, collaborative where possible, produce a change or tangible outcomes, and use action learning or action research approaches within a project framework (RMIT, n.d.).

The PhD (project) shares many aspects with the PhD (thesis): a research methodology course is compulsory as is a written and oral presentation as the ‘first review’ process which when successfully completed is taken as confirmation of candidature. However, instead of a research study which may or may not relate directly to a workplace or profession and the production of a large thesis, PhD (project) candidates complete a project in their work-place generally using action-research or other
Practice-based epistemologies and methodologies. Candidates also produce a durable record of their project which, in the School of Education, is often a written ‘copy of the product and/or a brief description with evaluation data’ but could take the form of photographs or digital record’ (RMIT, 2007c, p. 40). An exegesis of between 20,000 and 40,000 words in support of the project is also produced. This is defined as ‘an account and/or defence of what was done which must include reference to the processes involved [and] the significance for Practice of what was learned and what was produced’ (RMIT, 2007c, p. 40). It is aimed at ‘defining the purpose and theoretical base of the work and the factors taken into account in its conception, development and resolution’ (RMIT, 2007c, p. 40). A further requirement (which is not required for either PhD (thesis) or EdD candidates) is an oral defence of their project to a panel of examiners, who receive copies of the durable record and exegesis six weeks before the defence.

Because the PhD (project) involves a three-way partnership set up between the candidate, the School and the workplace, it is clearly a different subfield to the PhD (thesis). The three levels of analysis in terms of the field of power, the objective structures of relations between the agents’ positions and the habitus of agents (Bourdieu & Wacquant, 1992b) must accordingly be handled separately. It could be argued that the PhD (project) is no different to the PhD (thesis) in terms of the first level of analysis because it still comes under the ‘specific legitimate terms of governance’ (Grenfell & James, 1998b, p. 169) of the Australian Government, the University and the School. However, Government imperatives urging universities to provide Practice-based doctoral degrees has, as indicated in Chapter Two, been seen as ‘encouragement’ for many Australian universities to establish alternative work-related doctoral programs such as professional doctorates and also in the case of RMIT and some other universities, doctorates by project.

The second level of analysis, the objective structures of relations between the agents’ positions (Bourdieu & Wacquant, 1992b), brings in the many fields (work, family, study) in which candidates find themselves, and the subfields of more than one doctoral program in which many supervisors sometimes find themselves simultaneously. Of particular interest in this relatively new program is what is considered to be a legitimate project or product in the PhD (project) and the resulting pedagogical issues. Lack of consistency and agreement in this (some evidence of which is seen in the candidates’ interviews) has an obvious effect on candidates for whom the entire process of doctoral study is new. While agents acting in this subfield still include supervisors, candidates, examiners and the research office coordinator and administration officer as with the PhD (thesis), they also potentially include those in the workplace. In PhD research projects with the workplace as a key element, there is a threat that workplace values may be at odds with those of the academy with a ‘shift
in the status of epistemologies and power relationship between the academy and sites of Practice’ (Reeders, 2002, p. 1). This yields an added complexity to the relative amounts of cultural and symbolic capital wielded by the various agents: instead of the field as a unified entity with one set of rules for one game, there may be two, or as one subfield is substituted for another, the rules of one game may gain over the other (Grenfell & James, 2004). This second level of analysis, along with the third, which focuses on the habitus of the agents, is further discussed in relation to the data in this case study.

Aside from any possible Government-imposed heteronomy, the PhD (project) does have the capacity to deliver substantial benefits to workplaces and candidates. Although no recent research (apart from the current study) has been conducted among PhD (project) candidates in the School of Education, among the first cohorts of research degrees by project in the School (Masters and PhD), common motivations for enrolment were the benefit of conducting the research in their workplaces (an important consideration given that many candidates also had family commitments) and the belief that their workplaces would recognise and support such research (Reeders, 2002). In keeping with workplace considerations, both career opportunities and the ability to complete their PhD through a project in their workplaces were the main motivations for candidates in the present research.

Five of the six PhD (project) candidates had prior Masters degrees, although only Boris had completed a Masters by research. Peter began his candidature in a research Masters by project and after some months was able to convert to a PhD. Although Ben had completed his last prior degree around nine years before he enrolled in his PhD, others had more recent histories of postgraduate study. Only Boris had any major experience with research. However, while the process and outcomes of a research degree are very different to that of coursework, it is perhaps likely that if these candidates have completed action research in their own workplace (to which, of course, they are intimately acquainted and in which they are likely have developed a considerable amount of cultural capital), their lack of research experience may not be important. The important issue will be the ease or difficulty of merging workplace and academic priorities into the doctoral program.

All candidates were working at the time of their research. Two worked full-time, although one part-time worker worked close to full-time and another took some months off work to work full-time on his research. Three candidates were over fifty and could be classed as late career researchers, the other three, mid-career researchers. Further demographic and contextual data of the PhD (project) candidates can be seen in Table 6.1. The pseudonyms used for the two supervisors interviewed regarding their work with PhD (project) candidates are Paul and Pam.
Table 6.1 Demographic and contextual data of PhD (project) candidates

<table>
<thead>
<tr>
<th></th>
<th>Peter</th>
<th>Ben</th>
<th>Sally</th>
<th>Liz</th>
<th>Carol</th>
<th>Boris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male/Female</td>
<td>Male</td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>30-34</td>
<td>55-60</td>
<td>60-64</td>
<td>50-54</td>
<td>40-44</td>
<td>35-39</td>
</tr>
<tr>
<td>Studying: Full-time / Part-time</td>
<td>Full-time</td>
<td>Full-time</td>
<td>Part-time</td>
<td>Part-time</td>
<td>Part-time</td>
<td></td>
</tr>
<tr>
<td>Working: Full-time / Part-time</td>
<td>Part-time</td>
<td>Part-time</td>
<td>Full-time</td>
<td>Full-time</td>
<td>Part-time</td>
<td>Full-time</td>
</tr>
<tr>
<td>Occupation (current or usual)</td>
<td>Instructional designer</td>
<td>Commerce, then lecturer</td>
<td>Lecturer</td>
<td>Primary teacher</td>
<td>Instructional designer</td>
<td>Training consultant</td>
</tr>
<tr>
<td>Prior Masters? (C) = Coursework (R) = Research</td>
<td>No (converted from Masters to PhD)</td>
<td>Yes (C)</td>
<td>Yes (C)</td>
<td>Yes (C)</td>
<td>Yes (C)</td>
<td>Yes (R)</td>
</tr>
<tr>
<td>Date of most recent academic qualification</td>
<td>2000</td>
<td>1993</td>
<td>1995</td>
<td>1994</td>
<td>1997</td>
<td>2003</td>
</tr>
<tr>
<td>Funded research place?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Changed 1st supervisor?</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Has 2nd supervisor?</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

1 Although working part-time at the time of interview, he did not work throughout his project
2 Worked close to full-time – 4 full days per week
3 Took some months off work in final year - completed his PhD full-time during that period

6.3 The norms and practices of candidates in the PhD (project) program

This section describes and analyses findings from candidates in the PhD (project) program relating to the norms and practices experienced in their studies. The section has been divided into the same conceptual groupings as in the previous chapter. Findings are summarised in Table 6.2 below; more complete data can be found in Appendix 9, Matrix 2.1.
### Table 6.2 Summary of PhD (project) candidates’ responses to sub-question one: How do the norms and practices of candidates differ?

<table>
<thead>
<tr>
<th>Summarised categories</th>
<th>Peter</th>
<th>Ben</th>
<th>Sally</th>
<th>Liz</th>
<th>Carol</th>
<th>Boris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural relationship to academic field</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>Moderate</td>
<td>Moderate</td>
<td>High</td>
</tr>
<tr>
<td>Learning community?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Study on campus?</td>
<td>Very seldom</td>
<td>Fortnightly</td>
<td>Almost never</td>
<td>Varies – fortnightly – monthly</td>
<td>Can’t separate from work</td>
<td>Very seldom</td>
</tr>
<tr>
<td>General experiences</td>
<td>Mixed - Project suits him - Program not well-defined</td>
<td>Positive - Good supervision</td>
<td>Mixed - Scope too large for exegesis - Need clarity of sup, role</td>
<td>Mixed - Good supervision - Not enough time</td>
<td>Mixed - Project suits them - Program not well understood</td>
<td>Positive - Project suits him</td>
</tr>
<tr>
<td>Felt like dropping out?</td>
<td>No (something to prove)</td>
<td>Yes (but sense of responsibility to supervisor)</td>
<td>Yes (but sense of responsibility to supervisor, plus determination)</td>
<td>Yes (but has something to prove, plus sense of responsibility to supervisor)</td>
<td>No (something to prove)</td>
<td>Yes (but prevented by passion for the research and satisfaction)</td>
</tr>
<tr>
<td>General learning</td>
<td>- Personal development - Knowledge of topic</td>
<td>- Professional development - Personal development - Knowledge of topic</td>
<td>- Personal development</td>
<td>- Personal development</td>
<td>- Knowledge of topic</td>
<td>- Personal development - Knowledge of topic - Professional development</td>
</tr>
<tr>
<td>Independent learning important?</td>
<td>Yes, and has no problems</td>
<td>Yes, and has no problems</td>
<td>Yes, and has no problems</td>
<td>Yes, but has no problems</td>
<td>Yes, and has no problems</td>
<td>Yes, and has no problems</td>
</tr>
<tr>
<td>Workload / Managing time</td>
<td>No problems (Worked part-time)</td>
<td>No problems (Did not work)</td>
<td>Very difficult (Worked full-time)</td>
<td>Very difficult (Worked part-time)</td>
<td>No problems (Worked part-time)</td>
<td>Few problems (Worked part-time)</td>
</tr>
<tr>
<td>Thesis issues</td>
<td>Unsure of exegesis</td>
<td>Wanted to write a narrative</td>
<td>Word limit too restrictive</td>
<td>Writing style and Lit. Rev.</td>
<td>Writing style</td>
<td>- English lang. - Too attached to writing</td>
</tr>
</tbody>
</table>

#### 6.3.1 Cultural relationship to the academic field

The act of becoming a doctoral candidate would seem to demonstrate the possession of a habitus that has already embodied much of the cultural capital required for success, given that all have experienced prior academic success: in this instance, all except one PhD (project) candidate had a prior Masters degree. However, for most, this is the first degree with a substantial research component, which requires very different strategies for success than coursework. Added to that, is the extent to which one has a predisposition (their habitus) for learning and understanding the ‘rules of
the game’. The habitus develops through the family environment and is difficult and slow to change; even when it adapts to include different practices and ambitions, the changes are always biased towards past experiences that predisposes them to act in particular ways (Bourdieu, 1972/1977). A person born into a family with cultural capital will always be culturally advantaged compared to those born into families without it: merely gaining a degree neither makes a person feel comfortable in ‘playing the game’, nor guarantees a feeling of belonging to this more elite game. To get a feel for the amount of inherited and developed cultural capital, candidates were asked if they had been encouraged or expected to attend university by their parents, and if they had published academic articles before their PhD study.

Although no PhD (project) candidate had parents who attended university, all but one had siblings who attended, indicating that education was likely to be valued by these families. Both Liz and Carol seem to have a moderate cultural relationship to the academic field. Both of Liz’s parents matriculated at a time when staying at school beyond Year Eight was unusual. She was encouraged to attend university and, as the first in her family to study for a PhD she is aware that her family are very proud of this achievement. Showing some cultural and symbolic capital, she is about to have a book chapter in a professional teaching text published and has also published professional resources in her area of expertise. Carol was the first in her family to attend university, going directly from school to her undergraduate degree; her siblings both attended as mature-aged students. Although she worked in an academic environment, it was as an instructional designer and her only publications were on-line reports of funded projects, which were not overly ‘academic’.

Sally’s only publication, similarly, was a non-academic on-line report of a project, although it was a major government-funded report of a year-long project. She had also produced a refereed conference paper on an aspect of her PhD project. However, she has a self-confessed low cultural relationship to the academic field. When discussing difficulties she was experiencing with her supervisor, she had this advice: We’re just not academic, and if you’re supervising a TAFE teacher, then please have the ability to come down to that level and don’t take the depth of knowledge and skills for granted. She did not attend university until much later in her life, and although she had struggled with many issues in her doctoral study, she had a determination to succeed and enough social capital to enable her to locate and enlist the assistance of useful ‘critical friends’. Both of Sally’s children have attended university, perhaps pointing to some form of transformation of her habitus and an increase in cultural capital, particularly educational capital, over the many past years of undergraduate and postgraduate studies as a mature aged student, the joint effect of which is likely to encourage similar dispositions in her children given that children ‘inherit’ their habitus from their families. Peter also appears to lack a
strong cultural relationship to the academic field: …like, going to uni wasn’t really discussed at home – I’ve just, kind of, found myself doing this.

Boris clearly remembers both he and his siblings being encouraged but not pushed to attend university and although his siblings did not go on to PhD study, he felt a strong push to take it to its limits, and became addicted to continue studying. His background was in industry rather than education, but his business was bringing the two together and he talked of his PhD study and his previous Masters by Project study as having provided him with the skills and educational understanding necessary not only for his business but also for personal growth: …I learned about educational theory and, you know, it’s just as I believed and felt in Practice…and to validate this understanding of education and to see it in use – it has made me a better person as well as a better business person. Because of his reflexive understanding resulting in a well-developed habitus operating at the conscious level as he ‘develops new facets of himself’ (Reay, 2004, p. 437), it is argued that he has a high cultural relationship not only to the academic field but also to his work field. Ben is also considered to have a high cultural relationship to academia. Although the question of his family attending university was not asked directly, it is clear that his family possessed a level of cultural capital sufficient to encourage him to attend university: I came from quite a conservative home and there was an expectation that I would go into a conservative professional career; I was brought up in England with parents who worked in Cambridge, and all the rest of it, you know. Although he worked in the corporate field for much of his life before his doctoral studies, he had accrued further cultural capital in the academic field, having completed two Masters degrees and lectured in a Masters course.

6.3.2 Experience of a learning community

None of the PhD (project) candidates felt themselves to be part of either a School research culture or a community of learning. In the case of the research culture, all felt that they had few chances to talk to other researchers, particularly in an informal setting. For instance, Ben lamented that he had the chance to discuss his research with only two or three other research students: I like talking about my own stuff, but I’m also interested in other people’s.Echoing the feelings of Boris, he asked: …I know research does go on among lecturing staff and research students, but where do you go to talk about this? Similarly, Peter was briefly reminded that he was part of a research culture when he attended School research seminars, but these things don’t happen very often – we need more informal sessions. Interestingly he felt more aligned to a research culture outside of the School while reading the literature and writing his literature review.
Although the three other PhD (project) candidates also felt there were few chances to discuss their or others’ research, more complex issues were apparent. For example, Sally, clearly showing her habitus to be at odds with those of other younger research candidates who have more social capital, would not attend any of the informal discussion groups suggested above because she felt there to be: a wide chasm between me and younger researchers. Although Liz made the journey from her home many kilometres away from the University for regular meetings with her supervisor and attended School research seminars, she admitted that had informal research groups been available she would have had difficulty in participating. However, she did feel that it was vital to be part of some sort of learning community and although she did not feel part of the School’s community of learning or research community, she did feel lucky to be in a supportive education workplace environment that had become her community of learning. Similarly, although Carol felt the need for more opportunity to participate in networks or clusters (which she had been led to believe would be the case in this program), she also admitted that family commitments would make it difficult to attend. Her lack of social capital is obvious when she reflects: I suppose what you really need is access to networks, but she understood that developing a learning community is a difficult pursuit when students do not come together regularly for a class, understanding that most education students are part-time and have work and family commitments.

This was a sentiment not shared by Ben: I welcomed hearing from the uni that there were study workshops on all sorts of things, like writing but I was always disappointed by the lack of continuity by the students. He would have liked the opportunity to meet regularly with other candidates and did not think that it was unrealistic to expect research students to give up some time for this: You know, you’re doing this full-time, or even part-time, and you can’t come to a 2-hour workshop each month? I think if it’s understood that you’re learning to be a researcher, part of that is becoming part of this academic community and sitting at home and not sharing with anyone else is not being part of it, and it’s actually missing out on the PhD experience. He felt angry and cheated that there was no sense of collegiality and strongly suggested that the School develop an expectation that students attend both formal and informal discussion sessions.

Both Peter and Boris felt that the lack of a learning community impeded their ability to learn and therefore their ability to develop cultural capital in this field. The former felt that he needed to be part of the learning community of his research topic: I’d like that sense of exchanging ideas, you know, bouncing back to someone who is in the field. Although he acknowledged the expertise of his supervisors in the educational component of his research, his specific research was more aligned to
another discipline in which he clearly had little social capital. This issue points to potential difficulties with cross-disciplinary study in adapting one’s habitus in order to accrue cultural and social capital in two subfields of the general research education field. The impediment to learning for Boris was working in isolation. He had a firm belief about how he learned: If I don’t present to people and if I don’t discuss with people, I don’t even know what I know. Sally similarly felt the lack of a learning community in terms of validation of her work: …it’s the importance of being valued and having my work validated. She worked in the TAFE area and believed that her feelings were compounded by not working in a job that values the academic level. She is painfully aware that she is not, as Bourdieu would have put it, a ‘fish in water’: When I compare myself to others, that’s not where I’m coming from in terms of my origins. I don’t feel part of that learning community. This was further compounded by the same feelings she felt when discussing whether she felt part of a research culture: that she was far removed from some of the younger ones, clearly feeling that she lacks adequate cultural and social capital in this field.

Clearly, the lack of a learning community where candidates can freely and often discuss their research and learn of other research has had the effect of preventing the development of cultural capital of PhD (project) candidates in this field. This is echoed by one of the supervisors, Paul, who was critical of the traditional single or double supervisor system and the power play built into this: The notion that there is a single supervisor with this master-novice mentality needs to be addressed…The by-project people are all experienced professionals in their own field and we should be treating them as such. He felt that it was critical that a supervisor of this mode has an understanding of the context in which candidates were conducting their research, which meant: getting out and meeting people in situ, and thereby treating the workplace as an extended research community. He sees project research as: working with groups of people, rather than on them. However, he also understands that this is not the traditional view of academia and has heard unofficial comments in the School about over-servicing by PhD (project) supervisors. Although her candidates are an identifiable cohort, despite traditional academic ways of operating, one supervisor has managed to successfully build a community of scholars around the student community so they can learn what’s happening. Like Paul (S), Pam (S) also privileges her candidates’ knowledge and works towards bringing the cultural and social capital that they have accrued in their work field into the academic field.
6.3.3 General program experiences

When asked what it was like to study in the PhD (project) program, none of the candidates cited wholly negative comments, although four had mixed responses. For example, it had been *definitely a windy road* for Peter. He felt that the nature of the PhD (project) was not clearly defined and that he was *going along blindly*. Despite this, however, he believed that the ability to complete a useful project was an important element that would not have been possible through the PhD (thesis). This was an almost identical response to Carol, who also felt that *people don’t have their heads around it*. She believed this to be because as an emerging field, *it has a whole different set of assumptions that underpin it [and] it challenges traditional ways of doing things*. It annoyed her that she had repeatedly been asked what the ‘product’ was: *for them to think of a product as something that is an entity rather than maybe a contribution to a body of knowledge, or a more skilled practitioner*. However, like Peter, she also found the PhD (project) program suited her need for *useful* research. Other candidates who had a mixed response included Liz, who enjoyed an excellent relationship with her supervisor, but as with most women with families and full-time workloads, finding time to study was very difficult. Both Ben and Boris felt their study had been largely positive, the former because of good supervision and the latter because being able work on a project in his workplace was of great benefit to him.

Four candidates had often felt like withdrawing their candidature but in most cases a sense of responsibility to their supervisors kept them from doing this. For example, Ben’s commitment was the result of the quality of supervision: *I would go into the meeting with him and say I just don’t know that I can do this – I can’t cope…and I would come out of that meeting feeling ‘I can do this’, so I would always turn up at the meetings – always*. Despite the upheaval of changing supervisors many times, Sally felt commitment to all of her many supervisors: *I think of my supervisors that have contributed towards my completion of it – and this is my 4th supervisor now, and I feel as though there’s a sense of responsibility and commitment. They’ve all tried to help me*. It seems that while Ben merely needed his supervisor to remind him his cultural capital was adequate to enable him to ‘play the game’, Sally shows an indebtedness to her long list of supervisors for at least attempting to show her the rules. While Liz also felt a sense of responsibility to her supervisor, a more important reason was the need to prove herself among her male work colleagues; pointing to the importance to her of developing the cultural and symbolic capital in the field of her workplace through her PhD, she would have felt *an enormous lack of esteem* had she withdrawn. In a different way, Boris had become *addicted to study*; to him, *it’s love, passion and satisfaction*. 

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6.3.4 Learning and the development of skills

The varied responses by PhD (project) candidates when asked what they had learned through their PhD studies included an increased understanding and enhancement of personal traits, knowledge of research topic and professional development. Of the five who felt that their studies had an effect on their personal qualities, three were closely related; for instance Peter felt it had increased his ability to take responsibility to get things done, and Ben believed his PhD had continued to build on his two Masters degrees in terms of his ability to research by himself and now felt confident of doing more research independently. Sally learned to be an independent learner in a more dramatic way; she found that her first research methodology class was the steepest learning curve she had experienced and became demoralised. On the brink of withdrawing her candidature, she needed to decide what she would do when confronted with something she had no idea about, and worked out a variety of strategies so that she could teach herself what it all meant. From this and further difficulties, she also developed a reflexive understanding of an aspect of her habitus that will stand her in good stead to complete her degree: I learned that I have a dedication I didn’t think I had and it’s actually an incredible persistence to get things done. Doctoral studies had also encouraged Liz to be reflexive about her skills: I’ve always thought of myself as just an average person, just being a prep. teacher, but now I’m nearly there, I’ve realise I’m actually a little brighter than I thought. It has proved that I do have something great – that I do have the intelligence to do it. For Peter, doctoral study had created an ongoing ability not to take things at face value not just with research, but had changed how he thought about things in the world in general. Personal development for Boris was tied to professional development. His ultimate goal was to help other people learn but, coming from a discipline outside of education, his immediate goal was to learn how to learn and learn how to think, which he feels he accomplished. He saw no point in further study in his own discipline area: …there’s no point making a sharp pencil even sharper. If you keep sharpening it, you’re just wasting the pencil. More important for him was to become a good learner: …then I think I’ll be able to help other people to do the same thing.

While Boris also felt that knowledge of his research topic was as important as personal and professional development, he saw them as separate: this [personal and professional development] is vitally important to me as a person, but that [knowledge of research topic] is very important to the wider community. However, for Ben, the topic and professional development were more closely intertwined. Although he had no doubts about the specific knowledge produced by his project, towards the middle of his research he experienced a crisis in terms of being able to justify it educationally.
However, to his relief, by looking at learning theory and experiential learning, his analysis was very much focused on the experience as an educational experience for him: *I felt that this very much validated [the project] as being an extremely powerful learning experience.*

The candidates brought mostly practical skills such as organisational, word-processing, reading and study skills to their studies. Most also thought of themselves as independent learners but, although supervisors expect a level of independence in their candidates’ learning, Liz found this to be difficult because it did not suit her learning style: *I like to talk about what I’m doing, discuss things, and get others’ point of view, and doing it yourself is one of the hardest things I’ve found.* All candidates felt that the process of their doctoral studies had built on their previous studies, although three candidates singled out writing skills as becoming particularly well-developed through the process. Although Paul (S) identified the ability to write as the key skill he expected from his candidates, he also identified it as the most problematic issue. The candidates did, however, appreciate the opportunity to develop their writing skills. Peter, for instance, felt that the level of his writing skills was *ten-fold what it was before,* and having been to a Learning Skills Unit academic writing workshop, also found that explicit awareness of writing conventions such as paragraphing also had a positive effect on his reading. Similarly, Ben found that in particular he learned to pay much more attention to how he writes: *I now acknowledge that this isn’t going to be the final version – I learned the power of rewriting and rewriting and you know that’s just become a natural way I write now.* While Boris still felt that his English writing skills were less than perfect, he had no doubt that he was now writing *at the level of a PhD* and that all aspects of his language and writing had improved through the doctoral program. All candidates thought the skills they had developed would be useful at least in their workplaces, and for some, in life generally. Perhaps more importantly, these skills seem to have become part of their habitus and have changed their approach.

### 6.3.5 Workload issues

Not surprisingly, those who were working part-time had fewer problems with structuring their time, as did those whose research was part of their workload. Carol’s research was structured within her workload and instead of spending time reading at home, she kept up with this on public transport while commuting to and from work. Boris’s research was also structured within his workload, and in fact found that his research helped his business financially to the extent that he was able to take three months off work to write: *I just had to get it down on paper, because if I didn’t do it I would fail because you forget all those fine details.* He stressed, however, that it was the actual research that enabled this: *if it wasn’t for my research, it would have been impossible to get to that stage.*
Both Sally and Liz had to deal with difficulties common to those of their age and gender. Their full-time workload as teachers and their family commitments as wives, mothers, daughters and grandmothers meant that weekends, their only time for consolidated study, were often not available. One had had on-going life-threatening illnesses in two immediate family members; the other had an elderly parent and dealt with the death of another during her candidature. In both cases, study in the evenings was not possible because of work commitments, resulting in both using annual leave for this purpose. Further, Liz had used her long service leave and Sally was planning to. Compounding this for Sally was her natural predisposition for completing things that led to a determination to complete; however, her habitus also was one of a high achiever and she firmly believed her hopes of excellence to be compromised by lack of time.

The intersecting fields that candidates find themselves in also have personal ramifications. The impossibility of giving up anything other than study was pointed out by Liz: …there are no answers to this: you have to give up something, but what? Family? Work? These are impossible choices to make. She also felt that she had given up a lot personally in terms of regular personal activities she no longer took part in. Boris pointed out the suffering by his family: …my wife hates me for it and wanted to murder me…and I’ve got a young family and they’re not happy with what I’m doing, I can tell you that much! And of course there’s the guilt – when I have to say ‘no’ to time with my children and wife – it’s terrible. He was thankful to have reached an understanding with his wife who, at the same time, was supportive: Anyone else would have given up a long time ago, but she was very understanding.

6.3.6 The exegesis

The structure of the exegeses of all PhD (project) candidates interviewed was similar to a traditional thesis, with an introduction, literature review and methodology which was generally followed by some discussion of development, processes and significance of the project. Because research degrees by project are relatively new in the School of Education, there were very few completed exegeses for candidates to view, and the official University guidelines are vague. Most candidates took the advice of their supervisors, although candidates reported that in some cases their supervisors did not feel confident in their guidance.

12 For a definition of a ‘traditional’ thesis, see p. 99.
13 For a discussion of requirements of exegeses at RMIT and within the School of Education, see p. 9.
It seems also that the type of candidate attracted to the PhD (project) was looking for something different to the traditional thesis. Both Liz and Carol begrudgingly found they had to ‘play the game’ that they thought was trivial and irrelevant, particularly for a PhD by project. Liz, for instance would liked to have been more creative, but her supervisor convinced her otherwise: Because of the examiners, you’ve got to write as if this is an academic person who only sees one way of writing…if you’ve got to convince them that there are other ways, then it’s a double job you’re doing. Liz also took the advice of her supervisor and used a style that she believed to be patronising: I don’t want to do things like ‘In this chapter I will…’ and ‘In this chapter I have…’ – I feel as though I’m putting down the person who’s going to read it, but I’ve done it because I’ve been told to, but I thought that because of the project nature of this degree that the writing would be more practical as well.

Similarly, Carol’s supervisor was: a traditional academic writer who doesn’t like anything that vaguely looks like a personal pronoun. Although Carol understood herself to be a member of this discourse community and will ‘play the game’, she was not happy: Even in a degree that sets out to be different, you’ve got to satisfy the elite that you’re a member…as a gate-keeping barrier. This raises the question: is it a failing of the degree itself or a lack of awareness by ‘traditional’ academic supervisors of legitimate alternative possibilities in writing styles representing changes in the field? This is, of course, compounded by the knowledge that it is ultimately the amount of cultural capital held by the examiners that will allow full entry into the field, and if supervisors cannot identify potential examiners who have empathy with and value the PhD (project), they will need to revert to the more traditional model of the PhD: There’s a very real fear of what the examiners are going to do – it’s pretty new in education (Paul, S).

The word limit for PhD (project) exegeses, from 20,000 to 40,000 words (RMIT, 2007c), also caused some issues with project candidates. For example, Sally found that this limit forced her to produce a skeletal exegesis with no guts and depth. This issue was echoed by Paul (S), who felt that the regulations that exegeses should be between 20,000 and 40,000 words (RMIT, 2007c) were flawed: If candidates put in 20,000 words, they would fail outright…and in Education, even if you did 40,000 words I don’t think they’d pass. Apart from fear of the examiners’ responses, he also felt that the nature of workplace change (the most common research in a PhD (project)) was an issue too large to be confined to the word limit: What you’re doing is documenting the changes – the interventions you take and why you’re taking them. What was your intention and why? What did you do? Why did you do it that way and not some other way? That’s got to be informed by the literature and the actual factual conditions on the ground. And there is, at the end, what happened. Similarly, Peter was told by his supervisor to go beyond 40,000 words – even up to 60,000 words because when you submit
you exegesis, that’s what people look at and that’s what they’re used to reading – long theses. So you’re basically encouraged to break the rules because the field’s not ready for this form of PhD.

Four PhD (project) candidates believed only the obligatory supervisors and examiners would read their exegeses. Although Boris would have liked it to be read by many, Sally had a more pragmatic view: Actually, I don’t mind…I just want to get it done – I’m not very precious about it. As a more useful method of distributing research to a greater readership, Carol and Boris plan to publish papers from their research.

The potential readership of the exegesis unearthed two different issues, one with particular ramifications for the practitioner-based research. In terms of the latter, Ben was grappling with the problem of dealing with practical types of organisations that might be interested in his research because in Australia, an academic is almost a derogatory term. Showing an example of the difficulties experienced when the symbolic capital of one field (the academic field) is not transferable to another (the business field), he was concerned that when they read his exegesis, they would not understand it because it was quite abstract and philosophical. Paradoxically, however, although he felt the theoretical aspect to be of great importance in understanding the practical application, he was not sure it was helpful to the practical appliers. A quite different issue became evident when Liz was asked this question. Although her answer initially unproblematically included senior administration staff and colleagues from her educational work environment, she talked at length about whether her husband would read her exegesis, and thought that he might just do a quiet read. However, she had not offered any draft material for him to read because that’s me being only a prep teacher to his being a uni lecturer, and yet I know that he hasn’t got his PhD. She had always been a step ahead of him, getting her Masters before he did, and she was very angry about this ridiculous hierarchical thing – you might have a great knowledge when you’re a lecturer but ability-wise…to teach a preppie it takes a lot of knowledge and ability. It is clear that although she possesses more educational capital than her husband, and her employment in senior education administration would carry a substantial amount of cultural capital and possibly symbolic capital in her workplace, at home she perceives her husband to carry more symbolic capital.

6.3.7 Summary

There were few consistencies in the norms and practices of PhD (project) candidates. Although personal development was the most common attribute gained by PhD (project) candidates, many also felt personally alienated from the School and any idea of a learning community. While the program afforded some time relief if it was directly related to the candidates’ workplace, as with most other
doctorates in the field of Education, the female part-time candidates were of the age where they had many competing fields in their lives and found major difficulties in finding adequate time.

Some tensions were evident in this program because of the program’s newness, for instance, in guidance provided for the exegesis. While those with supervisors who have been part of this program from its inception or those who have themselves completed a PhD (project) are a valuable source of information for their candidates, other candidates had supervisors who felt less confident in their advice. The practical nature of the program also drew candidates who in some instances felt disappointed when writing their exegeses to find that they were, in fact, still in the same academic field as the PhD (thesis). Although this seems partly to do with choice of supervisor rather than a failing of the program, importantly, it also shows that despite the University attempting to define the new subfield of project-based doctoral studies through its regulations, the degree is still a site of struggle because it is the examiners who ultimately have the defining capital and determine the boundaries.

