ANGLIA RUSKIN UNIVERSITY

SUPPORTING A NON-MODULAR PROFESSIONAL DOCTORATE

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ANGLIA RUSKIN UNIVERSITY
FACULTY OF HEALTH, SOCIAL CARE AND EDUCATION

ABSTRACT

DOCTOR OF EDUCATION

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Purpose
This research considers the design and operation of a non-modular professional doctorate to meet the needs of professionals working in the built environment who wish to obtain a doctoral qualification. It seeks to identify the essential components and support mechanisms to provide an alternative to other forms of doctorate which draws on their strengths while addressing some of their shortcomings. It answers questions regarding the suitability of a programme which can successfully operate within a reasonable timeframe.

Research Design
The research is set in a real-life phenomenological paradigm concerning the experience and development of candidates registered for a professional doctorate. The conceptual framework governed both the design of the research and the design of a two-stage curriculum. Regular intervention and evaluation using action research methodology was used to improve practice. The research produced findings through multiple sources of evidence. Data were collected from course documentation, online discussion forums, focus groups, individual reflections and interviews.

Findings
The work found that a community of practice consisting of candidates and staff, specifically focused on learning and the continuous development of candidates, provides a suitable vehicle for professional doctorate work. Candidates benefit from engaging in carefully constructed summative and formative assessment with prompt feedback. The assessment informed regular workshops containing an active learning format supplemented through additional support from a virtual learning environment. Crucially, all three components are required to support each other by drawing on their individual strengths.

Conclusion
This action research project made a modest but significant contribution to curriculum development at doctoral level. The research developed a model which enabled academic practice to help candidates improve their professional practice. Self-motivated candidates with appropriate supervisory support can complete a professional doctorate within a realistic timeframe when there is carefully constructed synergy between their doctorate, its supporting mechanisms and their own professional practice.

Key words: Non-modular education, professional doctorate, community of practice, assessment, workshops, virtual learning environment, work-based learning.

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Chapter 1 Introduction - Context and Rationale

An Alternative Doctoral Model for Professional Practice

The writing of this thesis was driven by the need to produce alternative doctoral provision in the Department of the Built Environment at Anglia Ruskin University. It grew out of a concern that traditional full-time, and particularly part-time, PhDs do not always meet the needs of professionals working in industry and commerce. The PhD, despite being the 'gold standard' for doctoral education for many years, is not designed for a specific professional market, nor is it directly focused on a specific professional discipline. In addition, it has been regarded by some as 'too academic, having little practical value and not meeting the needs of industry' (DTI, 1993:57).

A number of specific concerns have been voiced about the part-time PhD model in particular. The positioning of the research proposal at the start of the PhD is featured too early in the research process for the part-time candidate. Experience at Middlesex University has shown that candidates entering a professional doctorate already possess a rich mix of academic and professional underpinning knowledge which requires considerable time to examine and reflect on, before developing and justifying their proposed project (Armsby and Costley, 2009). The part-time PhD model, with its emphasis on academic supervision, provides limited potential for exposure to multidisciplinary reflective scrutiny by professional peers working within the field of inquiry. At Anglia Ruskin University for example, although faculty

training and University-wide compulsory training was provided in 2004 for all PhD candidates, little of it was assessed by professional peers (staff and candidates), and the provision was separate from the one-to-one supervision. From my experience in working with candidates at training events for PhD candidates at the University, it would appear that there can be considerable variation in the quality of candidates' supervisory experience, depending on the allocation and make-up of the supervisory team. Some candidates I encountered were receiving excellent support and supervision and were making good progress, whilst others were having a long, lonely experience, finding it very difficult to complete their doctorate in a reasonable timeframe. I wanted to explore the possibility of developing a range of more robust supervisory frameworks that would involve a team of supervisors proactively supporting part-time candidates. This would involve bringing candidates, training events and supervision together as one community.

The report from the Higher Education Funding Council for England (HEFCE, 2005) raised concerns regarding the supervision and support for research training which resulted in poor completion rates. McAlpine and Weiss (2000) had reported earlier that for those students who did manage to complete, very few did so within the required timeframe. Golde (2000) revealed that, when referring to PhD students, it was evident that in some cases the most able students at a university were the least likely to succeed. In some extreme cases, candidates have been left to their own devices with little support or quality control over what they were doing. Experience at Anglia Ruskin University has resulted in some mature part-time candidates taking up to ten

years to complete their doctorate. In short, the part-time PhD failed to meet the needs of a number of part-time candidates; supervision was not consistent and was not specifically designed for a mature professional audience.

These conclusions were largely drawn from evidence from the professional practice experience of past and present staff and candidates at this University. Such evidence is supported in this thesis through an examination of literature, presented in detail in Chapter Two, which provides a critical review of doctoral provision in the UK (see DTI, 1993; Noble, 1994; UKCGE, 1996; Usher, 2002; Green and Powell, 2005; Taylor and Beasley, 2005; Armsby and Costley, 2009). To summarise, it is argued that traditional routes have failed to provide the personal and professional skills required for employment and their single discipline nature and focus on academic knowledge does not always meet the need of candidates involved in professional practice. There is also further evidence presented in the literature of poor completion rates and completion times within the conventional PhD route.

One response to these concerns was the development and rapid growth in professional doctorates in the UK from the early 1990s through to the present day (Scot *et al.,* 2004). These doctorates were developed at a time when most new university programmes in the UK subscribed and conformed to validation procedures largely designed for taught courses. They were generally approved as a two-stage research degree of six years duration, with the first stage being a modular, credit-rated, taught programme (Figure 1.1).

Stage 1 was comprised of taught modules at masters level, followed by Stage 2 of the programme which was regarded as the research element (HEFCE, 2002). Students could typically spend two years in Stage 1, followed by up to four years duration in Stage 2. In this model, candidates are required to pass the modular Stage 1 and apply to progress to the doctoral level Stage 2 via a university masters degree examination board.

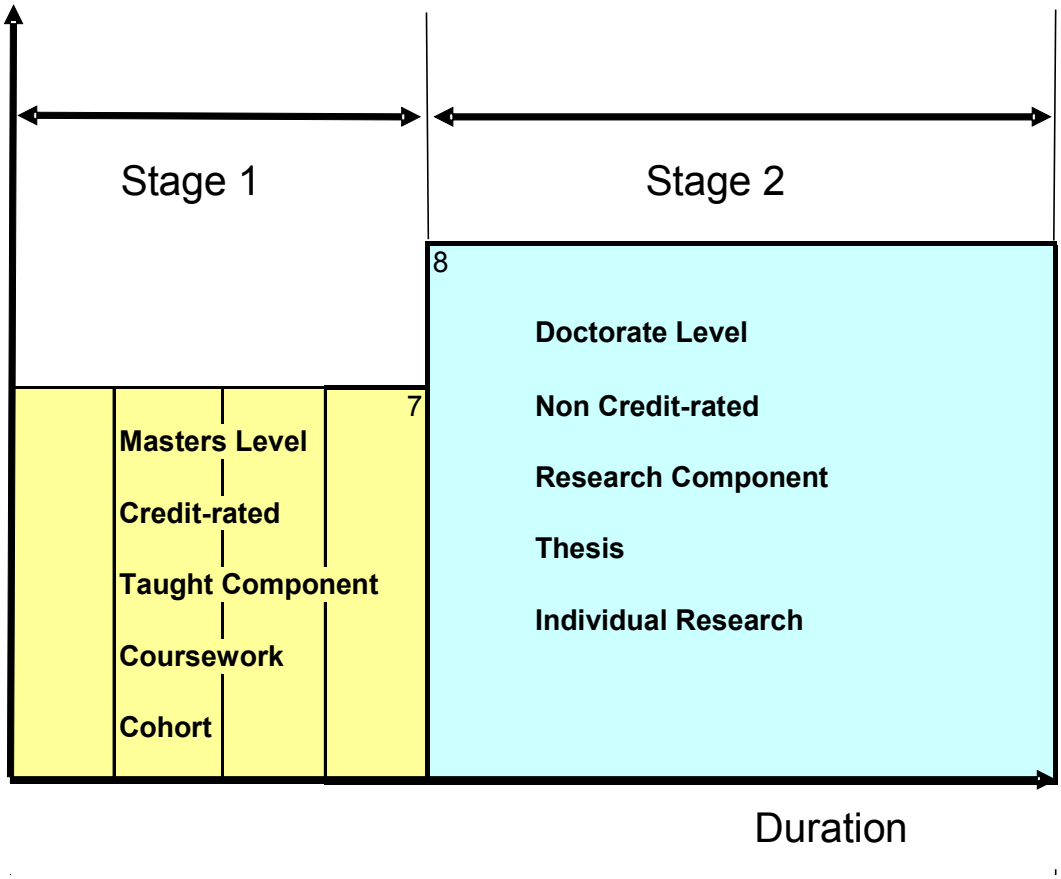

Figure 1.1 A UK Model of a Modular Credit-Rated Professional Doctorate

This UK Professional Doctorate Model addresses many of the concerns about the part-time PhD, particularly in terms of it being more professionally focused, its delivery of specific professional practice and discipline-related content, the providing of time in Stage 1 to reflect on professional expertise and the development of research skills required for the project, and its more

user-friendly cohort experience where other candidates can support one another. However, it does give rise to a number of other issues that are important to this dissertation. These are briefly outlined here and discussed in more detail later.

My experience of working on a taught modular programme, both at undergraduate and masters level, has led me to raise a number of specific issues that relate to matters of quality and to the appropriateness of the masters modular structure for doctoral programmes. There are problematic connotations attached to the descriptor 'Taught Doctorate' or 'Taught Component,' often associated with negative perceptions of the professional doctorate; this was expressed as recently as 2011, by United Kingdom Centre for Graduate Education (UKCGE, 2011). They argue that the terms 'taught' and 'doctorate' should not be combined, since they can be construed as being mutually contradictory when applied to graduate research degree programmes. The term 'taught' implies that a programme is not a degree by research. Applying a modular approach to at least part of a doctoral programme could reinforce such views. If candidates are registered on a doctorate, what advantage is to be gained by limiting their study to masters level in the first two years of their programme? At Anglia Ruskin University, entry to our professional doctorates is by a masters degree which includes a research methods module and a final dissertation; what progress would be made by focusing solely on masters level descriptors in Stage 1? Without a masters level restriction in Stage 1, there might be an opportunity to raise candidates' thinking to a higher level.

There can be a lack of flexibility in content and pace of study within modules. Candidates must either pass or fail modules at a specific point in time. My experience of doctoral provision has shown that the pace of individual research can vary from candidate to candidate, sometimes for a variety of reasons, and whilst this can be accommodated on an individual PhD programme, it is very difficult to accommodate whilst studying a set modular content within a set time-frame with a fixed start and finish time. There is a potential lack of opportunity to assess the important reflection between modules, if taught sequentially and assessed separately. In addition, the candidate's intellectual research journey is not a neat, continuous, linear process, set at two distinct levels. A time of slow progress can result in modular failure; students can be de-motivated by early failure. From my experience, a modular scheme that focuses on summative assessment can fail to recognise the tensions between the formative and summative nature of assessment. This was recognised by Cowan (2006:159) when he asserted that 'I would much rather have the opportunity to benefit from formative evaluation before I am judged summatively'.

The variation in the amount of credits allocated by UK universities to Stage 1 of their doctorates makes the credits less meaningful as a transfer mechanism, or that of quantifying specific outcomes to compare one professional doctorate programme to another (Hoddell, 2002). The masters/doctoral split gives rise to perhaps a false perception that candidates are studying a taught masters programme first, followed by a research-based doctorate, and therefore does not easily provide an integrated programme

from start to finish. Such perceptions can be damaging. The masters/doctoral split then leads to a validation requirement to specify the minimum proportion of the programme that is at doctoral level to ensure equivalence to the PhD. The credit-rating cited by UKCGE (2002), specifies that 360 of the 540 credits required in total must be at doctoral level. This leads to the possibility that the total amount of work required for a professional doctorate far exceeds that required by the equivalent PhD. A smaller thesis on the other hand, examined on the completion of the Stage 2 research component, raises issues about equivalence to the PhD thesis and might potentially devalue the importance of the research-related foundation work in Stage 1. At Anglia Ruskin University this concern over level and proportion of doctorateness is catered for in the Research Degree Regulations (2011) by stating that professional doctorate candidates have the option to:

> *submit and defend by oral examination a thesis comprising a maximum of 80,000 words as a single piece of work, in which 21,000 are words developed/derived from Stage 1 papers but incorporated as chapters….'*

In this manner, all of their work can be considered in the viva at doctoral level and a strong synergy can be created between Stage 1 and Stage 2. The effectiveness of this strategy will be examined by this thesis.

A masters modular programme can have other potentially problematic consequences for candidates. There can be a lack of contact between Stage

2 supervisors and candidates during Stage 1 who are studying specific modules led by a single tutor, and this may limit the opportunity to build supervisory relationships early in the programme. A potential lack of contact between year cohorts and between Stage 1 and Stage 2 candidates, limits the potential benefits that can accrue by creating a vibrant community of learning, in which they can share common concerns and passions (Lave and Wenger, 1998). Once in Stage 2, there is a potential risk of breakdown of the cohort experience altogether, as the candidates may lose contact with each other as they work more on a one-to-one basis with their supervisor.

In response to the issues outlined above, the primary intention of this thesis is to explore an alternative non-modular approach to professional doctoral education which is designed to meet the learning needs, professional and academic aspirations, and continuous development requirements of a built environment professional audience. This audience can potentially consist of any professional working in the industry but will typically include architects, surveyors, construction managers, civil engineering and planners. In doing so, this thesis will explore the nature of the doctoral journey and the support mechanisms required to enable these professional candidates to complete their doctorate within a reasonable timeframe, without the aid of the modular structure. The research findings explored emerge from an examination of my professional practice as Director of a new Professional Doctorate for the Built Environment, PrD (BE), which began in 2004 in the Built Environment Department.

Framing the Research Questions

In order to develop and focus the overall direction of the study, a number of research questions were created. Such questions are important in providing a framework for research activity, the selection of the methodological approach and the methods to be employed, data gathering and evaluation of the results (Andrews, 2003). They help operationalise the research from the general early abstract ideas to the specific concrete activities which are required to achieve the intended research outcomes. According to Cohen, Mannion and Morrison (2004:75), this 'operationalisation is critical for effective research.' The selection of research questions help define the nature of the specific research undertaken which establishes a strong link between what is to be achieved and how it is realised. They are placed here in the introduction with a rationale as to why they are important and to inform the selection and shape of the theoretical chapters, research strategy, and research output that follow.

The key research question is presented below together with a series of sub-questions that flow out of it. Consideration is also given to some of the issues, dilemmas and challenges that might be faced in exploring the questions:

The Key Question

> What are the essential components and support mechanisms that need to be in place for the development of a non-modular professional doctorate, that can facilitate successful candidate completion within a realistic timeframe?

Sub-questions

1. How can a learning environment be created for mature candidates that acknowledges an individual's subject focus, ability, and experience; fosters intellectual freedom, experimentation and creativity and encourages peer learning and scrutiny?

2. How can the curriculum be designed to offer intellectual challenge through active involvement in self-directed learning at a pace that suits individual candidates within the collective experience of a doctoral community?

3. How can assessment and feedback be developed and managed to facilitate successful candidate completion within a realistic timeframe?

The main research question recognises the concerns that the developing university department faced in embarking on a new programme of study at doctoral level, largely unfamiliar to the supervisory support team, who would not be working with a traditional modular scheme. Would it be possible to design and operate an alternative doctoral programme which was not taught, modular or credit-rated, and yet could meet the needs of professional candidates whilst satisfying internal and external scrutiny? What opportunities and challenges would this bring?

