Contesting the Culture of the Doctoral Degree

Judy Maxwell RMIT University

Situated within a renewed focus on 'practical' research, this paper explores candidates' experiences of the culture of three doctoral research degrees in a School of Education in an Australian university. The research design was underpinned by Bourdieu's theory of practice and three meta-themes emerged: tensions between and within the field; challenges to autonomous principles; and the importance of habitus and cultural capital in doctoral study. Five recommendations were proposed, aimed at producing a vibrant doctoral learning community with a deeper understanding of candidates' issues.

INTRODUCTION AND CONTEXT

This paper outlines 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). Much of the debate around the nature and value of the doctoral degree has focused on the development and diversification of doctoral programs. New programs have emerged as a result of 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, particularly from within one faculty or school where it is possible to compare three different doctoral degrees. This 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.

RMIT University is a university of technology which 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). Until recently, the School of Education 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 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). 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. The EdD has recently been

disbanded, while the PhD by project is relatively new to the discipline of education, being offered in the School for the first time in 2000. It consists of research that is 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, 2004).

The focus of both the EdD and the PhD (project) 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, 2008, 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.).

DOCTORAL DEGREE DIVERSITY AND CANDIDATURE

The value of the doctoral degree has been well-documented. It has been for many years the preeminent degree used as a training 'apprenticeship' into research and scholarship. However, 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. 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).

Increasingly, candidates are seeing the value of the research degree as enabling engagement at a high level with the professions and industry. 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. 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.

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 publication², 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 (1997, 1999) commentary on the corporatisation and commodification of higher 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 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. 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).

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.

The professional doctoral program is not the only doctoral program to have attempted to bring the university to the workplace. 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, 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).

Interestingly, although new forms of doctoral programs have developed, the nature of doctoral candidates has remained largely unchanged. 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 much research showing the particular issues of postgraduate research candidates (Barnacle & Usher, 2003; Conrad & Chipperfield, 2004; Harman, 2002; McAlpine & Norton, 2006; Pearson & Ford, 1997). Attrition problems, for instance, have been shown to be multifaceted (Evans, 2002; Golde & Dore, 2001; Lovitts, 2001). Latona and Browne (2001) sum these up by pointing to three broad factors: science-based candidates, who are often supported within a team and have a sense of belonging, are more likely to complete; individual supervisory factors, including the need for a clear understanding of relevant roles and responsibilities, have the capacity to impede or assist progress; and the individual characteristics of candidates, for instance, those who have a prior Honours degree are more likely to do well.

Supervision practices have also been well-researched. Much of this literature relates to the tension between 'the irreconcilable poles of pupil and independent researcher' (Frankland, 1999, p. 9). For instance, although Sinclair (2004) found that a direct interventionalist approach taught the competencies needed for successful completion, this functionalist approach was found to be too narrow by Lee (2008). In her study, other approaches such as critical thinking, enculturation into the disciplinary community, emancipation and developing a quality relationship were more important.

However, there is little research available 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. What is needed is a study that looks to understand the candidates' emotions, and their 'bodily dispositions' and 'practical consciousness' (Bourdieu, 1990) of their habits and activities within the particular cultures of each of the three programs.

AIMS AND RESEARCH DESIGN

This research aimed to capture the cultures 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. The research question was: 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) was conducted using semi-structured, indepth 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 had submitted within the previous year. Participants were allocated a pseudonym and identified with the type of doctoral program and identification as candidate (C) or supervisor (S) in brackets, for example: Sally (project, C); Tina (thesis, S). 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. The research design was therefore underpinned by Bourdieu's theory of practice (Bourdieu, 1977, 1990). This allowed analysis of candidates' experiences and the doctoral structures within which their practice resides through one critical lens.

Bourdieu's key concepts are habitus, field and capital. Habitus is a general disposition that 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 field is 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. Bourdieu (1993) points out that educational institutions privilege particular social capital (strategic networks) and cultural capital that students bring with them, and that institutions 'endorse and normalize particular types of knowledge, ways of speaking, styles, meanings, dispositions and worldviews' (Margolis, Soldatenko, Acker, & Gair, 2001, p. 13).