6.4 The extent to which the PhD (project) program met the candidates’ needs and expectations

This section describes and analyses findings from candidates in the PhD (project) program in terms of the degree to which the program met their needs and expectations. As with the previous section, it begins with a summarised table of responses (Table 6.3); more complete results can be found in Appendix 9, Matrix 2.2.
Table 6.3  Summary of PhD (project) candidates’ responses to sub-question two:  
*To what extent does the program meet candidates’ needs and expectations?*

<table>
<thead>
<tr>
<th>Summarised categories</th>
<th>Peter</th>
<th>Ben</th>
<th>Sally</th>
<th>Liz</th>
<th>Carol</th>
<th>Boris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program choice</td>
<td>Wanted practical outcome</td>
<td>- Others not appropriate</td>
<td>- Proj. more appropriate</td>
<td>- Wanted practical outcome</td>
<td>- Others not appropriate</td>
<td>- Wanted practical outcome</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- EdD not on par with PhD</td>
<td>- EdD not on par with PhD</td>
<td>- EdD not on par with PhD</td>
<td>- Poor writer: wanted shorter text</td>
<td>- ESL: wanted shorter text</td>
</tr>
<tr>
<td>Met needs?</td>
<td>Yes</td>
<td>Yes</td>
<td>Partially</td>
<td>Yes</td>
<td>Partially</td>
<td>Partially</td>
</tr>
<tr>
<td>Positives</td>
<td>- More critical stance</td>
<td>Ability to do a project</td>
<td>Ability to do a project</td>
<td>Ability to do a project</td>
<td>Ability to do a project</td>
<td>Ability to do a project</td>
</tr>
<tr>
<td></td>
<td>- New insights from research</td>
<td>- Time between submission and oral defence</td>
<td>- Time between submission and oral defence</td>
<td>- Time between submission and oral defence</td>
<td>- Time to agree on research focus</td>
<td>- Lack of learning community</td>
</tr>
<tr>
<td>Negatives</td>
<td>- Lack of supervision specific to field</td>
<td>- Time between submission and oral defence</td>
<td>- Poor supervision</td>
<td>- Poor supervision</td>
<td>- Poor supervision</td>
<td>- Poor supervision</td>
</tr>
<tr>
<td>Supervisor relationship</td>
<td>Constructive</td>
<td>Constructive</td>
<td>Not constructive</td>
<td>Constructive</td>
<td>Constructive</td>
<td>Constructive</td>
</tr>
<tr>
<td></td>
<td>- Motivating</td>
<td>- Motivating</td>
<td>- Felt powerless</td>
<td>- Motivating</td>
<td>- Goals/standards not discussed</td>
<td>- Goals/standards not discussed</td>
</tr>
<tr>
<td></td>
<td>- Goals/standards discussed, but exegesis not clear</td>
<td>- Goals/standards not discussed</td>
<td>- Goals/standards not discussed</td>
<td>- Goals/standards not discussed</td>
<td>- Goals/standards not discussed</td>
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</tr>
<tr>
<td>Other support</td>
<td>- Software training</td>
<td>- Software training</td>
<td>- Software training</td>
<td>- None</td>
<td>- PG forum</td>
<td>- Software training</td>
</tr>
<tr>
<td></td>
<td>- LSU</td>
<td>- PG forum</td>
<td>- Research forums</td>
<td>- Work colleague</td>
<td>- Work colleagues</td>
<td>- LSU</td>
</tr>
<tr>
<td></td>
<td>- Experts in his field</td>
<td>- Experts in his field</td>
<td>- Experts in his field</td>
<td>- experts in his field</td>
<td>- Experts in his field</td>
<td></td>
</tr>
<tr>
<td>Personal gain</td>
<td>- Satisfaction</td>
<td>- Satisfaction</td>
<td>- Satisfaction</td>
<td>- Satisfaction</td>
<td>- Satisfaction</td>
<td>- Personal growth</td>
</tr>
<tr>
<td></td>
<td>- Personal growth</td>
<td>- Personal growth</td>
<td>- Pride</td>
<td>- Pride</td>
<td>- Pride</td>
<td>- Pride</td>
</tr>
<tr>
<td>Changed self- perception?</td>
<td>Yes (confidence)</td>
<td>Yes (no longer feels inadequate)</td>
<td>Yes (confidence)</td>
<td>Yes (recognition of abilities)</td>
<td>Yes (recognition of abilities)</td>
<td>Yes (recognition of abilities)</td>
</tr>
<tr>
<td>Changed others’ perception?</td>
<td>Yes (other than family)</td>
<td>Yes (family proud)</td>
<td>Yes (family proud)</td>
<td>Yes (family proud)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>See yourself as researcher?</td>
<td>Partly</td>
<td>Yes</td>
<td>Varies</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
6.4.1 Program choice

All PhD (project) candidates had information about the three School doctoral programs at their time of enrolment, although Sally had originally enrolled in the EdD because the PhD (project) had not yet begun. She initially chose the EdD because she felt the three years of research (part-time) was manageable. However, she quickly realised that the scope of her research was too great for the EdD and turned it into a project. Had the PhD (project) not been devised, she would have converted her study to the PhD (thesis) but because she had already begun her research using an action learning methodology, the PhD (project) seemed more appropriate. All other candidates chose their program either because they wanted a more practical outcome or because the other degrees were not appropriate for their particular research. Boris, indicating that his habitus was in tune with the general habitus of the program, felt particularly excited about the program: …there was that initial feeling – good vibes – and we really need more of these programs in other universities. He went on: …For me, if there was no PhD by project, I would not do a PhD. If there’s no purpose, if I can’t put it into Practice, what’s the point? These thoughts are echoed by both PhD (project) supervisors: Pam (S) sees the project as allowing for many more possibilities than are possible with the PhD (thesis), while, like Boris, Paul (S) felt its strength to be: trying to make a difference on the ground. Both Liz and Boris chose the PhD (project) because of the shorter exegesis rather than a thesis. They perceived themselves to be poor writers: Liz struggled at school and was diagnosed with dyslexia; Boris has English as a second language.

Aside from the practical aspects of the PhD (project), three candidates perceived the difference in potential for the PhD to create more educational and symbolic capital than the EdD. Both Ben and Liz felt the PhD degree had more currency internationally, whether it was completed through a project or a thesis, and Liz felt the future of the EdD was in jeopardy, having heard of two universities where this had been disbanded. Sally felt that the EdD was a lesser degree: It’s just not really on a par with the PhD – it just doesn’t have the same significance and the coursework takes away from the research. Her habitus also seemed to be more in tune with the ‘philosophy’ aspect of the PhD: I have difficulty with the term Doctor of Education – to me it’s very clinical, whereas Doctor of Philosophy probably suits the way that I’m quite philosophical about life. Carol was particularly interested in any differential between the PhD (project) and PhD (thesis): It’ll be interesting to look at the aspect of power - theoretical versus practical…and to see whether what I’m doing is ever accredited with the same standing as the telephone-book thesis.
6.4.2 Positive and negative aspects of the program

All PhD (project) candidates felt the program had met their needs either fully or partially. For three, good supervision was cited as the main contribution to this. As with Paul (S), the ability to complete a project that was useful in their workplace was, not surprisingly, cited as a positive aspect with five of the six candidates. They were passionate about the practical aspect of their research: Carol felt her ability to explore concepts and be reflective of her Practice in ways she might not have thought about before; Liz felt the importance of developing a resource that could support the kind of teaching she was passionate about; and Peter felt the value of having reached a point where he now felt confident in discussing his research in his field. For him, it was clear that his habitus had now commanded more cultural and social capital, not necessarily in the academic field, but certainly in the field of his Practice: I had trouble with trying to find my place in that field, you know, and now I think I have it.

The ability to integrate academic research into the workplace was considered important by Boris and Sally. Boris found his research project important in terms of promoting university research in his industry: It has opened doors so I can promote the importance of university education in industry. We really need to integrate academic education into real settings in industry. However, he believed it important that academic research should not be compromised, and in seeing that the two fields are currently separate, he admits: …there are real divisions and how to achieve that is difficult, but we need to learn how to use academic education – with that rigour. Sally felt that working as an action learner provided useful professional development and it also suited her abilities: I think in TAFE we haven’t been groomed as academics in research and I think that the smaller size of the exegesis and the nature of my product suited my learning style and academic ability.

There were varied responses relating to negative aspects of the program. The oral defence of their research from the perspective of the time between submitting and presentation to the panel caused some concern: …one of the worries I have now is that I feel some of it slipping away in that, when you’re working on it, you’re thinking about it every day, and you’re totally immersed in it, and I worry that I’ll struggle for some of the references and all that. I’ll need to find some way of revising for it (Ben). Similarly, showing her perception of having developed little capital in the academic field, Liz was worried that she would forget the theory and methodology: I think I’ve trained myself not to remember that because the theory isn’t important to me, and I’m not an academic person so that whole thing about epistemology – I can’t talk about it easily. And it’s a long time since I wrote my literature review – I won’t remember it now…I don’t see myself as dumb, but I don’t see myself as academic. Sally also had much difficulty with this aspect: …I just don’t know if I’ll remember it all.
when I come to present – you know, those academic words and phrases – they’re just not me. She had found her research methodology unit very difficult, having very little ‘feel for the game’ (Bourdieu, 1980/1990, p. 63): I couldn’t understand when they talked about epistemologies, paradigms and all those different methodologies, and everyone had come from an academic background and I was the only lame-brained one there. However, demonstrating a habitus of extreme determination, she continued to attend the classes, consulted dictionaries and used a system of ‘post-it’ notes in her work to explain concepts. She passed this unit, but had since forgotten most of it: I think, well, that’s not meant for me, and I’ll keep it to my level and get out of it what I need. She did, however, wonder: …why don’t they bring it down to the levels of people like me?

The lack of a learning community was also cited as a negative by both Carol and Boris. While Carol had been under the impression that there would be clusters of students (which was initially the case for Masters by project candidates) and was somewhat disappointed to find this not to be the case, Boris felt this to be a particular issue for him because his learning style is to discuss: I feel that I work in isolation, but if I don’t talk to people, I don’t know what I know. The cross-disciplinary nature of Peter’s research had caused him some issues in that his supervisor was from the School of Education, but, although his research had an educational focus, it was firmly rooted in another discipline. While he understood that this was unavoidable and had built his social capital in that field by establishing a learning community through contacts who were able to support him to an extent, he felt meeting with his supervisor to be somewhat difficult because of a lack of deep understanding of his research.

Interestingly, candidates and supervisors differed slightly in identifying the positive and negative aspects of the PhD (project). Although none of the candidates expressed any great difficulty with their actual project in their workplace, Paul (S) felt that this aspect was potentially the most difficult and dangerous: My own line is that the by-project is more difficult because you’re dealing with real-world complexities…and there’s the conflict that they have to deal with [in workplace change as a result of the project]. And clearly there’s a risk: what happens if your workplace suddenly changes? What happens if you’re in the middle of it and you’re no longer working there? Similarly, although most candidates stated that they had mainly gained in personal development rather than workplace skills (see Section 6.3.4), Paul (S) also felt that an important benefit of this doctoral mode is to produce a more skilled practitioner: They have the ability to gather data, analyse it, make meaning out of it and use it to inform Practice. Further, the workplace was not the only consideration by Pam (S). A negative aspect for her was the difficulty her candidates had in differentiating the exegesis from the
artefact or product. However, she clearly felt that this was a minor consideration compared to the benefits: *It allows for maximum flexibility... for people to incorporate different ways of knowing so that if they want to use digital ways of knowing or artistic forms of expression, there is room for that. I feel like it's a step out of and beyond privileging of written text, which I love!*

A negative aspect of this program is also seen as the struggle for power between agents who inhabit a field, particularly as it is located within other hierarchically structured fields. Although the program is legitimised through University and School regulations, supervisors of the PhD (project) appear to lack the required social and cultural capital in negotiating changed practices and in the opinion of some supervisors of the other doctoral modes. Although some supervisors in other programs felt it was on equal footing with the other doctoral programs: *...they all have their place* (Eric, EdD, S); *All of them need to be rigorous and I believe they are* (Todd, thesis, S), others did not. Tina (thesis, S) felt it to be *too instrumental and formulaic and designed to get people a qualification without really engaging deeply and critically*. Although she had not supervised in this mode, her sentiment was echoed by Paul (project, S): *We’re treated with a great deal of suspicion.* Paul also pointed to difficulties inherent in the need for a new supervision structure: *What’s needed is to employ someone sessionally who had workplace expertise and to also have a supervisor managing a group of students. But team supervision is a kind of an anathema to the regulations; the system that is established by the regulations and the traditional way of supervising conspires against giving support.* A further point was made regarding the University’s need for candidates to publish: *Publications aren’t generally useful in project research because it’s too topical.* Clearly, one small program in one small School in one university does not have the defining cultural or symbolic capital to change the regulations.

### 6.4.3 Pedagogical issues

All but one of the PhD (project) candidates were generally satisfied with their current supervisors and felt they received constructive feedback and could discuss issues freely. Many commented on the pedagogical style of the supervisors as suiting their needs: rather than a dictatorial style, supervisors variously had a guiding, gentle or nurturing element, which was a factor in keeping some from withdrawing. For instance, from Liz: *...if he came at me like a bull at a gate...I would have been out of here. And I really think it’s...his quiet pushing all the time that has kept me at it.* She also valued his patience. Similarly, Ben stated: *I was never told what to do – it was more just a gentle guiding and that was extraordinarily powerful and if it hadn't been for that, I might well have dropped out.*

Ironically, however, the gentleness of Sally’s supervisor had created a difficulty: *...he’s nurturing and...*
gentle with me but in that gentleness I sometimes feel as though I need approval from him – I’m apologising for my writing when normally I wouldn’t have to, and I’m almost too scared to write. I have to pretend I’m writing for someone else – I have to withdraw the emotion from it. Both supervisors interviewed clearly identified this guiding element in their practice. For Pam (S): It’s really a brokering role – I’m an enabler. Similarly, Paul (S) felt: It’s not supervising in the traditional sense; it’s helping them facilitate change on the ground. On the other hand, he was disparaging about the traditional supervision practices: If you applied that practice in other education contexts, like schools, you’d be sacked for negligence [...]. There’s no accountability – once a person has latched on to a supervisor, there are all these issues of power. He points to the project-based supervisory relationship as having less disparity in amounts of cultural capital when he argues: The idea that you’re an expert in a particular field doesn’t really work with project people. However, the struggle for power in this subfield is apparent. Compounding Sally’s lack of cultural capital in this field was a strong feeling that her supervisor was guiding her in a direction she did not feel was appropriate but when she discussed this she had difficulty in understanding her supervisor’s response, feeling inadequate and powerless. Paul (S) also points to the power struggle evident in supervisory structures, which must still work within general Government and University rules: Clearly, there needs to be a change of approach towards team supervision, but this is an anathema to the regulations because they’re always asking you, in terms of performance, how many students you’re supervising and how many have succeeded.

Motivation was considered to be as important as constructive feedback by most candidates. Ben, for instance, felt that his supervisor kept the momentum going through his pedagogical style: …you know, I would go to meetings with him feeling that I just can’t cope with this any more. And during the meeting he would say ‘This is very good’, or ‘Have you thought about doing this’, and I’d come home absolutely charged and thinking ‘I can do this’. For Peter, motivation was more important than constructive feedback. Because his research was cross-disciplinary, and neither supervisor had specific knowledge in his field, he found himself having to work independently and find most of his resources without support from his supervisors. Ironically, where they did attempt to guide his research in a more overt manner, it produced problems. He understood one of his failings to be often …going down one of those garden paths that are sort of interesting but not related but felt that both supervisors were compounding this: …they’re distracting rather than focusing, because they have their theoretical interests and are both trying to integrate their stuff into my research. Although he appreciated the input, he found the roles reversed: I had to say ‘no’ to them and try to keep focused.
Because the School of Education does not have a large number of staff able to supervise PhD candidates, not all supervisors of PhD (project) candidates fully understand the nature of this degree. The extent to which they did was an important factor in the supervisory relationship of the candidates in this study. While Ben, Liz, Carol and Boris had supervisors who had an in-depth understanding of the program, the inability to fully discuss the goals and standards of the program caused some problems for Peter and Sally. Neither of Peter’s supervisors had a good understanding of this mode of study and, having tried several avenues to find support, Peter came to the conclusion that it was not clearly defined anywhere in the School. As already discussed, he had conflicting advice in terms of the exegesis, finding himself in the situation where he advised his supervisors: I told them I was writing a mini-thesis but a bit shorter, but with more of a focus on a rationale and foundation for the practical work. He hoped that would be acceptable, but felt that his supervisors were agreeing with him because they had no further knowledge. Sally felt that her major difficulties with scoping her study to fit into the exegesis word limit could have been avoided: All they had to do was explicitly tell us what they expected, and to think about this when they looked at my first review. Carol’s senior supervisor was from a different School and knew little about the program, but her second supervisor had completed his own PhD by project so she felt that between her supervisors, both the theoretical and practical integrity of her research had been addressed. However, she did have reservations about the emergent nature of Practice-based degrees and people not having their heads around it yet, particularly from the perspective of her senior supervisor not having adequate knowledge: She needed to be acculturated into what ‘by project’ means and what a focus means, rather than a question…she didn’t understand the processes or have the same communications with administration. Because it’s an emergent field and has a whole different set of assumptions that underpin it, it’s very hard.

Both Sally and Boris pointed to their perceived lack of cultural capital in doctoral studies by identifying gaps in their abilities that their supervisors were not necessarily aware of. Sally believed there should be: …much more clarity of what the supervisors expect from their students and they need to clarify exactly the depth of knowledge and skills, especially with TAFE teachers…they need to have the ability to come down to that level because we’re just not academic. She felt there was a great mismatch between this reality and supervisors’ general beliefs that they have candidates who can work independently and have the academic skills to succeed. Boris took this further, and expected more from the University in terms of providing an explicit understanding of and training for the academic skills necessary to complete a PhD. He believed that a central role of the university should be to provide an adequate basis to begin the study.
6.4.4 Assistance other than from supervisors

Other than general library support, PhD (project) candidates variously cited library workshops on EndNote, the Learning Skills Unit, NVivo workshops and the University Post-graduate Research Forum workshops as resources they had used. The four candidates who attended EndNote sessions felt they were well-taught, although Sally found them not to be helpful because she had already written a substantial part of her exegesis. She found timing to also be an issue with the NVivo workshop she attended: *I think you need time beforehand so that when you actually have done your data, you can put it into the program.* Four candidates mentioned the Learning Skills Unit workshops. However, two did not use it in their PhD studies: although Liz had difficulties with *just the whole thing of what a literature review* was, she found out about the workshops too late; Sally had attended when studying for her Masters and *learned a lot about academic writing style and referencing.* Peter believed that *the most valued workshop was one on writing from the learning unit because there was a good bibliography of references on writing and there were some practical exercises that really helped.* Although Boris found the Learning Skills Unit workshops helpful, he was unable to access as much English language assistance has he would have liked because this was only offered one evening per week. Neither Ben nor Carol found the Postgraduate Research Forum workshops to be helpful: *It was good to talk to other researchers, but I wanted something practical that you could take away with you* (Ben).

As discussed in 5.3.5 above, despite the University directive for research candidates to be informed of the Minimum Resources Policy, none of the PhD (project) candidates interviewed had any knowledge of it. Two were aware that there was an amount of funding but did not know how much, and Liz was angry that she did not know about possible conference funding: *…there were a couple of conferences that would have been useful and I’m sure it would have given me the impetus to get a paper going – you know, they keep saying that we should be writing papers, but why don’t they let us know there’s money?* Apart from the possibility of claiming funding, however, no candidate felt disadvantaged when they were shown the Policy: one worked on campus and the others spent very little time on campus, preferring to work on their own computers at home or in their workplace.

All PhD (project) candidates had support from other than University-provided support. Three candidates were able to discuss ideas and get feedback from people in their industry or technical field, which they felt was essential given that their supervisors did not have this expertise. Peter found that

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14 It is assumed here that all doctoral candidates would use the University library services to search for and borrow resources, therefore only specific workshops outside of these general activities are discussed here.
being a doctoral candidate helped to open channels of conversation: …it means I can get in touch with high profile people in the field that I couldn’t have talked to if I didn’t have a university email address. It gives you credibility in the field. Other candidates sought support from work colleagues or ‘critical friends’ who had completed or were completing PhDs. Both Carol and Boris were disappointed that there was not a learning community set up for doctoral students; however, Sally stated that, although she depended on her two ‘critical friends’ who assisted her in a cognitive and emotional way so she felt less isolated and depressed, she would not attend sessions with other doctoral candidates because it’s a time thing and it’s an age thing…there’s wide chasms between us, and they’re doing it for different reasons. Ironically, had there been an inclusive community, she would have realised that many School of Education doctoral candidates shared similar characteristics to herself, having feelings of unworthiness consistent with a perceived lack of appropriate disposition and relative amounts of capital in the field of doctoral study.

6.4.5 Personal issues

When asked what they expected to gain personally from their doctoral studies, most cited the satisfaction of completing and personal growth. Liz mixed the satisfaction of completing it with feelings of pride. She was the first in her family to attempt doctoral studies, and she saw this as an opportunity to show to myself that [she could] achieve. It was not only proof to herself, however; she had difficulties in her workplace with a male hierarchy and felt she had to prove herself: …you know, as women we have to prove ourselves just that little bit more, and so this is what it really is – it’s to show these men that we can do it and that was my initial reason for doing it. Although she had not yet completed, she felt she had achieved a considerable amount of personal growth. Sally also hoped to get a sense of personal growth from it: perhaps overcoming my fears, my ineptitudes of writing, my not being good enough when I compare myself to the younger ones; so it will be overcoming a whole range of feelings about myself. Given that only one candidate had already completed, it is not surprising that three candidates felt that they had not yet gained anything personally from their studies. Those who did all showed a change in their habitus and a development of cultural capital. For instance Ben (who had completed) felt he had a better understanding of his effect on other people and the ability to influence them and the responsibility that went with that. Boris felt more comfortable as a person because the research had allowed him to explore and understand other aspects of life. He believed: …in learning more and more, I feel that I’ve defrosted, that I’ve actually come home – very relaxed. Liz felt she could at last both formally present and informally talk to strangers without feeling as though she knew nothing.
All PhD (project) candidates felt that the doctoral process had changed their self-perception in positive ways. Ben no longer felt inadequate educationally, which was a milestone for him: *It’s bizarre – it’s revenge! I’ve laid that ghost to rest.* I got the second to top mark in my MBA but I’d done pretty poorly up until then and I still had difficulty in accepting that I could be good academically – until now! For both Peter and Liz, the process had affirmed them as learners and in their work areas. However, Liz still did not see herself as academic in any way, finding the academic language and processes very difficult: *The academic language and processes put a real spoke in the wheels of this research and although I’ve found myself to be a little brighter than I thought and had the intelligence to do a PhD, I’ll still be Dr X the prep. teacher.* Not surprisingly, Liz was the only PhD (project) candidate not to perceive of herself as a researcher.

When asked if they felt that their doctoral studies had changed others’ perceptions of them, three believed their families felt proud of them. Peter, however, felt that people other than family treated him differently, with unexpected outcomes: *It creates this sort of expectation that you know things*; he found that disconcerting so now does not tell people he is studying. Boris was clear that his studies had not changed others’ perceptions: *Other people don’t understand what it is, and it certainly doesn’t describe who I am.* He does not see any instance where he might refer to himself as ‘Doctor’.

### 6.4.6 Summary

The needs and expectations of PhD (project) candidates were largely met for most candidates. The nature of the project clearly enabled most candidates to conduct the type of practical research that they found appropriate, although supervisor relationships were not all constructive and motivating. For the candidates, an important negative aspect to emerge was the length of time between submission of the project and exegesis and the oral defence. However, it is clear that the subfield of the PhD (project) is felt to be inferior to the PhD (thesis) by both candidates and some supervisors of the latter program.

Pride seemed an important element in most PhD (project) candidates. For instance the satisfaction of having completed a doctoral degree was cited by most in terms of their personal expectations, and family pride seemed important to them. Similarly, their reflexivity in terms of recognising abilities they did not previously have provides some evidence to show that doctoral studies have developed many candidates’ habitus.
6.5 PhD (project) candidates’ notions of research and Practice

This section describes findings from candidates in the PhD (project) program in terms of their notions of research and Practice. These are summarised in Table 6.4, but more complete results can be found in Appendix 9, Matrix 2.3.

Table 6.4 Summary of PhD (project) candidates’ responses to sub-question three:
What are the differences in notions of research and Practice?

<table>
<thead>
<tr>
<th>Summarised categories</th>
<th>Peter</th>
<th>Ben</th>
<th>Sally</th>
<th>Liz</th>
<th>Carol</th>
<th>Boris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic area</td>
<td>General education</td>
<td>General education</td>
<td>VET</td>
<td>Schools</td>
<td>General education</td>
<td>Industry education</td>
</tr>
<tr>
<td>How situated within body of knowledge</td>
<td>International (but new field, so limited)</td>
<td>International (but new field, so limited)</td>
<td>Localised (VET research)</td>
<td>International (but new field, so limited)</td>
<td>Difficult to situate – highly contextualised</td>
<td></td>
</tr>
<tr>
<td>Motivation for research deg.</td>
<td>- Career</td>
<td>- Career</td>
<td>- Personal satisfaction</td>
<td>- Career</td>
<td>- Career</td>
<td>- Career</td>
</tr>
<tr>
<td></td>
<td>- Interest in topic</td>
<td>- Interest in topic</td>
<td>- Career</td>
<td>- Ability to do project</td>
<td>- Interest in topic</td>
<td>- Interest in topic</td>
</tr>
<tr>
<td></td>
<td>- Ability to do project</td>
<td>- Ability to do project</td>
<td>- Professional development</td>
<td>- Ability to do project</td>
<td>- Ability to do project</td>
<td>- Professional development</td>
</tr>
<tr>
<td>Aiming for excellence?</td>
<td>Yes, but limitations</td>
<td>Yes, but limitations</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Must research be applied?</td>
<td>Useful in some way</td>
<td>Useful in some way</td>
<td>Useful in some way</td>
<td>Essential</td>
<td>Essential</td>
<td>Essential</td>
</tr>
<tr>
<td>Relationship of research to an applied field</td>
<td>No workplace – Plans to use research</td>
<td>In specific workplace</td>
<td>In specific workplace</td>
<td>In specific workplace</td>
<td>In specific workplace</td>
<td>In specific workplace</td>
</tr>
<tr>
<td>Knowledge to be used in your workplace?</td>
<td>Would be specifically useful (skilled practitioner)</td>
<td>Yes, in general way (skilled practitioner)</td>
<td>Yes, in general way (useful resource)</td>
<td>Yes, in specific way (useful resource)</td>
<td>Yes, in specific way (skilled practitioner)</td>
<td></td>
</tr>
<tr>
<td>Any issues?</td>
<td>Potential intellectual property</td>
<td>No</td>
<td>No</td>
<td>Potential intellectual property</td>
<td>Potential intellectual property</td>
<td></td>
</tr>
</tbody>
</table>

6.5.1 Research topics and their location within current knowledge

Of the PhD (project) candidates interviewed, only two were researching topics that dealt with a specific education environment, the others having a wider application for educational concepts. Three were related to on-line development, and one in particular seemed to have more to do with sociology.
than education\textsuperscript{15}. However, when its relevance to education was discussed, a deeper level was evident that involved insights and understanding of experiential learning and adult learning environments.

Another topic had the aim of improving the quality of workplace education and managing change, being able to: assist senior managers in industry to become good researchers and help their people to learn how to learn. All but two of the candidates’ topics were broadly based within international research. Of these, the three candidates whose topics were set within an on-line learning context found a limited knowledge base, reflecting the newness of this field. However, the other candidate, Liz, somewhat paradoxically showed concern that although she was creating new links with her research, the area of the arts had nothing new to offer: \ldots if it was a technological thing, I could understand that there would be new things, but I think the arts are so old. Boris had difficulty relating his research to other knowledge because his study was highly contextualised to the workplace: It’s dealing with real issues that have emerged recently and the literature doesn’t deal with these… even recent research that might have been useful is out of date and out of touch. There is an important issue here in terms of merging two incompatible fields. There is still the academic understanding that research does not exist in a vacuum and must be legitimated by situating it within a relevant body of knowledge, but in Boris’s case, there was very little academic research that was relevant: You know, this academic stuff – it’s hard to apply in Practice. It’s all good in books but how do I put it into Practice?

\textbf{6.5.2 Motivation for and purpose of research}

Multiple factors motivated candidates to enrol in their doctoral studies. All candidates were motivated by improved career prospects, and interestingly all but one cited that the availability of the project mode was also a key factor in either their decision to enrol in a PhD, continuing with doctoral study, or their ability to research their chosen topic. An intrinsic interest in the topic of the research was also a key factor in five candidates, gaining professional development (that is, aiming to improve performance in their current workplace) a factor in three, and two candidates cited personal satisfaction.

Career mobility was a key motivation for most. Peter, for instance was hoping to move to a corporate environment. Having spent the last ten years studying, he felt that his doctoral studies would balance out the limited part-time employment listed on his CV and that a PhD with a clear practical application would give him an edge in his employment area. Conversely, Ben had spent many years

\textsuperscript{15} The reader is reminded that for confidentiality, very little detail is given of topics or other information that could identify respondents.
in the corporate world and hoped his PhD would allow him to move to employment as an academic. He had no illusions that this would be easy, however: *The environment is full of academics of my age who’ve done this all their lives so…I mean I’ve got a PhD – so what! Everyone else has got one too.* Sally also hoped her PhD would give her the possibility to move to a new field, although her motivation also came from personal satisfaction: *For me it’s self-achievement…it’s not about external awards; it’s about something for me, and where it leads…I see myself doing more community services using what I’ve achieved and getting the satisfaction of working in that field – I think it will open doors for me. Similarly, a feeling that *there’s probably career pathways within the on-line learning area*, as well as personal satisfaction, motivated Carol to begin a PhD, but it was more her interest and belief in her research: *…offering successful and equitable education in an on-line environment.* Rather than the corporate or academic worlds, Boris aimed to use his PhD in industry to develop training programs in order to create *a society of competent learners – people who can learn and change direction depending on their aims.* For the other two candidates, opening doors was also a possibility but not the prime motivation. Working with male leaders in an education bureaucracy led to Liz’s initial motivation. Although she already had higher qualifications than they did, she felt that in the workplace she was *still a little woman.* She believed, as a woman, that she had to prove herself *to show these men that we can do it.*

The project aspect of the PhD program was important to candidates in different ways, and in all cases their particular type of research would have been difficult or impossible to achieve in either of the other doctoral programs because of the artefacts and practical elements produced. Four specifically chose RMIT because of the possibility of project-based research. Peter had converted from a Masters by project in another school at RMIT and both he, Ben and Boris identified the project as important because they wanted to have practical, concrete outcomes. Boris decided on the PhD (project) at RMIT following extensive research and discussion with academics at a variety of universities and after discussion with a senior academic in this program he felt: *This is really me. This is exactly what I want.* It was the chance suggestion from a senior academic at Carol’s place of employment that the work she does could be turned into further study that appealed to her and led to her enrolment in the PhD (project).

Although Sally began her doctoral studies in the EdD program (at that time only the PhD (thesis) and the EdD were available), she found the EdD to be too clinical and not to have the same significance as the PhD. Had the PhD (project) not come into existence, she would have changed to a PhD (thesis), but she would not have been able to complete her current study: *I would have had to change it completely and now the motivating aspect of me to continue is that it is a real program and action*.
learning in the PhD by Project promotes that. However, changing to the PhD (project) was not easy. She had originally planned to use naturalistic enquiry and found the action research process problematic, made all the more difficult because her copious data led to her latest senior supervisor’s suggestion to convert to quantitative analysis, with which she had no experience. Compounding that, to keep her exegesis under 40,000 words, she had to ignore much of her data. At that time, she believed it would have been better to convert to a PhD (thesis) and use all of her data, but her supervisor rejected this and, showing the unequal balance of cultural capital in the relationship, she found it difficult to disagree with him: *I got to a stage where I didn’t know what to do, and you have to trust somebody.* Similarly, Liz began her doctoral studies through a PhD (thesis) because the PhD (project) was not yet offered. Her supervisor suggested that she change to the PhD (project) because: *I kept saying I want to finish up with something concrete – a resource that I could give to a class-room teacher.* Interestingly, although she has worked as a school principal and more recently in senior education administration, she still thought of herself as a primary teacher because that’s what she loves, and therefore: *...a lot of my thinking is that practical act of hands-on thinking; the theory’s just...you have to do it but it’s just part of the project.*

### 6.5.3 Candidates’ practice as researchers

All candidates except one were still aiming for excellence in their studies. Boris, for instance, felt that a substandard PhD would be no value to him and consequently no value to beneficiaries of the research. As a further personal consideration, he felt that doing his best was difficult, *and if you have a family, you’re making sacrifices, so I’m not doing a PhD that means nothing to me.*

Two candidates placed limitations on doing their best. For example, Peter pointed to the fluctuating nature of this aspect of doctoral study: *At the beginning you want to change the world and you want everybody to refer to it; then there’s a bit of depression where you realise you won’t be changing the world, but you might make a significant impact on things; after that, you sort of think you’re not going to change anything and the depression sets in again.* He admits to being a perfectionist, but qualifies it by saying: *it’s not going to be the very best, because you have to take it down a notch to get within the time frame.* Similar limitations to doing one’s best, despite attempting this, were voiced by Sally. Initially she was *supremely optimistic,* and the intent was still to do very well, but she believed that a lack of time, too many family commitments and a lack of passion for her topic would produce a less than perfect PhD.

Liz was no longer aiming for this in her doctoral studies. Although she was passionate about her study area, she makes a distinction between the usefulness of her product and the overall degree of
excellence in the doctoral degree and was no longer aiming for excellence: I’m just aiming to get through – for me it’s never been about writing the perfect PhD – it’s about how the study will help teachers and children.

6.5.4 Relationship of doctoral research to an applied field

Not surprisingly, all PhD (project) candidates believed that it was either essential for any research they undertook to be applied or for it at least to be useful in some way. Further, the research projects of all but one were located in their workplace; however, even Peter, who did not have a current workplace related to his research, felt that it helps to have or imagine some sort of workplace situation. Both Liz and Carol pointed to some difficulties in applied research, particularly that which is done in their workplace. The former, for instance, believed that it had created confusion: I try to put myself in boxes: this is my research and this is what I’m doing in the schools. And sometimes they just intermesh and I get absolutely frustrated, confused and just have to stop. Somewhat different issues of identity were experienced by Carol: she was grappling with the power relationships involved in the pursuit of knowledge from the theoretical basis versus the pursuit of knowledge from the practical basis, and while she felt that those in academia would see the former as the only appropriate knowledge base from their perspective, she saw the workplace as fundamental and that all power relations and politics were bound up with this. She felt compromised because this issue also formed the basis of her actual research project.

Four of the six candidates believed new knowledge from their research was specifically useful in their workplaces. Peter, for instance had no doubt that he would use it in future workplaces through honing his skills and understandings in his area. Similarly, Carol plans to use her research knowledge, and Boris is already using his research knowledge in their respective workplaces. They both felt they will, or have already, become more skilled practitioners as a result of their research. For instance, Carol plans to use her knowledge to ensure equity of access to education for her students, while Boris believes that as he has become a better practitioner, others will benefit from it. The two candidates who believed their research to be useful only in a general way did so because their workplace either does not now exist (Ben) or were not planning to stay (Sally). Further, Sally’s early action research had been accomplished and put into practice but she had to adapt her project to something that was more generic (an advice kit for teachers) which she hoped to be a useful resource. Producing a useful resource was also important to Liz: I’m hoping I’ll finish up with a resource – something I can hand to a classroom teacher and say ‘This should help you...’ In her case, two workplaces are likely to
benefit from this: school environments under her jurisdiction and a university in which she works part-time in teacher education.

Three candidates pointed to some issues with intellectual property in practitioner research. For instance, the research that Peter was doing came to be valued at his part-time workplace, which caused him to ask himself: *Do I give people part of my thesis before I submit it? There’s a copyright issue, like, you’re making your work less valuable, but there’s also the higher goal of helping research by giving access to your work.* A different issue faced Carol, related to her research being part of her work practice: *As a worker within a university, written into our contracts is that any intellectual property is the property of the University, [but] I, as a researcher-practitioner, will have my own intellectual property that the University can’t own.* Although Boris has thought about this as a potential issue, he has now discounted it: *It won’t affect me – I’ll be happy to give it to RMIT and say ‘It’s your intellectual property’ if necessary.* However, he was worried about one incident: *The product I developed for the research, I used it in a company and there was a danger that intellectual property could be disputed and I was very cautious.* To ensure there were no issues, he asked the industry manager to sign a letter acknowledging that ownership of the research belonged to Boris.

### 6.5.5 Summary

Because the PhD (project) is a Practice-based research program, it was no surprise to find that the key factor in this analysis was the strong relationship of their research to their particular Practice. The research of all but one candidate appeared to involve Mode 2 knowledge, given that it was completed in their respective workplaces and most believed their research would be specifically useful in this workplace. Furthermore, all candidates cited improved career opportunities as a motivation, with all but one citing this as their key motivation. Ability to complete their research through a project in their workplace was also a motivating factor for all candidates. Interestingly, although the two candidates in full-time employment saw themselves as employees, most perceived themselves to be researchers.