Sub-question 1 acknowledges the need to support mature people who would bring a wealth of prior experience to their learning. Each candidate would

have their own research topic and unique past experience. It was assumed that candidates would be knowledgeable in the sense that they would be the experts in their field, but would not necessarily possess the required research skills to design a research proposal at the start of their doctorate. It was recognised that difficulties might be encountered in asking candidates to re-examine their academic and professional knowledge. How would the candidates react to exposing their professional practice to the rigours of academic examination? How would it be possible to give them the freedom to experiment and explore their ideas? Assuming that they are the experts in their field, how much guidance and direction would they need?

Sub-question 2 is concerned with the nature of the challenge that students might face. Could they be given the intellectual freedom to focus on their own research, yet follow a common programme of study that would meet their specific needs? Would they be able to develop systems for peer support and how important would these be? What standard would be required in the early stages of their work which would indicate that they could work and achieve at doctoral level? An early guiding principle was to develop a doctoral programme that might keep the individual research nature of a PhD and yet draw upon the support mechanisms available for cohort learning.

Sub-question 3 stems from experiences on taught modular programmes which focus on summative assessment and where the formative nature of assessment and feedback is not always fully utilised to help students develop. This is an issue that has been identified regularly in the UK National Student Survey at undergraduate level (2009, 2010, and 2011). The proposed new

Professional Doctorate for the Built Environment (PrD (BE)) created a new and exciting opportunity, outside the traditional modular framework, to explore alternative methods of study that might capitalise on regular formative assessment.

A major concern at the start of the doctoral programme and an academic driver for the research, stemmed from quality and quality assurance issues. Without the modular structure, the driving force for quality would be the programme itself, rather than meeting the requirements of the familiar regulatory framework. This presented exciting opportunities at a time when the issue of quality was of major importance to the University. When the UK Quality Assurance Agency (QAA) audited Anglia Ruskin University in 2004, they found that staff practice did not always conform to the quality assurance practice written in the University Code of Practice documents (QAA, 2004). What they found was a wide variation in what was claimed by the University central management and in staff practice. As a result, the QAA delivered the verdict of 'limited confidence' in the quality processes at the University in 2004. The Built Environment Department formed part of the audit trail at that time and, although the QAA were very complementary on the performance of the Department (QAA, 2004), recording some 30 positive points concerning the performance, with only two minor points for suggested improvement, this only confirmed the QAA's concerns that the University was unaware of the standards that were being achieved in individual departments. Equally, other departments demonstrated some poor practice that again the University appeared not to be aware of. The University had to work very hard to improve

their performance to ensure that their procedures were fit for purpose and it finally received a confidence vote in 2007. It was important that this new doctoral programme could ensure the quality of candidate experience.

Key Academic and Professional Practice Influences on this Study

Although this is a practice-based research project which generates findings from investigating problems and issues relating to a particular specific practice programme, the actions taken are founded on sound principles developed by others. Two specific strands of literature-based knowledge are drawn on. Gibbons *et al.,* (1994) identify the two modes of knowledge which were applied to this professional practice focused research project. Mode 1 forms of knowledge are seen as essentially disciplinary forms of knowledge, generally constructed within universities. The literature on Mode 1 knowledge described it as academic, established, propositional, scientific, pure, linear, causal, cumulative, deductive, and reductionist**.** Consulting this knowledge and academic theory is seen as a key element of doctoral research (Philips and Pugh, 2005) and therefore cannot be ignored in a professional practice doctorate. However, the Mode 2 knowledge described by Gibbons *et al.* must be central to a professional doctorate as it is trans-disciplinary knowledge produced outside universities and largely generated through workplace practice and inquiry. An examination of this practice-based knowledge reveals that it is practical, applied, specific, contextual, social, practice-based, inductive, synoptic, innovative, experiential, intuitive, and reflective. These are characteristics which are very much applicable to the development of a professional doctorate.

The key theoretical academic area which underpins this research is drawn from literature on the development of doctoral education and in particular,

professional doctorates in the UK and Australia where these new forms of doctorates have flourished since the 1990s (Brown and Cooke, 2010). Since the PrD (BE) is regarded here as an educational experience as well as a research programme, theory is also draw from educational literature with a particular focus on adult learning (for example Billington, 1988; Knowles, 1990; Cowan, 2006) and Work-Based Learning (WBL) (Garnett, Costley and Workman, 2009) .

Research Strategy

The research presented in this thesis has been made possible by the timely validation of the Professional Doctorate for the Built Environment PrD (BE) in 2003. Crucially, the new degree was validated by the Research Degrees Committee (RDC) of the then, Anglia Polytechnic University (APU, now Anglia Ruskin University), rather than the taught Quality Assurance Committee in the Academic Office. This freed the proposed research degree from the normal modular constraints applied to taught programmes. That is, the approval was not guided by outcome driven pathways and credit-rated modules, detailed level descriptors, student progression and quality control normally associate with taught programmes (Armsby and Costley, 2009). RDC was able to compare what was being validated against a backdrop of the doctoral requirements of a PhD which was more familiar to them.

In short, the RDC validation produced the PrD (BE) as non-modular; a two-stage doctorate with Stage 1 being examined by three research papers of 7000 words each, followed by a Stage 2 60,000 word thesis. Crucially, these two stages could be combined into an 80,000 word thesis examined at doctoral level by a conventional viva. The programme was to be supported by a series of workshops and conventional supervisory arrangements. Validation approval brought with it the responsibility to support candidates in each stage of a programme which would not benefit from the familiar modular structure available to other professional doctorates in the UK. This presented both an exciting and demanding opportunity in terms of how the new Built Environment Professional Doctorate was going to be delivered in practice. It

was at this point that I registered for the Doctor of Education (EdD) in the Faculty of Education at the University in September 2004, to coincide with the commencement of the PrD (BE). The intention was that experience and learning gained through one programme would inform and benefit the other, and my research.

The new non-modular scheme opened up new possibilities for learning for students and staff within our department. The PrD (BE) was to be supported by specific and timely workshops, designed to aid the candidates on their intellectual journey. It would be formally assessed by a portfolio of evidence in Stage 1 over an agreed flexible period of time, rather than at the end of modules, or only through the final thesis. In addition, there was the opportunity for the use of WebCT, a new virtual learning environment (VLE) which the University had purchased in the late 1990s for its taught programmes. This possessed tremendous scope to meet the needs of busy part-time doctoral candidates by putting them in control and at the centre of their learning. WebCT could give access to resources and the opportunity to extend communication beyond the classroom. It had the potential to transform group learning experience (Salmon, 2003) from the familiar location and limited face-to-face group tuition, to working online in a new context for learning with its asynchronous nature. Although the VLE was not made a requirement of validation, this was introduced by me at the start of the delivery of the PrD (BE) as an essential feature to provide extra support and choice for the candidates. There was an opportunity to merge the candidate-centred PhD approach and the cohort nature of a formal programme of learning, to

produce a new kind of doctorate specifically designed to cater for, and support the needs of, this built environment doctoral group as a community of practice.

Research Methodology

The research questions developed above for this research project are ambitious, but are ones which needed to be answered for the success of the PrD (BE) itself. The new degree programme provided a unique site for this research in terms of examining the development and nature of the doctoral programme.

In effect, the validated Professional Doctorate for the Built Environment (PrD BE) has been used as a case study to generate the finding of this research from its early beginnings in 2004 to the present day. Any action taken, however, has been motivated by the primary desire to improve the programme and the quality of the candidate experience. Action research (Costello, 2003) has been the main driver of change on the programme and has generated the findings discussed in this thesis. Action research was selected for this project as it permits changes to be made to improve the PrD (BE) which can be examined for their effectiveness in a logical and organised way. The reflective methodological approach was chosen for its ability to bring about real and lasting long-term improvements to the programme (Schon, 1991). Schon's view was that practitioners should engage in the study of their own practice and develop their own theories and explanations

derived from that practice. Action research, as an educational setting, is ideally placed to bring about Schon's aims.

Action research enables a researcher to learn from direct experience due to its cyclical nature (Kemmis and McTaggart, 1992). It is most appropriate, as Frost (2002:25) argues, because, 'action research is a process of systematic reflection, enquiry and action carried out by individuals about their own practices'. In this way, those involved can gain 'an in-depth understanding of the phenomena being investigated, can make improvement and, by doing so, reform practice' (Hopkins, 1985:156). It enables the researcher to take immediate action and examine the consequences in a systematic way to improve practice (Costello, 2003). I felt being able to make immediate interventions and reflect on the consequences would be a particularly important tool when developing a new programme. Action research enabled the challenging questions of this research to be explored in-depth. Feedback is a key mechanism of learning (Race, 2002); feedback from candidates and staff on the effectiveness of professional doctorate programmes in the University was utilised to inform practice in order to support the continued improvement of the PrD (BE).

Structure of the Thesis

This introduction is followed by three theoretical chapters. Chapter 2 discusses aspects from the literature on doctoral education, highlighting potential problems and issues and how professional doctorates developed as one response to the changes required. Chapters 3 and 4 provide the theoretical underpinning for the research in terms of educational theory appropriate for adult learning and Work-Based Learning (WBL). These chapters form the theoretical foundation for the research which draws on them to develop a conceptual framework. These early chapters lead to a natural development of action research as a suitable research strategy for this project which is described in Chapter 5, Research Methodology and Methods. The conceptual framework is developed further in Chapter 6 by interviewing colleagues and candidates from the University's existing professional doctorate programmes to explore and learn from their experience. That existing professional practice served to bring further insights into appropriate design and operational issues to underpin the research. The analysis of the findings from applying the action research cycles specifically designed for this project are discussed in terms of operationalisation in Chapters 7, 8 and 9. Chapter 10 examines and discusses the impact of, and the general issues that arise from the research. The thesis is brought to a close with a final discussion of the conclusions in Chapter 11.

Chapter 2 - Doctoral Education and Emergence of the Professional Doctorate

Introduction

The next three chapters describe the theoretical perspectives which underpinned the development of the research. These theoretical aspects, investigated as part of Step 3 of the action research cycle, and described later in Chapter 5 (see Figure 5.1), informed the design of the underlining conceptual framework. This chapter explores a number of issues of concern regarding the fitness for purpose of the PhD for professional audiences and describes the emergence of the professional doctorate as one response to these issues. Chapter 3 discusses specific literature concerned with the needs of adult learners and Chapter 4 focuses on the nature of WBL as a suitable approach to learning at doctoral level.

History of Doctoral Education

The first doctoral research degree was offered by the University of Berlin; founded by Humboldt in 1810 (Taylor and Beasley, 2005). Humboldt envisaged a new type of knowledge which emerged from enlightened thought and the search for a universal truth. As part of their degree, students had to submit a research thesis and pass a comprehensive viva examination which focused on the originality and creativity of their work.

Academic staff at the university were required to hold a PhD, engage in research themselves and were expected to publish scholarly material; a

requirement that still holds true today in UK universities. This raises a question, central to the development of this thesis, concerning whether this model of a PhD can serve the needs of industry and commerce if its essential purpose is concerned with academic development of the individual. The research aspect set the university apart from society and placed it in a position of 'authority' on issues of the production of knowledge (Parks, 2005, Brown, *et al.,* 2004). It was not until 50 years later in 1861, that the PhD emerged in America at Yale University. This was swiftly followed by doctorates offered at Harvard University. Both these doctorates followed the Berlin model of having a narrow research focus examined in-depth by a thesis and oral examination of the original work. The UK was much slower to address the research issues of candidates at a university. Oxford established a PhD in 1917 and the concept of the doctorate soon spread throughout the UK, Canada and Australia. One view of completing a PhD is that it is a form of academic apprenticeship. In this apprenticeship model, the candidate learns about the nature of research, ethics, intellectual rigour, framing research questions and the pursuance and moulding of them into an original piece of research (Mullins & Kiley, 2000).

The narrowly defined academic focus of research in the PhD has remained the UK model until relatively recently, when the Quality Assurance Agency published its postgraduate requirements in the Code of Practice for the Assurance of Academic Quality and Standards in Higher Education (QAA, 1999 and 2004). Although research skills and techniques remain key elements, the PhD has, to a certain extent, been professionalised by the

introduction of additional skills of career management, personal effectiveness, team working and other related transferable skills (Roberts, 2002). The UK Research Council (2001) played an important role in defining the range of these additional skills which were required for doctoral education, when they published their joint statement on training requirements. This change resulted from dissatisfaction expressed, particularly in government sponsored reports and inquiries into higher education during the 1980s and 1990s, concerning its narrow academic focus. The next section explores how this has led to changes in UK doctoral education since 2001.

Criticism of Doctoral Education: The Original Drivers of Change

The past twenty years have seen the examination of doctoral level study and its importance to the sustainability of the UK economy. In 1993 the UK Government published its White Paper Realising our Potential (DTI, 1993), in which it questioned whether the PhD was meeting the needs of industry and commerce and asking if it was too focused on developing opportunities for a career in academia. It highlighted that many successful PhD students did not always possess the required skills to work in industry. As the UK government considered its spending plans, this report also stressed the need for value for money in the generation of effective doctoral education. In 1996 the UK Council for Graduate Education (UKCGE, 1996) reported that doctoral education in the UK was sometimes regarded as a fringe activity in higher education, catering for a select few and that UK universities should strive for excellence as they moved towards supporting the needs of a wider audience. There has also been criticism regarding the employability of PhD students outside the world of academia (Noble, 1994). Questions were raised about whether PhD students were being equipped with the skills required to promote the development of a knowledge economy (Usher, 2002). The Office of Science and Technology (OST, 1994 and 2002) put forward the case that universities responsible for the training of postgraduate students should ensure that they were equipped with the skills that matched the requirements of a wider range of employers than academia. These skills were to specifically include communication and resource management skills that

would be of value to industry and commerce. The narrow focus of the PhD at that time did not always meet these needs.

Green and Powell (2005) drew attention to the debate surrounding the need for the PhD to change and become more relevant to the requirements of the national economy. They argued that the pressures for change were driven by three key concerns: an apparent loss of international standing of the British PhD; a lack of personal and professional skills required for industry and commerce; and the poor completions rate, including lengthy completions.

In their handbook for doctoral supervisors, Taylor and Beasley (2005) discuss this dissatisfaction with the doctoral education being provided during the 1980s and 1990s in the UK and also focus their attention on the need for change (Taylor and Beasley, 2005:10-14). They questioned the 'fitness of purpose' of the traditional PhD. They cited and considered evidence from survey literature which examined the performance of doctoral education (see for example, Blaume and Amsterdasaka 1987; Winfield 1987; Bowen and Rudenstein 1992; Golde 2000; Leonard 2000; Colebatch 2002). Taylor and Beasley summarised these concerns and highlighted the main issues to be addressed. They described poor completion rates, reporting that less than 50 per cent of UK candidates were graduating with a doctorate. There was concern expressed over completion times. Of those that completed, a very large proportion did not complete within the normal limit for both full and part-time modes. They questioned the purpose of undertaking a traditional PhD and whether its academic focus could always meet the needs of industry and

commerce. They found that there was a general failure to equip candidates with skills required for employment outside academia and that there was an absence of entrepreneurial skills. They raised questions concerning the overall poor return for public investment in doctoral education in terms of its value to industry and commerce.