Bourdieu frequently explicates his theory of practice with an analogy of a game (Bourdieu, 1991, 1998), where serious players come together within a particular field. 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. The main players in the 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.

SUMMARY OF RESULTS

The case study data revealed an 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. These are now discussed.

Tensions Between and Within the Fields

Fields and sub-fields 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 relevant 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 sub-fields are not those with the power in the larger field. While Bourdieu (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 sub-field in demise, within a relatively new sub-field 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 Six), 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, 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 sub-fields 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 sub-field 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 sub-field, 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 sub-fields 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) sub-field 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 sub-field are replaced by other agents who might show little acceptance of its worth (lacking the required 'illusio'). The PhD (project) sub-field 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 sub-field 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 sub-field 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.

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.

There are also challenges to autonomous principles of dialogical pedagogy, which includes an overemphasis 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 substandard 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.

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 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, with varying abilities to succeed in an educational research practice of which most had 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 it 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.

Mills (2008) argues for the habitus' 'transformative potential' (p. 79). 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 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 new-found 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 to 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 doctoral journeys. Being largely isolated meant they had little conception of the field as a whole, much less their program sub-field. 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.

Candidates who work, particularly those working full-time in senior positions and studying parttime, 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.

A NEW LOOK AT SUPERVISOR PEDAGOGY

The clear message in terms of supervisor pedagogy 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.

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, 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 sub-field is part.

CONCLUSIONS AND RECOMMENDATIONS

There is clearly a problem inherent in emerging sub-fields 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 sub-field. The PhD (project) exists because of Government demands for industry-relevant programs. However, sub-fields 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.

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.
- 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.
- 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.
- Develop a supervisor pedagogy aimed at habitus transformation. 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.
- Ensure supervisors and learning support staff develop awareness of the effects of relative amounts and types of cultural capital in candidates.

This research offers a new way of understanding the practice of doctoral study 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. 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 (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.

ENDNOTES

¹ 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 in Australian universities.

² 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, accompanied by an over-arching paper. Discussion of these doctorates does not fall within the scope of the present study.

REFERENCES

Barnacle, R., & Usher, R. (2003). Assessing the quality of research training: The case of part-time candidates in full-time professional work. Higher Education Research and Development, 22(3), 345-358.

Barnett, R. (2000). Realising the university in an age of supercomplexity. Buckingham: SRHE/Open University Press.

Boud, D., & Tennant, M. (2006). Putting doctoral education to work: Challenges to academic practice. Higher Education Research and Development, 25(3), 293-306.

Bourdieu, P. (1977). Outline of a theory of practice (R. Nice, Trans.). Cambridge: Cambridge University Press (Original work published 1972).

Bourdieu, P. (1988). Homo academicus (P. Collier, Trans.). Oxford: Polity Press (Original work published 1984).

Bourdieu, P. (1990). The logic of practice (R. Nice, Trans.). Oxford: Polity Press (Original work published 1980).

Bourdieu, P. (1991). Language and symbolic power. Cambridge, MA: Harvard University Press.

Bourdieu, P. (1993). The field of cultural production: Essays on art and literature. Cambridge: Polity Press

Bourdieu, P. (1998). Practical reason. Cambridge: Polity Press.

Bourdieu, P. (2000). Pascalian meditations (R. Nice, Trans.). Stanford: Stanford University Press (Original work published 1997).

Bourner, T., Bowden, R., & Laing, S. (2001). Professional doctorates in England. Studies in Higher Education, 26(1), 65-83.

Brennan, M., Kenway, J., Thomson, P., & Zipin, L. (2002). Uneasy alliances: University, workplace, industry and profession in the Education Doctorate. Australian Educational Researcher, 29(3), 63-83.

Conrad, L., & Chipperfield, C. (2004). The role of research higher degree students as learners. Paper presented at the Quality in Postgraduate Research Conference: Reimaging research education, Adelaide.

Davis, H., Evans, T., & Hickey, C. (2006). A knowledge-based economy landscape: Implications for tertiary education and research training in Australia. Journal of Higher Education Policy and Management, 28(3), 231-244.