Given this close connection to their workplaces, it was also expected that the embedded and specific nature of their research might produce difficulties in locating it within a body of existing knowledge, and this indeed was the case with five of the six candidates. However, perhaps ironically given these difficulties, in keeping with the general belief within the discipline of education, all candidates believed knowledge to be constructed.
6.6 Concluding comments

Although there were few consistencies in their norms and practices, PhD (project) candidates generally had a positive experience, with their needs and expectations largely met. As expected, there was a strong relationship of their research to their particular Practice, both in terms of its usefulness to Practice and in being specifically located within their Practice. This close connection was also instrumental in providing the initial motivation for enrolment and for sustaining candidates throughout their project. It also, however, produced some difficulties in locating their research within a body of existing knowledge, a practice generally deemed important in a doctoral degree.

Some negative aspects of the program were cited, however. These included the time between submission of the project and exegesis and presenting the oral defence, and, as with the other doctoral programs, time constraints on the largely female, part-time candidates who had many competing demands on their lives. However, there were some significant time advantages if the research was carried out in the candidate’s workplace. A further negative aspect is the lack of status generated from those outside the program (both supervisors and candidates) who felt the PhD (project) to be inferior to the PhD (thesis). This is clearly an issue that the School must resolve.

Other negative themes to emerge were the tensions stemming from a program that was both new and innovative. As an emerging subfield, not all staff in the School understand its structure, aims and possibilities, including some who are currently supervising PhD (project) candidates. On a broader plane, showing that the degree is still a site of struggle, there are tensions seen in identifying examiners who are sympathetic to the program; it is the examiners who ultimately have the defining capital and determine the boundaries. Further, while it is clear that the traditional supervisory practices are not necessarily the most appropriate for PhD (project) candidates, there are difficulties in constructing new fields hierarchically situated within broader fields, particularly while a more traditional subfield exists. There is a decided irony in this, given the Government call for more work-based research in universities.
Chapter 7

Case Study Three: The EdD Program

7.1  Introduction

The purpose of this chapter is to develop a comprehensive understanding of candidates’ experiences in the Doctor of Education (EdD) program. Transcript data from the semi-structured interviews of candidates are described and analysed, augmented by data from supervisors in this program. The chapter begins with a description of the field of EdD in the School of Education, and a description of the candidates who were part of this study. Justification for retaining this chapter is then discussed to the research relating to the EdD program is then discussed, followed by discussion guided by the key elements from the first three research sub-questions (see Section 5.1).

7.2  Contextualising the field and candidates of the EdD program

The EdD program has a short history in RMIT’s School of Education. In line with Government calls for more work-based research (see Chapter Two), Faculties or Schools of Education in many Australian universities established Doctor of Education programs. RMIT introduced the EdD in 1997, first offered as a coursework doctorate and then, in 1999, as a research higher degree under the Australian Government Department of Education, Science and Training’s classification of at least two thirds of the program consisting of research. The EdD program was rested in 2006 because of insufficient candidates. The candidates interviewed for the present study were among the last to complete the program.

As a research program, the EdD included four semester-long units of coursework and a thesis, the length of which was not to exceed 60,000 words (RMIT, 2007c). It was a professional doctorate, aimed at practitioners seeking advancement and development as professionals within the education area. As with the PhD (thesis) and PhD (project), a research methodology unit was compulsory unless already completed, and this usually formed one of the three units of coursework. Candidates were also to produce a written and oral proposal of their research (their ‘first review’) which was appraised by two academics from the School and if successful served as confirmation of candidature. The
research component was very like that of the PhD (thesis), other than the shorter length and the generally stronger alliance with the professional needs and aims of the candidate. The program initially set out to ensure all coursework units would be highly relevant to the candidates’ research and thesis. However, because this program had failed to attract candidates over the past few years, the coursework units became increasingly limited, with many candidates enrolled in the program’s final years finding themselves enrolled in units that were neither interesting to them nor relevant to their research.

As a program in demise that had a major negative impact on the candidates, justification is needed for the continued inclusion of the EdD program in this study. The coursework units are a key difference between the other doctoral programs in the School and would have produced a major focus in the comparison analysis had this research been completed at an earlier time. However, the negative focus on the coursework element was not an issue discussed by candidates throughout their responses. Of the four conceptual groupings of questions relating to the first research sub-question (the norms and practices), coursework was discussed in three, but only negatively in two. Of the five conceptual groupings of questions relating to the second research sub-question (the needs and expectations), it was discussed in two, but only negatively in one. Coursework was not discussed at all in the section on notions of research and Practice. The fact, therefore, that there are responses to many questions that do not relate to coursework or that have a positive focus on coursework, provides justification for retaining data on the EdD program in this research. Where there is discussion related to these negative aspects, the reader will be reminded of the limitations. There is, however, a cautionary note to this: the researcher is aware of the potential psychological impact on candidates who felt particularly strongly about their negative experiences. In understanding that this may have produced biased views of other aspects of their doctoral studies in their interviews, the researcher let the data speak for itself as much as possible.

A further reason for maintaining the EdD program in this study is the rare ability to look specifically at candidates’ experiences in programs in demise and those in developing programs. Some of the issues discussed in Chapter Six are specific to the developing nature of the PhD (project), just as some issues in the present chapter identify issues specific to programs drawing to an end. This is therefore a valuable by-product of the cross-case analysis (Chapter Eight) where these subfields are seen within the context of the broader field of doctoral study in the School.
The position of the field of EdD study in relation to the field of power (Bourdieu & Wacquant, 1992b) is very similar to that with the PhD (project). The field of power involves the same hierarchy: at the top is the Australian Government’s policies that dictate, among many other regulations, university research funding structures and maximum length of candidature, and more recently, the type of research it expects from universities. Within this, the University has its regulations and also the School. The second level of field analysis involves understanding the sometimes competing subfields of the three doctoral programs and within the EdD in particular, the agents competing for position in terms of the amounts and types of capital they bring to the field. As with the PhD (thesis), these include the candidates, supervisors, and the research office and research coordinator. There is also the potential for the candidates’ workplace to enter this field (as is often the case with the PhD by project). The third level of analysis is the habitus of these agents, and in the present study, as with the PhD program, these are restricted predominantly to the candidates and to a lesser extent, the supervisors who were interviewed. The remainder of this case study involves second and third levels of analysis; there is further discussion of the first level in the cross-case analysis in Chapter Eight.

While all five EdD candidates had prior Masters degrees, only one had completed a Masters by research, the others having experienced either a minimum of research experience or none. Two candidates had gone virtually straight from completion of their Masters degree into the EdD, but for the others it had been at least six years since their previous university study. There is therefore an expectation that the candidates will bring varying amounts of cultural capital to the field at the beginning of their study, particularly understanding that the process, pedagogy and outcomes of a research degree are markedly different to that of coursework. Because candidates were close to the completion of their doctoral degree there is a further assumption that this will have developed, to the degree that their habitus has either enabled or constrained this.

Despite a variety of motivations for their candidature in this degree, Alison could be considered to be a mid-career researcher and Tim, Lyn and Jennie late career researchers. Ronald was semi-retired. All were studying part-time and all except Ronald working full-time. Further demographic and contextual data of the PhD (thesis) candidates are seen in Table 7.1. The pseudonyms for supervisors interviewed for this program are Emily and Eric.
### Table 7.1 Demographic and contextual data of EdD candidates

<table>
<thead>
<tr>
<th></th>
<th>Alison</th>
<th>Tim</th>
<th>Lyn</th>
<th>Jennie</th>
<th>Ronald</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male/Female</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Age group</td>
<td>45-50</td>
<td>50-54</td>
<td>50-54</td>
<td>55-59</td>
<td>64-69</td>
</tr>
<tr>
<td>Studying:</td>
<td>Part-time</td>
<td>Part-time</td>
<td>Part-time</td>
<td>Part-time</td>
<td>Part-time</td>
</tr>
<tr>
<td>Working:</td>
<td>Full-time</td>
<td>Full-time</td>
<td>Full-time</td>
<td>Full-time</td>
<td>Part-time</td>
</tr>
<tr>
<td>Occupation (current or usual)</td>
<td>Lecturer</td>
<td>Manager</td>
<td>Training manager</td>
<td>Lecturer</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Prior Masters?</td>
<td>Yes (C)</td>
<td>Yes (C)</td>
<td>Yes (C)</td>
<td>Yes (C)</td>
<td>Yes (R)</td>
</tr>
<tr>
<td>Date of most recent academic qualification</td>
<td>1990</td>
<td>2000</td>
<td>2001</td>
<td>1994</td>
<td>1994</td>
</tr>
<tr>
<td>Funded research place?</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Changed 1st supervisor?</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Has 2nd supervisor?</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

### 7.3 The norms and practices of candidates in the EdD program

As in the previous two chapters, the section has been divided into the conceptual groupings of the candidates’ cultural relationship to the academic field, their experience of the culture of learning and research, general program and learning experiences, organising time between study and other aspects of their lives, and issues relating to their thesis. These are summarised in Table 7.2 below, but more complete data can be found in Appendix 9, Matrix 3.1.
Table 7.2  Summary of EdD candidates’ responses to sub-question one:
How do the norms and practices of candidates differ?

<table>
<thead>
<tr>
<th>Summarised categories</th>
<th>Alison</th>
<th>Tim</th>
<th>Lyn</th>
<th>Jennie</th>
<th>Ronald</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural relationship to academic field</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Learning community?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Often on campus for EdD?</td>
<td>Very seldom</td>
<td>Research merged with work – difficult to say</td>
<td>Almost never</td>
<td>One hour per fortnight</td>
<td>6 hours per week</td>
</tr>
<tr>
<td>General experiences</td>
<td>Mixed - Lack of information - Useful research</td>
<td>Negative - Lack of School leadership</td>
<td>Negative - No direction or structure</td>
<td>Negative - No time to reflect &amp; learn - Treated poorly as a student</td>
<td>Mixed - Good supervision - Program disjointed</td>
</tr>
<tr>
<td>Felt like dropping out?</td>
<td>No (Already completed coursework)</td>
<td>No (Already completed coursework)</td>
<td>Yes (but kept going because of belief she can do it if others can)</td>
<td>No (Already completed coursework)</td>
<td>Yes (but kept going because of commitment and wife’s encouragement)</td>
</tr>
<tr>
<td>General learning</td>
<td>- Research knowledge - Knowledge of research topic</td>
<td>- Professional development - Knowledge of research topic</td>
<td>- Patience - Topics in coursework units</td>
<td>- Knowledge of research topic - Nothing from coursework units</td>
<td>- Knowledge of research topic</td>
</tr>
<tr>
<td>Independent learning important?</td>
<td>Yes, and no problems</td>
<td>Yes, and no problems</td>
<td>Yes, but has problems</td>
<td>Yes, but has problems</td>
<td>Yes, but has problems</td>
</tr>
<tr>
<td>Workload / Managing time</td>
<td>Very difficult (Worked full-time)</td>
<td>Some difficulties (Worked full-time)</td>
<td>Very difficult (Worked full-time)</td>
<td>Very difficult (Worked full-time)</td>
<td>Some problems (worked part-time)</td>
</tr>
<tr>
<td>Thesis issues</td>
<td>None</td>
<td>Structure</td>
<td>None</td>
<td>Some sections</td>
<td>Written expression</td>
</tr>
</tbody>
</table>

7.3.1 Cultural relationship to the academic field

Two EdD candidates could be considered to have a high cultural relationship to the academic field. Ronald had completed a Masters by research (although he did not have a Bachelor degree), had produced three refereed papers, was working on research in an academic work environment and was currently supervising Masters candidates. Although he was not conscious of being influenced or encouraged by his family to attend university, he had clearly developed the disposition and required amount of cultural capital to work successfully in an academic environment. Jennie, on the other hand, was very conscious of being influenced or encouraged by her family to have a university education. When she had finished school, her sisters were already studying for their Masters, and with a step-mother who had also attended university, she strongly felt the encouragement of her family. However, she was more influenced firstly by the nuns with whom she grew up and who had prepared her for a teaching career, and secondly by a former matron who had encouraged her to study nursing.
Despite ambivalence about her professional career (she later became a teacher), she had no doubt of the influence of these people: …and so I was always going to go…even at home with my step-mother, it was always like I would go to university. Jennie also has presented a paper at an international conference and has a refereed journal article published on an aspect of her EdD study.

Lyn, however, must be considered to have a limited amount of cultural capital for use in an academic field, particularly in the research field. She did not have a Bachelor degree, but many years after completing a minor TAFE qualification, went into a coursework Masters. Although she succeeded in this and in the coursework units for her EdD, she felt under-prepared for research: I have no idea about it – I’m a real novice in the area. She was the first in her family to have gone to university and although her husband and children are proud of her achievements, her parents were bemused: They just don’t understand why I would want to go to uni. I’ve got a good job and they think that should be enough. She felt that getting something published was one of those mysteries and she wouldn’t know how to start.

Both Alison and Tim show some cultural relationship to the academic field. They both work in an academic field, but the data show an ambivalence and a lack of comfort. Although Alison did not attribute any encouragement to attend university from her family, it seems a reasonable assumption that she was influenced through her family members’ habitus. Educational and cultural capital is clearly important in her family, given that, at a time in the past when it was not the norm to attend secondary school her father had gone to a private school and matriculated and her mother stayed until Year Ten. Her father and his brother went to university, as did Alison’s two brothers who had both completed postgraduate studies. She still felt uncomfortable in an academic environment, however: I don’t particularly feel that I belong either at the job or doing the degree. Similarly, despite his sister having attended university, Tim did not believe this was particularly encouraged through his family. In fact, as with Lyn, he also has a Masters degree by coursework but no undergraduate degree. Although he had presented a paper at a national conference, it was not refereed and he acknowledged that publishing in the TAFE sector has not been the thing.

### 7.3.2 Experience of a learning community

Although all but one of the EdD candidates believed that a culture of learning and research existed (in part because they had attended School research seminars), none of these felt part of it. Ronald was the only candidate to feel supported by such a culture, but interestingly, he both lectured in and was supervised through a different RMIT School and it was clearly the research culture of the School he
worked for that was responsible for much of his comfort: *working here, you’d talk to people who did research and there was not much need for contact with the School of Education.*

Ronald did, however, feel a learning community to have existed throughout his coursework units, and although he began meeting regularly with other candidates from the same units, as the pressures of research had taken over, this ceased. He also felt more of a sense of belonging to the School of Education at that time because he was exposed to other lecturers from the School. This positive aspect was echoed by a supervisor: *They were more connected into a culture…[and] the students shared their experiences within the School and therefore built links and bridges for others* (Eric, S).

Although not all candidates felt their coursework to be useful, most at least felt somewhat supported because of their ability to communicate and discuss issues in regular classes. Jennie, for instance, did feel part of a community in some coursework units: *We used to have meetings, we used to talk a lot more and I used to feel valued as a student at this level and my ideas were listened to and feedback was given, and all in a collegial way.* However in the last two or three years she has had little contact with the university and no contact with other students.

All candidates felt that the School should provide more informal discussion opportunities. For instance, Lyn pointed to the loneliness that could largely have been avoided had there been a learning community: *It’s been a very lonely trek through the Antarctic as far as I can see.* The only link she had with any research culture were emails advising her of the University’s Postgraduate Research Forum seminars, which she could not attend: *They’re all on from 2.00 – 4.00 on a weekday and I work full-time – what use is that?* This made her particularly angry because she perceived herself as: *a raw beginner in the area, and haven’t come up through the ranks in the university…and being a mature age student…I always just feel that I don’t belong.* Although she held a very senior public service position, it was clear that in the field of postgraduate research she lacked the required cultural and social capital to be an equal player. Both Alison and Tim saw the irony of the lack of a learning community in a School of Education: *Like, there’s no student lounge in the City campus for the School – at least I don’t know of one…and I can’t imagine a school like Education [strongly emphasised], for God’s sake…that shouldn’t be too hard to set up a learning structure* (Alison).

Similarly, Tim argued: *…there’s no structure in place to support this learning or to support this sustaining of my knowledge or to coach each other…and there’s no leadership driving it, and it’s a School of Education.* Alison offered further comment: she believed two problems that the School might have in setting up such discussion opportunities were that there was not a critical mass of research students and that *the geography of the situation [was] a disaster.* By this, she meant that the
Bundoora campus\textsuperscript{16} was too isolated – \textit{you get the impression that everyone’s running in the door and running out the door and no-one wants to be there and that staff are scattered everywhere.}

\subsection*{7.3.3 General program experiences}

No EdD candidate had wholly positive experiences of their program, and many of the negative experiences were clearly the result of a program in demise. Although Ronald had positive experiences with the research component of the program, he felt that the program itself was disjointed: \textit{It went through the first bit and then the whole thing seemed to come to a shuddering halt for about eighteen months…they couldn’t find teachers for the electives, and it was quite frustrating and difficult.} Similarly, Tim had difficulties with the organisation of coursework: \textit{I don’t think I could call it flash, and I’d say that it suffered from lack of leadership.} Lyn also felt there was neither direction nor structure and that the entire EdD cohort had been forgotten: \textit{I don’t understand the structure; I don’t have any paper that tells me any of this.} Although this seems to show a surprising lack of initiative given obvious copious amounts of cultural and social capital in her very high-ranking public sector position, she is aware that this counts for very little in the academic field: \textit{I tried so hard and often to talk to someone and I always felt like a nuisance – If I did find someone who would help, I just didn’t understand what they were saying.} No-one had told her, or other EdD candidates that she had kept in touch with, that the program was being ‘rested’: \textit{…like, there’s been no official communication…} I feel that they’ll be glad when we’re gone – \textit{when they get us off their books – we’re just too hard for them to deal with.} The lack of information also caused problems for Alison. She was not told what the ‘first review’ process involved and became agitated when people she had had never seen or heard before began to make critical remarks. Even when she realised the purpose of the process she \textit{resented this sort of blow in, make comments and blow out again attitude.}

Although only one candidate had taken leave of absence, two had thought seriously about withdrawing from candidature. It seemed that appropriate elements of their habitus kept both in the program: for Lyn, \textit{sheer tenacity} had kept her in the program, whereas it was a natural sense of commitment and encouragement from his wife that prevented Ronald from withdrawing. The other candidates had not contemplated giving up their studies because they had already completed the coursework and, as Jennie said, \textit{the coursework was such a disaster and to finally have done it…you just can’t walk away from it because it would mean all the tears and frustration of the program were for nothing.}

\footnotesize\textsuperscript{16} The higher education component of the School of Education is mainly located at Bundoora, a suburb 18 kilometres from City campus, although some supervisors have offices at the City campus.
7.3.4 Learning and the development of skills

Although four of the five EdD candidates felt they had learned a significant amount of knowledge from their research topics, most felt little learning had taken place from the coursework units (although the reader is reminded of the limitation to this, mentioned in Section 7.2). Along with knowledge of research topic, Alison also felt she had learned much about case study knowledge and Tim felt this was his *apprenticeship* in terms of changing the way he works with his postgraduate students, *showing them the tricks of the trade that [he] learned along the way, and they feel more confident as a result*. Both Alison and Jennie were very critical of the coursework units. They found themselves studying courses that were neither relevant nor interesting, and one unit that Jennie had enrolled in was not even taught: *I was just told to buy a book and write about it*. She was also bitter about her research experience: *I don’t feel like a doctoral student and I’m not being treated like one, and not being able to learn from the doctoral experience makes me very sad*. Lyn was the only person to have found the coursework units useful, but felt that the research component had taught her only frustration and the importance of patience.

Apart from some basic research skills that three candidates came to the program with, generic skills and attitudes were rated highly as being useful. Jennie felt that perseverance and passion were more important than practical skills because while the latter were able to be learned, it would all come to nothing unless the affective domain was satisfied. Others, such as Lyn and Tim were more practical in their orientation: Tim found his excellent organisational skills were essential, while for Lyn it was her quick typing and computer skills. There was similar variation between research and practical skills in terms of what they had developed. Lyn, however, not only believed she had learned no skills through the doctoral process, as evidence that capital appropriate for one field does not necessarily transfer to another, she felt that even had she developed skills they were not likely to be useful in her public sector workplace, especially writing skills: *…it alienates corporate business writing to a degree. They don’t want the waffle – it all comes back to a very business case presentation: dot points, recommendations, approved, not approved*. She still managed to keep her humour, however: *So really, it’s just personal satisfaction at this stage, except I’m not getting any [laughs]*. All other candidates believed the skills they had developed or enhanced would be useful either in the workplace or in future research.

As with candidates in the other two programs, the issue of independent learning posed problems for some EdD candidates. Lyn and Jennie identified their natural learning styles as requiring conversation
and feedback, and while this aspect of their habitus may be positive with an adequate supervisor relationship, both had dysfunctional relationships with their supervisors (see Section 7.4.3). They both thought they would be part of a learning community, which Jennie believed would give you that feedback that you need. Lyn was clear about where she saw independent learning: …it was not what I signed up for. I really wanted to be part of the family – part of the institution, you know. Similarly, Ronald pointed to the reciprocal duties of his supervisor and himself as sometimes being in conflict: He expected me to be independent, but I expected him to give me direction, but with discussion this issue was resolved.

7.3.5 Workload issues

Despite difficulties with finding relevant units, most EdD candidates found the shorter time-lines of the coursework units a little easier to fit into their lives: I loved the challenge; I loved the chase; I loved the completion; I loved the satisfaction of getting it done – and you don’t get any of that when you’re doing research – maybe at the end, but I haven’t got there yet (Lyn). However, when it came to the research component, despite all research being based on the candidates’ workplaces, all experienced some degree of difficulty with their workload.

As expected, the only candidate in part-time work, Ronald, reported no problems in getting the research component completed, although he found the coursework units particularly challenging because he was then working full-time. All others worked full-time and became increasingly worried as the end of their candidature loomed. Alison, Lyn and Jennie cited particular issues with their time divided between work and family pressures and all have tried to work around this by using annual and long service leave. As a lecturer, Alison was entitled to keep one day per week for research but in reality, this evolved into: putting on a load of washing, dealing with phone calls and work emails, you know, teaching duties tend to erode that time. Jennie felt that being pushed to finish did not give her the time to reflect and learn and that, paradoxically, although she was writing about the importance of learning styles, she felt that she was being treated badly because she was not given credit for her own learning style. Jennie had also just accepted a position at another workplace and she had begun to panic as she realised her difficulties: I don’t know what I’ll do – the new job’s going to be traumatic and I can’t take any annual leave now for a year and I may not be able to finish this. People are chasing after me and following me…and I’m sick of all this. And I don’t know what difference it’ll make working with different types of students from those in the data.
There was some variation in the degree to which candidates’ research was integrated into their workplace, and those who gathered their data during their work time, such as Tim and Jennie, found that this reduced their workload issues at that time. With others, although their research was located generally in their workplace, work on their research was not part of their actual workload. No candidate was in a position where the analysis and writing up of the research could be completed during work time, so there were still problems.

### 7.3.6 The thesis

The EdD candidates had a clear understanding of the ‘rules of the game’ when it came to writing their theses with all having either a traditional\(^\text{17}\) or close to traditional structure. Most felt the importance of keeping to a reasonably traditional structure in order to minimise problems with the examiner. However, although Tim’s thesis had a semi-traditional structure, he pointed to the evolutionary nature of the process. He argued that: *there is no template, and there should be no template*, but he also felt that supervisors should be discussing some alternatives: *They should be showing their students a range of exemplars – if you’re doing qualitative stuff, here’s some – if you’re doing quantitative stuff, here’s some others*, and further, that candidates should be asked to read and report on a variety of theses as part of their research methodology course.

Two candidates cited no issues with their thesis and both saw the benefit in using other theses as potential models, both in terms of selecting an appropriate structure and perusing the content of sections such as the introduction. Lyn, for instance, found the Australasian Digital Thesis\(^\text{18}\) program very useful in terms of *having all these theses right at your fingertips – it’s like networking the easy way* which, in a way, could be seen as building social capital in this field. All other candidates had some difficulties in writing their thesis. In the case of Tim and Jennie, there were issues either caused by, or not solved by, their respective supervisors. For example, Jennie had difficulty in both her methodology and data chapters and because of a lack of contact with her supervisor, had written these with neither assistance nor feedback. Although Tim understood that a ‘pecking order’ in his research questions necessitated different lengths of each of the data chapters, his original senior supervisor insisted that it be moulded *to suit the conventions*, and although he later capitulated, it caused the candidate some anxiety. He also had some difficulty with his review of the literature, finally deciding that it was best interspersed throughout the appropriate chapters. Because he had to resubmit his

\(^{17}\) For a definition of a ‘traditional’ thesis please see p. 99.

\(^{18}\) The Australasian Digital Thesis program is an on-line database of digital theses of postgraduate research students at Australian and New Zealand universities.
thesis, a further issue was the need to restructure and cull much material, but some robust advice from the second supervisor (here, he meant a new senior supervisor) assisted him with this. Ronald pointed to quite different issues. Apart from minor arguments with his supervisor about expression, he also found it difficult to ensure ethical integrity by maintaining anonymity: ...if you take big American companies – it doesn’t matter if you call it the Acme company – anybody who works in the industry can sort of read the description and know who it is.

Most EdD candidates were realistic about who is likely to read their theses. Although Tim and Jennie thought that the stakeholders for their research might read it, particularly when it was up-loaded onto the on-line Australasian Digital Thesis (ADT) program, Tim believed that it was not a standout piece of research that’s going to set the world on fire. He also understood that the academic language and jargon was likely to be at odds with some of his potential audience: The theory and all that...it needs to have other media-type releases to convey the meaning – to explain it in more layman’s terms. Lyn had similar worries: My supervisor wants me to put more of an academic slant on it to get it through...whereas the people who would be reading it – people in the corporate world and the public sector - won’t want that. They’ll be looking for some tangibles out of it. She felt the best way to distribute her research was to present her findings through publications in the many public sector forums around the country. Although Alison held a slight possibility that her thesis might be read by some of the stakeholders, she felt that in reality it probably would not be read by anyone other than the examiners. Ronald held out a little more hope and was optimistic that when his thesis was uploaded to the ADT program other researchers or those writing theses in his research area might use it as a resource. However, as an aside, and showing traditional aspects of his habitus, he also believed that it was a shame that RMIT is doing away with the submission in the bound copies.19

7.3.7 Summary

Candidates’ experience of aspects of the coursework section of the EdD program clearly shows a program at the end of its life. They were clearly disappointed that this aspect of their program did not live up to the School’s promises of them being able to integrate content from the units into their research. They also felt they had not learned anything particularly valuable and had wasted a considerable amount of their time. However, it seems that having struggled to complete the

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19 Rather than doctoral graduates providing bound copies of their theses for the University, from 2008 RMIT will only accept digital theses on CD-ROM.
coursework units under difficult circumstances actually strengthened their resolve to stay in the program.

There were also some positive aspects of the coursework component. Ronald had already submitted his thesis when interviewed and therefore completed his coursework units a year or two before the other candidates; despite citing disorganisation and administrative issues, he found available units that he felt were extremely relevant to his research. Most also felt that the coursework units were both easier to manage in terms of their time and that the regular contact with lecturers provided a feeling of support and of being part of a community of learning. However this benefit disappeared for all but Ronald once the candidates began the research component of the program. It seems clear that coursework units at their best can provide exposure to a range of lecturers from the School, enabling them to feel part of a larger learning community, and provide the necessary support and a useful introduction to the research component.

7.4 The extent to which the EdD program met the candidates’ needs and expectations

This section describes and analyses findings from candidates in the EdD program in terms of the degree to which the program met their needs and expectations. As with the previous section, it begins with a summarised table of responses (Table 7.3); more complete results can be found in Appendix 9, Matrix 3.2.
Table 7.3  Summary of EdD candidates’ responses to sub-question two:
To what extent does the program meet candidates’ needs and expectations?

<table>
<thead>
<tr>
<th>Summarised categories</th>
<th>Alison</th>
<th>Tim</th>
<th>Lyn</th>
<th>Jennie</th>
<th>Ronald</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program choice</td>
<td>Believed coursework would slot into thesis (but they were irrelevant)</td>
<td>Believed coursework would slot into thesis (but they were irrelevant)</td>
<td>Believed coursework would slot into thesis (but they were irrelevant)</td>
<td>Believed coursework would slot into thesis (but they were irrelevant)</td>
<td>Believed coursework would slot into thesis (and they did)</td>
</tr>
<tr>
<td>Met needs?</td>
<td>Partially</td>
<td>Partially</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Positives</td>
<td>- New insights from research - Research methodology unit</td>
<td>- Doing well in coursework units</td>
<td>- New insights from research</td>
<td>- New insights from research</td>
<td>- New insights from research</td>
</tr>
<tr>
<td>Negatives</td>
<td>- Coursework units - Lack of learning community</td>
<td>- Coursework units - Poor understanding of research methodology unit</td>
<td>- Coursework units - Lack of learning community</td>
<td>- Coursework units - Lack of learning community - Lack of time</td>
<td>- Lack of organisation</td>
</tr>
<tr>
<td>Supervisor relationship</td>
<td>Constructive - Understood the journey but unsure of EdD - Goals/standards discussed; sup. unsure of EdD</td>
<td>Constructive - Warm relationship - Original supervisor under pressure - Goals/standards not discussed</td>
<td>Poor - No rapport - Difficult to arrange meetings</td>
<td>Constructive earlier, poor lately - Supervisor under pressure - Goals/standards not discussed</td>
<td>Constructive - Work together outside of supervisor relationship - Goals/standards discussed</td>
</tr>
<tr>
<td>Other support</td>
<td>- None from Uni. - Critical friend</td>
<td>- Software train. - Another academic</td>
<td>- Software train. - LSU - PG forums</td>
<td>- Software training - LSU - Counselling - 2 ‘critical friends’</td>
<td>- Software training - PG forums - Work colleagues</td>
</tr>
<tr>
<td>Personal gain</td>
<td>Nothing yet</td>
<td>Respect in the work sector &amp; satisfaction of completing</td>
<td>Nothing</td>
<td>Nothing</td>
<td>Satisfaction of completing</td>
</tr>
<tr>
<td>Changed self-perception?</td>
<td>No</td>
<td>Yes: Surprised what he knows</td>
<td>Yes (Negative)</td>
<td>Yes (Negative)</td>
<td>Yes. Confirmation that he can do it</td>
</tr>
<tr>
<td>Others’ perception?</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>With some</td>
</tr>
<tr>
<td>See yourself as researcher?</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
7.4.1 Program choice

All EdD candidates knew of the existence of both of the School’s PhD programs, although three had little information about what was then a very new PhD by project. Not surprisingly, the coursework aspect of the degree was the key motivation for enrolling in the EdD, particularly the belief that the coursework units would be an integral part of their research and thesis. They were told, as Lyn put it: \( \text{\ldots that it would just plug and pin straight into your thesis}, \) but only Ronald found this to be the case. By way of summarising their feelings (and once again, the reader is reminded of the limitations stated in Section 7.2), Jennie pointed out that: \( \text{\ldots there weren’t enough choices and we were pushed to do subjects because it was convenient, but they weren’t a help in my research, they didn’t help me to develop and I was not interested in them}. \) Ronald, however, found the units to be interesting and relevant to his research. This is a further clear indication of a program in demise: Ronald had completed his coursework much earlier than the other candidates and at the time the others enrolled, the School was beginning to withdraw resources to the program. Although this was not surprising given the low EdD numbers in the latter stages and the School’s need to maintain financial control, the toll that this took on the candidates needs to be acknowledged. Other motivations relating to the coursework component were to do with learning styles. Both Lyn and Jennie felt they learned better in a class situation where they could, as Lyn put it, \( \text{bounce ideas off others}. \) In fact, for her, had there been a purely coursework doctorate, she would certainly have enrolled in that, as would Alison, who chose the EdD because of the shorter thesis and spaced coursework writing. Both Tim and Ronald made a point of stating they felt the EdD had the same status as the PhD; Tim, clearly believing the EdD has an abundance of cultural and symbolic capital, pointed out: \( \text{\ldots half the people at Harvard have got EdDs or other doctorates, and at the end of the day, people still call you \textquote{doctor}}. \)

7.4.2 Positive and negative aspects of the program

The EdD program only wholly met the needs of one candidate although all cited some positive aspects, with good supervision being an important aspect for three. Not surprisingly, the positive focus was on the research component rather than the coursework, with all but one feeling the benefit of gaining new insights from their research as the highlight. The only positive aspect for Lyn, however, was \( \text{the euphoria when [she] got good marks for the coursework}, \) despite none of them holding any interest for her, although she keenly felt her lack of cultural capital in this field in her belief that she did not really earn the mark: \( \text{\ldots maybe I was just given that mark to stop me complaining, and it actually made me think – I heard that some students who my lecturer gave HDs to are failing in other classes. Maybe what I’ve done is not as good as the marks show}}. \)
There was considerable anger from the four EdD candidates who cited inappropriate coursework units as a major negative aspect of the program. Although the lack of choice was, as explained earlier, a result of the imminent demise of the program at the time, it had perhaps a more damaging effect on some candidates than School management might have expected. Alison, for instance, found many units did not even relate to education. She studied international studies when what she had hoped for were units on curriculum design or learning theory: *None of the units helped me to be a better professional, and it’s a ‘professional’ degree.* On a more personal level, Lyn felt angry at the School requesting her to contact other schools in the University to identify some coursework subjects for herself, which she felt should have been done by the administration. To add to her already confused feelings and lack of any cultural or social capital in the university system, she felt vulnerable and exposed when those she spoke to seemed to not know what [she] was rambling on about. Even Ronald, who generally felt happy about his coursework units, felt a sense of disorganisation: *There needed to be a clearer projection of what electives and what compulsory subjects were to be done – there was too much switching and swapping.*

Some candidates also cited the lack of a learning community as a negative aspect. While their coursework units, even though not useful in many cases, helped them to feel part of a community of learners, this ceased when they moved to their research work. Lyn, for instance, desperately wanted to feel some belonging to the university. She felt embarrassed to say she was *street-wise, not academic-wise,* being acutely aware of her lack of cultural or social capital in this field: *There’s no infrastructure to support people like me who are part-time and don’t know anything about research. You know, you’re always behind the 8-ball when you sit outside – there’s an invisible set of ways of doing things and culture that I have no knowledge about – I’m absolutely not in the know.* Although she had clearly ‘fallen through the cracks’ in terms of her induction program, it is interesting to note that she felt the substantial amount of power she held in her field as a senior manager in the public sector was not consonant with this field of doctoral studies in a wry understanding that the substantial capital she held in her field of Practice did not transfer to the academic field – the ‘game’ had different rules: *I usually find a way around things like this but I’m having trouble applying the same tactics here – it’s a whole different game.*

### 7.4.3 Pedagogical issues

Three EdD candidates enjoyed constructive relationships with their supervisors, feeling that they could freely discuss any issues. Most also sought a practical approach from their supervisors but in two cases this was denied. Tim, for instance, felt that he did not get enough practical feedback from
his original supervisor: ...what I always needed was to get back to the basics of learning – talk to me, show me how – and I never really got that. Towards the end of his candidature, his supervisor left RMIT and his new supervisor was charged with assisting him to re-submit his thesis. While he still had great regard for his original supervisor, his new supervisor very quickly understood what needed to be done: It was a diagnosis of the student and how to fix it. Although his original supervisor was quick to offer feedback, his new supervisor operated differently: I had to fish for information – you know, if it was any good or was it interesting and all that, because he never volunteered that information. He was focused and mechanical because he had to be – we only had a year to re-submit. But I wanted and needed that sort of feedback. However, it seems that understanding of this practical need came only with hindsight. He clearly believed himself to possess a substantial amount of cultural and social capital in the field in which his topic sat, certainly more than his original supervisor: I’m different – I have deeper knowledge that goes back a long time and knew a lot more about this topic (Tim). It seemed, however, that he had mistaken his capital in this field for cultural capital in the research field. Having developed major problems with his research and thesis, he admitted: I was a very, very difficult student and I just didn’t take sufficient advice – I thought because I knew my subject area I knew how to go about this whole research thing.