Taylor and Beasley also called into question the purpose of doing a PhD, citing Leonard (2000), who had described it as an opportunity for a researcher to undertake a piece of research that interested them and that this would be used as the starting point for a career in the academic world. They questioned whether this view of the PhD was really what was required to meet the needs of industry and economic growth. They put the case that, 'In the context of the PhD…..the research topic should have relevance to real world needs…and be driven by the needs of stakeholders including governments, industry and commerce and not what were seen as the whim of research students or their supervisors' (Leonard, 2000:11). They also questioned the sometimes single discipline nature of the PhD and pointed out that increasingly, problems in industry require a multidisciplinary approach to solving problems. They went on to specifically argue that students should be able to gain access to a multidisciplinary team rather than be supervised by just one person. They cited Fishman (2002) to illustrate the problems of finding a solution to environmental issues requiring input from a range of specialists. For example, solving the sustainability issues concerning new development and its effect on ecosystems may require 'wide-ranging expertise from agriculture, forestry, hydrology, marine resource management

and law.' A single discipline would not have all the skills required to come to a satisfactory solution.

The Higher Education Funding Council for England (HEFCE) (2005), conducted a study of doctoral completion rates in the UK and reported that only 71 per cent of full-time candidates and 34 per cent of part-time candidates had managed to complete within a seven year period. This compared poorly against the intended target of three years for the full-time and six years for the part-time mode. The report also raised concerns about the supervision and support for research training. There was evidence of a wide variation in the standards of supervision and training.

The traditional view of the PhD, originally designed as a full-time programme, was that it would focus on Mode 1 academic knowledge and not develop Mode 2 practice-based knowledge required in industry and commerce (Gibbons *et al.,* 1994). There was a lack of personal and professional skills being developed. They argued that as part of Mode 2, intuitive skills were essential 'to spot commercial opportunities for the application and exploitation of research bringing expertise to bear…..and place and market the final product' (Taylor and Beasley, 2005:12); skills which were not being developed and encouraged in the PhDs of the 1990s.

Reports have continued to highlight the need for a change in higher education to meet the needs of industry and commerce; together with a focus on a multidisciplinary approach to problem solving (see for example Winfield 1987;

Harris 1996; Roberts 2002; QAA, 1999-2010). Universities were seen as a potential site for change if they were to be able to increase their focus on the acquisition of employment-based skills. Alongside this, it was argued, there was a need to promote the idea of learning in the workplace linked with employer engagement that would help to redirect both the methods and content of further and higher education. In turn, reports from Dearing (1997), Lambert (2003) and Leitch (2006) called for greater engagement by universities with industry and business.

As a response to the issues and problems outlined above, policies and processes were put in place to reform and redefine doctoral education from 2001 onwards (Research Councils/AHRB, 2001; Roberts, 2002; HEFCE, 2003; QAA 2001 and 2004). Additional skills were specified to include communication, problem solving, and team management, in addition to the traditional doctoral skills. The requirements of a doctorate have evolved considerably since 2001.

There are now currently five versions of a doctorate offered by UK universities (Lee, 2009). These are the traditional PhD, the PhD by published work, the new route PhD, the practice-based doctorate and the professional doctorate, reflecting the pressure for diversity in postgraduate education in the UK (Scott *et al.,* 2004). The focus of the models , ranges from the pure PhD doctorate, firmly located in the academic discipline of a university, guided and directed by experts within, through to the professional doctorate, at the other end of the scale, which is placed outside the university and is driven by a

professional discipline and set within the workplace. It is the professional doctorate and its focus on the workplace that is of interest to this research and its development is now discussed further in the next section.

The Emergence of the Professional Doctorate.

As one response to the concerns discussed previously, professional doctorates began to be developed. The first professional doctorates had their origins in North America in the field of education, allowing academics to pursue a professional qualification to doctoral level. In Canada, for example, the EdD was developed for educational practitioners to advance their professional education (Allen *et al*., 2002). The US had a similar professional doctorate qualification as a pre-service high-level qualification for the education profession. These qualifications were characterised by a substantial taught coursework element, a dissertation and supervised professional practice. The Council for Higher Education in the US (2005) regarded professional doctorates as qualifications that focused on practice and were not regarded as a research degree of equal status with the PhD. Entry requirements were also different, with only the PhD requiring masters degree entry. Recent concern has been expressed regarding the status of the professional doctorate in the US. For example, Stewart (2009) points out that some of these doctorates are not necessarily rooted in doctoral research tradition and some of the candidates may not be drawn from the graduate population. It is also asserted that the final project may be so small that it would be difficult to generate meaningful research output from it.

Australia saw a marked increase in professional doctorates during the 1980s and 1990s (Maxwell and Shanahan, 2000). The development was welcomed as it was seen as a way of reconstructing the relationship between theory and practice, requiring universities to rethink their conceptualisation of the purpose

of research (Park, 2007). This type of doctorate was developed in response to a demand for increased diversity in higher education and a desire for universities to have a stronger relationship with industry. These 'first generation' doctorates were also characterised by a first stage taught element assessed by coursework and followed by a research project. There was little structural difference from the PhD, with the professional doctorate sometimes being described as PhD plus coursework. These early forms of professional doctorates however, continued to favour academic knowledge over professional knowledge (Maxwell and Shanahan, 1997). Maxwell noted the evolution of these programmes into what he describes as 'second generation doctorates' (Maxwell, 2003:280). Such programmes were seen to be more flexible in delivery and assessment, more integrated in terms of professional practice and offered a range of assessment methods including the submission of a portfolio of work drawn from a workplace setting. In developing the programme of study in this way, the balance between theory and work-related practice significantly changed. It also raised issues of comparability between the new and traditional structures. These are matters that will be returned to later in the discussion.

So, what defines the nature of a professional doctorate? According to Powell and Long (2005:8), a professional doctorate is, 'an award at a doctoral level where the field of study is a professional discipline and which is distinguished from the PhD by a title that refers to that profession.' This definition however, fails to provide a comprehensive overview of its exact nature.

Lee (2009), in citing Hoddell (2000), characterises the professional doctorate as specifically focusing on a named subject area e.g. engineering. In addition, it is argued that the focus of study should relate directly to that subject area and have specific taught elements. Many PhD programmes in the UK also now include taught or training elements in response to the criticism described earlier; however, as Lee (2009) goes on to argue, one of the distinguishing features of a professional doctorate, unlike the traditional PhD, is that the taught elements are assessed. This is a very significant point. As part of the reform of the PhD, Anglia Ruskin University, like other UK universities, now include a wide range of training opportunities which address the skills defined by the Research Councils and which are now incorporated into the Vitae Researcher Development Framework (2010). Whilst some of the training requires compulsory attendance, none of the skills explored are directly assessed at the events. Stage 1 of the professional doctorates in the UK are assessed by assignment which can, where appropriate, build in aspects of the Vitae Researcher Development Framework.

Some academic resistance has been met in relation to the introduction of a taught element in professional doctorates. Recently, UKCGE, in 'recognising that research focus of the PD (professional doctorate) is the hallmark that defines the researching professional,' suggested that the term 'Taught Doctorate' should not be used as it has 'pejorative overtones…often associated with negative perceptions of the professional doctorate by the

academy' (UKCGE, 2011:15) There remains the question as to whether a research degree can be taught.

The first professional doctorate in the UK was in clinical psychology introduced in 1989 as a pre-service qualification leading to a DClinPsy. This was followed in the 1990s by in-service doctorates in Business Administration (DBA), Education (EdD) and Engineering (EngD). These doctorates embraced the ideas of evidence-based practice-focused research and work-based learning techniques that legitimised knowledge production outside the traditional boundaries of the university (Brown *et al*., 2004).

Powell and Long (2005), in their publication *Professional Doctorate Awards in the UK*, record that in 1998 there where 109 professional doctoral programmes in UK universities; this has subsequently risen to 153. They suggest that the number of professional doctorates is likely to increase in the future. Brown and Cooke (2010) have confirmed this, by reporting that the UK had 300 in 2009. They also expressed concern over the potential proliferation of titles and nomenclatures for professional doctorates. In a recent survey reported by Brown and Cooke (2010), more than 100 titles are identified including some small variations, e.g. DEng, EngD. Unlike the Doctor of Philosophy with its single nomenclature of PhD, professional doctoral studies clearly utilised a wide range of titles. This is because all new professional doctorates must be validated by the host university and with each validation event comes new approved titles. Such a proliferation of awards is potentially confusing to students, employers and indeed the academic community. Since

all of the programmes should be at doctoral level and arguably mean the same thing, it may be desirable to have one single general title such as, DProf. Powell and Long (2005) put forward a case for the UKCGE to act on a national basis to clarify the range of names and nomenclatures and create a register of professional doctorates in the UK. This is strongly supported by UKCGE in their report on professional doctorates in the UK (2011) in which they express concern over the range of titles.

At the start of the 21st century, the New Route PhD was introduced as a pilot project in ten universities in the UK. This was modelled on developments in North America where part of the PhD has formal taught elements which are passed before proceeding on to complete a shorter thesis (Park, 2005). In effect, candidates complete one year of a masters taught programme followed by three years of doctoral level study. Candidates are linked with industrial partners who can play a part in the supervision process. This 1 plus 3 model has the advantage of clearly stating that the first year is at masters level followed by at least three years of doctoral level work and fits well with the modular approach. However, concern has been expressed by examiners about the lack of intellectual grasp, coherence, engagement with the literature, originality and methodological weaknesses of some of these practice-based doctoral theses (Winters *et al*., 2000). For, as Winters goes on to argue**,** universities must ensure that the quality of the output from practice-based doctorates is as high as that of the traditional PhD if they are going to be accepted by stakeholders**.** They will, at the same time, need to develop their own characteristics.

The Nature of Professional Doctorates

According to the United Kingdom Council for Graduate Education (UKCGE, 2002), professional doctorates can be characterised by cohort-based learning designed to eliminate the feeling of social and intellectual isolation associated with the more traditional part-time PhD. In this first UKCGE report on professional doctorates in the UK, they described the professional doctorate as 'a programme of advanced study and research which, whilst satisfying the university criteria for the award of a doctorate, is designed to meet the specific needs of a professional group external to the university, and which develops the capacity of individuals to work within a professional context' (UKCGE, 2002:62).

Another distinguishing feature is that they commonly comprise of two elements; part one, which is often modular, is assessed by set coursework, followed by a research project culminating in the conventional thesis examined by a viva voce. Green and Powell argue that the professional doctorate combines the notions of a taught 'predetermined curriculum' with 'individually designed programmes of research' (Green and Powell, 2005:95). Another variation of this model is when professional doctorates are examined from a portfolio of candidates' work containing a number of referenced journal articles (Costley and Stephenson, 2008). In all cases however, the professional doctorate is specifically designed for experienced professionals, in contrast to the PhD, which is designed for apprentice researchers (Bourner *et al.,* 2001).

Lee (2009) refers to studying a professional doctorate as an exciting challenge for professionals. She describes it as a study journey that 'should stimulate intellectual, personal and professional development in addition to the creation of knowledge and expertise that will better inform and underpin professional practice' (Lee, 2009:10). Whilst all of this could be achieved on a conventional PhD, unlike the professional doctorate, the PhD is not necessarily specifically designed to inform professional practice. In the PhD, the emphasis is placed on the contribution to knowledge which can be focused on theoretical aspects and may not result in a change to professional practice (Green and Powell, 2005).

The professional doctorate, with its practice focus, must be regarded as being capable of generating the same standard of work as that produced in the traditional PhD, if it is to have true value. Lee (2009), citing Lunt's (2006) study of professional doctorate qualification, suggested that there is no distinction between types of doctorates and the final outcome or level of study. Thus in the UK, a professional doctorate must satisfy all the requirements described by the Quality Assurance Agency for Higher Education (QAA) regarding doctoral level study. In 2001, the QAA published a framework for higher education qualifications in England, Wales and Northern Ireland which included general descriptors of awards for the full range of higher qualifications from certificate level to doctorate level. The descriptors for doctoral awards, published again recently by QAA (2011) as doctoral characteristics, have not changed since 2001. They are couched in terms of the need to create and interpret new knowledge through original

research, satisfy peer review and extend the forefront of academic or professional understanding. This knowledge should be substantial and be acquired in a systematic way. Holders of the title must demonstrate the ability to conceptualise, design and implement a project capable of generating such new knowledge and be able to adjust projects in the light of unforeseen circumstances.

In 2001, the QAA level descriptors did not distinguish between the PhD and the professional doctorate. The only reference to professional doctorates in the 2001 document is in a statement about titles:

> *The titles PhD and DPhil are commonly used for doctorates awarded on the basis of original research. Doctoral programmes, that may include a research component, but which have a substantial taught element lead usually to awards that include the name of the discipline in their title (e.g. EdD for Doctor of Education). A doctorate normally requires the equivalent of three years' full-time study" (QAA, 2001).*

The QAA term 'taught element' reinforces the concerns raised by Green and Powell (2005) and by UKCGE (2011), about the taught/research balance and the implications for credibility of the professional doctorate as a research degree of equal standing to the PhD. The concern is that the terms 'taught' and 'research' do not sit comfortably together in the same sentence. However, the QAA framework is clearly intended to cover all doctorates, including professional doctorates. It can been seen from the examination of these descriptors that all doctorates must have a strong focus on research and the development of new knowledge, academic or professional, and there

are clear implications for developing research skills (Lee, 2009). When designing a new doctoral programme, these QAA features of research, critical thinking, research method trainings, and contributing to knowledge or professional practice, must be satisfied if it is to gain recognition as a true doctorate award approved by the QAA (2001).

These descriptors are repeated again in the 2004 and 2008 versions of the framework and professional doctorates are now mentioned, but there is little further discussion on their exact nature. For example, in 2008, the QAA does not provide any more detail on the differences between the PhD and the professional doctorate apart from one further statement that is helpful when it refers to the title 'Professional Doctorates' and describes their nature as that aimed to develop an individual's professional practice and to support them in producing a contribution to professional knowledge. The notion of improvement to the candidate's individual practice has now been added.

Both the PhD and the professional doctorate must extend the boundaries of a particular discipline, but in the case of a professional doctorate, this should also result in the development of the candidate's own practice as well as the wider implications for professional practice as a whole (Lee, 2009). This must be an attraction for the individual, their company and industry (Garnett, Costley and Workman, 2009). At the same time, any new doctorate such as the Professional Doctorate in the Built Environment must comply with all the QAA level descriptors to help guard against any criticism that it is not equivalent, or is inferior, to the PhD. It may be very difficult to argue however

that a professional doctorate is different, yet equivalent to the PhD if there are no differences in the final award outcomes (Lunt, 2006). If they both meet the QAA level descriptors, why is there a need to have different titles? Professional doctorates are open to perhaps unfair criticism, that equates professional or practitioner research with amateurism (Saunders, 2007).

In 2011, the QAA published further clarification on doctoral characteristics. In addition to the doctoral descriptors which apply to all doctorates, they added further text to explain the nature of the professional doctorates. According to the QAA (2011), the additional key features include:

> *a practice base rather than an exclusively institutional focus; candidates are working while completing their doctorate and already possess significant professional experience. Successful completion of the degree normally leads to professional and/or organisational change that is often direct rather than achieved through the implementation of subsequent research findings.*

The implications from the QAA are that, in addition to what might be achieved on a PhD programme, the fundamental basis of a professional doctorate is that candidates must solve problems relevant to their own professional practice and as such, make a significant contribution to current professional knowledge. Thus, the starting point for the research is the identification of the problems and issues in the workplace (Lester and Costley, 2010). The professional doctorate, therefore, starts in professional practice engages with

theory and ends in the improvement of that practice (Anglia Ruskin University Research Student handbook, 2010), in contrast to the PhD where candidates often start from a wider theoretical basis before narrowing the work down to a practical investigation followed by further theoretical considerations.