DEST (2004). Students 2003: Selected higher education statistics. Retrieved May 20, 2004, from http://www.dest.gov.au/highered/statistics/students/03/student_tables.htm

Etzkowitz, H., & Leydesdorff, L. (1997). *Universities and the global knowledge economy: A triple helix of university-industry-government relations*. London: Cassell.

Evans, T. (1997). Flexible doctoral research: Emerging issues in professional doctorate programs. *Studies in Continuing Education*, 19, 174-182.

Evans, T. (1998). *Doctoring the doctorate: Issues and standards for the 21st century.* Paper presented at the Quality in Postgraduate Research Conference: Managing the New Agenda, Uni. of SA, Adelaide.

Evans, T. (2001). Tensions and pretensions in doctoral education. In B. Green, T. Maxwell & P. Shanahan (Eds.), *Doctoral education and professional practice: The next generation?* (pp. 275 - 302). Armidale: Kardoorair Press.

Evans, T. (2002). Part-time research candidates: Are they producing knowledge where it counts? *Higher Education Research and Development*, 21(2), 155-165.

Frankland, M. (1999). The master/apprentice model for the supervision of postgraduate research and a new policy for research education. *Australian Universities Review, 1*, 8-11.

Gale, T. (1999). Fair contest or elite sponsorship? Entry settlements in Australian higher education. *Higher Education Policy*, 21(1), 69-91.

Gale, T. (2003). A doctorate by definition: Exploring possibilities and opportunities in education. Paper presented at the Defining the Doctorate AARE mini-conference, Newcastle.

Golde, C. M., & Dore, T. M. (2001). At cross purposes: What the experiences of doctoral students reveal about doctoral education. Retrieved October 4, 2008, from http://www.phd-survey.org

Grenfell, M., & James, D. (1998b). Theory as method. In M. Grenfell & D. James (Eds.), *Bourdieu and education: Acts of practical theory* (pp. 152-178). London: Falmer Press.

Grenfell, M., & James, D. (2004). Change *in* the field - changing the field: Bourdieu and the methodological practice of educational research. *British Journal of Sociology of Education*, 25(4), 507-523.

Harman, G. (2002). Producing PhD graduates in Australia for the knowledge economy. *Higher Education Research and Development*, 21(2), 179-190.

Latona, K., & Browne, M. (2001). Factors associated with successful completion of research higher degrees *Higher Education Series Report No. 37*. Canberra: DETYA Higher Education Division, Communications Unit.

Lee, A. (2008). How are doctoral students supervised? Concepts of doctoral research supervision *Studies in Higher Education*, 33(3), 267-281.

Lee, A., Green, B., & Brennan, M. (2000). Organisational knowledge, professional practice and the professional doctorate at work. In J. Garrick & C. Rhodes (Eds.), *Research and knowledge at work*. London: Routledge.

Lovitts, B. E. (2001). *Leaving the ivory tower: The causes and consequences of departure from doctoral study.* Lanham: Rowman & Littlefield.

Malfroy, J., & Yates, Y. (2003). Knowledge in action: Doctoral programmes forging new identities. Journal of Higher Education Policy and Management, 25(2), 119-129.

Marginson, S. (1997). *Markets in education*. Sydney: Allen and Unwin.

Marginson, S. (1999). Diversity and convergence in Australian higher education. Australian Universities' Review, 42(1), 12-23.

Marginson, S. (2007). University mission and identity for a post post-public era. Higher Education Research and Development, 26(1), 117-131.

Margolis, E., Soldatenko, M., Acker, S., & Gair, M. (2001). Peekaboo: Hiding and outing the curriculum. In E. Margolis (Ed.), *The hidden curriculum in higher education* (pp. 1-20). New York: Routledge.

Maxwell, T., & Shanahan, P. (1996). Reconceptualising the doctorate: Issues arising from comparative data on the Doctor of Education in Australia. In T. Maxwell & P. Shanahan (Eds.), Which way for professional doctorates? Context and cases (pp. 29-55). Armidale: University of New England.

Maxwell, T., & Shanahan, P. (1997). Towards a reconceptualisation of the doctorate: Issues arising from comparative data relating to the EdD degree in Australia. Studies in Higher Education, 22(2), 133-150.