Despite the generally positive supervision in this program, it is clear that a lack of information about the goals and standards of the program caused issues with some candidates. Only two candidates felt that these had been discussed, and in both cases issues were addressed only in an ad hoc way throughout their candidature. Further, in one of these cases (Alison) neither the candidate nor her supervisor (who had not supervised an EdD candidate before) was sure of the requirements, although Alison had a pragmatic approach to this and she was not overly concerned. Other candidates, however, found themselves in difficult situations. As discussed, one candidate had to resubmit his thesis, and both Jennie and Lyn felt their supervisors overestimated the amount of knowledge they had about the nature of research and thesis writing. Lyn in particular felt challenged by not understanding her supervisor’s expectations: Look, I’ve got a high-level job in the public sector and I’m used to asking questions and getting answers that I can understand. No-one’s told me what they expect – I don’t even know what a thesis is supposed to look like, and when I ask, he talks in a stratosphere above what I can understand, and when I asked questions I still couldn’t understand the answers. As with Tim, this is another clear example that cultural and social capital is not necessarily transferable to other fields. Further, she felt hampered because she was a mature aged student from the corporate environment: I haven’t risen through academia through the traditional route of a Bachelor degree, and feeling her lack of social and cultural capital in the field of academia: I wish
there were people in academia who had worked in the corporate world or whatever for a good decade and then have come back to supervise, so they would know the challenges faced by people like me.

The personal aspect of the supervisor relationship seemed important to most. Alison felt that, because her supervisor had not long gone through the doctoral process herself (although it was PhD and not an EdD), she understood the journey: …she remembers what it felt like at different stages of the process and that helps me to get through it. Ronald already had a personal relationship with his supervisor before he enrolled: We had worked together for some time so we knew each other’s foibles very well and we had a good personal respect for each other. Negative personal aspects were also cited. Lyn felt there to be no rapport between her and her supervisor while Jennie felt that what was a very positive personal relationship had changed: …the person I knew a few years ago is a different person because he’s under a great deal of pressure and his spirit is broken. This had produced a role reversal: I’m now trying to take care of him and being a support and trying to uplift him and encourage him, but it’s hard because that’s what I need at the moment. It’s like we’re both taking each other down. Although she felt unsupported in recent months, she showed intense loyalty: …I don’t think I would change my supervisor, simply because I believe in him and he believes in me, and that’s very important.

7.4.4 Assistance other than from supervisors

All but one of the EdD candidates pointed to the invaluable assistance of informal support from ‘critical friends’, work colleagues or academics from other universities. Lyn, the only candidate not to have anyone other than her supervisor for support, pointed to the difficult nature of research compared to the coursework: …in the courses I could help the others and actually we all helped each other – they were just essays and that’s not difficult, but because my supervisor’s not really interested, I still need somebody to talk to about the research and how to do it – to just show me what to do. I feel so stupid. The candidates also felt reasonably supported through University workshops and resources. Other than the general library service, candidates used a combination of EndNote library workshops, NVivo and SPSS workshops, the Learning Skills Unit, the counselling service and student rights officers for support. All but one attended EndNote workshops, although only Jennie found them helpful; others felt overwhelmed and in one case just dumb – couldn’t get it at all (Alison). Neither Jennie nor Ronald felt the Postgraduate Research Forum workshops to be

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20 It is assumed here that all doctoral candidates would use the University library services to search for and borrow resources, therefore only specific workshops outside of these general activities are discussed here.
particularly useful in any sense other than to know there were other doctoral candidates around (Ronald), although Ronald found an SPSS workshop to be very useful for his quantitative analysis. Two candidates used the Learning Skills Unit, one for individual assistance with a learning adviser where, although she felt: it was great and it really helped me understand about research and writing the thesis, she also needed support with research because of difficulties with her supervisor and felt that the Learning Skills Unit should also deal with this. She also attended some Learning Skills Unit postgraduate workshops and found these and the handouts to be helpful. Tim did not think the Learning Skills Unit would be useful for him: I could write and compile essays and I knew what I was doing and I referred a lot of other people to the Unit, but in hindsight he felt: …it would have been handy to get some reassurance about what I needed to do in the early stages of the thesis and the Learning Skills Unit would have been a very good starting point. Both EdD supervisors valued the Learning Skills Unit service and freely referred their candidates there: …it has been extremely valuable and this is shown in the work the students produce. It fulfils a crucial role at doctoral level (Eric, S); Sarah from the Learning Skills Unit has talked to the students a lot about writing and incorporating the literature and that’s all been very useful (Emily, S).

No candidate knew about the Minimum Resources Policy, although both Alison and Lyn knew they could apply for funding. In fact, the latter did apply for conference funding but was told that the fund had run out of money. None of the candidates believed they would have made use of items listed in the Policy other than funding because all but one worked full-time, and that candidate thought it was: all just pie in the sky stuff anyway.

7.4.5 Personal issues

In terms of candidates’ expectations of gaining personally from the program, responses were split between changes in what they were and changes in who they were. For instance, both Alison and Tim expected self-recognition that they might know more than they did, whereas the others expected some kind of personal growth. However, when asked what they had actually gained, only Tim and Ronald had achieved what they had expected, although this is perhaps not surprising since they had both completed their studies. Others who had yet to complete their studies cited that they had gained nothing personally, except for Jennie who unfortunately felt she had only gained stubbornness – not to give up when people are trying to bully you. In becoming reflexive and deliberately trying to change her habitus, she found that she was trying to develop a greater resistance and to believe in herself more strongly. However, adaptation of habitus is only possible through considerable effort, and she was finding this very difficult.
All candidates but one felt that their doctoral study had changed their self-perception. Both Tim and Ronald were pleased to realise they were capable of successful completion and Ronald also became reflexive of an element of his habitus he wasn’t aware of: *I now know just how persistent I can be – they should rename it a Doctor of Persistence!* Unfortunately, the other two candidates felt it had changed their self-perception in a negative way. Jennie was beginning to doubt her ability and struggling to maintain a positive self-perception and Lyn was dismayed at what she did not know about doctoral study: *I’m acutely conscious – embarrassingly conscious that I know nothing about research and can’t even seem to learn about it.* Both Tim and Ronald perceived of themselves as researchers which was not surprising given they had both completed their doctorates. What was surprising, however, was that Jennie was the only other candidate to feel this way. Although she was having major difficulties with time-restrictions and her supervisor, it seems that her high level of cultural capital enabled her to still feel an integral part of this field.

Two candidates believed it had changed other people’s perceptions of them to some extent. As well as greater respect from those in his work sector, Tim felt that his children were proud of him and now saw him as a learner. Although Ronald also felt a new respect from his work colleagues, in understanding that educational capital does not necessarily transfer from one field to another, he found it not to have changed the perception of people he knows outside of the university sector: *It doesn’t really have much implication outside academia and people outside really don’t understand it. It has no relevance to my friends and other people I see socially unless they work in an academic environment.* Although the other candidates had yet to complete their doctorate and therefore be less likely to feel that others’ perceptions of them might change, they were all quite sure it would not have an impact. For instance, Alison felt that she will *still be a wife and mother and teacher*; Lyn argued that no-one in her family and few in her workplace knew what a doctorate was and why she would want to study for one: *I come from a very low working class background, so the word university was never spoken, and in those days girls either went to work in a shop or a factory, or if you were really smart and your parents could afford it, to a business school to learn how to do shorthand and type.*

### 7.4.6 Summary

While the research component of the EdD program allowed most candidates to gain new insights that they felt would be useful in their workplaces, it is clear that apart from this, the needs and expectations of most EdD candidates were not met. All but one EdD candidate felt a deep sense of disenfranchisement with their program, and there was a deep sense of hurt among the candidates that what they were promised in terms of selection of coursework units did not eventuate. However, as a
program in demise, the reader is reminded that it is not typical of an EdD program. Despite this anger, many EdD candidates identified positive experiences of and clear benefits from their coursework units.

Further, apart from the lack of explicit discussion of the goals and standards of the program, most candidates did feel they had been supported by their supervisors, particularly in terms of their ability to discuss issues freely. Personal aspects of the relationship also seemed important, and in this there were both positive and negative experiences, as there were in their self-perceptions and personal aims from the program.

### 7.5 EdD candidates’ notions of research and Practice

This section describes findings from candidates in the EdD program in terms of their notions of research and Practice. These are summarised in Table 7.4, but more complete results can be found in Appendix 9, Matrix 3.3.

**Table 7.4 Summary of EdD candidates’ responses to sub-question three:**

**What are the differences in notions of research and Practice?**

<table>
<thead>
<tr>
<th>Summarised categories</th>
<th>Alison</th>
<th>Tim</th>
<th>Lyn</th>
<th>Jennie</th>
<th>Ronald</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic area</td>
<td>Higher Ed.</td>
<td>VET</td>
<td>Public sector</td>
<td>VET</td>
<td>Higher Ed.</td>
</tr>
<tr>
<td>How situated within body of knowledge</td>
<td>International knowledge base</td>
<td>Localised knowledge base</td>
<td>International knowledge base</td>
<td>International knowledge base</td>
<td>International knowledge base</td>
</tr>
<tr>
<td>Motivation for research deg.</td>
<td>- Professional development - Career</td>
<td>- Status - Professional development - Career</td>
<td>- Personal satisfaction - The need to keep learning - Status - Career</td>
<td>- Personal satisfaction - Professional development - The need to keep learning - Career</td>
<td>- Career (originally) - Personal satisfaction</td>
</tr>
<tr>
<td>Aiming for excellence?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No (research) Yes (coursework)</td>
</tr>
<tr>
<td>Must research be applied?</td>
<td>Essential</td>
<td>Essential</td>
<td>Essential</td>
<td>Useful in some way</td>
<td>Useful in some way</td>
</tr>
<tr>
<td>Relationship of research to an applied field</td>
<td>In specific workplace</td>
<td>In specific workplace</td>
<td>In specific workplace</td>
<td>In specific workplace</td>
<td>In specific workplace</td>
</tr>
<tr>
<td>Knowledge to be used in your workplace?</td>
<td>Yes, in specific and general way (skilled practitioner)</td>
<td>Yes, in specific and general way (skilled practitioner)</td>
<td>Yes, in specific and general way (skilled practitioner)</td>
<td>Yes, in specific and general way (skilled practitioner)</td>
<td>Yes, in specific and general way (skilled practitioner)</td>
</tr>
<tr>
<td>Any issues?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
7.5.1 **Research topics and their location within current knowledge**

Only one EdD candidate’s research topic did not relate directly to an education environment. Lyn’s topic related to the public sector; it was only loosely associated with training, but when asked why she chose to do her doctorate in an Education discipline rather than a business environment she cited RMIT’s School of Education as having an excellent reputation in educational leadership and management and her topic was about leadership development in her work area. The research of all but one of the EdD candidates sat within an international knowledge base. For Tim, this was a mixture, but it was predominantly based on localised knowledge within the State of Victoria. While Lyn tried to find recent localised literature in her research area, this became a problem. She found Australian literature to be five to ten years behind the rest of the world so she used literature predominantly from America and the OECD. However, she found the locating of her research within the literature particularly exciting because of the continuity: *I’ll be bringing my two bob’s worth into the centre on top of the previous research, and then probably somebody else will say ‘Aha’ and move on – you feel part of it all, like building blocks…you know, like-thinking minds’.*

7.5.2 **Motivation for and purpose of research**

Candidates were motivated to enrol in the EdD for a variety of reasons, including personal satisfaction, the challenge to keep learning, professional development, status and career opportunities. All had multiple reasons for enrolling. In a professional doctorate one might reasonably have expected to see professional development cited as a key motivation by all respondents. This was not the case, however, and although this was cited by three candidates, with two it was a more minor consideration than other motivations. For the one candidate who cited professional development as her main motivation, it was very clear: *It’s to improve my performance in the classroom – to become a better teacher.* Although Tim was aiming for some professional development, his prime motivation was status: … *not a lot of people in the TAFE sector have a doctorate…and I thought I would be able to have more influence.* He also, however, hoped to get a vastly increased level of knowledge out of it, and to put some of that knowledge back into his education field. Professional development in terms of a commitment to society was also the rationale for Jennie: *There’s a commitment when you know of things that can be changed…when you have knowledge to share…I think I can make a little bit of difference with my work and hopefully it will have a positive change – I think I will then have met my commitment to society.* Her main motivation, however, was personal satisfaction: *I’m doing it for myself – for my own growth and to know I can do it.*
Although four of the five candidates cited career opportunities as a motivation factor, it was not a major motivation. For instance, while Ronald originally enrolled because as an academic he clearly had to have a doctorate for promotion, by the time he had neared the end of his doctorate he was close to retirement: *...it became a case of, well, I'd put too much into it to just, sort of, drop it. It was just personal satisfaction in the end.* Of the three other candidates, Alison thought it might broaden her options, Tim thought it may lead to a career move in the future, and although Lyn understood her new-found academic capital would be of little use in the public sector, she thought that it may give her some credibility to set up a consultancy in the future.

Personal satisfaction was given as the prime motivation by three candidates and a key motivation for two, who discussed this in relation to their need to keep learning. For example, what Jennie wanted was *the satisfaction to be able to explore more, to be able to learn more and as I grow with this, that will be personal satisfaction for me.* Similarly, for Lyn, the *primary driver is to keep learning and to keep on finding out how to learn.* For her, this was the only thing left: *I’ve got a Masters, and I want to study something else – I wanted that challenge – but there was really nothing else left except doctoral studies.* As with Tim, status was a factor for her: *a legitimate prestige that goes with it.*

*Personal validation is a big thing – there’s a huge amount of ego in doing anything like this.* This is a particularly interesting statement to make given her previous discussion about the lack of value in terms of educational capital of a doctoral degree within the fields of her workplace and family. She seems to feel there is some currency outside of an academic environment.

### 7.5.3 Candidates’ practice as researchers

Only Jennie was still aiming for excellence in her doctoral studies. She argued that unless she produced good quality work it would not have the same influence, and showed that she understood the rules of the game: *I want this research to be respected so I need to be able to defend it really well, and for that, it has to be excellent work.* Other candidates were merely striving to complete their doctorate, but there were various reasons given for this attitude. For instance, a lack of time placed restrictions on Alison: *Are you kidding? I’m happy just to get through it. If I was doing my absolute best, I wouldn’t be doing it part time because you just can’t do it.* For Tim, the scope of his research prevented him striving for excellence: *I was...covering far too much territory because of the complex terrain of the subject,* but he was very satisfied in the end because, although he did not believe he had produced an ‘excellent’ thesis, he had learned an enormous amount through the process. Although Ronald chose to enrol in the EdD because of the coursework units and worked intensely in an attempt for excellent marks in these, of the research and thesis he stated: *It was just so enormous and there*
were many, many times when I thought I’ll never get out from under this stuff. I just wanted the thing finished. Lyn felt disappointed in knowing that she would have to be satisfied with a sub-standard thesis: I got a lot of pleasure and passion out of my previous postgraduate studies and would have loved to produce something that’s really outstanding, that I could be really proud of and that could help the field in some way, but that’s just not going to happen. Although she managed to look after a family, work long hours in a demanding job and complete other postgraduate study in recent years, she had become dejected: I’m a very optimistic person and a ‘can-do’ person, but I’m really disappointed that this will just not be to the standard that I was aiming for. On top of my supervisor problems, the research is such a never-ending thing and you can’t break it up like you can with the coursework.

7.5.4 Relationship of doctoral research to an applied field

Both EdD supervisors interviewed felt that a great benefit of this program was the ability to relate to candidates’ education workplaces: It connects the University to the education profession in a way which the PhD doesn’t quite do (Eric, S); It’s practitioner-field based so it has a strong application to current Practice (Emily, S). Echoing this, all EdD candidates felt it essential that any research they might conduct be related to their workplace, or at least useful in some way. Reasons were varied; for instance, Alison felt that as educators we do not have the time to research anything that does not impact upon our teaching. Lyn made a similar point: You spend all your holidays doing your research because you work full-time, so there’s absolutely no point if it’s not relevant – if it couldn’t be applied somewhere to make some sort of difference. For Tim and Ronald, researching in a relevant field where there is some sort of intrinsic interest helped to provide, as Tim stated: …elements of passion that makes the research journey so much easier. For Jennie it was important to have the confidence to be able to say: Oh yes. It’s been done that way, but now I’ve got some evidence to say it can be done this way.

The research of all EdD candidates interviewed was located within their workplaces and was part of their specific work responsibilities; the value of this is seen in many ways. For Alison, the best way to find out how today’s learners are learning was to research her own students. This was reiterated by Jennie; having her research based in her workplace was important because it’s congruent with what I’m doing and what I’m believing and writing. I need my research to be based in my workplace to actually experience what’s going on…only then can I sit down and reflect and write – it’s a real life situation. Tim found that his research fitted so neatly into [his] professional role that one fed the
other. For Lyn, it was the ease with which she could engage in her research; she believed it would be problematic to research leadership in a different corporate environment.

All candidates planned to use knowledge from their research in their actual work environment but also saw a broader application for others to use the knowledge to change their Practice. When asked how they would use their research in their workplaces, the three who held teaching or lecturing positions believed it would enhance skills in order for them and others to change classroom Practice. Both Tim and Lyn believed that their research might lead to changed Practice in their workplaces and the workplaces of others through the production of new knowledge rather than them becoming more skilled practitioners. For instance, Lyn believed that looking at what works in [her] own organisation would be very useful for her and her managers, but the knowledge could also be used in similar organisations in the public sector. None of the candidates interviewed believe there to be any intellectual property or related issues. In fact Lyn pointed out that the public sector is very much into sharing knowledge: Anyone can use this knowledge and I hope they do.

7.5.5 Summary

Little, if any, research by EdD candidates appears to involve Mode 2 knowledge. Although the research of all candidates interviewed was completed in their specific work environment, they all saw a use for it beyond the workplace, either in other workplaces or as professional development for themselves. Further evidence of a generally broad aspect to their research is that only one candidate located his research within a localised knowledge base, all others situating their research predominantly within an international research base.

In keeping with this professional doctorate all EdD candidates gave Practice-oriented motivations (among others) for enrolling such as to increase career prospects or for professional development. This combining of research and Practice is seen in the belief by all candidates that any research they did be applied or at least useful in some way.

7.6 Concluding comments

The key theme to emerge here is the severe trauma caused when a program is in demise and elements begin to break down. Although an advertised benefit of enrolling in the EdD was the ability to ‘plug in’ coursework units to the research component and ultimately to transfer some of the coursework writing into the thesis, this occurred for only one of the candidates in this study. This was combined with administration failure in relation to enrolment in coursework, a likely effect of the demise of
routine processes when there is no longer a critical mass of candidates for this program. The coursework units therefore caused trauma in many candidates of the same intensity as that cited in Lee’s (1999) study.

However, as identified in Chapter One and at the beginning of this chapter, these traumatic events cannot be taken as typical of this program and must only be seen in the context of a program in decline. The coursework units, as some respondents pointed out, also had the potential to provide a vibrant learning community through communication between candidates and a range of School lecturing staff. However, although this was the case for most, despite good relationships with their supervisors, the only candidate to actually experience a learning community throughout the research component, had his needs met through his supervisor’s school’s rich research and learning community.

There were positive aspects related to the research component, however. All found it beneficial to relate their research to their workplace and all found that it gave them new insights. These were not only related to their Practice; they felt they would be useful beyond their immediate workplace.
8.1 Introduction

The cross-case analysis of the present chapter sets out to highlight significant similarities and differences across the case studies of the three preceding chapters in order to answer the main research question: *How do candidates perceive the respective cultures of traditional, Practice-based and professional doctoral education?* A cross-case matrix was developed for each of the first three research sub-questions to identify patterns or themes (Appendix 10, Matrices 5.1, 6.1 and 7.1), and summarised responses were developed from these (Appendix 10, Matrices 5.2, 6.2 and 7.2). Miles and Huberman (1994) argue that this allows for a scan down rows and across columns ‘to see what jumps out’ (p. 242). However, they also point out that superficial summarising across themes by itself is not enough. What is needed is a combined approach, ‘protecting case sequences and gaining the conceptual power that cut-across variables can bring’ (p. 205); this is the approach taken in this chapter. While the aim of a cross-case analysis is, as Merriam argues, ‘to build abstractions across cases’ (1998, p. 195), care is also taken to avoid the danger of analysing multiple cases at too great a level of inference, ‘aggregating out the local web of causality and ending with a smooth set of generalizations that may not apply to any single case’ (Miles & Huberman, 1994, p. 435). To this end, discussion and analysis remain grounded in the data. Although these data are specific to their context and therefore not generalisable to other contexts, it is hoped that this cross-case analysis will generate insights and allow meta-themes to emerge that could both add to the theory in research pedagogy and provide some basis for change.

The chapter begins with a short comparison of the demography of candidates in each doctoral program followed by summary data and discussion of similarities and differences across the three cases in terms of the first three research sub-questions:

- How do the norms and practices of candidates in each model differ?
- To what extent does each program meet candidates’ needs and expectations?
- What are the differences in notions of research and Practice in each program?

From this extrinsic framework, discussion moves to meta-level themes emerging from this analysis, leading to some tentative answers to the fourth research sub-question:
- What can we learn from answers to these questions in terms of supervision pedagogy and learning support?

As articulated elsewhere, discussion and analysis of data and the resultant themes are aided throughout by the use of Bourdieu’s (1972/1977; 1980/1990; Bourdieu & Wacquant, 1992a) theoretical framework and concepts of habitus, capital and field, and are discussed in relation to the relevant literature.

8.2 Comparison of candidates’ demography

The demographic comparison (Appendix 10, Matrix 4.1) shows very few differences between programs. For instance, all candidates in each program had a prior Masters degree except one of the project candidates, who had converted from his Masters enrolment to PhD. However, only one candidate in each program had a prior Masters degree by research, the others being by coursework combined with small research studies. Similarly, some candidates in each program had changed senior supervisors and most did not have a second supervisor. The majority of candidates from the PhD (thesis) and EdD programs, and half from the PhD (project) were female and aged in their fifties, which concurs with Cumming and Ryland (2004), who identify a 106 percent increase in the number of doctoral candidates aged between 50 and 60, from 2,353 in 1998 to 4,848 in 2003.

The main differences are seen in candidates’ full-time or part-time status. While five of the six PhD (thesis) candidates were either not working or working part-time, four of the five EdD candidates were working full-time. Similarly, four PhD (thesis) candidates were studying full-time while five of the six PhD (project) and all five of EdD candidates were studying part-time. Given the workplace focus (whether professional or Practice-based) of the EdD and the PhD (project), this may not be surprising, and, in fact, the research of candidates from these programs was indeed work-related (see Section 8.5).

8.3 Cross-case analysis of the norms and practices of candidates

The striking issue here is that across all programs a lack of a learning community showed as an important negative element (see Appendix 10, Matrices 5.1 and 5.2 for details). An interesting observation is that, in terms of what they learned, both PhD (project) and EdD candidates tended to cite the practical knowledge of the research topic, while the PhD (thesis) candidates felt they had learned more about the nature of research and how to do it. This general division between the applied
nature of the PhD (project) and EdD and the more traditional orientation to the PhD (thesis) is also seen in other aspects of the data.

There were few differences between programs in terms of the cultural relationship to the academic field of candidates. Measured in terms of inherited and developed cultural capital and a disposition for understanding and adopting the ‘rules of the game’, candidates rated high, moderate and low were seen across all programs. The only difference found was that four of the six PhD (thesis) candidates had a high relationship, possibly reflecting a more traditional, less ‘applied’ stance towards their doctoral studies. In fact, the research of all but one of these particular candidates had only a broad connection rather than a specific connection to an applied field.

Although each program had some candidates who were often and some who were seldom on campus, there was an overwhelming cross-program response regarding the lack of a learning community. While most candidates from each program understood such a community to exist, the only candidates to actually feel part of either a learning or research community were the two PhD (thesis) candidates who were studying full-time and who used the School’s research room each day and one EdD candidate who found such a community among lecturers and researchers in another RMIT school in which he worked. In line with Gardner’s (2008) and Martin et al.’s (2006) studies, with most candidates, their only personal contact was with their supervisor (and for the four who had one, their second supervisor). However, the perception of the existence of a learning community that candidates felt excluded from is a complex issue. A number of PhD (thesis) and PhD (project) candidates, all women with family commitments, pointed to major time constraints which would have prevented them from attending study or research meetings, thus although Martin et al.’s (2006) research community of practice is based on sound principles, in this case it would have been futile.

Similarly, although most EdD candidates felt part of a learning community through their coursework units, this ceased when these were completed. Ironically, this one feature that caused candidates the most stress of all doctoral subfields seemed to hold the most promise in terms of development of cultural and social capital. As Jennie (EdD, C) put it: I used to feel valued as a student at this level and my ideas were listened to in class and feedback was given, and all in a collegial way. While all candidates must periodically present at and are encouraged to attend School research conferences, what is needed is a socially cohesive learning environment where candidates can develop and monitor their varying amounts of social and cultural capital through contact not only with other candidates, but also with those who have this capital in abundance: experienced supervisors and researchers. However, as noted above, this is difficult to achieve for those with family commitments.
Unlike the high general rate of student satisfaction seen in Neumann’s (2003) study (possibly reflecting the large number of candidates in her study compared to the current study), some candidates from each program reported their general program experiences as positive, some negative. Reflecting variability in supervisor-candidate relationships, both good and poor supervision were cited across all programs. The key cross-program difference is found in relation to program structure, with only PhD (project) candidates citing this as a positive feature of their general experiences (related to the project component). However, some of the same candidates also felt the structure to be a negative aspect, in particular because there were no well-defined guidelines for writing an exegesis (along with, for EdD candidates, the poor coursework units and associated administration which, as already discussed, was atypical of such a program). The feeling of powerlessness is evident in metaphors from these candidates: The structure of the artefact, the structure of the exegesis – it’s all been a rocky path…I’m still in the cold water, really (Peter, project, C); This exegesis – it’s been a windy road and I’m still not sure (Ben, project, C); They don’t have their heads around it yet (Carol, project, C); I need some sort of guide book through this (Ben, project, C). Although Kamler and Thomson (2007) argue that self-help books on thesis writing offer little, arguing for doctoral practice as predominantly discursive social practice, they do not problematise this in terms of Practice-based doctoral study. Although Maxwell (2002) argues that Professional Doctorate researchers should position themselves authoritatively in the professional field, with Practice-based research this is more difficult. Arguably this is an area where writing circles (Larcombe, McCosker, & O'Loughlin, 2007; Lee & Boud, 2003) of PhD (project) candidates and supervisors could thrive, allowing full discussion of the nature of an exegesis as well as issues of identity and competing fields of study (Bourdieu, 1977). It is unfortunate that although program structure was a clear motivation for candidates to enrol, their lack of cultural capital precluded them feeling as though they were legitimate players in these games.

Although across all programs some candidates felt seriously about discontinuing their studies, pride, commitment to the supervisor and the fact that they had already completed too much were reasons cited for continuing. These were also reasons given by those candidates who had not contemplated withdrawal. Not surprisingly, EdD candidates felt strongly that they would not withdraw because they had already completed their coursework subjects. More interesting, perhaps, is the strong response by a number of PhD (project) candidates that both pride and commitment to their supervisors kept them in the program. In fact, when looking across all programs, the sense of pride, determination and of ‘having something to prove’ were only reported by those candidates with a low or moderate cultural relationship to the general academic field. This determination to succeed could be seen as the
behaviour of what Bourdieu (1979/1984) calls the autodidact: those who lack the instinct and
embodiment of a habitus totally suited to the field, and who are ‘too [serious and anxious]…to escape
the permanent fear of ignorance or blunders’ (p. 330).

A variety of responses were cited in terms of what the candidates felt they had learned from their
doctoral studies, including knowledge of the topic, knowledge about research procedures,
professional development and personal development. Differences between programs involved the
relative importance candidates from particular programs accorded each response and the absence of
some responses from any candidate in particular programs. For instance, while knowledge of the
research topic was of critical importance to candidates in both the PhD (project) and the EdD, no PhD
(thesis) candidate mentioned it. Instead, knowledge about research procedures and the nature of
research were important to four of the six PhD (thesis) candidates. No PhD (project) candidate,
however, cited learning about research procedures although four of the six felt personal development
to be an important aspect of their learning. Given the Practice-based nature of the PhD (project) and
the professionally-based nature of the EdD, it is not surprising that their focus is on learning about
their research topic, thereby having a chance to develop their cultural and perhaps symbolic capital in
their workplace fields. It is also, perhaps, no surprise that the PhD (thesis) candidates felt knowledge
of the nature of research to be an important aspect of their learning given their more traditional focus
on the thesis.

All candidates saw the need to be independent learners in doctoral study and all believed they were.
However, there were substantial problems for some candidates, predominantly those in the PhD
(thesis) and the EdD programs, who felt that their natural learning style was to talk through issues and
because of limited time with their supervisors and the lack of a learning community they found it
difficult to maintain independent learning strategies. There were also some serious tensions between
independent learning and supervisor guidance. Some candidates felt they had invested a great deal of
time ‘being independent’ and getting on with their research, only to be told by their supervisor that
they had misunderstood their guidance.

Not surprisingly, some candidates from each program experienced workload difficulties, although
there were candidates in both the PhD (thesis) and the PhD (project) who reported no difficulties.
This seems to be partly related to the nature of the PhD (project) program and partly related to
whether the candidate was studying or working full- or part-time. As expected, those who were
working full-time and studying part-time across all programs experienced greater difficulties than
others. However, in the case of the PhD (project) candidates, even if they worked full-time or close to
it, they experienced fewer issues if their project was not merely contextualised to their workplace, but an integral part of it. Many PhD (project) candidates valued this opportunity and freely acknowledged its workload and time benefits. A further issue to surface across all programs, even with those who worked part-time, was the responsibility and time commitment many women candidates felt towards their families. Responsibilities include being sole carer for children, managing aged parents and looking after grandchildren. Male candidates also can feel this responsibility; for instance, Boris felt himself to be under considerable pressure at home because he was not able to give time to his family. He did, however, have the luxury of taking three months off work to complete his studies, and through the possession of economic capital, he and the other candidates who did not work, exhibited a transformation of economic capital into educational capital (Bourdieu, 1983) through buying time to complete their doctoral degrees.

Arguably it is in the writing of the thesis, that is, the representation of a focused exploration of a complex topic in probably the largest body of work written by the candidates, that the particular dispositions of candidates more obviously come to the fore. Dispositions such as positive or negative self-perceptions of their writing abilities, persistence or procrastination, their ability to take a risk or their perfectionism affect the production of the all-important thesis upon which they succeed or fail.

Candidates from each program had experienced some major issues in writing their thesis or exegesis, mostly relating to writing style, English language difficulties or specific sections such as the literature review. However, as previously alluded to, a between-program difference is seen in the nature and severity of the problems experienced by some PhD (project) candidates. Tensions surround the praxis of this new subfield clearly show the uncertainty of key players in the field. These are played out in the contested nature of the exegesis experienced by some candidates and supervisors. Because the boundaries of fields and subfields are fluid, agents from different fields must interact with each other when they move from one field to another. This is the case with PhD (project) supervisors who also supervise in the more traditional PhD (thesis) programs (for example, the supervisors of Ben, Liz and Carol). The PhD (project) subfield may have moved beyond the habitus of these supervisors, producing what Bourdieu (1972/1977; 1980/1990; 1997/2000) terms hysteresis, where the operational context of the habitus shifts in a way the habitus has not previously had to deal with. Similarly, some candidates made assumptions about the possibilities of producing a document substantially different to the ‘traditional’ thesis and were disappointed to find they had to satisfy the elite (Carol, project, C). To prevent the symbolic violence occurring in the perpetuation of the ‘taken for granted’ ideas of the more traditional PhD (thesis) it is important for those with the symbolic and cultural power in the PhD (project) program to better articulate the essence of and possibilities for exegeses.
Compounding this, of course, is the need to understand the broader field of power within which all doctoral programs sit in terms of examiners’ expectations of the form, style and word limit for exegeses. The 20,000 to 40,000 word limit articulated in RMIT’s (2007b) guidelines caused problems for some candidates and supervisors not only because of the perception that it did not allow sufficient depth, but because of the fear of some supervisors that examiners would fail such a short piece of work.

This is clearly a problem inherent in emerging subfields that challenge traditional modes of research. These larger issues will only be resolved when those with the symbolic and cultural power in this broader field of power are willing to engage in the ideologies and possibilities of this new subfield. The PhD (project) exists because of Government demands for industry-relevant programs. However, subfields cannot be developed within a broader field with the expectation that all activity will fit neatly into the original field. This requires a change of attitude, expectations and regulation changes from those with substantial amounts of cultural capital in the broader field, that is, those who write the ‘rules of the game’ at government and university levels and those who are likely to be called on to examine candidates.

8.4 Cross-case analysis of candidates’ needs and expectations

An essential difference between programs of the needs and expectations of candidates (see Appendix 10, Matrices 6.1 and 6.2 for summaries) is seen in the positive aspects identified: PhD (thesis) candidates tended to value the personal development gained through their study; for PhD (project) candidates it was the project-based structure; and for a number of EdD candidates, the positive element was their research topics. Elements that went through all programs were the general lack of guidance and lack of a learning community, as well as uncertainty about the goals and standards expected.

Candidates across all programs clearly chose to enrol in their particular doctoral program because of its structure. A number of PhD (thesis) candidates did not want the coursework units of the EdD or felt a project was not appropriate for their research topic. Conversely, EdD candidates were motivated by the coursework structure of this program which some felt would make the workload manageable.