It is within the nature of the professional doctorate that the research may not involve just one narrow topic; but may address a range of issues during a study of importance to the sponsoring company. The important point is that these issues are being addressed by approaches commensurate with doctoral level study (Trafford and Leshem, 2008). As such, candidates develop the ability to contribute at all levels of their professional activity through solution-orientated research (Lester, 2000). The problem and the solutions become the context for higher level conceptualisation. Thus, the professional doctorate goes beyond merely solving today's problems in the workplace and examines the issues within the context of higher level thinking. It moves the learner beyond improving specific competence into conceptual understanding and judgement (Graham *et al*., 2006).

The professional doctorate builds on the ideas of Schon. He argues that when practice gives rise to new knowledge, this in turn can inform and improve practice (Schon, 1991). Accordingly, candidates need to develop the analytical and evaluative reflective skills described by Schon, when formulating research questions from their practice. Professionally-based doctorates need to provide time and space for this reflection to take place before candidates can formulate their research proposals (Armsby and

Costley, 2009). This central requirement for a professional doctorate to have significant organisational and professional impact in the workplace is a key characteristic and sets it apart from the PhD (Lester, 2004). The difference is further illustrated by Bourner *et al*. (2000), in their discussion of PhD candidates being professional researchers and professional doctorate candidates being researching professionals. The critical thinking of the candidate must extend beyond solving the particular workplace problem; it should consider the wider implication for the advancement of the professional practice of their discipline. Drawing from their factual conclusions in the work-based investigation, professional doctorate candidates must articulate conceptual conclusions of value to, and have implications for, wider professional practice (Trafford, 1999).

The beliefs and values advocated by Eden and Huxham (2002), illuminate further the characteristics important to professional doctorate education. They argue that practitioner-based research requires an integral involvement of the researcher within the organisation to bring about change. The output of the research must also have

> *some implications beyond those required for action or generation of knowledge in the domain of the project* (Eden and Huxham, 2002:269).

This means that the outcomes of the research should have conceptual meaning for others. The findings should have some relevance and be transferable to other similar situations. They suggest that any theory-building

will be incremental, moving through a cycle of exploring underpinning theory-to-action, thus developing theory, inductively, in small steps. They stress that practice-based research is more than collecting data and then analysing it; it is concerned with exploring the data as it emerges to inform practice.

This chapter has discussed the nature and limitations of the conventional UK PhD in meeting the needs of industry and commerce. Arguments were presented which questioned the PhD's original concept of academic development and sometimes narrow single-discipline nature, which do not always equip professional research students with the range of skills they require. Questions were raised concerning variation in supervision standards and the length of time candidates were taking to complete their research and submit their thesis. An examination of reports from Harris, 1996, Roberts 2002, Leitch 2006, Smith 2010 revealed the importance and value of a wide range of professional as well as academic skills which are now required to encompass all forms of doctoral education. These include teamwork, communication and the need for a multi-disciplinary approach to solving work related problems. In response, UK universities require PhD candidates to attend a wide range of training events and or modules to develop these skills whilst completing their studies. This training can be regarded as separate from, but supportive to, the PhD.

Another response to the concerns raised regarding the limitations of the PhD was the emergence in the early 1990s of the modular, credit-rated, part-taught professional doctorates. These were doctorates with specific titles such as

health and social care, education or business administration, were practice-based and assessed by a range of methods from coursework to final thesis. Their contribution to knowledge focused on a change in professional practice, often directly through incremental cycles during the doctoral journey. Their typical output could be conceptualised beyond specific work-based problem solving, and could inform the future practice of others. Skill development could be within and form an integral part of the programme.

Concerns over the masters taught element of these programmes and the balance between the masters and doctorate split have been identified. In addition, the proliferation of individually validated titles and nomenclatures is also discussed as a damaging and potentially confusing aspect for candidate and employer understanding. Nevertheless, these professional doctorates possess specific characteristics which encourage continuous professional development and enable real change to occur in working practice.

These characteristics have clear implications for the selection of appropriate research methods to undertake insider research and raise preconditions regarding ethics of care when undertaking practitioner research (Costley, Ellott and Gibbs, 2010). It may be difficult for the candidates to research their own practice without the involvement of their peers and those above and below them in their company. This was particularly the case with this research as it involved both staff and candidates working on the PrD (BE). These research design issues are further explored in Chapter 5. Before doing so, we now turn to educational theory which informed this research project

through the examination of aspects of learning theory, particularly those pertinent to mature learners, and the nature of work-based learning. These aspects underpinned the design of the PrD (BE) experience and are dealt with in Chapters 3 and 4.

Chapter 3 – Educational Underpinning

Introduction

This section reviews the educational theory which has been utilised in developing the intended scaffolded experiences for Stage 1 of the PrD (BE). If Stage 1 is charged with supporting candidates as they strive to bring about change in themselves and in their organisation, then the processes involved need to be informed by, or founded on, established learning theory and practices which are concerned with change. This chapter begins by examining some general theories of learning and then focuses attention on the principles of adult learning.

Theories of Learning

A common theme which emerges from an examination of education theory is that learning is a process that brings about a change, permanent or otherwise, in the individual (Klein, 2009). This learning can be regarded as a 'relatively permanent change in behaviour with behaviour including both observable activity and internal processes such as thinking, attitudes and emotions' (Burns, 1995:99). Atkinson *et al.* (1993) regarded the process of learning as a relatively permanent change in behaviour that results from practise. The change in behaviour can be recognised in learners when they can do something that they could not do prior to the learning activity (Hergenhahn, 2009). According to Brown, students regard learning as 'an increase in knowledge, memorising, acquiring facts or procedures, making sense, and understanding reality' (Brown, 2004:7). He says that 'when you have learnt

something, you begin to see things you couldn't see before'. However he stresses that these descriptions do not explain how or why students actually learn. There is no single agreed theory that explains all learning.

The range of theories is now briefly discussed with a view to informing the design of a suitable learning experience for professional people who wish to undertake a doctorate.

Behaviourism

At one end of the spectrum of theory are the beliefs of the behaviourists. They hold the view that learning is concerned with external stimulation and resulting responses, rather than with the personal internal processes of memory, thinking and feeling (Brown, 2004). Behaviourism is therefore a positivist scientific approach to learning, focusing on behaviour and ignoring individual characteristics and brain involvement in learning. Strong advocates of this were Watson (1913) and Skinner (1973) who believed that all that was required was the careful design of stimuli to create the right responses in the learner. The role of the teacher was to help build connections between the stimuli and the responses. Learning tasks should be subdivided into objectives to be learnt. The simpler objectives should be learnt first, followed by increasingly complex objectives to reach the required standard (Brown, 2004). Response learning is weakened if it is not followed and reinforced by rewards (Jordan, Carlile and Stack, 2008).

Behaviourism has shaped for many years the curriculum at British universities. Outcomes for learning can be defined and qualification and level descriptors can be written and quality assured. These outcomes 'describe the characteristics and parameters of student learning and achievement for a given qualification' (Anglia Ruskin Academic Office, 2008). The Quality Assurance division of the Quality Office at Anglia Ruskin, as with most UK universities, strongly supports such an approach as it enables it to 'set and maintain nationally comparable academic standards of achievement within qualifications' (*ibid*). Specifying learning as behavioural outcomes in this way is designed to help students understand exactly what is expected (Jordan, Carlile and Stack, 2008). The UK Quality Assurance Agency describes doctoral education in terms of level descriptors. The nature of the PrD (BE), as with all other doctorates in the UK must therefore be shaped by, and must comply with, the standards set by the UK Quality Assurance Agency for Higher Education (QAA). In their description of doctoral characteristics, QAA (2011) specifies that:

> *Doctoral degrees are awarded to candidates who have demonstrated:*
>
> 1. *the creation and interpretation of new knowledge, through original research or other advanced scholarship, of a quality to satisfy peer review, extend the forefront of the discipline, and merit publication*

2. *a systematic acquisition and understanding of a substantial body of knowledge which is at the forefront of an academic discipline or area of professional practice*
3. *the general ability to conceptualise, design and implement a project for the generation of new knowledge, applications or understanding at the forefront of the discipline, and to adjust the project design in the light of unforeseen problems*
4. *a detailed understanding of applicable techniques for research and advanced academic enquiry*

Typically, holders of the qualification will be able to:

- *make informed judgements on complex issues in specialist fields, often in the absence of complete data, and be able to communicate their ideas and conclusions clearly and effectively to specialist and non-specialist audiences*
- *continue to undertake pure and/or applied research and development at an advanced level, contributing substantially to the development of new techniques, ideas or approaches*

and will have:

- *the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex and unpredictable situations, in professional or equivalent environments.*

The design of any new doctorate offered by UK universities must be informed by these QAA standards, which were first published in 2001. They are quite complex outcomes and, according to Brown (2004), these high level intended outcomes will require breaking down into simpler statements in the early stages of a doctorate to help candidates build towards the more complex characteristics of the finished product. However, this objective positivistic approach to learning, derived from behaviourist theories, attracts some criticism and some of the underlining assumptions are questioned (Brown, 2004). Care will be needed when applying such an approach to doctoral level work.

Brown (2004) argued that learning is more than achieving behavioural objectives or outcomes. He points out that focusing on objectives might encourage students to strive to achieve 'only the minimum standards'; he also raised concerns and made the case that behaviourism reduces learning to 'bundles of stimuli and response', puts the teacher 'centre-stage', encourages 'passive compliance' from the students, 'personal meaning is neglected', and

outcomes ‘are the weapons of accountability’ (Brown, 2004:10), much of which could be argued is not appropriate for a candidate-centred doctoral research project. In addition, if outcomes are written for quality assurance purposes, they may not be fully understood by the learner. Indeed, outcomes can mean different things to different students depending on the level. For example, to evaluate the results of an experiment is a high level skill (Bloom, 1956), but it will mean something different for a primary school child compared to a university student. To state the outcome as ‘evaluate’ is therefore not enough to ensure that the student knows what is expected; further advice and guidance may be required (Brown, 2004). Critics of the behaviourism theories argue that learning involves mental internal processing by the mind of the learner and an understanding of this is required for the learner (See Raelin, 2008; Turner, 2005). This is now discussed in the next section.

Cognitivism

Raelin (2008) suggests that learning involves much more than a behavioural process and suggests that it needs a cognitive one as well. Atherton (2009) supports this by stressing that learning is not always about behavioural change and that cognitive processes are required. Moon (2009) regards learning as external experiences which are internalised by the reprocessing of ideas already possessed by the learner. An understanding of these internal processes is important for mature candidates embarking on doctoral level work who are in possession of a great deal of prior learning and experience.

Cognitive psychology expresses learning as internal information processing of the mind (Baddeley, 1999). Memory is the key to all learning and performance. According to Turner, 'cognitive theory acknowledges the importance of mental development and processing in learning' (Turner, 2005:26). One cannot learn anything without memory. Gestalt psychologists argue that the whole learning experience is important and involves student perceptions, actively searching for meaning and patterns, reorganising ideas and thoughts and learning in context (Wertheimer, 1968). Relationships between the various parts of learning by considering them as a whole experience, are the key to understanding and provide new insights into complex ideas and problems. The advocates of Gestalt theory therefore suggest that the use of open-ended projects and self-directed learning provides a way of supporting the learner (Atherton, 2011). The cognitive processes involved in thinking holistically in context, considering alternative perspectives, working with others in small groups, developing problem solving skills, would seem to be appropriate for doctoral level work.

Ausubel places particular importance on starting with the student's current experience. He stresses that 'the most important single factor influencing learning is what the learner already knows. Ascertain this and teach him accordingly' (Ausubel, 1978, cited in Race, 2001:2). Ausubel (1978) also stresses the use of what he calls 'advanced organisation,' in which the students are oriented toward the required learning through concrete examples which provide scaffolding or bridges that link previous experience and

knowledge to new understanding. Turner (2005) argued that the building up of new experiences increases cognitive abilities and increases learning.

Constructivism

Much of the early thought on constructivism stems from the work of Piaget and is seen as a natural progression from cognitivism. Constructivists believe that learning is concerned with creating meaning from previous experience. New information is transformed from and linked to prior knowledge, rather than the collection of new facts (Mezirow, 2000). Jordan, Carlile and Stack regard constructivism as, 'what people do with information to develop knowledge' (2008:55). It personalises new information in the context of what the learner already knows (Brown, 2004). It is an active process where these new ideas are constructed from current and past experience.

Social constructivism emphasises how meanings and understandings grow out of social encounters. Vygotsky (1962) introduced the notion of the Zone of Proximal Development (ZPD); a zone where children study just beyond their current level of knowledge and ability. Working with others (adults) in this ZPD, enables them to achieve more than they could on their own. Turner (2005) describes this as scaffolding support: when a tutor would offer support when the learner is struggling and less when they become more competent on their own, thus stretching the learner just beyond their current knowledge. According to Atherton (2011), the ZPD is about 'can do with help, not as a permanent state but as a stage towards being able to do something on your

own. The key to stretching the learner is to know what is in that person's ZPD and what comes next, for them' (Atherton, 2011). In this way, learning is personalised for the learner and they are not stretched beyond what they might be capable of at any one time.

Brown argues that an implication of constructivism is that it is important to establish the 'prior knowledge and existing concepts through discussion tasks and mind maps' for the learner (Brown, 2004:35) . This will ensure that the learner will be ready for, and open to, new learning opportunities. He continues by stressing that the creation of a supportive environment in which the learner feels comfortable and safe encourages them to 'reveal their conceptions of what they are studying and how they study' (Brown, 2004:35). For professional people embarking on a doctorate, according to the constructivists, a useful place to start would be with an examination of their prior knowledge and experience from their practice.

Adult Learning

Knowles (1990) brings the concept of adult learning to the fore in his text on adult learners. He discusses his ideas in term of andragogy, which he describes as 'the art and science of adult learning'. He too puts forward the case that adult learners are best served by an environment which allows them to bring their experience to bear as a resource for learning. According to Knowles, adults learn best when they are intrinsically motivated to solve problems which are perceived as related to their needs. They should be able to influence the design of the learning situation and apply their learning in new situations. Students should actively engage in their learning and be largely self-directed. The learning environment should have the capacity to provide feedback which can then be acted upon by the students. Knowles promoted the use of learning contracts and suggested that learners should develop their own set of objectives and diagnose their own learning needs. Learners should be encouraged to become involved in the planning of activities, methods and content. Critical reflection is also advocated by Knowles as a key feature of adult learning. He also stressed that it is important to develop a climate and an environment conducive to learning.

These perspectives are further supported by Billington (n.d.), who conducted a study into the development of effective learning environments for adults engaged in research. In her research, it was specifically argued that there were a number of key factors that stimulated adult development. Her findings shaped a case for creating an environment conducive to learning and asserts that what was required was a safe and supportive environment, which

honoured individual needs and respected the past life achievements and current abilities of the students. This environment should encourage and foster intellectual freedom, experimentation and creativity. It should treat adults as peers and equals with opinions which are valued. The study revealed that staff often commented that they learnt just as much from their students as the students learn from them.

Billington also found that self-directed learning was important and that students should take responsibility for their own learning. She discovered that the pacing of the intellectual challenge was also a key factor. She contended that optimal pacing requires the challenging of students just beyond their present level of ability, rather akin to the Zone of Proximal Development (ZPD), established by Vygotsky. If challenged too far, she argues that students may give up; if challenged too little, they can become bored and learn little. When students experience intellectual stimulation to the point of feeling discomfort, they potentially can lean more. By discomfort she means studying unfamiliar aspects and new skills in what Vygotsky would describe as the ZPD.