Maxwell, T., & Shanahan, P. (2001). Professional doctoral education in Australia and New Zealand: Reviewing the scene. In B. Green, T. Maxwell & P. Shanahan (Eds.), Doctoral education and professional practice: The next generation? (pp. pp 209-212). Armidale: Kardoorair Press.

McAlpine, L., & Norton, J. (2006). Reframing our approach to doctoral programs: An integrative framework for action and research. Higher Education Research and Development, 25(1), 3-17.

McWilliam, E., Taylor, P., Thomson, P., Green, B., Maxwell, T., Wildy, H., et al. (2002). Research training in doctoral programs: What can be learned from professional doctorates? Canberra: Department of Education, Science and Technology.

Mills, C. (2008). Reproduction and transformation of inequalities in schooling: The transformative potential of the theoretical constructs of Bourdieu. British Journal of Sociology of Education, 29(1), 79-89.

Mills, C., & Gale, T. (2002). Assuming an alias: Revealing student identities in schooling. Paper presented at the Australian Association for Research in Education Annual Conference.

Moriarty, B., Danaher, P. A., & Danaher, G. (2008). Freire and dialogical pedagogy: A means for interrogating opportunities and challenges in Australian postgraduate supervision. International Journal of Lifelong Education, 27(4), 431-442.

Moses, I. (1994). Planning for quality in graduate studies. In O. Zuber-Skerritt & Y. Ryan (Eds.), *Quality* in Postgraduate Education (pp. 3-13). London: Kogan Page.

Neumann, R. (2002). Diversity, doctoral education and policy. Higher Education Research and Development, 21(2), 167-178.

Neumann, R. (2003). The doctoral education experience: Diversity and complexity. Canberra: Department of Education, Science and Training.

Neumann, R., Kiley, M., & Mullins, G. (2008). Australian doctoral graduates: Where are they going? Paper presented at the Quality in posgraduate research: Research education in the new global environment - Conference proceedings, Canberra.

Pearson, M. (2005). Framing research on doctoral education in Australia in a global context. Higher Education Research and Development, 24(2), 119-134.

Pearson, M., Evans, T., & Macauley, P. (2008). Growth and diversity in doctoral education: Assessing the Australian experience. Higher Education, 55, 357-372.

Pearson, M., & Ford, L. (1997). Open and Flexible PhD study and research. Canberra: Evaluations and Investigations Program, DETYA.

Poole, M., & Spear, R. (1997). Policy issues in postgraduate education: An Australian perspective. In R. Burgess (Ed.), Beyond the first degree: Graduate education, lifelong learning and careers. Buckingham: SRHE/Open University Press.

Reeders, E. (2002). The sustainability of practice-based research at RMIT. Office of the PVC (Learning and Scholarship). Melbourne: RMIT.

RMIT (2003). What is the research by project qualification? Retrieved June 10, 2003, from http://www.rmit.edu.au/browse/Our%20Organisation%2FFaculties%2FEducation,%20Language%20and %20Community%20Services%FResearch%2FFAQ%2FGeneral%20Questions/

RMIT (2008). Higher Degrees by Research policy and procedures information handbook. Retrieved July 3, 2008, from http://mams.rmit.edu.au/6rp3m7h5fawnz.pdf

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

Seddon, T. (1999). Research, recommendations and realpolitik: Consolidating the EdD. Australian Educational Researcher, 26(3), 1-14.

Sinclair, M. (2004). The pedagogy of 'good' PhD supervision: A national cross-disciplinary investigation of PhD supervision. Canberra: Commonwealth of Australia.

Usher, R. (2002). A diversity of doctorates: Fitness for the knowledge economy? Higher Education Research and Development, 21(2), 143-153.

Webb, J., Schirato, T., & Danaher, G. (2003). Understanding Bourdieu. Crows Nest, NSW: Allen & Unwin.

Yin, R. K. (1994). Case study research: Design and methods (2nd ed.). Thousaned Oaks CA: Sage Publications.

Yin, R. K. (2009). Case study research: Design and methods (4th ed.). Thousand Oaks: Sage Publications.