21 Data actually show the key difference to be the overwhelmingly negative feelings of EdD candidates regarding their coursework units. However, in line with the limitations to the study discussed in Chapters One and Six, the issue is discounted in this discussion.
Further, the PhD (project) candidates, not surprisingly, all either felt that the project suited their research topic or wanted the practical outcomes offered by the project. This partly concurs with Neumann’s (2003) study, where almost all candidates in professional doctorates chose these programs because of a lack of confidence in taking on a PhD, support in the research process through coursework, and the close relationship to Practice and their profession. In the present study, no EdD candidate identified the latter as motivation for enrolling, although, as indicated above, this was an important motivation for PhD (project) candidates. Two PhD (project) and one EdD candidate identified lack of confidence in a specific area: they felt that their poor writing skills precluded them from enrolling in a PhD (thesis) and that the only way they would achieve doctoral status was through writing the shorter texts of the other programs. Status was a further reason for program choice, with some candidates in both of the PhD programs identifying a greater amount of cultural capital attributed to a PhD than an EdD, although Tim (EdD, C) argued that this capital was embedded in the superficial title of ‘doctor’ regardless of the actual degree.

Some candidates from each program reported that their program generally met their needs, although the only EdD candidate in this category had already graduated and was perhaps more likely to feel positive. Having undertaken coursework units that were both interesting and relevant to his research at a time when the EdD program was viable, he may be a more genuine representative of the program’s original aims. Conversely, the only PhD (thesis) candidate who felt the program had definitely not met his needs had recently had serious difficulties in working with his supervisor and had at the time of interview just been allocated a new supervisor.

Some between-program differences showed when candidates were asked to identify the key positive aspects. PhD (thesis) candidates felt very strongly that they had gained substantial personal development and developing self-identification as researchers, with some also citing knowledge of the research topic and about the research procedure. No candidate in either the PhD (project) or EdD program cited personal development as a positive aspect. The predominant positive attribute of EdD candidates was an increased knowledge of their research topic, concurring with their earlier beliefs when asked about their general learning. However, there was an anomaly within PhD (project) candidates: although their overwhelming responses when asked what they had learned generally were personal development and knowledge of the research topic, none cited personal development as a positive aspect of the program. Instead, there was a predominant feeling that the key positive aspect was the project-based structure, and to a lesser extent, knowledge of the research topic. Perhaps this reflects the structure and content of the question: being asked what they learned may lead to answers
reflecting a more developmental nature, while being asked about a positive aspect is likely to produce a more practical response.

There were between-program differences as well as similarities in what candidates felt to be negative aspects. Candidates in all programs cited a lack of guidance and a lack of a learning community. Interestingly given its traditional, ongoing nature, a lack of clear guidelines was particularly strong amongst PhD (thesis) candidates, as was loneliness, which could perhaps be seen as a corollary of a lack of learning community. Interestingly, none of the PhD (project) or EdD candidates mentioned loneliness; instead, candidates focused on program-specific issues: timing of the oral defence (often many weeks following submission of the written work) and poor choices of coursework units, respectively. Not surprisingly, those who were full-time and largely studied on campus felt more a part of a learning community and were more satisfied than others. They felt more like equal players in the field – perhaps like many science-based candidates who conduct their research on campus alongside their supervisors.

Although candidates from each program felt their supervisor relationship to be constructive, this was particularly so with candidates from both PhD programs; interestingly, despite citing a lack of clear guidelines as a negative point, guidance was one of the supervisory attributes cited by a number of PhD (thesis) candidates whereas PhD (project) candidates largely found the supervision to have been motivating. Candidates in each program sought out support from a variety of sources other than from their supervisors, showing a level of independence confirmed earlier.

Personal gains of the candidates included the satisfaction and pride inherent in doctoral success and a degree of personal growth. Satisfaction and pride was a particularly strong gain in candidates from each of the PhD programs. Candidates in both PhD programs felt their studies had changed their self-perception in a positive way, with negative or no change reported only by EdD candidates. There was little difference between programs in terms of change in others’ perceptions of candidates; where there was a change in perception, it mostly involved family pride in the candidate, and that was particularly strong among PhD (project) candidates. Similarly, candidates’ perceptions of themselves as researchers showed little program differentiation apart from a particularly strong identification among PhD (thesis) candidates.
8.5 Cross-case analysis of candidates’ notions of research and Practice

There are very few differences in candidates’ thoughts on their research and Practice. The only appreciable general difference is that PhD (project) candidates felt their research had to be practical, useful in the workplace and lead to better employment. The responses are summarised in Appendix 10, Matrices 7.1 and 7.2.

There are no appreciable between-program differences in the topic areas of candidates’ research, although it is interesting that none of the EdD candidates’ research was located within schools or general education. Very little research of any program was limited to an entirely new field, most being situated within a broader knowledge base. Similarly, few differences showed between programs in candidates’ motivation to take on a research degree. Motivational factors included career advancement, interest in research topic, professional development and personal satisfaction. The main difference is that for the PhD (project) candidates, career prospects were considered more important by most. This is not surprising; given that their research was closely linked to their workplace, there is an opportunity to develop cultural capital within that field, along with educational capital, which could position them for career advancement. However, this needs to be seen in the context of Helen’s (thesis, C) experience where not only did she not develop cultural or symbolic capital in her school, comments from her colleagues were entirely negative. EdD candidates’ motivation was more strongly aligned to professional and personal development, although several mentioned career prospects. Candidates in both PhD programs were also strongly motivated by an interest in their specific research topics; however, this was not mentioned by any EdD candidate. Further, some candidates for each program were still striving to do their best, despite some major limitations, while a number of EdD candidates had given up any notion of producing their best and were now merely attempting to finish. However, transcript data show that this attitude was to a large extent a result of coursework dissatisfaction and cannot be seen as representative of the EdD program.

There was a general belief across all programs that their research should be of an applied nature, although some PhD (thesis) and EdD candidates felt that given the opportunity they would engage in purely theoretical research. Not surprisingly given the workplace focus, no PhD (project) candidate was interested in theoretical study. Some candidates from each program identified their research as useful in their specific workplace, although this was strongest among the PhD (project) and EdD candidates. The only candidates to cite a lack of use in the workplace were PhD (thesis) candidates. Similarly, only PhD (project) candidates identified issues in using their research in the workplace. These were all potential intellectual property issues, which show the potential for the fields of
research and the workplace to collide when symbolic and cultural capital (and perhaps economic capital) is at stake.

8.6 Summary of main findings

Many elements in this cross-case analysis have overlapped between the sub-questions, so a summary of the main findings is now useful in order to capture the essence of the findings. Bourdieu’s concepts added to the literature by providing another layer of understanding of issues of personal identity and the doctoral experience (Green, 2005; Green & Lee, 1995; Lee & Williams, 1999) within the particular structures of the various subfields and fields of doctoral study.

Many issues were common to all doctoral programs. For instance, a key finding was that the ease or otherwise with which candidates progressed is related to their habitus, confirming Lee and Williams’ (1999) understanding of the impact of irrationality and emotion on their studies. The current research extends this notion by assigning not only emotions but other perceptions, attitudes and practices to the particular habitus’ of candidates. The habitus appeared to either aid or constrain candidates’ success. Some struggled with self-sabotaging behaviours such as procrastination, while the habitus of others allowed them to continue in their studies despite many major set-backs. A further element seen through much of the data is the lack of appropriate cultural capital evident in some doctoral candidates. This is seen in gaps in candidates’ understanding of the expectations in doctoral study. Unfortunately, the data show that this can be missed by supervisors, who may assume that prior university studies have provided an effective basis for doctoral study.

Clearly, the lack of learning community precluded development of much needed social and cultural capital. There are clear benefits of coursework related to research degrees. While the EdD program, as discussed earlier, cannot be considered representative of EdD programs run in the School in previous years, participants in this study pointed to an important benefit of coursework units in terms of feeling part of a learning community. This sense of community ceased, however, when the coursework units were completed.

Other findings related more to the specific nature of the doctoral programs. These included the ambivalence evident regarding development of the types of cultural and social capital appropriate for doctoral candidates not aiming to work in an academic environment where these are in conflict with the workplace. A degree is needed which values the cultural, social and symbolic capital appropriate to the candidate’s workplace. Arguably this is what the PhD (project), and to a lesser extent, the EdD
aimed to do. However, as Malfroy (2004) points out, difficulties in framing doctoral programs within the workplace are substantial, and involve ‘complex issues of authority/power, organisational dynamics, ethical dilemmas’ (p. 73) among others. The PhD (project) and EdD degrees are set within the broader field of doctoral study (and power) and until there are agents in these subfields with equal amounts of the kinds of symbolic, cultural and social capital valued in the general, ‘traditional’ field of doctoral study, tensions are likely to persist.

Not surprisingly, PhD (project) and EdD candidates felt the applied nature of their research to be important. While PhD (thesis) candidates felt they had learned most about knowledge of research procedure and the nature of research, candidates in both of the other programs identified the research topic to be of most importance. Workload and time benefits were also seen in PhD (project) candidates who were able to complete their project in their workplace. Further, for PhD (project) candidates, career prospects and practical application for their research were important.

8.7 Discussion points

Through analysis of the case study data and cross-case discussion, three meta-themes emerged: tensions from within and between subfields and fields, challenges to autonomous principles, and an understanding of the importance of habitus in candidates’ trajectories towards becoming a full member of the doctoral field. These are now discussed.

8.7.1 Tensions between and within the fields

Fields and subfields can be seen as sites of continuous struggle and tension between agents in dominant, subdominant or homologous relationships to other agents. Those with the greater amount of the types of capital valued by the field will occupy higher positions. It can be argued that in the broader field of doctoral study, the capitals most valued are cultural and social capital. Assumptions can also be made that supervisors will have more capital than candidates, particularly when these capitals are of a symbolic nature, with the relevent prestige attached. Further, supervisors themselves will have varying amounts of these capitals relative to other supervisors. Those who are professors or associate professors, for instance, or those who have long-established and valued practices, command significantly more capital than others. In other words, power rests with the dominant agents.

This has ramifications for Practice when those who become dominant in subfields are not those with the power in the larger field. While Bourdieu (1984/1988) spoke of academia generally as being contested territory, with agents struggling to ‘determine the conditions and the criteria of legitimate
membership and legitimate hierarchy’ (p. 11), more specifically in this study, tensions are seen within a subfield in demise, within a relatively new subfield struggling to establish itself, and between the fields of academia and the workplace.

Although the issue of EdD candidates’ perceptions of the lack of appropriate program choices and associated difficulties with the administration of coursework units cannot be a factor in the comparison of doctoral programs (as explained in Chapters One and Seven), it is appropriate now to discuss it within the context of tensions in the demise and development of programs. The lack of coursework choice effectively robbed candidates of what McWilliam et al. (2002) argue can be a useful transition point into the rigour of doctoral research. The effects on EdD candidates were profound and produced lasting trauma. For some candidates interviewed, three or four years had passed since they had completed their coursework units, yet they still felt disenfranchised: It’s like I’m lost in the Sahara and there are no directions […] I’ve never felt so unsafe – like, I’m on a trapeze and there’s no safety nets anywhere (Lyn, EdD, C); It’s like being a kite – you’re buffeted around in different directions (Alison, EdD, C). Some had a poor self-conception and were no longer aiming to produce excellent research, and, although other factors could have led to this, a number of them felt this unfortunate experience to be the main cause. While some found the coursework a useful way to build contacts with lecturers and other candidates and thus were able to build some social capital in the field, this was negated by the administration problems and frustration felt in spending valuable time studying courses in which they had no interest.

The tensions here spring from competing values between an autonomous field focused on those who possess scientific, ‘scholastic capital’ and a heteronomous field of those possessing the administration power of ‘academic capital’ (Bourdieu, 1984/1988). Universities are businesses and there is an obvious need for them to rationalise their spending. In this context it is important to remember that the boundaries of fields and subfields are fluid and as fields converge with each other, social space becomes layered. In the case of the EdD program, the numbers of candidates fell. This left those within the EdD subfield with the scholastic capital, who still saw the educational value of the program, powerless against and dominated by agents within the broader doctoral field of the School, who possessed sufficient academic capital (who were in turn, of course, powerless to act on a lack of Government funding). Thus the subfield, no longer recognised as viable, disappeared, leaving no-one with sufficient scholastic cultural capital to plan for the program’s demise and ensure the candidates were not disadvantaged.
New and developing subfields also show tensions within and between those and other fields. As outlined above, for a program to survive there must be a critical mass of agents with sufficient cultural and symbolic capital who believe in the program. However, comments by some supervisors show an undercurrent of unease about the PhD (project). Tina (S, thesis), for instance, expressed concern at an instrumentality and lack of rigour in the PhD (project). Another supervisor was made aware of a very senior staff member’s disparaging remarks about the program. Further, during the period of this research, several agents with substantial levels of symbolic and cultural capital in the PhD (project) subfield left the School, with the result that supervisors of other programs have now begun to supervise candidates in this program. There is a danger if too many agents with the required amount of capital in that subfield are replaced by other agents who might show little acceptance of its worth (lacking the required ‘illusio’). The PhD (project) subfield could find itself in a precarious situation if there are insufficient ‘game players’ with enough symbolic capital within the broader School doctoral field who believe in the ‘game’. The fluid boundaries and converging fields produce a very real danger of the subfield collapsing or being reconceptualised.

Confusion within the PhD (project) is also seen regarding various aspects of the program, particularly regarding the exegesis. It seems there are no clear guidelines for candidates or supervisors in terms of defining principles; that is, what is acceptable or valued content and structure. Although both supervisors interviewed did not see this as a problem (except for the small word limit), candidates with supervisors both inside and outside of the School of Education reported a sense of bewilderment because their supervisors seemed also to lack any concrete advice. The two supervisors from this subfield also pointed to the exegesis as problematic. Although for Paul (project, S) this was more to do with his students lacking appropriate academic writing style, with Pam (project, S), it was more related to the structure of the program. She identified a number of her candidates as having difficulty in identifying what content belongs in the exegesis, compared to the artifact. It seems that the PhD (project) subfield has not established a doxic praxis (the accepted way of thinking and acting in the field), although with some supervisors from other programs questioning the legitimacy of the PhD (project) and others finding difficulty negotiating a path, it is important that it actually become orthodoxic: in other words, the elements, parameters, scholarship and values of the subfield need to be discussed and agreed to by the key agents.

Other tensions identified in this study have been resolved with a change in field. Two candidates, for instance, whose research was cross-disciplinary and who were in dispute with their original supervisors in the School of Education were provided with supervisors from other schools. In each case, as the candidates’ research plans were accepted by their new supervisors, there was a palpable
increase in the candidates’ level of capital as they felt accepted in their respective new ‘games’. In each case their previous workplaces were more aligned to the new fields and their habitus’ undoubtedly enabled them to have a better ‘feel for the game’ in these fields.

Conflict between the fields of the workplace and the university are also seen. Some candidates’ habitus, for instance, was more appropriate to their workplace. For instance, Lyn (EdD, C) had a very senior position in a large corporate workplace and was embodied by a substantial amount of cultural and symbolic capital there. However, as she attempted to ‘play the game’ in the doctoral field, her lack of recognised capital in that field, shown, for instance, in her inappropriate business-style dot-pointed writing, put her in a dominated position, causing a considerable amount of distress.

Further tensions between the university and the workplace are possible in the PhD (project). These include the difficulty for the candidate in dealing with conflict in the workplace following implementation of the project and the risk of the candidate losing his/her job before the research is completed. Although neither of these was reported by the candidate respondents, Paul (project, S) identified them as issues that have occurred with candidates he has supervised. The former produces a dilemma for the candidate. To see the true value of the research in terms of both an academic and a practical achievement (and perhaps to gain some cultural capital), it must be implemented; however, the workplace field is the enduring field for the candidate and the degree to which there is an increase in cultural capital as a result of the research depends upon how the research is received. There are also potential intellectual property issues whenever research is located and perhaps sponsored by a workplace, while still part of a university doctoral degree. Although the issues were resolved, two PhD (project) candidates experienced some degree of unease, one, Boris (project), felt the need for his industry manager to acknowledge ownership of the research to Boris. There are similarities here of a more global issue of the power relations between Government regulations and requirements pressuring universities to address uniform processes and standards and the candidates’ need for a more responsive doctoral program aligned with his or her workplace. The irony here, of course, is that the Government itself has indicated a need for more workplace research. Universities are caught in the middle.

8.7.2 Challenges to autonomous principles

Autonomous principles are seen to be challenged both in terms of fields and pedagogy. For instance, the general autonomous field of doctoral study with its underpinning values derived from the field itself is challenged by the heteronomous field of Government regulations regarding submission time. While the Government seemingly (mis)understands doctoral candidates to be young, male and
studying science, this view does not allow for doctoral candidates valued in Schools and Faculties of Education such as women and those who are working and maintaining part-time study. Completion rates are now performance indicators for university faculties and schools and tied to funding. Similarly, heteronomous intrusions into the general field of doctoral study, for instance, the Government focus on the ‘products’ of research such as generic or employment-related skills and research output for institutions, conspire against the ‘processes’ of research and the researchers’ engagement with these.

Heteronomous principles are also seen in RMIT’s regulations regarding the word limit of 20,000 – 40,000 for exegeses in project-based doctoral programs (RMIT, 2007b). This may be adequate for the project-based doctoral programs in Art and Architecture that the University has run for some years, but comments by candidates and a supervisor allude to the needs of the field of Education not being addressed. Paul (project, S), for instance, argues that these regulations do not take into account the nature of workplace change in terms of the need for adequate theorising as well as the practical aspects of the research. A further argument for a longer exegesis was also put by Paul (project, S), who pointed out the real fear of what the examiners are going to do. Similarly, Carol and Liz (both PhD project candidates) felt the PhD (project) program should have been able to offer more creativity in the exegesis. Instead, their supervisors understood the issues relating to the broader fields of power (Bourdieu & Wacquant, 1992b), in this case, the examiners, pointing out the need to ‘play the game’ through using more traditional writing styles and structures.

There are also challenges to autonomous principles of dialogical pedagogy, which includes an over-emphasis on the master/apprenticeship model of supervision (Moriarty, Danaher & Danaher, 2008). Paul (project, S), for instance, strongly argues for team supervision over what he perceives to be sub-standard master/apprenticeship practices with their power imbalances and lack of accountability. He argues that in the PhD (project) it is not possible to be an ‘expert’ in each workplace. However, as he points out, group supervision does not fit within the performance requirements. While the master/apprenticeship model with its clear lines of accountability and responsibility is appealing for heteronomous interests, the candidate is always dependent, ‘affirming an asymmetrical power relationship’ between candidate and supervisor, and confirming what for many candidates is ‘an almost instinctive sense of being an impostor, somebody who is yet to show that s/he really is entitled to a position within the field of knowledge production that research constitutes’ (Moriarty, Danaher & Danaher, 2008, p. 438).
However, this needs to be tempered with the understanding that not all candidates appreciate a dialogical approach from their supervisor. In the present study, for instance, Trang (thesis, C) construed the egalitarian approach from her supervisor as over-familiarity, finding it to be disturbing. She preferred an approach where she understood her supervisor to be the master. This is echoed by Moriarty, Danaher and Danaher (2008), who point out that some candidates from a Confucian heritage based on authority and deference ‘might find dialogical pedagogy so unsettling as to be ultimately destructive’ (p. 439). Once again, the importance of habitus is shown, which is now discussed along with cultural capital.

8.7.3 The importance of habitus and cultural capital in doctoral study

Two assumptions can be made with regard to doctoral candidates’ habitus and cultural capital. First is that the previous university study, even at Bachelors or coursework Masters level, will have provided candidates with cultural capital appropriate to the doctoral field and that the amount of cultural capital they present with will be incorporated within a habitus geared towards postgraduate study, thus assisting them in their doctoral studies. The second assumption is that they are aiming to build on their cultural capital by gaining legitimate membership of the ‘doctoral club’. These assumptions were tested in this study and found not to be true for all candidates. They came with unequal amounts of cultural capital and varying habitus, varying in their ability to succeed in an educational research practice of which most have little prior experience. Further, for some, the capital gained from the credential was secondary to personal and professional development.

Habitus is an important element in Bourdieu’s theory. It is an organising principle for actions, norms of behaviour, attitudes and perceptions, and as such, carries the cultural capital that individuals acquire through early socialisation. Because one’s disposition influences positions and position-takings in fields, it is a defining element in an individual’s success or lack of success in various fields in which they find themselves. It is the habitus that enabled some candidates to have a ‘feel for the game’ of doctoral study (although there were few of those in this study), other candidates to persevere against difficulties and ultimately reach success, and others to struggle painfully until they decide to withdraw.

We have little choice in the habitus we develop through childhood, and Bourdieu, in fact, argues that the habitus is reproductive, constraining our trajectory through life. Mills (2008) points to critiques of Bourdieu’s theory as being overly reproductive. However, she argues for its ‘transformative potential’ (p. 79), first, of the habitus then drawing on cultural capitals in terms of transformation, and finally discussing transformation of the field. Along with her fellow researcher (Mills & Gale, 2002), she
identifies two types of habitus: reproductive, in which individuals accept their social status and constraints; and transformative where they have the ability to change and improvise. In the context of education, Mills (2008) argues that reproductive and transformative potential of the habitus of an individual may vary between occasions.

A reproductive habitus was clearly seen in some candidates. Lyn (EdD, C), for instance, despite not having been allocated a supervisor for many months, accepted it as the norm. Despite her high-level managerial position, she still has an unshakable belief that things do not ever work out in her life outside of work. The administration staff seemed to feel there were no problems because she did not complain, which then became an act of symbolic violence, thus further perpetuating Lyn’s belief that things do not work out.

Evidence of a transformative habitus is also seen in the candidates. Personal growth was a key factor with candidates in most programs. Boris (project, C), for instance felt that while his research topic was important to the community, the personal development he felt he was gaining was vitally important to him personally. Similarly, when Sally (project, C) was determined to understand difficult concepts in her research methodology unit, she found a perseverance she did not believe she had before. Having ‘dropped out’ of many activities she had previously found difficult, this newfound determination has seen her through some very difficult times in her doctoral studies. Knowing when to constrain a habitus is also useful. Although Helen (thesis, C) is predisposed to discuss her research because she understood how much she learned by being able to articulate elements, she keenly felt her inability to discuss her studies in her school workplace. She understood clearly that not only was the PhD not valued as cultural capital in that field, but also to mention it would have had the reverse effect.

In attempting to show an assumed mass of cultural capital, Julie (thesis, C) owned up to being a ‘confessed snob’, denigrating the EdD in comparison with the PhD (thesis, C). With a history of doing particularly well in her research Masters degree and a habitus clearly aligned with doctoral studies, she saw the value of the PhD only if it was difficult to accomplish. Both Boris (project) and Lyn (EdD, C) also commanded a great deal of cultural and social capital, but in the fields of their workplace, not the university. However, each showed a different habitus, with Boris showing determination to somehow bring academic capital into his workplace, whereas Lyn, despite her high-powered corporate position found her work-perfect habitus with natural, high level social and oral communication skills to be of little use in doctoral studies.
Some candidates felt that there was an expectation by their supervisors that candidates come with sufficient capital to enable them to function fully in the ‘game’ of doctoral study. Where this attitude was apparent to candidates it affected them in varying ways. Both Lyn (EdD, C) and Jennie (EdD, C) felt such a lack of understanding of ‘the game’ to render them powerless to ask their supervisors questions because they felt it would reflect badly on them. A somewhat different reaction was Sunee’s (thesis, C) inability to ask questions because she did not know what questions to ask. As discussed earlier, the lack of any sense of learning culture left very little chance for candidates to develop cultural capital even as they neared the end of their trajectory. Being largely isolated meant they had little conception of the field as a whole, much less their program subfield. Many candidates from all programs called on their social capital and found it easier to discuss their issues with a ‘critical friend’ who was successful in this field or to ask another expert, which showed a disposition for finding alternatives, arguably a useful trait in doctoral study.

It is worth considering that candidates who choose technical universities will not be the same as those who choose sandstone universities. Ten of the seventeen candidates were from employment backgrounds other than higher education, which arguably increased their difficulties in working with Mode 1 knowledge practices. Their primary dispositions in many cases were of their workplace field, and this may have restricted their possibilities of engaging in doctoral study to enrolling in a technical university. It is therefore understandable that these candidates have low cultural capital.

Candidates who work, particularly those working full-time in senior positions and studying part-time, clearly have a habitus geared toward success in their careers, which may be different to that required for doctoral study. They also have often built up large amounts of cultural, social and symbolic capital in their workplaces. They attempt to ‘play the game’ in the doctoral field, but entering the game implies an acceptance of the rules, both explicit and implicit, of the game. Players with the required habitus and cultural capital, such as those in this study who have a close cultural relation to the academic field, possess a ‘feel’ for the game which brings with it the practical ability to perform. Those who lack the recognised capital in this field find themselves in a dominated position, and if also working, can find it difficult and confusing to develop their habitus in the required ways.

Conversely, those who are studying full-time and not working, particularly those who study on campus and have regular contact with supervisors and other research candidates, are in a better position to develop a habitus suited to the research environment. If there is a collective habitus of successful doctoral candidates it would seem to include motivation bolstered by personal and family
pride coupled with a determination to succeed coming from a perspective of having something to prove.

Nearly all candidates in this study have now successfully passed their degrees and thus have acquired more educational capital, but at what cost? For those with an appropriate habitus or the good fortune to work with a supervisor who can develop it, and the desired amount of cultural and social capital, the doctoral process will confirm that they are worthy members. Unless supervisors/teachers understand their students’ habitus and take steps to encourage transformation where necessary, their trajectories will be limited. For those who are missing these elements, even if they have been successful, the struggle has likely confirmed that they do not really belong in this field; they are like ‘fish out of water’:

Reading the future that fits them, the dispositions of such students confine possibilities to those they see to be suitable for the social group to which they belong: excluding certain aspirations as unthinkable, and inclining us instead to love the inevitable (Mills, 2008, p. 82).

8.8 A new look at supervisor pedagogy

The clear message in terms of answering the fourth sub-question in this study: *What can we learn from answers to these questions in terms of supervision pedagogy and learning support?* is that all stakeholders need to be aware that teaching at a skills level is a necessary but insufficient strategy to move candidates through their trajectory to becoming full members of the doctoral field. While there needs to be a pedagogical focus in the supervisor/candidate relationship, it needs to be understood as being more than merely teaching research and academic writing skills. Candidates need to be acculturated into the field of research – into the ways of thinking, doing and reflecting, in order for their habitus to become transformed so they can increase their level of cultural capital.

The master/apprentice model of inducting candidates into the discourse community only works if there is, indeed, a master. While supervisors have an abundance of cultural capital, they do not necessarily have the explicit awareness of the rules of the game, particularly when writing at the advanced level and style required of doctoral candidates. Although supervisors have a ‘sense’ of the game, implicitly understanding the rules in a form of doxic praxis, some seem to have difficulty in conveying these to the candidate.

Supervisors also need to be reminded of the power imbalance between themselves and their candidates. Because most candidates in this study were employed practitioners, often in high-level positions, and often older than their supervisors, there is evidence that even when supervisors attempt
an egalitarian pedagogical and social space with their candidates, that some candidates are very aware of their own lack of cultural and symbolic power – a recognition that in all social spaces are subject to the influence of power. There must be some scaffolding to not only build the candidates’ knowledge of the rules of the game, but to gradually induct them so their research knowledge becomes second nature to them; that is, to develop their habitus by imbuing it with cultural capital valued in the field of doctoral study.

This is more likely to happen when candidates feel they are part of a learning community where they can share their learning with others – with other research candidates and other lecturers and supervisors. This needs to be done formally, through, for instance orientation sessions in which candidates learn the explicit ‘rules of the game’, and watching and giving regular presentations at School research conferences (which is currently the case) where candidates can identify the expected standard. However, just as important is to provide ongoing opportunities for informal meetings where candidates can gradually get a ‘sense’ of the game. In this situation it might be possible to transform their habitus and develop cultural capital, gradually learning to ‘walk the walk and talk the talk’.

However, there may still be an issue in terms of candidates in Practice-based doctoral programs such as the PhD (project). Being inducted into and immersed within the academic environment may produce contradictions in candidates who do not wish to remain part of this field. Although they need to be seen (at least by supervisors in the final stages and their examiners) as having developed some degree of cultural capital in their topic area within the doctoral field, some are clearly attempting to build capital in their workplace as well. It is interesting that in ‘playing the game’, candidates have presupposed an ‘illusio’ (Bourdieu, 1990, p. 76), believing in and accepting the value of doctoral studies, despite not wishing to remain part of the major field within which the doctoral studies subfield is part.

The double issue of appropriate professional development for supervisory staff and academic language and learning staff is difficult to resolve. Supervisors need to be aware of the possibilities and requirements and underlying philosophies underpinning each of the doctoral degrees in which they supervise. The University has attempted to redress this issue by making the attendance mandatory of two of its workshops held throughout each year, but two supervisors in this study argued that they provide little in the way of supervisor support, preferring those set up by the School. It appears, however, that even the latter have yet to address the issues specific to differences in the doctoral programs, with, for instance, supervisors unfamiliar with the PhD (project) finding themselves supervising in this area. Similarly, the University also provides graduate workshops for HDR
candidates through the Graduate Research Office and through the academic language and learning area, but although the candidates interviewed who had attended these felt they had gained some skills through them, there is more that can be done in terms of understanding the need to address issues of habitus and the effect of this on learning. With the diversity of doctoral programs and candidates’ backgrounds and work experiences, it is clear that the underlying issues of appropriate habitus, relative amounts of the capitals that count, and the interaction of this within the particular subfields and fields need to be taken into account.
Chapter 9

Conclusions and Recommendations

9.1 Key findings and significance of the study

This study has focused on the positions and space doctoral candidates, and to a lesser extent, supervisors, occupy in the three subfields of the PhD (thesis), PhD (project) and EdD programs. In looking at the cultural practices of participants and their struggle for legitimisation in the field, Bourdieu’s concepts of capital, field and habitus were utilised.

The Government’s agenda of widening participation resulting in diverse student cohorts appears to be at odds with its own regulations. In reducing completion times, there is a failure by the Government to consider gender issues and the increase in part-time candidature. Despite much research showing diversity among doctoral candidates, regulations favour young candidates with few other responsibilities. Doctoral candidates in Education, conversely, tend to be part-time with either part-time or full-time work, predominantly female, and at an age where they have responsibilities to both children and aging parents. In the broader field of doctoral studies, it is clear that Faculties or Schools of Education have little symbolic capital.

The introduction of the PhD (project) subfield and the demise of the EdD program in the School of Education have provided a useful platform from which to view a change in the field of doctoral study. Bourdieu (2000) argues that if society changes and enough people understand and believe in these changes, change in the structure of the field can be effected through acts of resistance within this particular field. With this change can come a ‘subsequent constituent habitus’ (Grenfell, 2004, p. 186, emphasis in original). Although the scenario is not one in which one field is replacing another field, there are clearly issues where agents in the newer subfield feel the need to resist agents in the more traditional field. With the diversity of doctoral degrees now, it is important that supervisors have sufficient cultural capital in the particular subfield of that particular type of degree in order to maintain it as a subfield.

Although a notable finding is the greater perception of symbolic capital generated by the qualification of PhD (both by thesis and project) for some candidates and supervisors, there were no differences between each doctoral program in the extent to which the workplace was integral to the research; in
all programs it was possible to fully integrate the research into a particular workplace, or to merely
genralise the research to the broad work area. The difference in candidates’ experiences is
predominantly seen in those whose research is located within their workplace and also in those with
substantial cultural and symbolic capital in their workplaces. In the latter, candidates who have senior
positions in their workplace can have a habitus and the types and amount of capitals more appropriate
to this environment, which may produce more difficulties in developing those conducive to doctoral
study (bearing in mind that there will always be elements in common).

The trajectory of some candidates towards becoming successful agents in the doctoral field is clearly
smoother than with others, and in this there are no discernable differences seen between candidates in
each of the doctoral programs. It is clear that the lack of a learning community largely precludes the
possibility for candidates to develop appropriate capital that is needed to become valued players in the
field. However, even when candidates have successfully completed their doctoral studies, it is
difficult for them to develop much symbolic, cultural or social capital in this field unless they become
supervisors themselves. Further ambivalence was seen in terms of whether the kind of capital
appropriate to the doctoral field is actually relevant for candidates whose research focus is their
workplace. Thus, the power relationship between candidates and their supervisors will mostly not be
resolved. In any case, factors intrinsic to the candidate (their habitus) such as determination,
motivation and independence may be as important to success as a doctoral candidate as a valuable
candidate/ supervisor relationship.

9.2 Recommendations

Based on the findings of this research, the following recommendations are made:

- Develop a set of best-practice principles or guidelines for supervisory practice within
each of the School’s doctoral programs, and provide professional development related
to this to all supervisors in the School.

All supervisors need to have an in-depth understanding of all doctoral programs offered, including the
underpinning philosophy, processes, and inherent issues and potential solutions. This necessitates
agreement on the essential differences between, and similarities and possibilities within each of the
remaining two programs. Only through this activity will it be possible to identify boundaries between
each subfield.
• **Provide on-line and face-to-face opportunities for candidates to participate in networks or clusters with other candidates and supervisors to allow candidates to develop social and cultural capital.**

Clusters could be based around research topic areas or particular research methodologies in which critical reflection on various conceptions of research and doctoral study can be engaged. Given the difficulties of part-time candidates attending face-to-face sessions, on-line ‘blogs’ and ‘wikis’ could be used, with the occasional evening social event. These could be considered as part of the following recommendation: exploring alternative social events.

• **Explore alternative supervision practices as a way of developing learning communities.**

These could include a mix of individual and group sessions where supervisors bring groups of their candidates together on a regular basis. They could also involve embedding an academic language and learning adviser to work with candidates at critical moments in writing their thesis or exegesis and to set up on-going writing circles.

• **Develop a supervisor pedagogy aimed at habitus transformation.**

Supervisors need to be aware of self-sabotaging behaviours of some candidates’ habitus in relation to the field of doctoral study. Although the habitus is difficult to change and does not change quickly, it is important that candidates with a habitus likely to constrain rather than enable success in a research project are exposed to pedagogical strategies aimed at attempting to develop it. This would need to include work on candidate identity as a researcher. Merely teaching research ‘skills’ is inadequate; for the sustained journey of doctoral study, an appropriate habitus is crucial.

• **Ensure supervisors and learning support staff develop awareness of the effects of relative amounts and types of cultural capital in candidates.**

Lack of the ‘right’ type of cultural capital can show in gaps in basic knowledge and understanding, linguistic competency and behaviour. There is an assumption by many that, because of previous academic study, research candidates have the appropriate knowledge and understanding to begin a research project. For many without a prior research Masters degree, this is not so. Similarly, candidates may be highly endowed with cultural capital that is appropriate to the workplace but not for doctoral study.

### 9.3 Limitations of the study

Several limitations must be acknowledged. First, in view of Bourdieu’s fields of power and the logics of practice, a caveat to the recommendations must be stated. As powerful members of their discipline,
supervisors engage in pedagogies that are logically geared towards producing Mode 1 knowledge and therefore (re)produce the field. To change this practice to enable a viable subfield involving Mode 2 knowledge requires intervention by agents with the amount of valued cultural capital and sets of dispositions equal to or above the status quo in the School of Education. Given its immersion in the Mode 1 disciplinary interests of Education, change is to a large extent constrained by the School itself. Furthermore, hierarchical relations of power exist beyond the School: both the School itself as a subfield of the University, and the University as a subfield of the regulatory body of government have limited power given their respective disciplinary status and university status, as discussed in Chapter Three.