She asserted that active involvement in learning, as opposed to passively listening to lectures, where students and instructors interact and engage in dialogue, where students try out new ideas in the workplace, where exercises and experiences are used to bolster facts and theory, encourages personal growth and development. She continues by stating that programmes require feedback mechanisms, built-in to permit students to reveal and explain what works best for them. One fact identified was that research students do better

when they are researching their own chosen topic, rather than one selected by their supervisor. In other words, research students grow more in student-centred, as opposed to faculty-centred, programmes. Her study provides results that demonstrate that adults can and do experience significant personal growth at mid-life if these aspects of a learning environment are created.

Reflective Practice

If candidates are to start their research by examining their prior knowledge and experiences as Knowles (1990) suggests, they will need to be able to reflect carefully on that practice. Reflection on experience is widely accepted as a tool to improve practice and bring about change. One of the key advocates of reflection was Schon (1983), who developed the notion of reflection for practitioners. He argues that practitioners should improve their practice by framing and reframing their complex problem and then modifying their practice. He divided reflection into reflection-in-action for immediate decision-making, and reflection-on-action for a later deeper evaluation of events. Cowan added reflection-for-action to look ahead and plan future events. He further explains that 'the reflective practitioner asks those questions for which they seek answers that are relevant to their ongoing professional development' (Cowan, 2006:23).

Reflective questions are factual, analytical and evaluative concerning what, how and how well. According to Cowan, reflecting on current practice needs

to have three components: descriptive – what exactly is the problem/issue with careful definition of terms and context for the research; analytical – how does it currently operate/work; and evaluative – how well does it operate/work. He continues by saying that analytical reflection can act as an inductive bridge from practice to theory (specific experience to abstract conceptualisation). This inductive generalisation from the specific can inform future experiences which are similar. Evaluative reflection defines the gap or mismatch between actual performance and intended performance. Students are then in a position to minimise the gap by learning from mistakes, failures and successes.

Hatton and Smith (1994) have a similar approach to reflection and divide the process up into four levels of reflective writing. Descriptive writing, which simply describes events; descriptive reflection, which justifies and provides a reasoned explanation of events; dialogic reflection, where the learner engages in a dialogue with themselves to step back and explore alternative explanations from a range of perspectives; and finally critical reflection, which involves the broader conceptual context.

Raelin (1997:567) describes reflection as,

> *the ability to uncover and make explicit to oneself what one has planned, observed, or achieved in practice. Hence, it is concerned with the reconstruction of meaning. In particular, it*

> *privileges the process of enquiry leading to an understanding of experiences that may be overlooked in practice.*

In this way, reflection provides a means of evaluating what actually occurred, compared to what was intended and this creates an opportunity to learn for future actions.

Moon (1999) supports this analysis and regards reflection as a form of 'advance mental processing' with the purpose of being critical of past ideas and experiences and linking them to current events so that learning can be progressed and applied to new situations. He argues that:

> *practitioners need to reflect on an event and on their knowledge-in-action that has contributed to the outcome of their action, but they probably also need to draw in material from elsewhere, which may be a theory, experience, lessons or advice from others* (Moon, 1999:50).

These notions on reflection therefore should be important to professional people engaged in doctoral level work who are concerned with improving practice.

Communities of Practice

Since professional doctorate students will be working together as a cohort, the research on communities of practice are of value to this project. Much of the discussion concerned with a community of practice derives its nature from the work of Lave and Wenger from 1991. They coined the phrase 'communities

of practice' to describe learning through practice and participation. They describe a community of practice as a group of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly (Wenger, 2006). Wenger argues that three characteristics are essential for a true community of practice to form; these are: the domain, the community, and the practice. The domain is the identity of a group with shared interests, a commitment to that domain and a shared competence that distinguishes members from other people. The community consists of members who actively engage in discussions to help each other and share information. They build relationships to learn from the group. Wenger argues that 'unless they interact and learn together, they do not form a community of practice' (2006:2). In other words, a community of practice is more than a community of shared interests. The third and final requirement is that of the practice itself. Members of a community of practice are practitioners who develop a shared repertoire, expertise, tools and ways of addressing common problems.

The community develop their practice through a variety of activities; these include problem solving, requesting information, seeking advice from the collective experience of the group, reuse of common assets, coordination and synergy of resources, discussions of developments, shared documentation, and a mapping of knowledge and identification of gaps. Lave and Wenger's research focused on an investigation of how apprenticeships help people learn. The apprentice joins the community as a peripheral member and

learns from the expertise present in that community. Over time they become a more established member of the community. An apprenticeship scheme is a form of work-based learning (WBL). In a similar fashion, a professional doctorate can be regarded as WBL at the highest university level. The characteristics of a community of practice therefore, described by Lave and Wenger, could well describe the characteristics of a group of professional doctoral students engaging as a community of common professional and doctoral practice. WBL is therefore explored in the next chapter as a form of learning, appropriate to professional doctorate study.

Chapter 4 - A Work-based Learning Model for the Professional Doctorate

Introduction

This is the third literature-based chapter and considers the role of work-based learning theories in informing the development and operation of a professional doctorate and the required research for this project. In particular, it explores work-based learning (WBL) as an appropriate model of study at doctoral level for professional people working full-time in the built environment industry. It examines the literature on WBL characteristics and explores the nature of what can be a very powerful learning process. It makes the case for, and investigates this in terms of curriculum and assessment methods as well as critiquing its limitations. The discussion presented here explores theoretically-based knowledge on WBL and provides an understanding of the required pedagogy. This section begins by considering some general WBL theories and how they may be of particular use to candidates working on the PrD (BE). The section concludes with a discussion on how WBL theory has informed the design of this PrD (BE) action research project.

The Case for Work-based Learning

The Leitch Review (2006) identified that the skill base in the UK is fundamentally weak and this results in poor productivity and growth. According to Leitch, even if the UK meets the targets for skill development set by this review, it will lag behind its competitors by 2020. One response to this issue is to design educational experiences for employees in the workplace that facilitate their continuous professional skill development (Gray, 2001). Although the Leitch report was concerned with all levels of skill development, universities have a responsibility and a role to play by taking the lead in providing the essential higher level skills (QAA, 2001). The creation of a professional doctorate is one such development.

In his briefing on assessing WBL for the Learning and Teaching Support Network (LTSN), Gray (2001) stresses the importance of WBL as a means of realising the need for part-time study in HE in close collaboration with employers. In turn, it is hoped that it will go some way in addressing the demand for continued professional development in the workforce. This need for close collaboration with industry was identified as a key issue for the built environment construction industry by Dearing (1997). Recognising, assessing and accrediting learning in the workplace extends the opportunities for adults to study at degree level, thus widening participation in higher education (Gray, 2001). Workplace study has the added advantage of allowing candidates to contextualise their study (Boud, 1998). In doing so, students can gain a better understanding of the issues being studied by applying principles to practice,

exploring problems directly related to their work situation. The learning is thereby given more meaning.

Work-Based Learning Principles and Solutions

It has been argued that a WBL doctorate can contribute to the knowledge economy by utilising collaborative activities in and around the workplace (Gray, 2001). It is maintained that the development of critical thinking, creative problem-solving skills, and opportunities for collaboration enables individuals to transfer knowledge to new situations (Hmolo-Silver, 2004). Costley and Armsby (2007) maintain that WBL enables learners to become effective practitioner-researchers as they examine issues in a real work context. Brennan (2005), Conner (2005), and Nixon *et al*. (2006) regard WBL as playing an important role in meeting the demand for re-skilling and up-skilling the workforce. They argue that a WBL doctorate can provide opportunities for universities to respond to the needs of employers in a much more tailored and flexible way.

A reduction in subject specific taught content, enables candidates to contextualise by drawing on the collective wealth of knowledge they possess from previous experience gained in the workplace (Costley, 2000). Boud (2001) takes this point further by arguing that the development of the academic curriculum should be defined by the nature of the individual's work practice. Much WBL is concerned with the development of a series of professional based performance competencies or prescriptive outcomes (Garnett, Costley and Workman, 2009). However, at doctoral level, WBL needs to go beyond this to foster the ability to make evaluative judgements based on sound evidence (Graham *et al.,* 2006). Assessing WBL at doctoral level is about testing candidates' reasoning powers and judgements, rather

than routine performance, by raising their level of thinking beyond the particular. Doctoral level WBL is therefore ideally placed to utilise the WBL theories of learning, focused at the higher end of the Bloom's taxonomy in terms of high level analysis, synthesis and evaluation of research-generated evidence (Bloom, 1956).

There is general consensus in the literature on WBL (Boud, 1999, 2001; Costley 2000; Lee *et al.,* 2004) that the starting point for a WBL study is the candidate's own past experience and current work context. Boud, for example, believes that the WBL curriculum is defined by an examination of the nature and context of each candidates work setting. From an epistemological standpoint, WBL is concerned with what Gibbons *et al.* (1994) describe as Mode 2 knowledge, which emerges from practice. This Mode 2 knowledge is both generated from and used in the workplace. It is context driven, problem focused and often requires interdisciplinary collaboration to generate specific solutions. However, learners at doctoral level in a work-based context need to raise their level of thinking beyond their particular practical investigation, to conceptualise work-based issues (Brennan and Little, 2006).

Medhat provides an extremely useful definition of learning which encapsulates the WBL approach:

> *Learning is a process of active engagement with experience. It is what people do when they want to make sense of the world.*

> *It may involve an increase in skills, knowledge or understanding, a deepening of values and the capacity to reflect. Effective learning will lead to change, development and a desire to learn more* (Medhat, 2008:4).

Although this could be regarded as a general definition for learning, it is most applicable to doctoral level WBL in that it describes learning as a process whereby the candidate is actively engaged with experience; in this case a work-based context. Asking candidates to think, analyse, evaluate, plan, write and reflect on what they are doing at work can be a very effective tool for learning. WBL draws upon the educational theories discussed in Chapter 3. It is a useful mechanism for the generation of new knowledge that is capable of changing and improving professional activity; a key outcome for the doctorate (QAA, 2011). Accordingly, candidates can use WBL to practise and develop their ability across the full range of key or transferable skills (QAA, 2004; McVicar *et al*., 2006; UK Research Council, 2001; Vitae Researcher Development Framework, 2010).

In collaborative WBL there is likely to be a high degree of incidental learning taking place and an ideal place for this to occur is in the workshops, where candidates can share experiences (Lee *et al.,* 2004). For example, candidates who present their topic and research ideas to their colleagues in the workshop can learn to defend their work as it is opened up to the scrutiny of others who are not specialists in the field. The audience (supervisors and candidates) can develop their ability to evaluate the work of others by

engaging in its scrutiny. There is great potential for incidental learning from the whole group. The role of the supervisory team is not that of a master directing the apprentice and imparting knowledge as a revered expert, but rather one of a guide and critical friend who can be more of a facilitator, helping the candidates along their new and potentially very unfamiliar intellectual journey (*ibid.*). The idea of shared collective learning, advocated by Lee, does not occur as separate academic subjects in isolation, but is constructed holistically from practice (Costley, 2000). In professional doctorate study, the role of the host university changes from a conventional provider of discipline-specific content, to one of enabling collaborative learning in a workplace context.

Ebbutt (1996) defines WBL as involving employees in learning experiences, where most of the learning and research activity is carried out in the workplace. Ebbutt goes on to argue that WBL can be for work, at work and through work. It is different to most conventional classroom teaching in that the relevant content is not taught, but is derived from and developed in the working environment. Such a focus can act as a motivating force to help direct the students' learning (*ibid*). The difference at doctoral level is that WBL 'is not concerned with preparing for work, but is often a means of continued professional development' (Armsby *et al.,* 2009:115). A WBL doctoral programme can facilitate professionals in their endeavour to progress and improve in a work-based context.

Boud (2001) using the student's work as the starting point, lists seven key characteristics that a WBL curriculum should encompass: learning that is undertaken mainly at work but not identical to work; a diverse range of knowledge and skills already possessed by the candidates; learning outcomes concerned with standards and levels of achievement; critical reflection; a programme of negotiated related activities; support for learning in the workplace; and documentation of assessable learning outcomes.

These seven points can form the basis of a learning contract which is derived from the students' place of work. A number of authors advocate the use of learning contracts between students and supervisors (Stephenson and Sexton, 2005; Nixon *et al*., 2006). Anderson *et al*. (1998), for example, describe the need for a formal agreement which specifies what has to be learnt, the resources and strategies required, and what evidence might be produced to demonstrate learning has been achieved. These learning contracts formalise, for an individual, what can be otherwise informal arrangements. Such agreements may also include a personal development plan to aid candidate's development in an organised way.

Another useful guiding definition of WBL is one employed by Middlesex University as:

> *A learning process which focuses university level critical thinking upon work (paid or unpaid), in order to facilitate the recognition, acquisition and application of individual and*

> *collective knowledge, skills and abilities, to achieve specific outcomes of significance to the learner, their work and the University.*
>
> (Garnett 2004, Inaugural lecture, cited in Garnett, Costley and Workman, 2009:4).

This is a particularly useful description of what is involved in WBL as it not only highlights the importance of critical thinking, central to all higher education and particularly relevant to doctoral education, but also focuses learning on producing outcomes that are significant to the candidates, their organisation and the university.

According to Hills *et al*. (2003), learning through work means that learning outcomes are achieved through activities that are based on, or derived from, the context of the workplace. Using aspects at work that need improving, either from a personal or organisational point of view, candidates can engage with the full range of academic skills (knowledge, understanding, application, analysis, synthesis and evaluation) applied under their direct control to bring about the required change in performance (Solomon and Gustavs, 2004). WBL requires candidates to examine and question their current practice and that of their host organisation and, in doing so, have the opportunity to re-examine their whole epistemological set of beliefs. This can be quite a challenge for mid to senior professionals who have been working in an environment where the norms and ways of working are largely accepted as

good practice. Opening these up to doctoral level scrutiny can cause them to question established standards and accepted practice.

In their final report for the Higher Education Academy, Nixon *et al.* (2006:36), identify a WBL typology which could provide a very useful means by which to open a dialogue with new candidates concerning the nature of their topic and what they would like to achieve. They divide WBL into four types, as illustrated in Table 4.1

Type	Description
Type 1	Investing in learning to improve personal performance in securing new work
Type 2	Investing in learning to bring knowledge and skills into the organisation
Type 3	Investing in learning to improve personal and professional performance in existing work/organisation
Type 4	Investing in learning to improve the organisation's performance and competitiveness

Table 4.1 - Work-based learning Typology. Source: (Nixon *et al.,* 2006:36)

This typology illustrates that there are clear advantages for the candidate in terms of their personal and professional development at doctoral level but, combine this with the potential for new work and a competitive advantage for the organisation, and WBL becomes a very powerful catalyst for change. In many cases in WBL, the candidate's research may result in a number of these types of learning being achieved simultaneously. For example, personal

development can occur at the same time as improvements in organisational performance. WBL has the advantage over other methods of learning in that the skills required can be learnt in the context of the candidate's own topic rather than in isolation from the main subject area (Lee *et al*., 2004). The implication here is that learning best takes place in context. There are both advantages and disadvantages to this approach. There is some debate (see for example Boud, 1999) over whether learners should develop the skills they need first so as not to get in the way of learning a particular topic or discipline, or whether skills are best learnt in the context of the subject matter as it develops. For example, there is a case for doctoral candidates on a modular programme to study an early module on research methods before they develop their own research proposal. This is an approach that has been successfully adopted by the majority of professional doctorates in the UK on their modular schemes. In this way, candidates are equipped with the necessary skills they require and will have a better understanding of what is required to create a sound proposal. But learning research methods in isolation may make it difficult for candidates to obtain a full understanding of the effectiveness of different approaches. It involves a difficult new research language for many candidates and, to take the point on contextualisation made by Lee *et al*. (2004), to try and learn this in isolation from their own context may be difficult.