Issues of methodology also present some limitations. Fontana and Frey (1994) argue that to engage in a ‘real’ conversation ‘makes the interview more honest, morally sound and reliable because it treats the respondent as an equal’ (p. 369). To be treated as an equal in this case was not difficult, since the researcher was also a doctoral candidate. However, Alvesson (2003) points out that this does not guarantee an ‘honest’ response, and may lead the interviewer to more strongly guided responses. He further argues that it is rarely possible to separate distortions from authentic experiences of the respondents. Both of these points need to be taken seriously in this particular research. Many questions both initial and when seeking further information, were of the ‘why’ type, which Becker (1997) concedes can lead to self-justifying or normative responses. Similarly, the few doctoral candidates who had already passed their degree may, by the time of the interview, have psychologically moved on, their focus being on their success, with negative elements ‘forgotten’. Conversely, the candidates who had not yet submitted were under enormous stress, as evidenced by their interviews, and some may have found it easier to discuss negative aspects of their research than positive as compared to those who had already submitted. In an attempt to balance this, the researcher often repeated questions relating to positive aspects throughout the interviews. However, the point remains that a few candidates seemed to feel that the friendly, ‘real’ interview was an invitation to ‘vent their spleen’.

Bourdieu (1999) argues that interviews tend to be more useful and successful if the researcher is able to see the world of the participants. Being in the same situation as the candidates, the researcher already had a grasp of some of the issues facing them and could empathise. Although this was useful in terms of ensuring a level of ease in the interviews, it had the potential to produce some difficulty in distancing the researcher’s prejudices, experiences and orientations in the analysis, and as Creswell (1998) argues, it will have inevitably shaped the interpretation and approach to the study in some way. Further, the research is not exempt from the researcher’s underlying interests. It is positioned
within the higher education field and engages in Mode 1 knowledge, which may act to advantage the researcher. Understanding the threat of potential bias was kept to the fore through the coding and analysis, and as much as possible, the researcher let the data speak for itself.

There is a tension here, however, related to what Bourdieu calls an ‘intellectualist bias’ (Bourdieu & Wacquant, 1992a). While interviewing candidates, the researcher’s identity was as theirs: a doctoral candidate immersed in the same world and relatively equal in the field (aside from the imbalance in activity between interviewer and interviewee). However, despite an attempt to focus on ‘concrete problems to be solved practically’ (Bourdieu & Wacquant, 1992a, p. 39) and not to assume the view of the ‘impartial spectator’ (Wacquant, 1998, p. 226), success in the game of doctoral research depended on engaging in coding, analysing and writing up the thesis. Even the notions of ‘bias’ and ‘allowing the data to speak for itself’ may be part of the doxa of research and therefore be misrecogntions. Doubtless, in these activities the researcher developed a ‘scholarly gaze’ through engaging in presuppositions that are ‘built into concepts, instruments of analysis…and practical operations of research’ (Bourdieu & Wacquant, 1992a, p. 40). As this intellectualist bias is what Bourdieu calls ‘the most insidious source of bias’ (Mills & Gale, 2005), it is clearly a limitation to this research.

As a qualitative study with a small number of participants from one School of Education, the data collected is clearly not representative of all doctoral candidates, limiting the generalisability of the research. However, rather than generalisation of content, the study sought to achieve analytic generalisation (Yin, 1994) in order to widen the relevance and applicability of the findings. Both Bourdieu (1972/1977) and Giddens (1991) argue that generalisations can be drawn from underlying themes and structures which go beyond individual agents.

It is important also to acknowledge the limitation caused by the reduction in numbers of EdD candidates which led to limited coursework options. The subsequent dissatisfaction of some candidates had the potential to impact on the integrity of this study, as identified in Chapter One and again in Chapter Seven. Although the decision to retain and use the data from the EdD program was justified (see Chapter Seven), and the researcher took care to remind the reader of this limitation when discussing these particular negative experiences, a more balanced comparative study would have been possible had the EdD program been more viable.
9.4 Concluding comments

This study has added to the knowledge of doctoral candidates’ journeys through a comparative study of three doctoral programs in a School of Education. It has sought to problematise and contest current understandings of doctoral candidates’ experiences by highlighting the complexities in the process. It has also captured some experiences specific to the different states of the program: ongoing, emerging and declining.

Although this research corroborated much of the previous research literature, it offers a new way of understanding these issues and provides a new body of knowledge on candidates’ experiences within the ever-expanding notions of doctoral study, particularly in relation to tensions between the fields of the workplace, university and Government policy.

There are some further studies stemming from the present research that could lead to deeper understanding in this field. For instance, a similar study to the present one could compare matched candidates and supervisors in a ‘traditional’ PhD and a Practice-based PhD program. Within this framework it would be useful to find out to what extent supervisors recognise expertise (through cultural capital or appropriate habitus) in their candidates. This would allow deeper insights into the candidate/supervisor relationship in terms of the relative perceptions of experiences, particularly from within Bourdieu’s methodological framework.

Further, there has been very little literature to date attempting to understand issues in academic research within workplaces. For instance, how is the researcher regarded by colleagues? What are some models of supervisory practice of workplace and academic supervisors working together? What happens when the researcher’s manager or workplace supervisor is in conflict with the academic supervisor?

It is clear that the academic and workplace worlds will continue to develop strong ties with each other. It will be important to ensure that the doctoral candidate, who, despite success in the workplace, will possess varying amounts capital appropriate for and a habitus variously suited to doctoral study, is not forgotten. Bourdieu (1972/1977) argues that it is necessary ‘to abandon all theories which explicitly or implicitly treat practice as a mechanical reaction, directly determined by the antecedent conditions and entirely reducible to the mechanical functioning of pre-established assemblies “model” or “roles”’ (p. 73). Far from a mechanical reaction, insights from the data in the
present study reveal the emotionally-charged process of succeeding as a doctoral candidate, with the on-going struggle to balance feelings of despair and inadequacy with a dogged determination to succeed.
References


Barnacle, R. (2003). Research graduates at work. Report on a study conducted on behalf of the RMIT Research & Graduate Studies Committee: RMIT.


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Erickson, F. (1986). Qualitative methods in research on teaching. In M. Wittrock (Ed.), *Handbook of research on teaching*. Washington DC: AERA.


supervisors in small and new universities. Paper presented at the Quality in Postgraduate Research: Knowledge creation in testing times, Adelaide.


Maxwell, J. (2002). Reconceptualising the research higher degree in an age of 'supercomplexity'. *International Journal of Learning, 9*.


Supervising postgraduate research: Contexts and processes, theories and practices. Melbourne: RMIT University Press.


RMIT (n.d.). School of Education Research Programs brochure.


Appendix 1: Interview schedule for candidates

Note that ‘Why?’, ‘Why not?’ or ‘In what way?’ invariably followed on from these questions where relevant.

1. **General data:**
   - Male/female
   - No. of years into program
   - Full-time/part-time
   - Date of birth

2. **Background information:**
   2.1 Have any family members attended university (eg parents, siblings)?
   2.2 Previous academic qualifications (including year of most recent qualification)
   2.3 Have you published any academic work before?
   2.4 What is your occupation? Are you still working? Full-time/part-time?

3. **Research:**
   3.1 Research topic
   3.2 To what degree do you see your research as ‘standing on the shoulders of previous research’?
   3.3 Why are you doing a research degree?
   3.4 In general terms, what do you hope to get out of your research?
   3.5 What epistemology/methodology are you using?
   3.6 Do you think there is an objective world or is it constructed?
   3.7 What do you understand by the concept ‘knowledge’?
   3.8 What, if anything, wouldn’t be acceptable as knowledge in your doctoral research?
   3.9 Do you see yourself as a researcher?
   3.10 What does it mean to be a researcher?
   3.11 Have you presented any aspects of your doctoral research? (Conference papers? Seminars? Journal articles? Other?)
   3.12 Are you aiming for excellence, or will you be satisfied just to get through the program?
   3.13 Would you like to do more research in the future? Do you think you will? [If yes: In what ways will this doctoral research have assisted you?]
   3.14 How important is it for any research you do to be applied research?
   3.15 Would you consider doing any purely theoretical research?
   3.16 Roughly what is the balance of theory to practice in your research? Are you happy with this balance?
   3.17 What is the relationship of your research to your workplace?
   3.18 Is there a research culture in the School of Education? Do you feel that you’re part of that research culture? [Yes: In what way? Can you describe this culture? In what ways could it be improved?] [No: What could contribute to this? Do you feel you’re missing out? In what way?]

4. **The nature of the program:**
   4.1 **General:**
      4.1.1 Tell me what it’s like to study in this program.
      4.1.2 What have you learned through your experience as a doctoral student? How did you learn most of what you’re learned?
      4.1.3 Did you know there were three doctoral programs before you enrolled?
      4.1.4 Why did you choose this particular doctoral program?
4.1.5 Do you have a funded place?
4.1.6 What, if any, administration issues have there been?
4.1.7 Tell me about your 1st review.
4.1.8 Has this program generally met or failed to meet your needs as a doctoral candidate? In what ways?
4.1.9 What have been the positives of studying for this doctorate?
4.1.10 What have been the negatives of studying for this doctorate? How could this doctoral program be improved?
4.1.11 In what ways have your needs changed at different points in your research?
4.1.12 What information and services have you required? Have these been provided? How often have you made use of them? In what ways have they been useful?
4.1.13 Did you need any other type of support in your research (other than your supervisors)? What? Why? How often?
4.1.14 Have you ever taken leave of absence? Deferred? Withdrew and re-enrolled? [If yes: How did this affect your subsequent study?]
4.1.15 Have you ever felt like dropping out of your studies? Why? What changed?
4.1.16 How important is it to be part of a community of learning? Who is part of that community? How do they contribute to the sense of community? What could be done to ensure an adequate learning community?

4.2 Career or workplace issues:
4.2.1 Do you think of yourself primarily as a [teacher, lecturer, manager, etc] or a researcher? [for those in employment].
4.2.2 In what ways will completing this doctorate enhance your current career or career options?
4.2.3 Who are the stake-holders in your research? What and how will they gain from your research?
4.2.4 Will this research, or any aspects of it, be useful in your workplace? How much knowledge transfer to your workplace is there likely to be?
4.2.5 In what ways will you use your research in your workplace?
4.2.6 If your research will be used in your workplace, are there likely to be any issues (eg intellectual property issue, etc.)? How could these be resolved?

4.3 Study issues:
4.3.1 How do you structure your time working on your doctoral program?
4.3.2 How do you cope with the workload in your study? Has this been consistent throughout or have there been times when you’ve been particularly busy? At what stage in your study have these occurred?
4.3.3 Are there any problems in fitting this study into your work, family and social life? [If yes, What strategies have you developed to cope with this?]
4.3.4 Do you know that full-time students are expected to study 40 hours per week; part-time students 20 hours per week? In reality, what do you do (rough average).
4.3.5 On average, how many hours each week are you on campus? What does this time consist of?
4.3.6 What skill that you had at the beginning of your study did you find useful in your PhD studies?
4.3.7 What skills are you developing/have you developed?
4.3.8 How will you use these skills in the future?
4.3.9 How important is it to be an independent learner in this program? In what ways? What aspects of your research did you or do you need to develop independence in?
4.4 **Personal issues:**

4.4.1 What did you expect to get out of this program personally?
4.4.2 What have you actually gained from your doctoral study personally?
4.4.3 In what ways has this study changed your perception of yourself?
4.4.4 In what ways has it changed other people’s perception of you? (e.g., family, friends, work colleagues).

5. **Thesis/exegesis issues:**

5.1 Who do you think is likely to read your thesis/exegesis? What does this mean for you as a writer?
5.2 How is your thesis/exegesis structured (i.e., chapter headings)? What discussions did you have with your supervisor about this?
5.3 What particular issues or problems have you encountered in writing your thesis/exegesis? How have you addressed these?

6. **Pedagogical issues:**

6.1 How did you get your supervisors (your choice, School choice, other)? Do you have a second supervisor?
6.2 Have you changed your supervisors in the course of your doctoral program? What issues were there with this?
6.3 Tell me about your relationship with your supervisor.
6.4 How often do you see your 1st supervisor? 2nd supervisor? Are you happy with this?
6.5 How do you supervisors help you?
6.6 What sort of feedback do you get? How do you feel about that?
6.7 Have the goals and standards of the program been clearly identified?
6.8 To what degree do you feel you’re able to discuss issues in your research with your supervisor(s)?
6.9 Has there been any discussion with your supervisor about a mismatch in roles and expectations between you?
6.10 Do you have anyone other than your supervisor(s) to assist you in your research (e.g., consultant, colleague, friend)? In what ways do they help?
6.11 Have there been times in your research when you needed some fairly major help? When? What? Who helped you, and how?
6.12 Do you now have a clear idea about how to proceed?
6.13 Do you have any further comments about your experiences in your doctoral studies?

Thank you
Appendix 2: Interview schedule for supervisors

General:
Have you supervised candidates in [either of the other two doctoral programs]?  
[Reminder that the supervisor is to answer the following questions in relation to the program established at the beginning of the interview, with the exception of comparative questions]

1. Program issues:
   1.1 What does it mean to be a researcher?
   1.2 In what ways (if any) are doctoral researchers different to other researchers in the School? In what ways (if any) are they the same?
   1.3 What knowledge do you have of RMIT policy and procedures? (eg HDR, Ethics, Intellectual property, etc)
   1.4 What sort of research culture for doctoral students do you think exists in the School? How could this be improved?
   1.5 In what ways do you see a prior Masters by research degree as preparation for doctoral study, compared to a coursework Masters?
   1.6 Are you aware if any of your doctoral students having been provided with a place on the basis of 'other qualifications or experience as the Faculty considers appropriate' as identified in the RMIT HDR policy? (ie not through the normal channels of a research Masters). In what ways (if any) were these students disadvantaged?
   1.7 If discussed, what are some of the reasons given by your doctoral students for doing a doctoral degree?
   1.8 What do you see as the benefits of this particular doctoral mode for the student? What, if any, are the negative aspects of this particular doctoral mode for the student?
   1.9 To what extent would you say most doctoral research you have supervised in this particular program is affiliated to the profession of education?
   1.10 What are the cornerstones of intellectual rigour in this doctoral program? How do you handle the situation if a student is unlikely to attain this?
   1.11 How do you see the relationship of theory to practice in this doctoral mode? Must there be both (ie not just theory)?
   1.12 Are there epistemologies or methodologies that wouldn’t be acceptable in this doctoral mode?
   1.13 How do you feel about the first and second review process?
   1.14 In what ways do you encourage your doctoral students to publish their research?
   1.15 To what degree in this doctoral mode is there difficulty in finding suitable examiners? How do you address this?
   1.16 What are some common general criticisms made by examiners in this doctoral mode (eg do they relate to writing issues, methodological issues, research rigour, etc)?

For supervisors in only one doctoral mode:
   1.17 From an outsider looking in, what do you think might be the relative strengths and weaknesses of each of the other doctoral modes in the School?

For supervisors who supervise in more than one doctoral mode:
   1.18 What are the relative strengths and weaknesses of each of the doctoral programs in which you supervise in the School of Education?
   1.19 How do you equate the different modes? Do you see any differences in rigour? Original contribution to knowledge? Etc.
   1.20 What, if any, are the differences in common general criticisms made by examiners in each doctoral mode in which you’ve supervised.
Pedagogical issues:

2.1 How many years have you been a doctoral supervisor in this doctoral mode?
2.2 How did you come to supervise your particular doctoral students in this program? (eg were they allocated by someone? Did they approach you personally?, etc)
2.3 How do you see your role as a supervisor in this doctoral mode?
2.4 What supervisory qualities do you think your students look for in you? How do you know they’re getting what they need, or want?
2.5 What qualities would an ideal supervisory relationship have?
2.6 How often do you see your students? Is this negotiated? To the best of your knowledge, do you know if the students are generally happy with the amount of contact?
2.7 As a doctoral supervisor, do you feel you’re teaching a ‘curriculum’? If so, what is the curriculum?
2.8 In what ways do you see your supervisory role as research ‘training’? In your role as supervisor, do you think there’s a difference between ‘training’ and ‘education’?
2.9 What pedagogical principles underpin your supervision? In what ways (if any) do these change according to particular students?
2.10 Do you see your supervisory role as ‘professional development’ for your students? In what way?
2.11 Do all of your students in this doctoral mode have 2nd supervisors? If not, why? Is this a problem? If yes, how do you see the role of 2nd supervisor in relation to your role? Are there any issues?
2.12 What percentage of your students do you know of would seek help from outside the university (eg a consultant)?
2.13 Do you consider your role as a supervisor to be one of research or teaching?
2.14 How important is it for your doctoral students to be independent learners?
2.15 Specifically, what kinds of assistance do you provided to your doctoral students (eg writing? research? keeping on track? Etc)?
2.16 What percentage of your supervisory time would you spend on supporting your students with writing their thesis/exegesis versus their actual research projects?
2.17 What knowledge and skills do you expect of students when they begin their studies?
2.18 What knowledge and skills do students typically present with?
2.19 What knowledge and skills do students typically lack?
2.20 What issues are most problematic? Are these generally different for part-time and full-time students? How do you deal with these issues?
2.21 What knowledge and skills should students have developed when they’ve completed this program?
2.22 What RMIT information and services for students have you advised students of? How do you think these have been useful to the student? Are there other services that you believe RMIT should provide?
2.23 Have there been any issues with doctoral students that you couldn’t solve yourself? What happened? Who in the School did you discuss this with?
2.24 What issues are involved if a student’s epistemological stance is different to yours?
2.25 What happens if your student wishes to use a suitable methodology that you’re not very familiar with? Do you try to work with this methodology? Refer the student to an expert in it? Suggest a different methodology?
2.26 What happens if your student wishes to write a ‘non-traditional’ type of thesis/exegesis?
2.27 What sorts of mismatched roles and expectations between you and your students have you been aware of?
For supervisors in more than one doctoral mode:

2.28 What differences have you encountered in your supervisory role?
2.29 What differences have you encountered with student needs and issues?

For PhD (project) supervisors:

2.30 What sort of collaboration is there between the student, workplace representatives and yourself? How does this work? What problems have there been? How were they resolved? What do you think are the benefits of this collaboration? What are the negatives?

2.31 Do you have any further comments about your experience as a supervisor of doctoral students in the School of Education?
Appendix 3: Copy of email content sent to potential candidate participants

Dear doctoral candidate,

I would like to invite you to participate in my PhD study entitled ‘Contesting the culture of the doctorate’. The aim of this project is to understand how candidates and supervisors perceive the respective cultures of the PhD, EdD and PhD (project) in the School of Education at RMIT University. The research seeks to identify the norms and practices of candidates and supervisors, differences in curricula and notions of research and practice in each program mode.

I will seek answers to my questions through in-depth interviewing of doctoral candidates and supervisors in each program mode and by analysing RMIT and Government documents.

I would welcome your participation in this research, which would involve an in-depth interview which would take approximately an hour and a half. This could be broken into two interviews if more convenient to you, and will be conducted at a location and time convenient to you. Your identity will remain anonymous.

If you have any questions about this research, please contact me: Judy Maxwell, telephone 9850 4615, or my Senior Supervisor, Associate Professor Heather Fehring, telephone 9925 7840.

If you would like to participate, please contact me on the number above, or email: judy.maxwell@rmit.edu.au

Many thanks,

Judy Maxwell
Appendix 4: Plain Language Statement sent to candidate participants

My name is Judy Maxwell and I am studying for a PhD entitled Contesting the Culture of the Doctorate: Candidates' experiences of three doctorates in a School of Education in the School of Education, D&SC Portfolio at RMIT University.

Thank you for your interest in participating in this research project.

The aim of the project is to understand how students and supervisors perceive the respective cultures of the PhD, EdD and PhD (project) programs in the School of Education at RMIT University. The research seeks to identify the norms and practices of students and supervisors, differences in curricula and notions of research and practice in each program, and the extent to which each program meets the needs of students. I will seek to investigate my research topic through in-depth interviewing of students and supervisors in each doctoral program and by analysing RMIT University and Government documents. As a participant in this research, I would like to interview you and ask a series of open-ended questions relating to your doctoral studies in the School of Education. The interview should take around an hour and a half, but if it is more convenient for you it could take place over 2 shorter sessions. The interview will take place at a location convenient to you and your permission will be sought to audio-tape the interview. All data will be kept in a secure location in my office and will be destroyed 5 years after completion of the research. No person other than me and my Senior Supervisor will have access to the raw data.

Although the results of this study may appear in University research publications, all information is strictly confidential and your identity will remain anonymous through the use of code names or pseudonyms. At no time will your name appear on any document or publication. Should you wish to review your interview for accuracy I will provide you with the transcripts. Participation in the research is voluntary, and you may withdraw consent to participate and discontinue participation at any time. You may also withdraw any unprocessed data previously supplied.

You are encouraged to ask for clarification at any time of any aspect that concerns you. If you have any questions about the project, please telephone or e-mail me: Judy Maxwell, telephone 9925 4009, e-mail: judy.maxwell@rmit.edu.au, or my Senior Supervisor, Associate Professor Heather Fehring, telephone 9925 7840 or e-mail: heather.fehring@rmit.edu.au

Thank you,
Yours sincerely

Judy Maxwell, BA, Dip Ed, BEd.

Any complaints about your participation in this project may be directed to the Secretary, RMIT Human Research Ethics Committee, University Secretariat, RMIT, GPO Box 2476V, Melbourne, 3001. The telephone number is (03) 9925 1745. Details of the complaints procedure are available from: www.rmit.edu.au/council/hrec.
Appendix 5: Copy of email content sent to potential supervisor participants

Dear doctoral supervisor,

I would like to invite you to participate in my PhD study entitled ‘Contesting the culture of the doctorate’. The aim of this project is to understand how doctoral candidates and supervisors perceive the respective cultures of the PhD, EdD and PhD (project) in the School of Education at RMIT University. The research seeks to identify the norms and practices of candidates and supervisors, differences in curricula and notions of research and practice in each program mode.

I will seek answers to my questions through in-depth interviewing of candidates and supervisors in each program mode and by analysing RMIT and Government documents.

I would welcome your participation in this research, which would involve an in-depth interview which would take approximately 1 hour. This could be broken into two half-hour interviews, if more convenient to you, and will be conducted at a location and time convenient to you. Your identity will remain anonymous.

If you have any questions about this research, please contact me: Judy Maxwell, telephone 9850 4615, or my Senior Supervisor, Associate Professor Heather Fehring, telephone 9925 7840.

If you would like to participate, please contact me on the number above, or email: judy.maxwell@rmit.edu.au

Many thanks,

Judy Maxwell
Appendix 6: Plain Language Statement sent to supervisor participants

My name is Judy Maxwell and I am studying for a PhD entitled Contesting the Culture of the Doctorate: Candidates' experiences of three doctorates in a School of Education in the School of Education, D&SC Portfolio at RMIT University.

Thank you for your interest in participating in this research project.

The aim of the project is to understand how students and supervisors perceive the respective cultures of the PhD, EdD and PhD (project) programs in the School of Education at RMIT University. The research seeks to identify the norms and practices of students and supervisors, differences in curricula and notions of research and practice in each program, and the extent to which each program meets the needs of students. I will seek to investigate my research topic through in-depth interviewing of students and supervisors in each doctoral program and by analysing RMIT University and Government documents. As a participant in this research, I would like to interview you and ask a series of open-ended questions relating to your work as a supervisor of doctoral students in one or more doctoral programs in the School of Education. The interview should take around 1 hour, but if it is more convenient for you it could take place over 2 shorter sessions. The interview will take place at a location convenient to you and your permission will be sought to audio-tape the interview. All data will be kept in a secure location in my office and will be destroyed 5 years after completion of the research. No person other than me and my Senior Supervisor will have access to the raw data.

Although the results of this study may appear in University research publications, all information is strictly confidential and your identity will remain anonymous through the use of code names or pseudonyms. At no time will your name appear on any document or publication. Should you wish to review your interview for accuracy I will provide you with the transcripts. Participation in the research is voluntary, and you may withdraw consent to participate and discontinue participation at any time. You may also withdraw any unprocessed data previously supplied.

You are encouraged to ask for clarification at any time of any aspect that concerns you. If you have any questions about the project, please telephone or e-mail me: Judy Maxwell, telephone 9925 4009, e-mail: judy.maxwell@rmit.edu.au, or my Senior Supervisor, Associate Professor Heather Fehring, telephone 9925 7840 or e-mail: heather.fehring@rmit.edu.au

Thank you,
Yours sincerely

Judy Maxwell, BA, Dip Ed, BEd.
Appendix 7: RMIT’s Design & Social Context Portfolio Human Research Ethics Sub-Committee consent form, 2006

Prescribed Consent Form for Persons Participating In Research Projects Involving Interviews, Questionnaires or Disclosure of Personal Information

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Design &amp; Social Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>School of</td>
<td>Education</td>
</tr>
<tr>
<td>Name of participant:</td>
<td></td>
</tr>
<tr>
<td>Project Title:</td>
<td>Contesting the culture of the doctorate: Candidates’ experiences in three doctorates in a School of Education</td>
</tr>
</tbody>
</table>

Name(s) of investigators: (1) Judy Maxwell Phone: 9925 4009 (2)  

1. I have received a statement explaining the interview/questionnaire involved in this project.  
2. I consent to participate in the above project, the particulars of which - including details of the interviews or questionnaires - have been explained to me.  
3. I authorise the investigator or his or her assistant to interview me or administer a questionnaire.  
4. I acknowledge that:  
   (a) Having read Plain Language Statement, I agree to the general purpose, methods and demands of the study.  
   (b) I have been informed that I am free to withdraw from the project at any time and to withdraw any unprocessed data previously supplied.  
   (c) The project is for the purpose of research and/or teaching. It may not be of direct benefit to me.  
   (d) The privacy of the personal information I provide will be safeguarded and only disclosed where I have consented to the disclosure or as required by law.  
   (e) The security of the research data is assured during and after completion of the study. The data collected during the study may be published, and a report of the project outcomes will be provided to Associate Professor Heather Fehring. Any information which will identify me will not be used.  

Participant’s Consent

<table>
<thead>
<tr>
<th>Participant:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Signature)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Witness:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Signature)</td>
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</tr>
</tbody>
</table>

Where participant is under 18 years of age:

I consent to the participation of ____________________________ in the above project.

<table>
<thead>
<tr>
<th>Signature:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Signatures of parents or guardians)</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Witness:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Witness to signature)</td>
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</tbody>
</table>

Participants should be given a photocopy of this consent form after it has been signed.

Any complaints about your participation in this project may be directed to the Executive Officer, RMIT Human Research Ethics Committee, Research & Innovation, RMIT, GPO Box 2476V, Melbourne, 3001. The telephone number is (03) 9925 2251. Details of the complaints procedure are available from the above address.
Note that two prior titles to this research exist, reflecting changes in supervisors and the restructure of a section of the Faculty of Education, Language and Community Services into the School of Education. The current title was approved on July 31, 2007.

26/10/2001
Ms Judith Maxwell
74 Fumea Grove
Bulleen
Vic 3105

Dear Ms Maxwell,

Re: Confirmation of Candidature for Doctor of Philosophy by Research thesis

I am pleased to inform you that your application for Candidature of Doctor of Philosophy thesis entitled "Negotiating between the 'ideal' thesis and postgraduate students own voices." has been ratified by Faculty Board and has now been recommended to the University Higher Degrees Unit.

I wish you well in your studies. Should you have any further questions regarding your application please do not hesitate to contact the Faculty Research Office.

Yours sincerely

Heather Porter
Higher Degrees Officer
Faculty of Education, Language and Community Services

Faculty Research Office
9925 7877
heather.porter@rmit.edu.au

cc: Supervisor
    Program Co-ordinator
Friday, 14 September 2001

Ms Judy Maxwell
74 Furneaux Grove
Bulleen
Vic 3105

Dear Judy

Re: Human Research Ethics Application

The Faculty of Education, Language and Community Services Human Research Ethics Sub-Committee, at its meeting on 6th September 2001 considered your application regarding your Doctor of Philosophy entitled “Contesting the culture of the thesis: The impact of changing epistemologies, literacies and student identities”.

I am pleased to advise that your application has received approval as MR classification, without amendment.

I wish you well in your research. Should you have any further questions regarding your application please do not hesitate to contact me on 9925 7840 or email heather.fehring@rmit.edu.au

Yours sincerely

Heather Porter
Secretary
FHRESC

for

Dr Heather Fehring
Chair
Faculty of Education, Language and Community Services
Human Research Ethics Sub-Committee

cc: Senior Supervisor
    Head of Department
Appendix 9: Results matrices from case studies

Matrices for each of the case studies are presented in this section. They include:

**Case study one**

- Matrix 1.1: PhD (thesis) candidates – Norms and practices
- Matrix 1.2: PhD (thesis) candidates – Needs and expectations
- Matrix 1.3: PhD (thesis) candidates – Research and Practice

**Case study two**

- Matrix 2.1: PhD (project) candidates – Norms and practices
- Matrix 2.2: PhD (project) candidates – Needs and expectations
- Matrix 2.3: PhD (project) candidates – Research and Practice

**Case study three**

- Matrix 3.1: EdD candidates – Norms and practices
- Matrix 3.2: EdD candidates – Needs and expectations
- Matrix 3.3: EdD candidates – Research and Practice
### Appendix 9

#### Matrix 1.1

**PhD (thesis) candidates – Sub-question one:**

How do the norms and practices of candidates differ?

<table>
<thead>
<tr>
<th>Categories identified from interview questions</th>
<th>Anne</th>
<th>John</th>
<th>Helen</th>
<th>Julie</th>
<th>Trang</th>
<th>Sunee</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background</strong></td>
<td></td>
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<tr>
<td>Family attended uni?</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Published before?</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Culture of learning and research</strong></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Research culture?</td>
<td><em>Partly exists</em></td>
<td><em>Partly exists</em></td>
<td><em>Exists</em></td>
<td><em>Partly exists</em></td>
<td><em>Exists</em></td>
<td><em>Exists</em></td>
</tr>
<tr>
<td>Community of learning?</td>
<td><em>Partly exists</em></td>
<td><em>Partly exists</em></td>
<td><em>Exists</em></td>
<td><em>Doesn’t exist</em></td>
<td><em>Exists</em></td>
<td><em>Exists</em></td>
</tr>
<tr>
<td></td>
<td><em>Doesn’t feel part of it – not often on campus</em></td>
<td><em>Doesn’t feel part of it – flagging School morale</em></td>
<td><em>Time constraints prevent participation</em></td>
<td><em>PhD study very lonely</em></td>
<td><em>Doesn’t exist</em></td>
<td><em>Exists</em></td>
</tr>
<tr>
<td></td>
<td><em>Not concerned</em></td>
<td><em>School should get research candidates together informally</em></td>
<td><em>Liked being forced to present</em></td>
<td><em>Need a buddy system</em></td>
<td><em>Feels part of it</em></td>
<td><em>Feels part of it</em></td>
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</tr>
</tbody>
</table>
### General Program Experiences

**What it's like to study in this program**
- Positive * Good supervision
- Not positive * Lack of information * Poor supervision
- Positive * Good supervision
- Not positive * Lonely * Mixed supervision
- Positive * Initially felt proud to be PhD st, later proud of the research
- Positive * Good supervision * RMIT is special

**Importance of being an independent learner?**
- Very important * She is an IL * No problems
- Very important * He is an IL * It caused problems
- Very important * She is an IL * But still needs feedback
- Very important * She is an IL * Some problems
- Very important * She is an IL, but had to force herself and still has problems

**How you got your supervisors**
- Candidate’s choice (Worked at RMIT & staff with expertise) New supervisor also candidate’s choice Positive (but disappointed by small audience) No No (has something to prove)
- Self-recommendation by original supervisor; New supervisor selected in discussion Positive (didn’t get message across, but good feedback) Allocated by School (because of misassumption)
- Candidate’s choice Allocated by School
- Candidate’s choice (Knew him from her Masters)

**1st review**
- Positive (but disappointed by small audience) Positive (but some administration issues)
- Positive (didn’t get message across, but good feedback) Negative (was given wrong advice, but good feedback) Positive

**Leave of absence?**
- No 6 months 2 X 6 months 6 months
- No (has something to prove) Yes (but son gave her confidence and she had come too far to give up) No (always finishes things) Yes (but kept going by family pride)

**Felt like dropping out?**
- No (has something to prove) Yes (but son gave her confidence and she had come too far to give up)
- No (spent too much to give up) No (always finishes things) Yes (but couldn’t give up this opportunity)

**Positive * Good supervision * RMIT is special**

### Organising Time

**How do you structure your time?**
- Organised routine around her part-time work
- Not a problem – no work
- Aims for weekends, but work and family encroach. Uses school holidays
- Not a problem
- Has a structure – works every day
- Has a structure – works every day

**Hours per week for study**
- Impossible to average, but often around 10
- Impossible to average, but sometimes whole days
- Impossible to average
- Impossible to average, but if you’re full time you should be putting a full week into it.
- More than 40 hours per week in the first 2 years. A little less now.
- Currently studies 10 hours per day

**Hours on campus for research**
- Very seldom
- Very seldom
- Very seldom
- Very seldom
- Every day
- Every day
## Appendix 9: Matrix 1.1 (Continued)

| Learning and the development of skills | What have you learned generally? | Skills you had at beginning of study | Skills you’ve developed | How will you use these in future? | Thesis/exegesis
---|---|---|---|---|---
| * Research knowledge (Sociology + Qualitative methodology) | * Too much to mention, but not what he needed | (Added question) | * EndNote | (Added question) | Examiners - perhaps stakeholders
| * Knowledge of research topic | * Prof. develop. Skills (Back up with evidence and refine details) | (Added question) | * Better presentation skills | (Added question) | Wants to publish thesis as a book for educational institutions and teachers
| | * Research knowledge (methodology, etc) | * Research knowledge (Ethics issues + Independent research skills) | * Read critically | * Broadened her ability to find answers | Only examiners and supervisor
| | | * Research knowledge (How to do phenomenological research) | * Understood the general nature of research (Masters) | | Examiners, supervisors and friends – Published paper is more useful
| | | | * Word-processing skills | | Examiners – perhaps stakeholders
| | | | * EndNote | | Examiners – perhaps stakeholders
| | | | * Library and internet searches | | Examiners – perhaps stakeholders
| | | | | | Examiners – perhaps stakeholders

### Thesis/exegesis

<table>
<thead>
<tr>
<th>Who will read it?</th>
<th>Structure?</th>
<th>Any issues?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examiners - perhaps stakeholders</td>
<td>Traditional</td>
<td>Yes - Writing style</td>
</tr>
<tr>
<td>Wants to publish thesis as a book for educational institutions and teachers</td>
<td>Originally wrote it as a book – told that wasn’t appropriate and now semi-traditional</td>
<td>Yes - Reshaping book into thesis – major issues with original supervisor over structure</td>
</tr>
<tr>
<td>Only examiners and supervisor</td>
<td>Traditional</td>
<td>Yes - Methodology</td>
</tr>
<tr>
<td>Examiners, supervisors and friends – Published paper is more useful</td>
<td>First section traditional, then non-traditional</td>
<td>No (It’s difficult, but writing a PhD shouldn’t be easy)</td>
</tr>
<tr>
<td>Traditional</td>
<td>Traditional</td>
<td>Yes - Structure</td>
</tr>
<tr>
<td>Semi-traditional (Began with traditional structure)</td>
<td></td>
<td>Yes – English and structure</td>
</tr>
</tbody>
</table>

*Some English writing skills
* Better English writing skills
* Better English writing skills
* Good English skills are useful everywhere

*Research knowledge (Sociology + Qualitative methodology)
* Knowledge of research topic
* EndNote
* Too much to mention, but not what he needed
* Prof. develop. Skills (Back up with evidence and refine details)
* Research knowledge (methodology, etc)
* Research knowledge (Ethics issues + Independent research skills)
* Research knowledge (How to do phenomenological research)
* Read critically
* Understood the general nature of research (Masters)
* Word-processing skills
* EndNote
* Library and internet searches
* Personal develop (Persistence and dedication)
### Appendix 9

**Matrix 1.2**

**PhD (thesis) candidates – Sub-question two:**

To what extent does each program meet the candidates’ needs and expectations?

<table>
<thead>
<tr>
<th>Categories identified from interview questions</th>
<th>Anne</th>
<th>John</th>
<th>Helen</th>
<th>Julie</th>
<th>Trang</th>
<th>Sunee</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information on all three doc. programs?</td>
<td>Yes</td>
<td>Not about proj</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Not about edd</td>
</tr>
<tr>
<td>Why did you choose the PhD (thesis)?</td>
<td>*Others weren’t appropriate</td>
<td>*Didn’t want to do coursework</td>
<td>*Proj. not appropriate</td>
<td>*Confessed snob – others are lesser value</td>
<td>*Proj. not appropriate</td>
<td>* Wanted to focus only on the thesis</td>
</tr>
<tr>
<td>Admin. issues?</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes (but not with School)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Positives and negatives of prog.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generally met or failed to meet needs?</td>
<td>Met needs</td>
<td>Failed to meet needs</td>
<td>Met needs</td>
<td>Partially met needs</td>
<td>Met needs</td>
<td>Partially met needs</td>
</tr>
<tr>
<td>Positives?</td>
<td>* New insights from research</td>
<td>* Having the opportunity to encounter other ways of thinking</td>
<td>* The confidence it had given her</td>
<td>* Finding out how resilient she was</td>
<td>* Pride at knowing that she could do such a large study</td>
<td>* The independence and strength it has given her</td>
</tr>
<tr>
<td>Negatives?</td>
<td>* More money for conferences</td>
<td>* The extreme personal effect of poor supervision</td>
<td>* Adapting to the academic culture</td>
<td>* Lack of professional support</td>
<td>* Lack of clear guidelines</td>
<td>* Lack of clear guidelines</td>
</tr>
<tr>
<td></td>
<td>* No learning community</td>
<td>* Lack of clear guidelines</td>
<td>* Loneliness</td>
<td>* Loneliness</td>
<td>* Loneliness</td>
<td>* English language difficulties in writing a large body of work</td>
</tr>
<tr>
<td>Pedagogical issues</td>
<td>How often see sups (average)?</td>
<td>What is your relationship with sups?</td>
<td>How do they help?</td>
<td>Goals and standards been identified?</td>
<td>Discussion re mismatch in roles and expectations?</td>
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<td>-----------------------------------------------</td>
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<tr>
<td></td>
<td>Monthly</td>
<td>Positive</td>
<td>* Can discuss issues freely</td>
<td>* Personal relationship that caused problems</td>
<td>* No encouragement</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Poor (but had just changed sup.)</td>
<td>* Personal relationship * No encouragement</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>* Lack of constructive feedback * Complimentary about writing but did not assist with research</td>
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<td></td>
<td></td>
<td></td>
<td>* Constructive feedback * But many students – takes her time to key into research</td>
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<td></td>
<td></td>
<td></td>
<td>* Constructive feedback</td>
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<td></td>
<td></td>
<td></td>
<td>No – caused problems</td>
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<td></td>
<td></td>
<td></td>
<td>* No – caused major problems</td>
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<td></td>
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<td></td>
<td>* Information either inaccurate or missing</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>* No – caused problems</td>
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<td></td>
<td></td>
<td></td>
<td>* No – caused major problems</td>
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<td></td>
<td></td>
<td></td>
<td>* Assumptions made by sup. at beginning</td>
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<td></td>
<td></td>
<td></td>
<td>* No, but no problems</td>
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<td></td>
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<td></td>
<td>* No – caused problems</td>
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<td></td>
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<td></td>
<td>* No – caused major problems</td>
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<td></td>
<td>* Sup. gave wrong information</td>
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<td></td>
<td>* No – caused problems</td>
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<td></td>
<td>* No, but no problems</td>
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<td></td>
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<td></td>
<td>* No – caused problems</td>
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<td></td>
<td></td>
<td></td>
<td>* No – caused problems</td>
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<td></td>
<td></td>
<td></td>
<td>* No – caused minor problems</td>
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<td></td>
<td></td>
<td>Positive</td>
<td>* Can discuss issues freely</td>
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<td></td>
<td></td>
<td></td>
<td>* Personal relationship</td>
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<td></td>
<td>* Approachable and flexible</td>
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<td>Yes, informally</td>
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<td></td>
<td>* Followed sup’s guidelines</td>
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<td></td>
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<td></td>
<td>* No, but no problems (some issues for sup. who is from outside RMIT)</td>
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<tr>
<td></td>
<td></td>
<td>Positive</td>
<td>* Can discuss issues freely</td>
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<td></td>
<td></td>
<td></td>
<td>* Guiding – not too critical</td>
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<td></td>
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<td></td>
<td>* Personal relationship but difficult</td>
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<td></td>
<td>Yes, informally</td>
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<td></td>
<td>* Followed sup’s guidelines</td>
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<td></td>
<td>* Needed explicit info. at beginning</td>
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<td></td>
<td></td>
<td>Positive</td>
<td>* Can discuss issues freely</td>
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<td></td>
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<td></td>
<td>* Personal relationship</td>
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<td></td>
<td>* Guiding role</td>
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<td></td>
<td></td>
<td></td>
<td>* No fixed schedule (but no problem)</td>
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<td></td>
<td></td>
<td>Positive</td>
<td>* Can discuss issues freely</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>* Guiding – not too critical</td>
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<td></td>
<td></td>
<td></td>
<td>* Sup. believes in her feedback</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Positive</td>
<td>* Can discuss issues freely</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>* Guiding role</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>* No fixed schedule (but no problem)</td>
<td></td>
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</tr>
</tbody>
</table>

Appendix 9: Matrix 1.2 (Continued)
## Appendix 9: Matrix 1.2 (Continued)

### Assistance from other than supervisors

<table>
<thead>
<tr>
<th>What info. &amp; services have you used?</th>
<th>What info. &amp; services have you used?</th>
<th>Know about 'Minimum Resources Policy'?</th>
<th>Anyone other than your sups to help?</th>
<th>Workload issues</th>
<th>Personal issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>* No info. &amp; services used. *</td>
<td>* No info. &amp; services used. *</td>
<td>* Yes – Academic from outside RMIT + sister and critical friend</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Knew of its existence. *</td>
<td>* Knew of its existence. *</td>
<td>* No (but friends and family help in other ways) *</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Yes – Academic from outside RMIT + sister and critical friend *</td>
<td>* Yes – Academic from outside RMIT + sister and critical friend *</td>
<td>* No (but friends and family help in other ways) *</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* RMIT + friend doing PhD in another School *</td>
<td>* RMIT + friend doing PhD in another School *</td>
<td>* Yes – Two ‘critical friends’ *</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Workload issues

<table>
<thead>
<tr>
<th>Coping with problems fitting study into life and work</th>
<th>Workload issues</th>
<th>Personal issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>* No problems *</td>
<td>* No problems *</td>
<td>* Satisfaction of completing *</td>
</tr>
<tr>
<td>* Works part-time *</td>
<td>* But would like to spend more time with family *</td>
<td>* Personal growth *</td>
</tr>
<tr>
<td>* Not a procrastinator *</td>
<td>* Used all LSL *</td>
<td>* Pride *</td>
</tr>
<tr>
<td>* Chooses to use time wisely *</td>
<td></td>
<td>* Nothing personal *</td>
</tr>
</tbody>
</table>

### Personal issues

<table>
<thead>
<tr>
<th>Expect to get out of it personally?</th>
<th>Personal issues</th>
<th>Expect to get out of it personally?</th>
<th>Personal issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Satisfaction of completing *</td>
<td>* Satisfaction of completing *</td>
<td>* Satisfaction of completing *</td>
<td>* Satisfaction of completing *</td>
</tr>
<tr>
<td>* Personal growth *</td>
<td>* Personal growth *</td>
<td>* Personal growth *</td>
<td>* Personal growth *</td>
</tr>
<tr>
<td>(Had not yet completed)</td>
<td>(Had not yet completed)</td>
<td>(Had not yet completed)</td>
<td>(Had not yet completed)</td>
</tr>
<tr>
<td>* Knowledge that she can do it</td>
<td>* Some personal growth but some negative changes *</td>
<td>* Personal growth *</td>
<td>* Personal growth *</td>
</tr>
<tr>
<td>* Yes *</td>
<td>* Yes *</td>
<td>* Yes *</td>
<td>* Yes *</td>
</tr>
<tr>
<td>* Knows she’s not a failure *</td>
<td>* Handles adversity in more productive ways *</td>
<td>* More confidence *</td>
<td>* More confidence *</td>
</tr>
<tr>
<td>* Yes *</td>
<td>* Yes *</td>
<td>* Yes *</td>
<td>* Yes *</td>
</tr>
<tr>
<td>* Family proud *</td>
<td>* NOT in workplace *</td>
<td>* Family proud *</td>
<td>* Family proud *</td>
</tr>
<tr>
<td>* No *</td>
<td></td>
<td>* No *</td>
<td></td>
</tr>
<tr>
<td>* No *</td>
<td></td>
<td>* Yes *</td>
<td></td>
</tr>
</tbody>
</table>

---

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### Appendix 9
#### Matrix 1.3  
**PhD (thesis) candidates – Sub-question three:**

What are the differences in notions of research and Practice?

<table>
<thead>
<tr>
<th>Categories identified from interview questions</th>
<th>Anne</th>
<th>John</th>
<th>Helen</th>
<th>Julie</th>
<th>Trang</th>
<th>Sunee</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topic</strong></td>
<td>VET education environment</td>
<td>Higher Education environment</td>
<td>School education environment</td>
<td>School education environment</td>
<td>School education environment</td>
<td>Business environment</td>
</tr>
<tr>
<td><strong>Where it sits within current knowledge</strong></td>
<td>Localised knowledge base</td>
<td>International knowledge base</td>
<td>International knowledge base</td>
<td>International knowledge base</td>
<td>International knowledge base</td>
<td>International knowledge base</td>
</tr>
<tr>
<td><strong>Motivation for doc. research</strong></td>
<td>* Personal satisfaction</td>
<td>* Personal satisfaction merged with * interest in topic</td>
<td>* Interest in topic</td>
<td>* Personal satisfaction merged with * interest in topic</td>
<td>* Personal satisfaction</td>
<td>* Interest in topic</td>
</tr>
<tr>
<td><strong>Epistemological/methodological stance</strong></td>
<td>Knowledge is constructed when doing research in education</td>
<td>Cultural ideas transformed into objective reality</td>
<td>Knowledge is constructed</td>
<td>Knowledge is constructed</td>
<td>Knowledge is constructed</td>
<td>Knowledge is constructed</td>
</tr>
<tr>
<td><strong>Research practice</strong></td>
<td>Varies (PT work)</td>
<td>Researcher (no work)</td>
<td>Teacher (FT work)</td>
<td>Researcher (no work)</td>
<td>Researcher (no work)</td>
<td>Researcher (no work)</td>
</tr>
<tr>
<td>See yourself as a researcher?</td>
<td>No</td>
<td>Yes</td>
<td>No (research in life)</td>
<td>Yes (research in life)</td>
<td>Yes</td>
<td>Yes (not related to life)</td>
</tr>
<tr>
<td>What is a researcher?</td>
<td>Finds knowledge</td>
<td>Finds useful knowl.</td>
<td>Finds knowledge</td>
<td>Answers to questions</td>
<td>Finds knowledge</td>
<td>Answers to quest.</td>
</tr>
<tr>
<td>Published PhD?</td>
<td>One refereed paper</td>
<td>No - aiming to</td>
<td>No - aiming to (has difficulty)</td>
<td>No - aiming to (has difficulty but sees importance)</td>
<td>No - aiming to (sees the importance)</td>
<td></td>
</tr>
<tr>
<td>Aiming for excell?</td>
<td>Yes</td>
<td>Yes but limitations</td>
<td>Yes</td>
<td>Yes, but limitations</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Do more research?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes – but not in workplace</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### Appendix 9: Matrix 1.3 (Continued)

**Beliefs related to applied research:**

<table>
<thead>
<tr>
<th>Importance of any research you do to be applied research?</th>
<th>Essential</th>
<th>Useful in some way</th>
<th>Essential</th>
<th>Useful in some way.</th>
<th>Not essential</th>
<th>Essential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do purely theoretical research?</td>
<td>No</td>
<td>Possibly</td>
<td>No.</td>
<td>Possibly</td>
<td>Possibly</td>
<td>No</td>
</tr>
</tbody>
</table>

**Relationship of doctoral research to applied field**

<table>
<thead>
<tr>
<th>Balance between theory and practice in doctoral research</th>
<th>Balanced</th>
<th>Balanced</th>
<th>Had to delve deep for theory</th>
<th>Balanced</th>
<th>Balanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship of research to workplace</td>
<td>Broad connection to researcher’s workplace + Broad connection</td>
<td>In specific workplace</td>
<td>Broad connection to researcher’s workplace</td>
<td>Broad connection to researcher’s potential workplace</td>
<td>Broad connection, but researcher aims to work in specific area</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stake-holders?</th>
<th>Educators/institutions</th>
<th>Educators/institutions/students</th>
<th>Educators/institutions/students</th>
<th>Primarily me + supervisor + the university + colleagues + students</th>
<th>Educators/institutions/students</th>
<th>Me, family and supervisor.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use new knowledge in workplace?</td>
<td>Not useful</td>
<td>Yes, in specific way</td>
<td>Yes, in general way</td>
<td>Yes, in general way</td>
<td>Not useful</td>
<td>Hopes it will be useful</td>
</tr>
<tr>
<td>How?</td>
<td>N/A</td>
<td>Defining and validating what I know to be true.</td>
<td>A more skilled practitioner</td>
<td>A more skilled practitioner</td>
<td>N/A</td>
<td>Will give her an edge in the work environment.</td>
</tr>
</tbody>
</table>

**Issues in workplace?**

| No | No | No | No | N/A | No |
Appendix 9
Matrix 2.1  
PhD (project) candidates – Sub-question one:
How do the norms and practices of candidates in each model differ?

<table>
<thead>
<tr>
<th>Categories identified from interview questions</th>
<th>Peter</th>
<th>Ben</th>
<th>Sally</th>
<th>Liz</th>
<th>Carol</th>
<th>Boris</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family attended uni?</td>
<td>Not parents, but brother</td>
<td>Not answered (but family expectation of uni.)</td>
<td>No</td>
<td>Not parents, but two sisters</td>
<td>Not parents, but sister and brother were mature age students</td>
<td>Not parents, but sisters and brothers and aunt</td>
</tr>
<tr>
<td>Published before?</td>
<td>No</td>
<td>No</td>
<td>Not in traditional sense – Online report of funded project</td>
<td>Book chapter about to be published and Professional resources</td>
<td>Not in traditional sense – Online reports of funded projects</td>
<td>No</td>
</tr>
<tr>
<td><strong>Culture of learning and research</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research culture?</td>
<td>* Partly exists</td>
<td>* Doesn’t feel part of it – few chances to talk to other res’chers * School should provide informal disc. opportunities</td>
<td>* Partly exists</td>
<td>* Doesn’t feel part of it – few chances to talk to other res’chers * School should provide informal disc. opportunities</td>
<td>* May exist, but doesn’t know. Lives too far away to come to many events * Nothing much can be done in her case</td>
<td>* Partly exists * Doesn’t feel part of it – few chances to talk to other res’chers * School should provide informal disc. opportunities (but time is an issue)</td>
</tr>
<tr>
<td>Community of learning?</td>
<td>* Partly exists</td>
<td>* Doesn’t feel part of it – needs to be able to exchange ideas with others in his field * School should set this up</td>
<td>* Partly exists</td>
<td>* Doesn’t feel part of it – sees it as validating her study and doesn’t believe they do. * School should support candidates through funding, etc.</td>
<td>* Exists</td>
<td>* Exists</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Mostly doesn’t feel part of it – has been to good study workshops but need more, plus sociable aspect. * School should set up informal groups</td>
<td>* Partly exists</td>
<td>* Doesn’t feel part of it here – lives too far away, but feels part of one in her workplace</td>
<td>* Doesn’t feel part of it – has family commitments: difficult to attend functions * More intellect. &amp; philosoph. discussions in informal groups (but has little time)</td>
<td>* Partly exists</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>* School should set up informal groups</td>
</tr>
</tbody>
</table>
### Appendix 9: Matrix 2.1 (Continued)

<table>
<thead>
<tr>
<th>General program experiences</th>
<th>Mixed - 'a windy road'</th>
<th>Positive</th>
<th>Mixed</th>
<th>Mixed</th>
<th>Mixed</th>
<th>Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>What it's like to study in this program</td>
<td>* Proj. suits him</td>
<td>* Good supervision</td>
<td>* Scope too large for exegesis</td>
<td>* Good supervision</td>
<td>* Not enough time</td>
<td>* Proj. suits him</td>
</tr>
<tr>
<td>* PhD by proj not well-defined</td>
<td>* She is an IL</td>
<td>* He is an IL</td>
<td>* She is an IL</td>
<td>* She is an IL</td>
<td>* Difficult - natural learning style is to talk</td>
<td>* He is an IL</td>
</tr>
<tr>
<td>Importance of being an independent learner?</td>
<td>* No problems</td>
<td>* No problems</td>
<td>* No problems</td>
<td>* No problems</td>
<td>Very important</td>
<td>* No problems</td>
</tr>
<tr>
<td>Very important</td>
<td>Very important</td>
<td>Very important</td>
<td>Very important</td>
<td>Very important</td>
<td>Very important</td>
<td>Very important</td>
</tr>
<tr>
<td>Candidate’s choice</td>
<td>Candidate’s choice</td>
<td>Allocated by School</td>
<td>Suggested by School</td>
<td>Candidate’s choice</td>
<td>Candid’s choice for orig. sup; New sup suggested by School</td>
<td>Positive (changed his focus as a result)</td>
</tr>
<tr>
<td>1st review</td>
<td>Positive</td>
<td>Positive</td>
<td>Negative (disagreement among academics)</td>
<td>Did not present</td>
<td>Largely positive (changed focus + unsure of expect.)</td>
<td>Positive</td>
</tr>
<tr>
<td>Leave of absence?</td>
<td>No</td>
<td>No</td>
<td>6 months</td>
<td>2 X 6 months</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Felt like dropping out?</td>
<td>No (Needed to know he could do it)</td>
<td>Yes (but kept going because of sense of responsibility to sup.)</td>
<td>Yes (but kept going by determination and sense of resp. to sup.)</td>
<td>Yes (but has something to prove)</td>
<td>No (had to find out if I could do it)</td>
<td>Yes (but kept going because of love, passion and satis.)</td>
</tr>
<tr>
<td>Organising time</td>
<td>Not a problem</td>
<td>Plans time and focuses well</td>
<td>Structured in blocks but sometimes sporadic</td>
<td>Very little structure (Used to be organised but now too many work and family pressures)</td>
<td>* Structured within her workload</td>
<td>Structured within his workload – Took 3 months off work after that to study</td>
</tr>
<tr>
<td>How do you structure your time?</td>
<td>Impossible to average</td>
<td>Impossible to average – sometimes 10, 15, 20, even 50 occasionally</td>
<td>Impossible to average – blocks of 10 hours on some days</td>
<td>Impossible to average</td>
<td>Around 15 hours per week plus ‘work’ time</td>
<td>Impossible to average over whole time – currently 2 days per week on research</td>
</tr>
<tr>
<td>Hours per week for study</td>
<td>Very little – meetings with sups/ w’shops</td>
<td>Sometimes fortnightly with sup.+ workshops</td>
<td>Almost never – sees supervisor at his home</td>
<td>Varies –two monthly, monthly, fortnightly</td>
<td>Can’t separate study from work</td>
<td>Very little – meetings with supervisor</td>
</tr>
<tr>
<td>Hours on campus for research study</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix 9: Matrix 2.1 (Continued)

<table>
<thead>
<tr>
<th>What has been learned?</th>
<th>What have you learned generally?</th>
<th>Skills at beginning</th>
<th>Skills you’ve developed</th>
<th>How use these?</th>
<th>Thesis/exegesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal development</td>
<td>(Take responsibility to get things done and to be more critical)</td>
<td>Organisational skills (Mind-mapping)</td>
<td>Writing skills</td>
<td>All generally useful in future workplaces</td>
<td>Supervisors, examiners, girl-friend, no-one else</td>
</tr>
<tr>
<td>Professional development</td>
<td>(Validation of proj. knowledge)</td>
<td>Understanding general nature of research</td>
<td>Writing</td>
<td>Writing and reading will always be useful</td>
<td>Many people, but applied/theory divide will cause difficulties</td>
</tr>
<tr>
<td>Personal development</td>
<td>(To be an indep. learn. and researcher)</td>
<td>Enhanced previous skills</td>
<td>Enhanced previous skills</td>
<td>Confidence in ability to learn independ. will be useful</td>
<td>Examiners, supervisors, no-one else</td>
</tr>
<tr>
<td>Knowledge of research topic</td>
<td>(proj)</td>
<td>Computer graphics</td>
<td>Word-processing skills</td>
<td>All useful, particularly will use computer graphics skills</td>
<td>Senior administration staff, work colleagues</td>
</tr>
<tr>
<td>Personal development</td>
<td>(To be an independent learner)</td>
<td></td>
<td>Good study skills</td>
<td>Allow for pathways to new workplaces</td>
<td>Examiners, sup., no-one else – Published papers more useful</td>
</tr>
<tr>
<td>Personal development</td>
<td>(Proof of her intelligence)</td>
<td></td>
<td>Good study skills</td>
<td>All generally useful in workplaces</td>
<td>Examiners, sup., no-one else – Publish papers more useful.</td>
</tr>
<tr>
<td>Knowledge of topic</td>
<td></td>
<td></td>
<td>Better study skills</td>
<td></td>
<td>Similar to traditional thesis, but also other possible</td>
</tr>
<tr>
<td>Personal development</td>
<td>(How to think and learn)</td>
<td></td>
<td>Writing skills at PhD level</td>
<td>*</td>
<td>* English language</td>
</tr>
<tr>
<td>Knowledge of research topic</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
<td>Too personally attached to writing</td>
</tr>
<tr>
<td>Professional development</td>
<td>(How to teach)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Thesis/exegesis**

- **Who will read it?**
  - Supervisors, examiners, girl-friend, no-one else
  - Many people, but applied/theory divide will cause difficulties
  - Examiners, supervisors, no-one else
  - Senior administration staff, work colleagues
  - Examiners, sup., no-one else – Published papers more useful
  - Examiners, sup., no-one else – Publish papers more useful.

- **Structure?**
  - Similar to traditional thesis
  - Similar to traditional thesis
  - Similar to traditional thesis
  - Similar to traditional thesis
  - Similar to traditional Thesis

- **Any issues?**
  - Unsure of exegesis.
  - Difficulty finding right ‘voice’
  - Wanted to write ‘a story you couldn’t put down’
  - 40,000 words not enough
  - Writing style
  - Writing style
  - * English language
  - * Too personally attached to writing

---

*All generally useful in future workplaces*
Appendix 9
Matrix 2.2  PhD (project) candidates – Sub-question two:
To what extent does each program meet the candidates’ needs and expectations?

<table>
<thead>
<tr>
<th>Categories identified from interview questions</th>
<th>Peter</th>
<th>Ben</th>
<th>Sally</th>
<th>Liz</th>
<th>Carol</th>
<th>Boris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Information on all three doc. programs?</td>
<td>* Wanted practical outcome</td>
<td>* Others weren’t appropriate</td>
<td>* Wanted practical outcome</td>
<td>* Others weren’t appropriate</td>
<td>* Others weren’t appropriate</td>
<td>* Others weren’t appropriate</td>
</tr>
<tr>
<td>Why did you choose the PhD (thesis)?</td>
<td>* Converted from Masters by project</td>
<td>* EdD not on par with PhD</td>
<td>* Originally enrolled in EdD (more manageable)</td>
<td>* PhD not on par with PhD</td>
<td>* EdD not on par with PhD</td>
<td>* EdD not on par with PhD</td>
</tr>
<tr>
<td>Admin. issues?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Positives and negatives of prog.</td>
<td>Met needs</td>
<td>Met needs</td>
<td>Partially met needs</td>
<td>Met needs</td>
<td>Partially met needs</td>
<td>Partially met needs</td>
</tr>
<tr>
<td>Met or failed to meet needs?</td>
<td>* Don’t have big expectations</td>
<td>* Good supervision</td>
<td>* Needs to be clarity of roles/expectations between cand.&amp; sups.</td>
<td>* Good supervision</td>
<td>* Lack of learning community</td>
<td>* Good supervision</td>
</tr>
<tr>
<td>Positives?</td>
<td>* Engendered a more critical stance</td>
<td>* Ability to do a project (have a resource)</td>
<td>* Ability to do a project (useful in her workplace and suited her abilities)</td>
<td>* Ability to do a project (useful in her practice)</td>
<td>* Ability to do a project (useful in her practice)</td>
<td>* Ability to do a project (useful in her practice)</td>
</tr>
<tr>
<td>Negatives?</td>
<td>* New insights from research</td>
<td>* Had submitted exegesis and worried that he may have forgotten everything before his oral defence</td>
<td>* Supervisors need to understand ‘gap’ in candidates’ knowledge, particularly those from TAFE</td>
<td>* Oral defence</td>
<td>* Worried about the oral defence – won’t remember</td>
<td>* Has taken too long to agree on research focus</td>
</tr>
<tr>
<td></td>
<td>* Lack of supervision specific to his field</td>
<td></td>
<td>* Lack of learning community</td>
<td></td>
<td>* Lack of learning community</td>
<td>* Lack of learning community</td>
</tr>
</tbody>
</table>
**Appendix 9: Matrix 2.2 (Continued)**

<table>
<thead>
<tr>
<th>Pedagogical issues</th>
<th>How often see sups (average)?</th>
<th>What is your relationship with sups?</th>
<th>How do they help?</th>
<th>Goals and standards been identified?</th>
<th>Discussion re mismatch in roles and expectations?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Varies, fortnightly to monthly (1st &amp; 2nd sup)</td>
<td>Positive</td>
<td>* Can discuss issues freely with both * Professional with 1st sup. * Personal with 2nd sup.</td>
<td>No – caused problems * Exegesis not clearly defined * Sups. not familiar with proj. * No, and it has caused problems</td>
<td>Yes, informally but exegesis not clear at beginning</td>
</tr>
<tr>
<td></td>
<td>Varied, fortnightly to monthly</td>
<td>Positive</td>
<td>* Can discuss issues freely * Guiding role – not dictatorial</td>
<td>* Knowledgeable about theory * Motivation * Suggested readings * Constructive feedback</td>
<td>No, but no problems</td>
</tr>
<tr>
<td></td>
<td>Varied, fortnightly to two-monthly</td>
<td>Poor</td>
<td>* Felt powerless in discussions * Gentle and nurturing, but felt vulnerable</td>
<td>* Quantitative analysis * Constructive feedback * Motivation</td>
<td>No – caused problems * Research proposal passed 1st review and ethics, but proved too large for a proj. * No, and it has caused problems</td>
</tr>
<tr>
<td></td>
<td>Varies, fortnightly to monthly (2nd sup only occasionally)</td>
<td>Positive</td>
<td>* Can discuss issues freely * Gentle, quietly pushing * Has patience * Trustworthy</td>
<td>* Constructive feedback * Motivation</td>
<td>No, but sup. won’t let her submit until he’s satisfied</td>
</tr>
<tr>
<td></td>
<td>Fortnightly</td>
<td>Positive</td>
<td>* Can discuss issues freely * Collaborative * Mentor * 2nd - Practical</td>
<td>* Constructive feedback * Support with theory (1st sup) * Support with the project process (2nd sup)</td>
<td>No, but no problems * Sup. not familiar with proj. * Emerging field – still finding the way</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
<td>* Can discuss issues freely</td>
<td>* Had to learn how to relate to new sup.</td>
<td>* Constructive feedback * Should be more support for candidates</td>
<td>No, but no problems * No, and some problems</td>
</tr>
</tbody>
</table>
### Appendix 9: Matrix 2.2 (Continued)

<table>
<thead>
<tr>
<th>Assistance from other than supervisors</th>
<th>Learning Skills Unit postgrad. workshops – Helpful</th>
<th>Post-grad Research Forum workshops – Not at all helpful</th>
<th>EndNote – Too late to be useful</th>
<th>NVivo – Too early to be useful</th>
<th>None – Need Lit. Rev. workshop but found out about Learning Skills Unit workshops too late</th>
<th>Post-grad Research Forum workshops – Not at all helpful</th>
<th>Learning Skills Unit postgrad. workshops – Helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>What info. &amp; services have you used?</td>
<td>* Learning Skills Unit postgrad. workshops - Helpful</td>
<td>* EndNote – Helpful</td>
<td>* EndNote – Too late to be useful</td>
<td>* None – Need Lit. Rev. workshop but found out about Learning Skills Unit workshops too late</td>
<td>* Post-grad Research Forum workshops – Not at all helpful</td>
<td>* Learning Skills Unit postgrad. workshops – Helpful</td>
<td>* Learning Skills Unit to improve English – Helpful, but needs longer opening times</td>
</tr>
<tr>
<td>Know about ‘Minimum resources Policy’?</td>
<td>No</td>
<td>No</td>
<td>No, but knew she could apply for funding</td>
<td>No, &amp; did not know she could apply for funding</td>
<td>No, but knew she could apply for funding</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Anyone other than your sups to help?</td>
<td>Yes – Academics &amp; experts from his field + friend doing PhD in same field</td>
<td>Yes – Experts in his technical field + daughter (and friends and other family have helped in non-academic ways)</td>
<td>Yes – Two ‘critical friends’</td>
<td>Yes – Work colleague</td>
<td>Yes – Work colleagues</td>
<td>Yes – People in industry</td>
<td></td>
</tr>
<tr>
<td>Workload issues</td>
<td>No problems * Only works part-time</td>
<td>No problems * Full-time student. but did not work throughout his proj. * Highly organised</td>
<td>Very difficult * Work and family pressures * Used annual leave and will use LSL</td>
<td>Very difficult * Work and family pressures * Used LSL * Given up a lot personally</td>
<td>No problems * Project completed in workplace</td>
<td>Very few problems * Project completed in workplace * Family pressures * Took 3 months off work</td>
<td></td>
</tr>
<tr>
<td>Coping with problems fitting study into life and work</td>
<td>No problems</td>
<td>No problems</td>
<td>Very difficult</td>
<td>Very difficult</td>
<td>No problems</td>
<td>Very few problems</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix 9: Matrix 2.2 (Continued)

<table>
<thead>
<tr>
<th>Personal issues</th>
<th>Expect to get out of it personally?</th>
<th>What have you gained personally?</th>
<th>Changed self-perception?</th>
<th>Changed others’ perception of you?</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Satisfaction of completing</td>
<td>(Had not yet completed)</td>
<td>* Personal growth</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>* Satisfaction of providing knowledge</td>
<td>(Had not yet completed)</td>
<td>(Had not yet completed)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>* Personal growth</td>
<td>(Had not yet completed)</td>
<td>* No longer feels inadequate educationally</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>* Personal growth</td>
<td>(Had not yet completed)</td>
<td>* Now understands she has persistence</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>* Satisfaction of completing</td>
<td>(Had not yet completed)</td>
<td>* Recognises her abilities</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>* Personal growth</td>
<td>(Had not yet completed)</td>
<td>* Family proud</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>* Satisfaction of completing</td>
<td>(Had not yet completed)</td>
<td>* Family proud</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>* Personal growth</td>
<td>(Had not yet completed)</td>
<td>* Family proud</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix 9

**Matrix 2.3**

**PhD (project) candidates – Sub-question three:**

**What are the differences in notions of research and Practice?**

<table>
<thead>
<tr>
<th>Categories identified from interview questions</th>
<th>Peter</th>
<th>Ben</th>
<th>Sally</th>
<th>Liz</th>
<th>Carol</th>
<th>Boris</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topic</strong></td>
<td>General education environment</td>
<td>General education environment</td>
<td>VET education environment</td>
<td>School education environment</td>
<td>General education environment</td>
<td>Industry education environment</td>
</tr>
<tr>
<td>Where it sits within current knowledge</td>
<td>International knowledge base (but field is new – limited knowledge base)</td>
<td>International knowledge base (but some areas of research is very new – limited knowledge base)</td>
<td>Mostly within localised knowledge (VET research)</td>
<td>International knowledge base</td>
<td>International knowledge base (but little lit. related to the work environment that this work sits within)</td>
<td>Difficulty in relating to other knowledge (highly contextualised to workplace and deals with recently emerged issues)</td>
</tr>
<tr>
<td><strong>Motivation for doc. research</strong></td>
<td>* Career (&gt;corporate) merged with * Interest in topic merged with * Ability to do project</td>
<td>* Career (&gt;academic) merged with * Interest in topic merged with * Ability to do project</td>
<td>* Personal satisfaction * Career (new field)</td>
<td>* Career (prove herself) * Ability to do project merged with * Interest in topic merged with * Professional development</td>
<td>* Career * Interest in topic merged with * Ability to do project merged with * Prof. development</td>
<td>* Career merged with * Interest in topic merged with * Prof. development merged with * Ability to do project</td>
</tr>
<tr>
<td><strong>Epistemological/methodological stance</strong></td>
<td>Knowledge is constructed</td>
<td>Knowledge is constructed</td>
<td>Knowledge is constructed</td>
<td>Knowledge is constructed</td>
<td>Knowledge is constructed</td>
<td>Knowledge is constructed</td>
</tr>
<tr>
<td><strong>Research practice:</strong></td>
<td>Researcher (PT work)</td>
<td>Researcher (PT work)</td>
<td>Employee (FT work)</td>
<td>Employee (FT work)</td>
<td>Employee whose work involves informal research (PT work)</td>
<td>Employee whose work involves informal research (PT work)</td>
</tr>
<tr>
<td>See yourself as a researcher?</td>
<td>Yes, with reservations</td>
<td>Yes</td>
<td>Varies</td>
<td>No</td>
<td>Yes (Researches her practice)</td>
<td>Yes (Researches his practice)</td>
</tr>
<tr>
<td>What is a researcher?</td>
<td>Finds knowledge</td>
<td>Finds knowledge</td>
<td>Finds knowledge</td>
<td>Theoretical person</td>
<td>Answers to questions</td>
<td>Ongoing reflection</td>
</tr>
</tbody>
</table>
## Appendix 9: Matrix 2.3 (Continued)

<table>
<thead>
<tr>
<th>Published PhD?</th>
<th>Aiming for excell?</th>
<th>Do more research?</th>
<th>Beliefs related to applied research:</th>
<th>Relationship of doctoral research to applied field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two conference papers – one refereed</td>
<td>No – aiming to</td>
<td>One referred paper – planning one more</td>
<td>No – aiming to</td>
<td>No – aiming to</td>
</tr>
<tr>
<td>Yes, but limitations</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Possibly</td>
<td>Yes</td>
<td>Yes</td>
<td>Probably</td>
<td>Possibly</td>
</tr>
<tr>
<td>No – aiming to</td>
<td>Yes, but limitations</td>
<td>Yes</td>
<td>Essential</td>
<td>Essential</td>
</tr>
<tr>
<td>No – aiming to</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>No – aiming to</td>
<td>Yes</td>
<td>Yes</td>
<td>Possibly</td>
<td>Possibly</td>
</tr>
</tbody>
</table>

**Beliefs related to applied research:**

- **Importance of research to be applied research?**
  - Useful in some way
  - Useful in some way
  - Useful in some way
  - Essential
  - Essential
  - Essential

- **Do purely theoretical research?**
  - No
  - Yes
  - Yes
  - No
  - No
  - No

**Relationship of doctoral research to applied field**

- **Balance between theory and practice in doctoral research**
  - Too much theory: 1/3 practice; 2/3 theory
  - Balanced but action res. led to difficulty
  - Balanced
  - Balanced
  - 30% theory; 70% practice

- **Relationship of research to workplace**
  - No specific workplace but hopefully related to future workplace
  - In specific workplace
  - In specific workplace
  - In specific workplace
  - In specific workplace

- **Stakeholders?**
  - Educators/institutions/students
  - Outdoor educators/institutions/students
  - Topic has ceased to exist, but broader application to TAFE managers and teachers
  - Educators/institutions/students
  - Specific work unit/students of that institution + broader application
  - Trainers, team leaders, executives in industry

- **Use new knowledge in workplace?**
  - Specifically useful if appropriate workplace found
  - Useful in general way
  - Useful in general way
  - Specifically useful
  - Specifically useful
  - Specifically useful

- **How?**
  - A more skilled practitioner
  - Producing a useful resource
  - Producing a useful resource
  - A more skilled practitioner
  - A more skilled practitioner

- **Issues in workplace?**
  - Potential intellectual property issues
  - No
  - No
  - No
  - Potential intellectual property issues
  - Potential intel. Prop. issues, but no longer
## Appendix 9
### Matrix 3.1 EdD candidates – Sub-question one:
How do the norms and practices of candidates in each model differ?