The adoption of appropriate WBL pedagogical strategies generates a need for a flexible approach to learning that is relevant to the candidate, their organisation and a specific professional community (Bourner *et al*., 2001). If

candidates are developing the skills they need as their project develops, they need to be in control of their own learning at a pace that suits them. Conventional classroom teaching may struggle to deliver this flexibility and relevance. A mixed mode of e-learning, workshops and individual supervision in partnership with the candidate is required. Gallacher and Reeve (2002) support this mixed approach when they argue that WBL requires 'partnership', 'flexibility', 'relevance' and 'accreditation'. Their use of the word partnership is particularly relevant to doctoral level WBL where there may be a joint partnership between the candidate, the employer and the university. A partnership of this kind can offer opportunities for a better understanding of the context and 'situatedness of the professional doctorate candidates within their communities of work' (Armsby and Costley, 2009:109). There are opportunities for knowledge generation and transfer, not in the conventional sense of university to organisation, but created together to produce new insights to problem which have relevance.

A business context WBL, 'allows professional practitioners in the field of business to reflect on and learn from their practice using methodology and tools appropriate to WBL as a field of study but also recognising and giving expression to the professional context and community from within which the knowledge is emerging' (Garnett *et al*. 2009:37). Brennan (2005) provides a useful account of these essential characteristics of work-based learning in terms of: task-related activities in the workplace, innovative techniques to meet particular work-related situations, self-regulated autonomy, and a concern with enhancing personal performance and improving organisational

performance. It is this last characteristic of enhancing and improving performance that is an important outcome from professional doctoral level work and will be a useful measure of the effectiveness of a professional doctorate programme. The focus on the particular work-based situation, outside of the academic sphere, is the key to enhancing performance in the context of work (Lave and Wenger, 1991). Candidates can play a unique role in generating innovative solutions as they implement change (Lester, 2004).

Curriculum for Work-Based Learning

An examination of Middlesex University's WBL approach to curriculum development provides an example of practice in what is recognised as a Centre of Excellence for WBL. The Middlesex core curriculum for all levels of higher education has four core components (Workman, 2009:5):

> *A personal review of the candidates current work experience and APEL…… Planning and a tripartite learning agreement (candidate, employer and University)….. A research development stage in which the learner develops skills of critical appraisal, selecting and justifying suitable research strategies and methods and project planning*….. and *the final WBL projects.*

The work is organised so each component is the foundation for the next which then builds on that experience. Workman (2009) describes this as a sound academic framework in which the student is able to negotiate an individual programme and become an autonomous learner, developing skills of lifelong learning and inquiry in order to meet personal and professional development needs. The curriculum draws on the theories of learning from Kolb (1984) and Schon (1987) to facilitate learning from reflection, discussed in Chapter 3. The candidates commence their studies by accounting and reflecting on their current experience. This can be counted towards their qualification either as specific or general modular credit by the process of accreditation of prior experiential learning (APEL).

This then forms the foundation of the individually negotiated agreement or contract of learning for the candidate. Learning needs and research strategies are identified and developed before the candidate embarks on their final project(s) to complete the qualification. In this way, the curriculum is flexible and takes account of the prior learning and skills of the individual candidate (Workman, 2009).

Accreditation of Prior Learning

The accreditation of prior learning in a formal APEL process is an important tool to ensure suitably qualified students need not study all of the content defined by the outcomes of a particular degree programme or module. However, it may be less valuable at doctoral level unless it becomes an integral part of the personal development of the candidate towards their research goals (Armsby *et al.,* 2006). Accreditation of APEL has enjoyed widespread use on modular courses to give credit for candidates' previous learning on entry to a programme (Garnett, 2000). Concern has been expressed as to the rigour with which it is applied and there is potential for variation in its application (Saxton, 2000). On the other hand, Armsby *et al.* (2006) make the point that APEL challenges the monopoly of established university knowledge but regard this as a positive step forward. They believe that there is a need for universities to acknowledge the value of the candidates' Mode 2 Knowledge described by Gibbons *et al.* (1994). They describe Mode 2 knowledge as integrated and cross-disciplinary and sensitive to context of application. The normal APEL process of reflecting on

experience, identifying what learning has been established and matching learning outcomes against existing modules, is perhaps one way of speeding up the experiences of student's progress on a set pathway. However, as Brennan argues (2005), it can be rather bureaucratic and unimaginative because the modules are unlikely to exactly match the nature of the professional experience.

Another approach to accreditation can be drawn from the ideas provided by Doncaster (2000). He argues that accreditation of prior learning should be a developmental process in its own right, designed to support the skills of self-directed learning. Armsby *et al.* (2006) support this view by stating that APEL should move from a simple account of prior learning to a more sophisticated approach to form a basis for reflection and future development. This can be achieved through reflection becoming an integral part of the assessed programme in Component 1 of the Middlesex programme. This then informs the formal agreement in Component 2.

APEL can be achieved if the work-based learners become map-makers, in terms of making plans for the future, rather than just map-readers specifying what has been before (Lester, 2007). Thus, APEL forms a vital part of the overall development process. In this way, candidates can achieve their doctorate at their own pace within certain university limits, whilst reflecting on, developing and improving their personal and professional performance and that of their organisation, as advocated by Workman (2009). Since WBL is designed around the individual needs of the candidate and their professional

circumstances, its supports the ideas of Costley and Armsby (2007) when they describe WBL as a transdisciplinary field of study that sits outside of subject frameworks and has its own set of norms and practices. It is the process that is important, not the particular discipline. This can potentially reduce the tensions between university discipline-based knowledge and the experience-based knowledge of the professional candidate (Breier, 2006).

Assessment of Work-Based Learning

In terms of assessment of WBL, there are a number of common themes explored in the literature. Costley and Armsby make the case that WBL requires generic assessment criteria more concerned with reasoning and making informed judgements based on evidence, rather than routine performance (2007:29). This fits well with the higher level skills implied in the doctoral descriptors defined by QAA (2011). Bodie and Irving (2007) shed further light on these requirements by stating that assessment of WBL needs critical reflection and the potential development of the candidate in a practical context. This idea is supported by Harvey and Norman (2007) who regard reflection as key in a social and cultural WBL setting. Brodie and Irving (2007) support this and argue that critical reflection is the means of developing the ability of students to critique workplace knowledge and develop their higher level academic skills. Klenowski *et al*. (2006), describe the use of portfolio evidence to stimulate reflective learning. They also raise issues concerning the dual role of assessment, in terms of its formative and summative functions, and argue that the latter can have detracting influence on the former. The focus on summative assessment can restrict experimentation and risk-taking. Boud (2000), also recognising this dual role, suggests that assessment, whilst meeting the formal requirements of the award, also needs to provide learning based on self-assessed judgements about learning. In WBL, this can be achieved by a range of assessment methods which can include reflective diaries, learning logs, portfolios, presentations and peer assessment (Brown, 2001).

The assessment of Stage 1 and 2 of a professional doctorate must meet the formal requirements of a university but also provide opportunities for continuous learning over a long period. The role of the supervisory team is to help design suitable learning activities, offering advice on how they are to be achieved and providing reflective and timely feedback to help ensure candidates know what is working and what they need to improve (Eraut and Hirsch, 2007).

In that sense, the assessment of any WBL should not be very different to the assessment of other forms of learning. It has a dual role of assessment for learning as well as providing a rigorous criterion-based framework to ensure quality of output in terms of what has been learnt. On most modular taught programmes, this is divided into formative and summative assessment. At doctoral level, the quality assured role of summative assessment is provided by the final thesis and viva, which is independently examined by experienced doctorial examiners external to the programme. This frees up all other assessed work during the doctorate to be used for learning. Formative assessment, gained over many years, can provide the focus of all that is eventually achieved in the viva. Using assessment in this way draws on the theories of Biggs (1999), Race (2001) and Cowan (2006).

Gray (2001) agues that direct experience is a very effective and powerful mechanism for learning. This is not only because it arises from actions and problem solving, but also because it focuses around real-life projects defined by the learner. These projects are both relevant to the individual and to their

employer. This helps to provide a strong motivating force for the candidate who can see the relevance of what they are doing and ensure that the university and employer are providing an education that closely matches their requirements (Dearing, 1997, Leitch, 2006). Brown and Knight (1994) make the point that the assessment of WBL, like any other form of learning, should provide diagnoses of the learner's strength and weaknesses, and feedback on their progress and achievement. It should provide motivation for the learner, formative information and a means of selecting further study. It should also provide the tutors with feedback on the effectiveness of their teaching.

In WBL, such activities can be controlled and monitored just as much by the student as by the tutor. This can assist in supporting students to take control of their own learning (Knowles, 1986). Gonczi (1999) builds on this and suggests that students can see, and partly design, the fit between what is to be learnt and the assessment. In all of this learning, as Race (2001) argues, a key component is feedback. Without this, both the student and the tutor cannot make the essential adjustments to the programme to improve the learning opportunities and tailor the learning to the needs of the students.

Gray (2001), citing Boud (1995), in his discussion of the principles of assessment and WBL, offers a warning that there is probably more ignorance of the significant issues involved in assessment than in any other area of higher education. Appropriate assessment and feedback is the key to a good educational experience and the development of student ability (Irving, 2008). Despite this, Boud had argued that assessment often receives less scrutiny

than teaching. Peer review at Anglia Ruskin University in my experience, for example, focuses on teaching practice rather than on the assessment. Gray develops this further by arguing that:

> *What makes this so problematic is that while students can, with difficulty, escape from poor teaching, there is no escape from poor assessment* (Gray, 2001:5).

WBL assessment has the advantage in that it engages students in problem-based learning rather than having a knowledge-based orientation. It is about process and performance, rather than content, which can be the criterion referenced against an agreed standard of achievement (*ibid.*). In addition, candidates can see the relevance of the assessment and the learning that is required and since it is strongly linked to their work, can see the context of what they are being asked to do. This provides very strong motivating forces to help guide candidates.

Biggs (1999) puts forward a case for alignment of the content, teaching, learning strategies and assessment for students to achieve the learning outcomes. All three aspects require attention to provide the conditions for learning. In a professional doctorate McWilliams *et al*. (2002) suggests that the assessment of Stage 1 of a programme needs to be closely integrated with the research developed further in Stage 2 and that there should be a close relationship between the candidates' professional and research training needs. Morely and Priest (1998) encapsulate the characteristics of this form

of doctorate, when they suggest that candidates should demonstrate a familiarity with advanced knowledge and analytical skills, display rigour and care in judging and decision making, and thereby become a reflective informed individual at ease with the use of academic research and literature.

Manathunga *et al.* (2004) indicate that assessment in the early stages of a professional doctorate should aim to develop candidates' academic or theoretical knowledge in the context of exploring their professional practice; doing so will develop the required research skills for the research project. They also argue that the learning objectives of the research component of professional doctorate programmes should fundamentally centre on solving a particular problem relevant to professional practice.

The Limitations and Problems with Work-Based Learning

Costley and Workman (2009), remind us that in order for a candidate to be successful on a programme using a WBL approach, there are a number of conditions that should be met. Candidates need to take control of their own learning and have the resources to undertake specific study activities. There should be a very strong synergy between their work and their studies. There has to be in place strong support from employers who can provide a suitable working environment for learning needs to be met. Alongside this, a university needs to create an appropriate learning environment that values WBL and the experiences the student brings to their studies. Without these requirements being in place, problems may occur. These special work-based conditions need to be recognised by the validating academic office in universities. It is clear from the current literature that, for WBL to be effective (see Garnett, Costley and Workman 2009, for example), candidates must take control of their own learning; they must be self-managed and at least to some extent, be self-directed. If the candidate does not take that control and does not possess the required self-management and determination, then it will be very difficult to complete the required work in the limited time available and all the support provided by a university and an employer, no matter how good and well intentioned, may not be effective.

WBL raises questions concerning the suitability of the learner's environment. Chisholm *et al.* (2007), argue that workplaces vary widely in their ability to support learners. The workplace must be a suitable environment, capable of

supporting the research project. Critics would argue that not all workplaces are designed to support learning and may not meet the needs of the students. Therefore, support is required from the employer in terms of understanding what is to be achieved, access to information and time to collect, analyse and evaluate the data. Garnett (2000) advocates the need for the development of a three way partnership between the employer, the candidate and the university. Employers need to be actively engaged in any agreement between the candidate and the university concerning the research project to achieve a successful outcome. Formal learning contracts can be drawn up between all three parties.

This chapter has built on the adult education theory introduced in Chapter 3, in order to focus these theories specifically on the demanding requirements of work-based learning. This model of learning has further informed the design and operation of the PrD (BE) and provided a theoretical base for its conception. Before exploring its conceptualisation and operation in detail, we now turn to the research design, methodological considerations and selected methods for this research project. The development of the active learning approaches advocated by the theories of adult learning and WBL require the methodology of action research to design, develop and operate the PrD (BE).

Chapter 5 - Research Design, Methodology and Methods

Introduction

This Chapter discusses the theoretical perspectives of research design and methodological considerations which provide insights into the most appropriate research methods for this investigation. The discussion begins at a paradigm level, then progresses through methodological considerations, finishing with the more practical techniques and methods of collecting data. In doing so, a case is built for the selection and use of action research as an appropriate research strategy to collect the required data for analysis and evaluation in order to answer the research questions.

Qualitative Research

At a philosophical level, this doctoral investigation is set in the phenomenological paradigm of qualitative research (Taylor and Bodgan, 1984), is naturalistic (Lincoln and Guba, 1986) and interpretive (Weber, 1947), socially constructed (Berger and Luckman, 1966), and is conducted in the real world of business and professional practice (Bryman, 2004). Although the cited theorists hold different perspectives on the application of phenomenological/interpretive research, they are all concerned with conducting research in real-world social settings in order to better understand the experiences, intentions, beliefs and understanding of individuals and groups within society. A qualitative approach has been selected for this study

because it can be used when researchers wish, for example as in this case, to 'discover and examine the meaning of the actions of participants in a holistic and contextual, social setting*'* (Payne and Payne, 2004:175).

Qualitative research was chosen as it facilitates in-depth analysis and evaluation of small samples as they naturally occur, using inductive rather than deductive logic, thus allowing evidence and meaning to emerge as the data is explored (*ibid*.). For Walker (1985), the fundamental difference between the natural and social sciences, is that it is not possible to use positivistic approaches to study social phenomena such as an educational programme and, as such, a qualitative approach is absolutely necessary. This is because a qualitative methodology focuses on the interaction between individuals, permitting interpretation and explanation of actions. The focus is on giving meaning to a social setting (McLaughlin, 2007). Walker (1985) further argues that a positivistic paradigm can struggle to deliver this level of meaning of a social situation. A qualitative approach is therefore adopted to explore the PrD (BE) in a holistic way, in its contextual natural setting, using inductive logic to provide meaning to the socially constructed experience of the candidates and staff. Donald Schon makes a case for professional social inquiry by 'applied science and research based techniques bounded by artistry' (Schon, 1987:13) rather than quantitative analysis. The social constructivist approach is appropriate for professional doctorate research as it recognises the importance of social interaction, how social meanings are constructed, modified or changed, and the constant state of evolution and revision to a social setting (Bryman and Bell, 2003). Constructivist learning

encourages more active involvement in a joint enterprise, creating or constructing meanings from a social perspective. This is a particularly useful approach to learning for middle managers searching for meaning in a changing environment (Thomas and Linstead, 2002). Constructivist learning can take place in authentic and real-world environments involving social negotiation and mediation (Robson, 1993). This research is concerned with the quality of the experience of candidates and staff on the programme and how this can be improved.

Justification of Action Research

The primary methodological approach to research in this study is one of action research. This has been selected because, as Winter and Munn-Giddings argue, 'action research is a model of work practice as well as a model for research' (2005:9). They suggest that it provides a mechanism to bring professional practice and research together, creating a 'culture of inquiry'. In doing so, it can be used to identify and record best practice. A culture of inquiry can utilise action research to study a social situation, such as the operation of the PrD (BE), in order to improve understanding and current practice (*ibid.*). In that sense, it can be used to conceptualise theoretical understanding of a practical situation. It is an all-embracing approach which can be used to support systematic reflection and increase understanding of complex social processes, including how they might change over time following specific interventions (McNiff, 2010). In turn, such an approach has the potential to improve an individual's professional performance and practice.

Reed and Procter stress the important point that to engage in action research, the researcher must have some control over the social situation in order to initiate and measure change; thereby enabling them to integrate their personal and professional learning (Reed and Proctor, 1995:195). They identify characteristics for practitioner research in the health and social care sector which have relevance to this research project. They make the case that the collaborative nature of the action research approach is likely to increase ownership of both the research process and outcomes.

Furthermore, they argue that the outcomes, although context specific, may be seen as relevant to similar situations and ways of working. Bassey (1999) helpfully explains this idea through the concept of 'fuzzy generalisations'; generalisations which may be applicable to other similar situations (Bassey 1999:12). He also discusses how the development of different case studies and action research projects help the researcher to explore emerging common concepts from different situations.

As such, action research can provide an approach that gives in-depth insights into practice from an 'insider perspective'. The idea of the insider perspective is explained by Hopkins as one which combines 'a substantive act of research, disciplined enquiry with a personal attempt to understand practice while engaging, improving and reforming it' (Hopkins, 2002:42). It is therefore ideally suited to improve and bring about change in an educational programme. This is elaborated on by Waterman *et al.*, who argue that 'action research is a period of inquiry that describes, interprets and explains social situations while executing a change intervention aimed at improvement' (Waterman *et al.*, 2001:11). This improvement can also affect the performance of the researcher as they reflect on changes made. Thus, a director of a programme has opportunities to improve as well as the programme being improved. In this way, action research can have an integral dimension for the development of the individual (me) as well as the practice. It can be a powerful tool to bridge the gap between practice and theory, and as such, links the practical with the conceptual (Winter and Munn-Giddings,

2005). This conceptualisation is an essential aspect of doctoral education (Trafford and Leshem, 2008).

Action research was also selected as an appropriate strategy of investigation in which a researcher can learn from direct experience of the aspect being studied (Kemmis and McTaggart, 1992:25). In that sense, the researcher is an insider involved with the phenomena being studied. As an insider, a researcher is in a unique position to study a particular phenomenon in great depth with specific knowledge of, and control over, the situation (Costley, Elliott and Gibbs, 2010). It is this direct experience, as director of the PrD (BE), which helped to facilitate my involvement in carrying out a structured programme of research. Action research proved to be particularly useful for this study because, as Frost explains, 'action research is a process of systematic reflection, enquiry and action carried out by individuals about their own practices' (2002:25). These are the very skills a lecturer should possess when running an educational programme.

Design of the Action Research Cycle

Most accounts of action research refer to its development in the 1940s through the work of Lewin (see McKernan, 1991; Hart and Bond, 1995; Whitelaw *et al.*, 2003). Lewin (1946) held the view that social science research needed direct involvement of practitioners in all phases of the inquiry. He referred to research that produced nothing but books, as inadequate. What was required was a form of social management through a specific approach to research, which could result in social action to bring about change.

Lewin (1946) was one of the first to develop a simple, systematic approach to what was termed action research. The first stage was to plan out what needed to be improved in practice, then act upon it, observing what had taken place and finally reflect on the appropriateness of what occurred (McNiff, 2010). This could then be recorded and the process repeated if necessary to make further changes to improve professional practice. It was argued that each cycle should have the potential to bring about change and improvement. The cyclical approach to improving educational practice is conceptually based in the work of Kolb (1984) and Cowan (2006).

A similar cyclical approach has been adopted in relation to this research when exploring the components of, and support mechanisms deemed appropriate for, the PrD (BE). During the early life of the project, a model was developed of the action learning cycle which evolved into the seven stage cycle illustrated in Figure 5.1. An example of the cycle in practice is illustrated in

Appendix I on page 305. The model naturally evolved from the experience of undertaking the action research on this project. Before starting to plan the actions to be taken it was considered desirable to examine, in detail, current practice and likely constraints of the practice to be investigated. This approach, which draws from scientific method, helped to define the problem and set the boundaries, which served to provide a detailed understanding of the current situation as a starting point for the research (Koning, 1994). It was a matter of taking stock of practice, what was current and what was possible; time spent at the start establishing a clear definition of the problem to ensure the correct issues are being addressed by future action (*ibid)*.

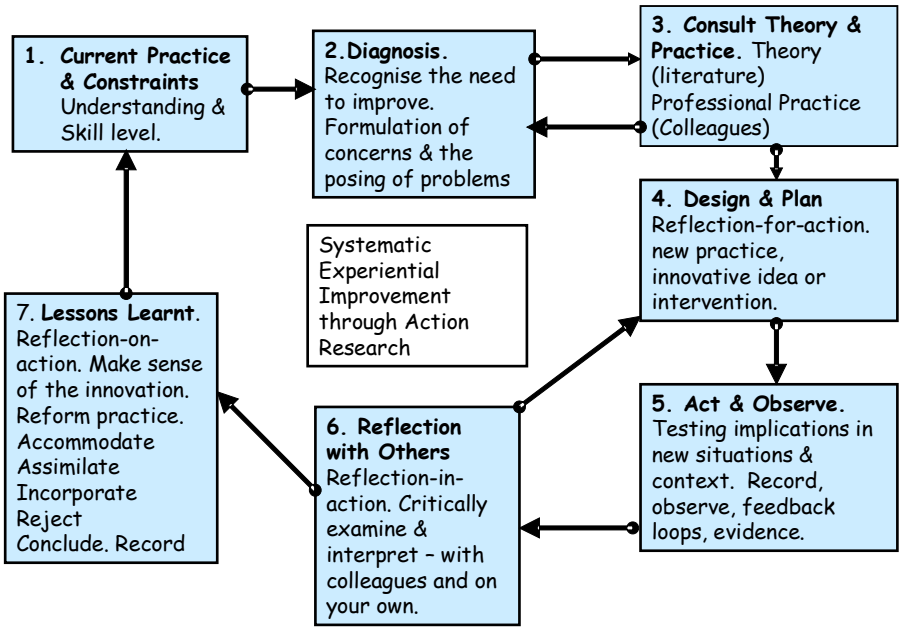

Figure 5.1 - The Action Research Model Designed and Adopted for this Research

This was then followed by a diagnosis of the problem or problems by documenting concerns to be addressed. McNiff (2010) explains that the first

step of action research is to identify an issue to be investigated, see what the situation is like at that moment and say why it is an issue for you. The development of these first two stages was also driven from a scientific and engineering background and a desire to understand the problem in as much detail to start with before making any changes. Thus, there was a need to provide a detailed examination of the problem before considering possible solutions (Koning, 1994). The analysis was developed in collaboration with other professional colleagues, for, as McNiff argues, 'practitioner researchers should appreciate that they are in the company of others, horizontally in current time and space, but vertically through time and influences' (2010:34). The diagnosis could be established through reflection on current practice and dialogue with others.

Thus armed with the details of the issue or problem and a diagnosis of the concerns, it was prudent to consult current theory and practice before taking any action. This consultation with professional colleagues, as well as engaging with the literature on the theoretical aspects of the work in question, enabled the project to develop in the light of the experiences of others, and how they had tackled similar problems. McNiff (2010) argues that collaborating with others in this way is a key aspect of action research. Examining theory and the practice of others featured throughout the life of the project. Time spent on Step 1 to 3 (Outlined in Fig 5.1) assisted in shaping decision-making processes about future actions and interventions to be pursued.

This next step concerns Lewin's (1946) plan of action to introduce the innovation or change which is designed to deal with the problems identified in the Step 2 diagnosis. Cowan (2006) describes this as 'reflection-for-action'. It is that reflection which 'establishes goals for subsequent learning or development, by the identification of needs, aspirations and objectives which will subsequently be prominent in the learner's mind' (Cowan, 2006:51). This was a key stage in the life of the research project where informed decisions and plans were made on the basis of the information generated in Steps 1-3. Once the plan was established (Step 4), action could then be taken.

Step 5 combines the action with observation. In practice, over time, it was difficult to separate these two activities of action and observation described by Lewin (1946). From experience, it became more convenient to act, observe and record at the same time. This step generated the data for analysis and evaluation and enabled the researcher to 'reflect-in-action' (Cowan, 2006:50). In this way, by implementing Step 6, the researcher could make adjustments in the light of fresh experiences (Schon, 1991). It is important to note that this 'reflection-in-action' requires the involvement of others (Bolton, 2005). Step 6 therefore involved the examination of the data generated in action, first with others, candidates and colleagues, and then finally through personal reflection. This stage was also important, not only in the development of my reflective thinking and the potential improvement of the doctorate programme, but also in the validation of the results. It helped ensure that I would not be making unsubstantiated claims from the experience. By acting in this way, staff and candidates could help establish the validity by the triangulation of the

conclusions made and provide evidence of the effectiveness of the intervention. Triangulation of the evidence, where information is drawn from more than one source, is one of the important techniques for demonstrating validity in qualitative research (Gray, 2009).

Consulting others and reflecting collectively on a regular basis, helped establish the reliability of the conclusions drawn. Candidates in particular were regularly asked to reflect on their particular experience, as the cohort acted as a focus group for the research. The candidates were asked to act as a focus group to 'bring to the fore issues in relation to specific concerns that were deemed important and significant' at particular times in the cycle (Bryman and Bell, 2003:369). In the context of this group discussion, individuals will often argue with each other and challenge one another's view. In this way, issues that concern them can emerge from the debate; issues that I might have overlooked. Bryman and Bell further argue that 'the focus group offers researchers the opportunity to study the ways in which individuals collectively make sense of a phenomenon and construct meaning around it' (*ibid*:370). They remind us that focus group reflections are a more naturalistic method of constructing meaning than formal interviews with individuals. Using Cowan's (2006) ideas on reflection-in-action and taking on board collective views, permits a return to Step 4 of the cycle to repeat the act with minor adjustments in the light of discussions, as the researcher acts to improve the situation. Further reflection was captured using the virtual learning environment (VLE) after the focus group sessions. This provided

additional evidence from candidates and staff who reflected further on the particular issues. This added further meaning to the focus group discussions.

At the end of the action research cycle (Step 7), reflection-on-action can take place in a considered manner to make sense of what has occurred and draw lessons from what has been achieved. This is essentially a stock-taking activity to define and identify the learning taking place. In theory, with each complete cycle, improved performance should occur, never returning to practice that which was less effective. Therefore, over a period of time with each turn of the cycle, there should be an improvement in practice. In fact, done effectively it will be more of a spiral, with each return to Step 1 involving new and improved current practice. Cowan (2006) develops this idea further by distorting the Kolb cycle of learning and adding Schon's reflection to produce an extended spring, where each turn of the coil represents a distinct level of progress.

The Position of Theory in Action Research

The point at which researchers engage with theory is worthy of further discussion. Dick (2000), cited in Costello (2011), explores an interesting aspect concerning the position of theory in a research project. He makes the distinction between theory-driven and data-driven research and asks whether researchers should engage first with theory and the wider body of knowledge on their subject to gain insights into the issues to be addressed. For the novice researcher, in the early stages of their work, this has an advantage of providing a better understanding of the current state of prevailing theory. He

argues that within such a perspective, theory-driven research is seen to make a contribution to knowledge by extending, refining or changing theory. In this way, research has the potential to identify and fill gaps in knowledge and understanding. However, he also asks researchers to consider the proponents of data-driven research in order to provide a better understanding, without any preconceptions derived from theory. This is the main concept of grounded theory where theory is derived from the systematic gathering and analysis of data (Strauss, 1987); a key component of which involves the codification of a large amount of data from which theory emerges. Dick (2000) takes this further by arguing that early engagement with theory may in fact stifle the potential creativity of the researcher. He notes that the data-driven approach in action research is of more value to practitioners because of its flexibility and responsiveness to the real-life research context.

However, Costello (2011) in examining Dick's ideas, argues that there is 'no need to choose between theory and data-driven research' (2011:19); each has its own place, merits and strengths. He asks why research cannot be both theory- and data-driven at different points within the research process. What Costello regards as the strength of this position is that it is important that the researcher displays an ability and willingness to ask pertinent questions and to test assumptions using reasoned arguments, irrespective of whether the activities are perceived as data- or theory-driven. The position of theory should be context specific. Engaging with theory at the appropriate time may reduce time wasted by a researcher investigating problems which already have been solved (Ellis and Levy, 2008).

In the action research model shown in Figure 5.1, theory has been placed third in the cycle as part of Consulting Theory and Practice, to engage with current knowledge and understanding based on elements of both practice and research, to help inform the planned action in the next stage. The argument for me is that Steps 1 and 2 should be free from theory, as Dick suggests, to gain a full understanding from practice of the problem to be addressed, without the preconceived ideas and notions from theory. However, theory is placed before the planned action so the actions can be informed by the reasoned arguments of previous research and academic writing. Importantly, the process also includes engaging with professional colleagues who may have insights of value to the project. This stage of consultation is designed to help ensure that the researcher is not working in isolation from established academic Mode 1 knowledge and the practice considerations of Mode 2 professional practice identified by Gibbons *et al.* (1994). This collaboration and reflection with others is a key recurring theme of the action research adopted here and is reflected in Steps 3 and 6. For these steps to be effective, an understanding of reflection was required.

The Importance of Reflection

According to Coghlan and Brannick (2005), a key component of action research is reflection. This can occur not only at the end of each cycle, but during any of the stages. It is this reflection that is the core of the learning process and raises the level of thinking above everyday problem solving (*ibid.*). Raelin (1997) informs us that reflection constitutes the ability to

uncover and make explicit to oneself what one has planned, observed, or achieved in practice. Hence, it is concerned with the reconstruction of meaning. In particular, it privileges the process of enquiry leading to an understanding of experience that may be overlooked in practice. Moon believes that 'practitioners need to reflect on an event and on the knowledge-in-action that has contributed to the outcome of their action, but they probably also need to draw on material from elsewhere, which may be a theory, experience, lessons or advice from others' (Moon, 1999:5). Boud, Keogh, and Walker (1985), argue that reflection is a process of turning experience into meaningful learning. By relating new data to that which is already known, researchers can establish relationships and make knowledge their own. Kemmis and McTaggart (1988) point out that although action research is concerned with the reflection of individuals, this can only be achieved through collaboration with others through participatory practice. Nixon (2008) concludes that reflection in a work-based setting can make a significant contribution to work practice.

The importance of reflective practice has become apparent and has gained popularity due to the work of Schon (1991). It has a particular place in the development of practice for those involved in education. They can use reflection on classroom activity to explore and improve their professional practice in a systematic way. This systematic approach formalises and documents the thoughts of teachers and enables improvements to be made which otherwise might be lost (see the work of McNiff, Lomax and Whithead, 1996).