<table>
<thead>
<tr>
<th>Categories identified from interview questions</th>
<th>Alison</th>
<th>Tim</th>
<th>Lyn</th>
<th>Jennie</th>
<th>Ronald</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family attended uni?</td>
<td>Father and two brothers. Not influenced by them.</td>
<td>Sister</td>
<td>No</td>
<td>Step-mother and sisters. Influenced by people around her Encouraged by family.</td>
<td>Brother</td>
</tr>
<tr>
<td>Published before?</td>
<td>Yes (professional resources)</td>
<td>Yes (1 national conference paper, but in TAFE you don’t publish)</td>
<td>No (I wouldn’t know how to start)</td>
<td>Yes – 1 professional resource (plus one from EdD)</td>
<td>Yes (3 international conference papers, 1 national conference paper)</td>
</tr>
<tr>
<td><strong>Culture of learning and research</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Research culture in School of Ed?            | * Partly exists  
* Doesn’t feel part of it – few chances to talk to other researchers and Bundoora campus isolated  
* School should increase numbers of research students and have more informal discussion opportunities | * Partly exists  
* Doesn’t feel part of it – few chances to talk to other researchers  
* School should provide informal discussion opportunities. | * Partly exists  
* Doesn’t feel part of it – few chances to talk to other researchers  
* School should provide informal discussion opportunities in evenings | * Partly exists  
* Doesn’t feel part of it – few chances to talk to other researchers  
* School should provide informal discussion opportunities | * Exists  
* Felt very much part of it – able to talk to work colleagues  
* Can always talk to your supervisor or other lecturers there |
| Community of learning?                       | * Partly exists  
* Doesn’t feel part of it – needs structure, but does not have the time anyway  
* A student lounge in the City campus may make a difference | * Partly exists  
* Doesn’t feel part of it – needs structure  
* School should set up informal discussion groups | * Doesn’t exist  
* Believed she would have more support  
* School should address lack of collegiality and ensure there are people to talk to when needed. | * Partly exists  
* Doesn’t feel part of it – needs to discuss her learning with others  
* School should set up informal discussion groups | * Exists  
* Felt part of it – could always talk to others  
* Maybe some informal discussion groups |
### Appendix 9: Matrix 3.1 (Continued)

<table>
<thead>
<tr>
<th><strong>General program experiences</strong></th>
<th>What it’s like to study in this program</th>
<th>Importance of being an Independent learner?</th>
<th>How you got your supervisors</th>
<th>1st review</th>
<th>Leave of absence?</th>
<th>Felt like dropping out?</th>
<th>Organising time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mixed * Needed more time * Useful research</td>
<td>Negative * Lack of School lead’ship</td>
<td>Allocated by School</td>
<td>Positive (didn’t understand audience’s critical role)</td>
<td>No</td>
<td>No (Already done coursework)</td>
<td>Tries to keep 1 day per week for research but has difficulty</td>
</tr>
<tr>
<td></td>
<td>Negative * No direction or structure</td>
<td>Mixed * Very important * She is an IL * No problems</td>
<td>Candidate’s choice</td>
<td>Had not presented</td>
<td>No</td>
<td>No (Already done coursework)</td>
<td>Structured around and within his workload</td>
</tr>
<tr>
<td></td>
<td>Negative * No time to refl. &amp;learn * Treated poorly as a student</td>
<td>Negative * Very important * Hi is an IL * No problems</td>
<td>Allocated by School</td>
<td>Positive (except sup handed out an earlier draft of res. Proposal)</td>
<td>No</td>
<td>No (Already done coursework)</td>
<td>Impossible to average – sometimes 10 to 15 hrs</td>
</tr>
<tr>
<td></td>
<td>Mixed * Program disjointed * Good supervision</td>
<td>Negative * Very important * Difficult – natural learning style is to talk</td>
<td>Candidate’s choice</td>
<td>Positive (except sup was from another school and didn’t have info)</td>
<td>No</td>
<td>No (Already done coursework)</td>
<td>Impossible to average</td>
</tr>
<tr>
<td></td>
<td>Mixed * Program disjointed * Good supervision</td>
<td>Negative * Very important * Difficult – natural learning style is to talk</td>
<td>Candidate’s choice</td>
<td>Positive (except sup was from another school and didn’t have info)</td>
<td>No</td>
<td>Yes (but kept going because of natural commitment and wife’s encouragement)</td>
<td>Organised routine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>How do you structure your time?</strong></th>
<th>Tries to keep 1 day per week for research but has difficulty</th>
<th>Structured around and within his workload</th>
<th>Structured around and within her workload</th>
<th>Organised routine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours per week for study</td>
<td>Impossible to average – some weeks only 1 hour</td>
<td>Impossible to average – sometimes 10 to 15 hrs</td>
<td>Impossible to average – did coursework on 1.5 – 3 hours per week.</td>
<td>Impossible to average</td>
</tr>
<tr>
<td>Hours on campus for research study (not coursework)</td>
<td>Very little – meetings with supervisors/library</td>
<td>Research merged with work – difficult to say</td>
<td>Almost none</td>
<td>Began with 2 hours per week, now about 1 hour per fortnight</td>
</tr>
</tbody>
</table>
## Appendix 9: Matrix 3.1 (Continued)

<table>
<thead>
<tr>
<th>What have you learned?</th>
<th>Skills at beginning</th>
<th>Skills you’ve developed</th>
<th>How will you use these?</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Research knowledge (case study research) * Knowledge of research topic</td>
<td>* Organisational skills</td>
<td>* Research techniques for info.</td>
<td>* Generally useful in workplaces</td>
</tr>
<tr>
<td>* Research knowledge (case study research) * Knowledge of research topic</td>
<td>* Basic research and academic writing</td>
<td>* Research techniques for info.</td>
<td>* Generally useful in workplace</td>
</tr>
<tr>
<td>* Professional development</td>
<td>* Organisational skills</td>
<td>* Fast typing</td>
<td>* If she develops skills they’re unlikely to be useful in corporate workplace</td>
</tr>
<tr>
<td>* Study skills</td>
<td>* Research techniques for info.</td>
<td>* Fast typing</td>
<td>* Only if more research is done</td>
</tr>
<tr>
<td>* Enhanced previous skills</td>
<td>* Organisational skills</td>
<td>* Nothing</td>
<td>* Only if more research is done</td>
</tr>
<tr>
<td>* Generally useful in workplaces</td>
<td>* Generally useful in workplace</td>
<td>* If she develops skills they’re unlikely to be useful in corporate workplace</td>
<td></td>
</tr>
<tr>
<td>* Knowledge of research topic</td>
<td>* Organisational skills</td>
<td>* Nothing</td>
<td>* Only if more research is done</td>
</tr>
<tr>
<td>* Enhanced previous skills</td>
<td>* Organisational skills</td>
<td>* Nothing</td>
<td>* Only if more research is done</td>
</tr>
<tr>
<td>* Research skills</td>
<td>* Organisational skills</td>
<td>* Nothing</td>
<td>* Only if more research is done</td>
</tr>
<tr>
<td>* Knowledge of research topic</td>
<td>* Organisational skills</td>
<td>* Nothing</td>
<td>* Only if more research is done</td>
</tr>
</tbody>
</table>

### Thesis/exegesis

<table>
<thead>
<tr>
<th>Who will read it?</th>
<th>Structure?</th>
<th>Issues?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maybe some stakeholders but probably no-one</td>
<td>Traditional</td>
<td>No</td>
</tr>
<tr>
<td>Stakeholders – Media-type releases in layman’s language more useful</td>
<td>Semi-traditional</td>
<td>Yes – structure</td>
</tr>
<tr>
<td>Anyone interested in her topic might skim it – Published papers are more useful</td>
<td>Traditional</td>
<td>No</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>Semi-traditional</td>
<td>No</td>
</tr>
<tr>
<td>When on ADT, ref. resource for others writing theses in this area.</td>
<td>Traditional</td>
<td>Yes – ethics and written expression</td>
</tr>
<tr>
<td>* Knowledge of research topic</td>
<td>* Research skills</td>
<td>* Quantitative research and software relevant to that</td>
</tr>
<tr>
<td>* Knowledge of research topic</td>
<td>* Research skills</td>
<td>* Research skills</td>
</tr>
<tr>
<td>* Knowledge of research topic</td>
<td>* Research skills</td>
<td>* Quantitative research and software relevant to that</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Thesis/exegesis</th>
<th>Structure?</th>
<th>Issues?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholders</td>
<td>Semi-traditional</td>
<td></td>
</tr>
<tr>
<td>When on ADT, ref. resource for others writing theses in this area.</td>
<td>Semi-traditional</td>
<td>Yes – ethics and written expression</td>
</tr>
</tbody>
</table>
### Appendix 9

**Matrix 3.2**

EdD candidates – Sub-question two:

To what extent does each program meet the candidates’ needs and expectations?

<table>
<thead>
<tr>
<th>Categories identified from interview questions</th>
<th>Alison</th>
<th>Tim</th>
<th>Lyn</th>
<th>Jennie</th>
<th>Ronald</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information on all three doc. programs?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
| Why did you choose the PhD (thesis)?          | * Believed coursework units would slot into thesis  
* Writing difficulties – needed shorter texts | * Believed coursework units would build skills  
* Sees it as equivalent to PhD | * Believed coursework units would slot into thesis  
* Coursework suited her learning style (discussion with others) | * Believed coursework units would slot into thesis  
* Coursework suited her learning style (discussion with others) | * Believed coursework units would slot into thesis  
* Sees it as equivalent to PhD |
| Admin. issues?                                | No     | No  | Yes | Yes    | Yes (but mainly because of AMS) |
| Positives and negatives of prog.              |        |     |     |        |        |
| Met or failed to meet needs?                  | Partially met needs  
* Good supervision  
* Coursework units not useful (apart from meth.) | Partially met needs  
* Good supervision  
* Coursework units not useful | Failed to meet needs  
* Very poor supervision  
* Coursework units not useful | Failed to meet needs  
* Coursework units not useful | Met needs  
* Good supervision  
* Good administration |
| Positives?                                    | * New insights from research  
* The research methodology elective | * New insights from research  
* The research methodology elective | * Doing well in the coursework units  
* New insights from research | * New insights from research  
* New insights from research | * New insights from research  
* New insights from research |
| Negatives?                                    | * Coursework units  
* Lack of learning community | * Coursework units  
* Poor understanding of research methodology unit | * Coursework units  
* Lack of learning community | * Coursework units  
* Lack of learning community  
* Lack of time | * Lack of organisation |
<table>
<thead>
<tr>
<th>Pedagogical issues</th>
<th>How often see sups (average)?</th>
<th>What is your relationship with sups?</th>
<th>How do they help?</th>
<th>Goals and standards been identified?</th>
<th>Discussion re mismatch in roles and expectations?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monthly</td>
<td>Fortnightly</td>
<td>No schedule</td>
<td>Every three weeks</td>
<td>Monthly, fortnightly at the end</td>
</tr>
<tr>
<td>How often see sups (average)?</td>
<td>Monthly</td>
<td>Fortnightly</td>
<td>No schedule</td>
<td>Every three weeks</td>
<td>Monthly, fortnightly at the end</td>
</tr>
<tr>
<td>What is your relationship with sups?</td>
<td>Positive</td>
<td>Positive</td>
<td>Poor</td>
<td>Was good, lately poor</td>
<td>Positive</td>
</tr>
<tr>
<td>Provide resources</td>
<td>* Can discuss issues freely</td>
<td>* Could discuss issues freely (with both)</td>
<td>* Difficult to arrange meetings</td>
<td>* Follow the same educational philosophy</td>
<td>* Liked the pragmatic feedback</td>
</tr>
<tr>
<td>Likes the pragmatic feedback</td>
<td>* ‘Understands the journey’</td>
<td>* Warm relationship (with both)</td>
<td>* Makes assumptions about candidate’s level of knowledge</td>
<td>* Allows her to believe in herself</td>
<td>* Guidance on thesis structure</td>
</tr>
<tr>
<td></td>
<td>* Able to resolve differences in understanding</td>
<td>* Orig. sup. under stress in workplace</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How do they help?</td>
<td>* Provides resources</td>
<td>* Already had knowledge in the field</td>
<td>* Difficulty in understanding feedback</td>
<td>* But had to write methodology with no assistance</td>
<td>* Guidance on quantitative methodology</td>
</tr>
<tr>
<td></td>
<td>* Likes the pragmatic feedback</td>
<td>* Orig. sup. not enough practical feedback</td>
<td>* Makes assumptions about candidate’s level of knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goals and standards been identified?</td>
<td>No, but no problems</td>
<td>No, but no problems</td>
<td>No, and it has caused problems</td>
<td>No, and cited no problems, but probs. were apparent.</td>
<td>Yes, informally</td>
</tr>
<tr>
<td>Discussion re mismatch in roles and expectations?</td>
<td>No, but no problems</td>
<td>No, but no problems</td>
<td>No, and it has caused problems</td>
<td>No, and cited no problems, but probs. were apparent.</td>
<td>Yes, informally</td>
</tr>
</tbody>
</table>
### Appendix 9: Matrix 3.2 (Continued)

**Assistance from other than supervisors**

<table>
<thead>
<tr>
<th>What info. &amp; services have you used?</th>
<th>* None</th>
<th>* EndNote – Not helpful</th>
<th>* EndNote – Not helpful</th>
<th>* EndNote - Helpful</th>
<th>* EndNote – Not helpful</th>
<th>* EndNote – Not helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>* SPSS – Not helpful</td>
<td></td>
<td>* Learning Skills Unit adviser - Helpful</td>
<td>* Postgrad. Research Forum workshop - Not helpful</td>
<td>* Counselling - Helpful</td>
<td>* Learning Skills Unit workshops - Helpful</td>
<td>* Learning Skills Unit workshops – Not helpful</td>
</tr>
<tr>
<td>* Learning Skills Unit</td>
<td></td>
<td>* Student Rights adviser – Not helpful</td>
<td></td>
<td></td>
<td>* Postgrad. Research Forum workshops – Not helpful</td>
<td>* Student Rights adviser – Not helpful</td>
</tr>
<tr>
<td>Know about ‘Minimum Resources Policy?’</td>
<td>No, but knew she could apply for funding</td>
<td>No</td>
<td>No, but knew she could apply for funding</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Anyone other than your sups to help?</td>
<td>Yes – ‘Critical friend’ who has completed EdD and others in TAFE sector</td>
<td>Yes – Work colleagues</td>
<td>No</td>
<td>Yes – Another academic assisting with a particular theory</td>
<td>Yes – Work colleagues</td>
<td></td>
</tr>
</tbody>
</table>

**Workload issues**

<table>
<thead>
<tr>
<th>Coping with problems fitting study into life and work</th>
<th>Very difficult</th>
<th>Some difficulties</th>
<th>Very difficult</th>
<th>Very difficult now</th>
<th>No problems with research – worked part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Work and family pressures</td>
<td>* Easier because research completed in workplace</td>
<td>* Took annual leave and 48/52 to get coursework done and is continuing this for research</td>
<td>* Difficult now – wanted to take annual and LSL but will begin new job.</td>
<td>* Collected data in workplace – no problem</td>
<td>*Was difficult with coursework because working full-time</td>
</tr>
</tbody>
</table>
### Appendix 9: Matrix 3.2 (Continued)

<table>
<thead>
<tr>
<th>Personal issues</th>
<th>Expect to get out of it personally?</th>
<th>What have you gained personally?</th>
<th>Changed self-perception?</th>
<th>Changed others’ perception of you?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>* Recognition for knowledge</td>
<td>(Had not yet completed)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>* Recognition for knowledge</td>
<td>(Had completed)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Greater respect in the work sector</td>
<td>Yes</td>
<td>* Surprised at what he knew &amp; what still needs to learn</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Personal satisfaction of completing</td>
<td>Yes</td>
<td>* Now knows he can do a doctorate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* The challenge</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Had not yet completed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Nothing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Had completed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Greater respect in the work sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Personal satisfaction of completing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Personal growth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Had not yet completed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Nothing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Surprised at what she didn’t know</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Family don’t understand and no relevance at work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Personal growth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Growth as a teacher</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Satisfaction of completing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Satisfaction of completing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Now knows he can do a doctorate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Now understands he has persistence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With some people
**Appendix 9**

**Matrix 3.3**

EdD candidates – Sub-question three:
What are the differences in notions of research and Practice?

<table>
<thead>
<tr>
<th>Categories identified from interview questions</th>
<th>Alison</th>
<th>Tim</th>
<th>Lyn</th>
<th>Jennie</th>
<th>Ronald</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topic area</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher education environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International knowledge base</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-compulsory education environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Localised knowledge base</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Where it sits within current knowledge</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Motivation for doc. research</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Professional development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Career</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Professional development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Career</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Personal satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* To keep learning (the challenge / because there was nothing else after Masters)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Career</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Epistemological/ methodological stance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epist/method.</td>
<td>Knowledge is objective</td>
<td>Knowledge is constructed</td>
<td>Did not understand the concept – but later answer: objectivist</td>
<td>Knowledge is constructed</td>
<td>Knowledge is constructed</td>
</tr>
<tr>
<td><strong>Research practice:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Researcher/employee</td>
<td>Employee (FT work)</td>
<td>Employee (FT work)</td>
<td>Employee (FT work)</td>
<td>Employee (FT work)</td>
<td>Researcher (PT work)</td>
</tr>
<tr>
<td>See yourself as a researcher?</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>What is a researcher?</td>
<td>Finds useful knowledge that needs to be shared</td>
<td>Finds useful knowledge that needs to be shared</td>
<td>Finds knowledge</td>
<td>Finds knowledge</td>
<td>Finds knowledge</td>
</tr>
</tbody>
</table>
### Appendix 9: Matrix 3.3 (Continued)

<table>
<thead>
<tr>
<th>Published PhD</th>
<th>No – aiming to Aspects of research been discussed in media</th>
<th>No</th>
<th>Two refereed conference papers</th>
<th>Two articles in text bks Working on 2 journal articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aiming for excellence?</td>
<td>No</td>
<td>Not in the usual sense</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Do more research?</td>
<td>No</td>
<td>Yes</td>
<td>Possibly</td>
<td>Yes</td>
</tr>
</tbody>
</table>

#### Beliefs related to applied research:

<table>
<thead>
<tr>
<th>Importance of research to be applied research?</th>
<th>Essential</th>
<th>Essential</th>
<th>Essential</th>
<th>Useful in some way</th>
<th>Useful in some way</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do purely theoretical research?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Possibly</td>
<td>No</td>
</tr>
</tbody>
</table>

#### Relationship of doctoral research to applied field

<table>
<thead>
<tr>
<th>Balance between theory and practice in research</th>
<th>80% theory; 20% practice</th>
<th>Unsure</th>
<th>20% theory; 80% practice</th>
<th>Balanced</th>
<th>Balanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship of research to workplace</td>
<td>In specific workplace</td>
<td>In specific workplace</td>
<td>In specific workplace</td>
<td>In specific workplace</td>
<td>In specific workplace</td>
</tr>
<tr>
<td>Stake-holders?</td>
<td>Me/ educators/institutions/students</td>
<td>Government/institutions/ students/employers</td>
<td>Management staff in public sector orgs.</td>
<td>Adult ed/vocational ed staff and students</td>
<td>Educators/institutions/ students</td>
</tr>
<tr>
<td>Use new knowledge in workplace?</td>
<td>Useful in a specific and general way</td>
<td>Useful in a specific and general way</td>
<td>Useful in a specific and general way</td>
<td>Useful in a specific and general way</td>
<td>Useful in a specific and general way</td>
</tr>
<tr>
<td>How?</td>
<td>A more skilled practitioner</td>
<td>A more skilled practitioner</td>
<td>A more skilled practitioner</td>
<td>A more skilled practitioner</td>
<td>A more skilled practitioner</td>
</tr>
<tr>
<td>Issues in workplace?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
Appendix 10  Results matrices from cross-case analysis

Matrices for the cross-case analysis are presented in this section. They include:

Matrix 4.1:  Demographic comparison of candidates

Matrix 5.1:  Summary of all candidates’ responses to sub-question one
Matrix 5.2:  Summarised responses from all programs to sub-question one:  
              How do the norms and practices of candidates in each model differ?

Matrix 6.1:  Summary of all candidates’ responses to sub-question two
Matrix 6.2:  Summarised responses from all programs to sub-question two:  
              To what extent does the program meet the candidates’ needs and  
              expectations?

Matrix 7.1:  Summary of all candidates’ responses to sub-question three
Matrix 7.2:  Summarised responses from all programs to sub-question three:  
              What are the difference in notions of research and practice?
Appendix 10 (continued)

Matrix 4.1  Demographic comparison of candidates

<table>
<thead>
<tr>
<th>Summarised categories</th>
<th>PhD (thesis)</th>
<th>PhD (project)</th>
<th>EdD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Female</td>
<td>5</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Age 30-39</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>50-59</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>60-69</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>70-79</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studying: Full-time</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Part-time</td>
<td>2</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Working full-time</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Working part-time</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Not working</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation (current or usual): Lecturer</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>School teacher</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Training consultant</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Administrator</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Instructional designer</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Manager</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Prior Masters degree: Coursework</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Research</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>None</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Most recent academic qualification – within: last 5 years</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>last 10 years</td>
<td>2</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>last 15 years</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>longer</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Funded research place? Yes</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Changed 1st supervisor? Yes</td>
<td>2</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Has and meets regularly with 2nd supervisor? Yes</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>
### Matrix 5.1  Summary of all candidates’ responses to sub-question one:
*How do the norms and practices of candidates in each model differ?*

<table>
<thead>
<tr>
<th>Summarised Categories</th>
<th>Responses</th>
<th>PhD (thesis)</th>
<th>PhD (proj.)</th>
<th>EdD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural relationship to academic field</td>
<td>High</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Learning community exists?</td>
<td>Yes</td>
<td>✔</td>
<td>✗</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>How often on campus?</td>
<td>Often</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>General experiences</td>
<td>Positive (good supervision)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Positive (program structure)</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Negative (poor supervision)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Negative (program difficulties – structure disjointed/poorly defined)</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Mixed experiences</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Felt like dropping out?</td>
<td>Yes (prevented by commitment to supervisor)</td>
<td>✗</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Yes (but too much already completed)</td>
<td>✔</td>
<td>✗</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>No – pride</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>No – done too much</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>General learning</td>
<td>Knowledge of topic</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Knowledge about research procedures</td>
<td>✔</td>
<td>✗</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Professional development</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Personal development</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Independent learning important?</td>
<td>Yes, and no problems</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Yes, but problems</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Workload/Managing time</td>
<td>Very difficult</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Somewhat difficult</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Not difficult</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Thesis issues</td>
<td>Yes – Structure</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Yes – Style</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

* Note: A double tick indicates a predominant view, where 4 of 6 (PhD programs) or 3 of 5 (EdD program) candidates identified this as either their sole response or together with others. A cross indicates that the response was made by no candidate in that program.

---

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Matrix 5.2  
Summarised responses from all programs to sub-question one:  
*How do the norms and practices of candidates in each model differ?*

<table>
<thead>
<tr>
<th>Summarised categories</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural relationship to academic field</td>
<td>PhD (thesis) candidates tended to have closer cultural relationship to the academic field</td>
</tr>
<tr>
<td>Learning community exists?</td>
<td>All but three candidates across all programs felt a lack of learning community, inhibiting development of social and cultural capital</td>
</tr>
<tr>
<td>How often on campus?</td>
<td>Few differences – most not often on campus</td>
</tr>
<tr>
<td>General experiences</td>
<td>PhD (project) candidates found program structure to be positive (but some negative aspects, particularly exegesis)</td>
</tr>
<tr>
<td></td>
<td>EdD candidates found program structure to be negative (but major factor in enrolling in it). Keenly felt lack of cultural capital.</td>
</tr>
<tr>
<td>Felt like dropping out?</td>
<td>EdD candidates did not contemplate dropping out: already completed coursework</td>
</tr>
<tr>
<td></td>
<td>PhD (project) candidates with low or moderate cultural relationship cited ‘pride’, ‘determination’ and ‘something to prove’ as reasons for not dropping out (autodidactic)</td>
</tr>
<tr>
<td>General learning</td>
<td>PhD (project) and EdD cited knowledge of research topic = chance to develop cultural capital in the workplace</td>
</tr>
<tr>
<td></td>
<td>PhD (thesis) cited knowledge about research procedures, and all but one want to do more research = chance to develop cultural capital in research field</td>
</tr>
<tr>
<td>Independent learning important?</td>
<td>This is a doxic practice but there is tension between candidates and supervisors (all programs). This capital is not perceived to be recognised or valued.</td>
</tr>
<tr>
<td>Workload</td>
<td>Major issue for women (all programs) = family commitments. Some were able to exchange economic capital for educational capital.</td>
</tr>
<tr>
<td>Thesis/Exegesis</td>
<td>Problem for PhD (project) candidates. Tensions around praxis in this subfield. May have moved beyond the habitus of some supervisors, producing hysteresis.</td>
</tr>
</tbody>
</table>
Appendix 10 (continued)

Matrix 6.1  Summary of all candidates’ responses to sub-question two:
To what extent does the program meet the candidates’ needs & expectations? *

<table>
<thead>
<tr>
<th>Summarised categories</th>
<th>Responses</th>
<th>PhD (thesis)</th>
<th>PhD (proj.)</th>
<th>EdD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program choice</td>
<td>Status</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Practical</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Structure</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Met needs?</td>
<td>Yes</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Partially</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Positives</td>
<td>Knowledge of topic</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Knowledge about research procedures</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Project structure</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Personal development</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Negatives</td>
<td>Lack of guidance</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Lack of learning community</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Loneliness</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Oral defence</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Coursework units</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Supervisor relationship</td>
<td>Constructive</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Other support</td>
<td>Software training (eg EndNote; NVivo)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>RMIT support services (eg LSU, GRO workshops)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Experts in the research topic field</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Critical friends</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Personal gain</td>
<td>Satisfaction / pride</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Personal growth</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Changed self-</td>
<td>Yes – more confident</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>perception?</td>
<td>Yes – not a failure</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Yes – in a negative way</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Others’ perception?</td>
<td>Yes (family proud)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>See yourself as</td>
<td>Yes</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>researcher?</td>
<td>No</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

* Note: A double tick indicates a predominant view, where 4 of 6 (PhD programs) or 3 of 5 (EdD program) candidates identified this as either their sole response or together with others. A cross indicates that the response was made by no candidate in that program.
Matrix 6.2  
**Summarised responses from all programs to sub-question two:**
_**To what extent does the program meet the candidates’ needs & expectations?**_

<table>
<thead>
<tr>
<th>Summarised categories</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program choice</strong></td>
<td>Structure of the degree most important, followed by status in both PhD (thesis) and PhD (project)</td>
</tr>
</tbody>
</table>
| **Met needs?**        | Yes, for PhD (thesis) and PhD (project)  
                       | No, for EdD |
| **Positive aspects**  | • PhD (thesis) = personal development, particularly showing development of habitus.  
                       | • PhD (project) = project-base structure  
                       | • EdD = research topic |
| **Negative aspects**  | • All programs: lack of guidance and lack of learning community  
                       | • PhD (project): timing of the oral defence (often many weeks following submission)  
                       | • EdD: Coursework units  
                       | • Those who were full-time and studied on campus felt more like equal players in the field because part of a learning community. |
| **Supervisor relationship** | Mostly positive, but some candidates felt lack of appropriate habitus. Some PhD (project) and EdD supervisors were not familiar with program. |
| **Goals/standards discussed?** | Little cross-program difference; mostly not discussed, which caused trauma. |
| **Other support**     | Little cross-program difference. Variety of support used: software training, RMIT support services, experts in the field, critical friends |
| **Personal gain**     | • PhD (thesis) and PhD (project): personal satisfaction and pride  
                       | • EdD: no personal gain from most  
                       | • PhD (thesis) and PhD (project): Yes; positive. Aware of enhanced habitus/cultural capital  
                       | • EdD: Yes; negative. Lack of cultural capital |
| **Changed self-perception?** | Little cross-program difference. Family pride cited - stronger among PhD (project)  
                       | Strong identification among PhD (thesis) candidates |
| **Changed others’ perception?** | |
| **See yourself as researcher?** | |
### Appendix 10 (continued)

**Matrix 7.1  Summary of all candidates’ responses to sub-question three:**

*What are the differences in notions of research and Practice?*

<table>
<thead>
<tr>
<th>Summarised categories</th>
<th>Responses</th>
<th>PhD (thesis)</th>
<th>PhD (proj.)</th>
<th>EdD</th>
</tr>
</thead>
<tbody>
<tr>
<td>General area of research</td>
<td>Schools</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>Higher Education</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>VET</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>General education</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Business/industry</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Where it sits within current knowledge</td>
<td>Broad / international</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Narrow / local</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Broad / international, but limited to a new field</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Motivation for research degree</td>
<td>Research topic interest</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>Career</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Professional development</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Personal satisfaction</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Status</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Ability to do project</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Aiming for excellence?</td>
<td>Yes</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Yes, but limitations</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Belief that candidates’ research must be applied</td>
<td>Essential</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Useful in some way</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Not essential</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Relationship of research to an applied field</td>
<td>Broad connection</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>Specific workplace</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Research knowledge useful in candidates’ workplace?</td>
<td>Yes, specifically related</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Yes, in a general way</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Not useful</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Issues in using research in workplace?</td>
<td>Yes (potential intellectual property issues)</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

* Note: A double tick indicates a predominant view, where 4 of 6 (PhD programs) or 3 of 5 (EdD program) candidates identified this as either their sole response or together with others. A cross indicates that the response was made by no candidate in that program.
### Matrix 7.2: Summarised responses from all programs to sub-question three:
**What are the candidates’ notions of research and Practice?**

<table>
<thead>
<tr>
<th>Summarised categories</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>General area of research</td>
<td>No difference between programs</td>
</tr>
</tbody>
</table>
| Where it sits within current knowledge                      | • Only 2 PhD (project) candidates situated within localised knowledge  
• One PhD (thesis) and one EdD also situated within localised knowledge                                                   |
| Motivation for research degree                              | • Ability to do a project strong motivation for PhD (project) candidates  
• Professional development strong motivation for EdD candidates  
• Career a slightly stronger motivation with PhD (project) candidates  
• Personal satisfaction slightly stronger motivation with PhD (thesis) candidates |
| Aiming for excellence?                                       | • Candidates in both PhD programs were generally still aiming for excellence, although some with limitations.  
• Only one EdD candidate was aiming for excellence. Comments show serious lack of cultural capital and resultant disenfranchisement. |
| Belief that candidates’ research must be applied             | General belief across all programs that their research should be applied  
• PhD (thesis) candidates’ research has broad application to applied field  
• PhD (project) and EdD candidates’ research strongly linked to their specific workplaces |
| Relationship of research to an applied field                |                                                                                                                                                                                                          |
| Usefulness of research in workplace                         | • PhD (project) and EdD useful in specific way. Provides opportunities for candidates to develop cultural and symbolic capital in the workplace  
• Some EdD research also useful in a general way                                                              |
| Issues in using research in the workplace                   | Three PhD (project) candidates cited potential intellectual property issues.                                                                   |