Reflective practice is concerned with learning to develop our thinking by examining and re-examining, and analysing what actually occurs in practice. By involving others in that scrutiny, the practice is opened up to the perceptions of a wider audience (Bolton, 2005). The greater the number of people involved in the reflection, the greater the potential to significantly improve practice (York-Barr *et al*., 2006). This research project was fortunate to have a 'captive' audience of professional candidates and academic staff to help improve the practice (Action Research, Steps 3 and 6), although there were ethical issues here that had to be considered and are discussed later in this chapter. The candidate and staff were brought together in workshops and online with the purpose of improving the quality of the programme. They proved to be willing participants in the reflective sections of the action learning cycle. As York-Barr argues (2006:31), the purpose of using reflective practice is to increase learning at an individual and organisational level. It is therefore a dominant feature of the action learning cycle modelled in Figure 5.1, with the intention to improve my own practice of running a professional doctorate and the professional practice of the staff in Anglia Ruskin University. By engaging in action research and reflection, competencies in methods of evidence-based enquiry can be developed to support what Pollard *et al*. describe as 'the progressive improvement of higher standards of thinking' (2008:14). The action research was designed to improve the quality of the PrD (BE) with the intention of improving a specific educational process and by doing so, improve my practice and performance. The work of Cowan (2006) was particularly instructive in this concern.

Cowan argues that 'reflective practitioners tend to ask those questions for which they seek answers that are relevant to their ongoing professional development; questions which are factual, analytical and evaluative' (Cowan, 2006:23). That is, reflective questions about 'what', 'how' and 'how well'. According to Cowan, reflecting on current practice needs to have three components:

1. Descriptive – **what** exactly is the problem/issue? Careful definition of terms. Context for the research.
2. Analytical – **how** does it currently operate/work?
3. Evaluative – **how well** does it operate/work? What is not working?

These questions of what, how and how well, are reflected in the research questions for this thesis, concerning the characteristics and support mechanisms for the programme.

Validity and Reliability of Action Research

Nachmias and Nachmias (1982) suggest that the ultimate goal of research is to explain, predict and understand empirical phenomena to produce an accumulation of believable knowledge. For this to be achieved, the output of the research activity needs to withstand tests of reliability and validity. In qualitative research however, these terms do not hold the same objective connotations as in quantitative research. Creswell (2009) describes validity as a means of checking the accuracy of the findings by employing certain procedures which triangulate the findings. Creswell argues that triangulation of different data sources and different collection methods, enables the

researcher to build coherent arguments and themes that emerge from the findings. Bringberg and McGrath (1985) on the other hand, make the case that validity is more to do with integrity, character and quality, rather than achieved by triangulation techniques. The reader needs to be convinced that the findings are credible. Hammersley (1992) further explains that research is valid if it represents accurately those features of the phenomena being studied. Adding to this case, Robson (2002) contends that validity is concerned with the credibility and trustworthiness of the findings. This can be achieved, in this study by prolonged involvement with its participants. Winter (1989) provides the argument that findings and theory are validated in action research through practice rather than by independent techniques or means. McNiff (2010) emphasise that action research validity is driven not by methodological considerations, but by the researcher's values and professionalism. She suggests that a key skill here is to ensure that the research is not jeopardised by bias and personal influence. Lincoln and Guba (1985) also remind us that trustworthiness is necessary in qualitative research to demonstrate validity and reliability of the findings. In this study, the use of reflections from others, both staff and candidates, strengthened the trustworthiness and validity of my reflections and conclusions. The open access to comments from all on the VLE was particularly powerful in establishing the validity of changes made. McNiff (2010) suggests that the starting point for validity rests with the researchers themselves. It was important to establish that I was a trustworthy researcher in the eyes of the candidates and fellow lecturers. Thus, this action research project had ethical dimensions which needed to be addressed.

Ethical Considerations

This project has been the subject of University Ethical approval procedures. See Appendix II and III (page 315) for details of the information sheet and consent form. This enabled a number of issues to be identified that are worthy of discussion here. The insider research approach discussed earlier in this chapter, does have ethical implications that need to be addressed in a work-based context. Qualitative research, such as this, places the researcher on the inside, immersed in the research rather than on the outside looking in objectively (Flick, 2006). Researching the behaviour of candidates and colleagues on a programme in this way raises issues concerning the power relationships between myself, as the director of the programme, as a researcher, and the tutors and candidates as participants. There are moral dimensions concerning who is doing the research, what is the motivation, what are the reasons, what is the contribution and who might gain and lose from the research (Jensen, 1997).

In conventional outsider research it is claimed that researchers are neutral and independent of the study. In insider research, researchers are working with colleagues to improve their practice and have a vested interest in the consequences and outcomes of the research. Participants need the research intentions and potential consequences to be made clear. Researchers therefore need to make their motivation explicit. The normal working educational relationships may aid or hinder the research; the staff and candidates may feel that they are obliged to behave in a certain way. For

example, they could react more positively to changes made to the programme than they otherwise would have done if I were not the programme director. In this manner, candidates in particular may feel that they should co-operate with the researcher in order to ensure they receive the help and support they require for their doctorate (Costley, Elliott and Gibbs, 2010:31). As the director and supervisor, I was drawing on the normal 'ground rules' of reciprocity and trust expected of a university education experience. When using these same rules as a researcher, Griffiths (1998) argues that there is a risk of exploitation and betrayal. Changes could be made to the programme for example purely for the sake of the research and to generate evidence for specific arguments not necessarily for the direct benefit of the candidates. Even if this does not occur, as was the case with this research, there may be the perception from the participants that it might. There is always the risk of unintended consequences occurring so it is important that good dialogue takes place to limit misunderstandings and develop trust (Gray, 2009). Trust between the teacher and the student as researcher and participant in particular, is crucial for the success of qualitative research.

Any action taken must therefore be, and be seen to be, for the benefit of the PrD (BE) and its students and not solely for the research project. It could be argued that I, as director, have a vested interest in the success of the PrD (BE), but if the candidates feel that changes have been made to their programme solely to aid the development of the research, their trust and co-operation may be lost. What was required was a very clear statement concerning expectations as candidates on the programme and as participants

of the research (Costley, Elliott and Gibbs, 2010). According to McNiff (2010), the main principle, as with all research, is to do no harm to the participants. She argues that, with all these multi-functional relationships, clear statements must be made concerning permission to carry out the research, ensure confidentiality, candidate access to findings, the right to withdraw, and the maintenance of honourable conduct throughout. Candidates must feel comfortable about what research is being carried out and be able to withdraw at any point in the process.

The issues of confidentiality and anonymity have been addressed, in part at least, by not identifying any particular person on the PrD (BE) or their employer involved with the research. Reference to particular candidate research topics has also been excluded from the discussion. Candidates were made fully aware that this research was being conducted and were regularly asked about their feeling towards the project.

With the exception of the University Annual Monitoring, which is a compulsory requirement, and the candidate reflections in their Research Proposal, candidates had the right not to participate in the research and give their views on the effectiveness of their educational experience. Not all of the candidates gave feedback in the workshops or online, but none objected to the research progressing in parallel with their PrD (BE). A full statement on these ethical issues was provided on WebCT in the University Ethics Application form. This document has a dual purpose in that it gives candidates an example to follow of an ethics application form as well as informing them of this research.

No candidate or member of staff has objected to being involved in this research project.

Critics of Qualitative Action Research

Qualitative research, such as action research, can offer practitioners a powerful tool to enhance their professional practice (Hopkins, 2008). Research strategies can be specifically focused on improving their own professional practice. They can provide interesting and illuminating insights into phenomenon in great depth by focusing on, and examining, small samples which generate a rich data set (Blaxter *et al*., 2001). They can be used to gain an in-depth insight into the dynamics present within the particular setting which may be lost in a wider quantitative study.

However, a critical view put forward by Hopkins (2002:50) that the rigour associated with tight specification of a set procedure in action research, may in fact trap researchers within a framework which inhibits independent action. Other critics of qualitative approaches refer to 'a perceived lack of rigour and compare them unfavourably to traditional quantitative research design' (Costello, 2011:52). Costello argues that often the study 'is small-scale and is therefore very limited in scope' (*ibid*). Its use of words as the unit of analysis can be too descriptive. Another concern expressed is that the researcher is often too close to the research and risks being unable to stand back and make informed independent judgements (Cohen, Manion and Morrison, 2000). As such, the work can be susceptible to researcher bias. There are also questions raised concerning the reliability of the evidence, that the

research may not be repeatable and that it is often non-generalisable. Hopkins (2008) makes the case that an overuse of the words problem, and improvement, gives the impression that action research is a deficit model of professional development where the starting point is that something is wrong and has to be put right. Adelman (1989) believes that much of educational action research can be very inward looking and of poor quality. The hallmarks of traditional research in terms of precision, control, isolation of variables, cause and effect, and being able to generalise from specific evidence by inductive reasoning are, to a large extent, incompatible with action research and therefore can give grounds for criticism (Cohen, Manion and Morrison, 2004). In short, critics often question the credibility of the findings and the trustworthiness of the conclusions.

These criticisms are addressed in this research by applying the notions of Robson (2002). The researcher was involved in the research for a prolonged period of time – the action research was developed through a number cycles between 2004 and 2011. In turn, each cycle was systematically evaluated in terms of its content, the processes involved and outcomes. The research methods selected were repeated with a number of students and staff groups as the population involved with the programme changed over time. Accordingly, they were asked for their assessments of the situations being investigated at particular points in time, independently of previous groups. The answers from different participants at different times were examined and compared for consistency. Consulting others in Step 3 of the action research cycle countered the arguments put forward by Adelman (1989) regarding the

focus on only looking inward. Working and collaborating with staff and candidates formed an important part of the reflection in Steps 4, 6 and 7 of the cycle, as shown in Figure 5.1. This approach has been particularly useful in gathering, triangulating and interpreting evidence and countering the argument that an insider researcher can be too close to the research and would naturally have biased views (Gray, 2009). The judgements concerning the success of changes made were based on data collected from staff and candidates. Triangulation, to strengthen the conclusions drawn, was achieved by the use of a variety of methods of data collection, from different participants and at different times (Costley, Elliott and Gibbs, 2010). Data was gathered from staff and candidates by interview, focus groups, reflective accounts, and discussion on WebCT. The research was designed to capture the perceptions of the candidates and members of staff. The length of time and repeated actions serves to strengthen the reliability of the results (Cohen, Manion and Morrision, 2000).

The Use of a Case Study

The Arguments for Case Study Research

As part of Step 3 of the action research cycle adopted for this research, professional practice is consulted as well as theory to inform the research. It was regarded as an important step in the action research cycle designed for this project; it informed the planned actions that followed. This consultation took the form of a case study of professional practice in the existing Doctor of Administration (DBA) and the Doctor of Education (EdD) which were validated in 1996 and 1998 at Anglia Ruskin University. Exploring the experience of these programmes gave an understanding of the issues I was about to encounter on the PrD (BE). A case study methodology was selected as, according to Robson (1993), it focuses on an empirical investigation around a specific case to gain an in-depth insight into the dynamics present within a particular setting. This instance can include a person, system, or organisation, or in this case an educational programme. Robson argues that the characteristics of a case study are set in a phenomenological paradigm of a real-life contemporary context. The real-life setting in this case was the educational experience of staff and candidates on the DBA and EdD.

Case study research can use multiple methods of collecting data which can be triangulated to strengthen the reliability of the findings. This includes documentary analysis, interviews, observations and participant observations, all of which are useful strategies to research a professional doctorate. For this project, documentary analysis and interviews with staff and candidates who were involved with the DBA and EdD prior to the commencement of the

PrD (BE) were selected to gather data. Direct observation was not possible in this case.

Cohen, Manion and Morrison (2000) strengthen the argument for a case study approach in this type of situation when they stress that it a high on external validity, it is inductive in nature and although generalisations from the findings can be dangerous, they can be used to support theory and can be applied to other similar situations. Thus what was learnt from the DBA and EdD could be transferred to the PrD (BE). Case study research can provide a rich data set, giving deep insight often missed in a wider study; it answers not only the 'what' and 'who' questions but, more importantly answers the 'how' and 'why' questions to explain complex social phenomena as they are witnessed, without alteration or modification. The 'researcher has no control over events; they simply report the findings' (Gray, 2009:247). In case study research the emphasis is on understanding processes as they occur in their full complexity and context. Its unique strength is its ability to deal with a full variety of evidence and is tailor-made for exploring new processes or behaviours.

Prejudices against Case Study Methodology

Yin (2009) argues that there can be confusion with case study teaching - information can be altered to suit what is being learnt. Some scientists view case study research as less desirable than experiments and surveys, as these can be statistically generalised to a wider population; case studies cannot. There is also a concern over the lack of rigour with no established procedures and protocols (unlike scientific method). Yin continues by

stressing that they cannot directly address causal relationships and they are prone to bias; providing evidence to support preconceived ideas. He also argues that they can make it difficult to replicate evidence, so they are low on reliability. Furthermore, sometimes case studies can take too long to gather the required evidence.

Despite these dangers, case study research can uncover valuable evidence from the professional practice of others to inform and improve one's own practice. It is for this reason that a case study approach is adopted as part of the conceptualisation of the PrD (BE), which is now described in the next chapter.

Data Collection Methods

Many methods of data collection are available to researchers engaged in action research. According to McNiff (2010), they range from the use of conventional tools such as surveys and attitude scales, head-counts, pre- and post-tests, journals, diaries, field notes and audio and video recordings, to the use of multi-media and websites. She argues that multimedia tools are especially powerful for documenting the live experience of participants at particular times. Social networks, such as emails, blogs, chat-rooms and virtual conference rooms can capture the experience of individuals and groups at the same time. The criteria for the selection of which of these methods are best suited to gathering data, is about their appropriateness for the task of answering the research questions. A wide range of methods should be used to enable triangulation of the data to strengthen the validity and reliability of the results (Creswell, 2009). The action research cycle, designed specifically for the research, has a number of deliberate feedback mechanisms built-in to gather data on the characteristics of, and support mechanisms for, the PrD (BE). These are now discussed.

Historical Documentary Evidence

As part of Step 3 of the action research cycle concerning the collective wisdom and the professional practice of colleagues, validation documents and course handbooks were examined to provide historical documentary evidence concerning the design and operation of the professional doctorates at Anglia Ruskin University. This acted as the starting point to systematically locate, analyse and evaluate historical evidence to establish facts and draw

conclusions about past events (Borg, 1963, cited in Cohen, Manion and Morrison, 2000). This informed the design and planned operation of the PrD (BE) and generated questions to ask later in interviews with staff and candidates associated with the programmes.

Focus Groups

The cohort of candidates and staff met for workshops five times per year (originally four) to work together as a 'community of practice' on common issues (Lave and Wenger, 1998). A small proportion of that time was used to gather data from the community on how well the programme was running, what was working and what needed changed. As ideas and changes were introduced, candidates' collective reactions could be captured. This was normally achieved through face-to-face encounters, but feedback forms were also used to document comments at the end of sessions. The cohort was, in effect, treated as a focus group of experts in the field (Bryman and Bell, 2003). This had the additional effect of building a research community who felt involved in the development of their own programme. In addition, before each workshop, candidates were asked via the conference facility in WebCT, to give advice on the content of the workshop and then again afterwards to reflect on its effectiveness. Any action taken to improve the effectiveness of the programme was identified and implemented as soon as possible. Feedback captured via the focus group was followed by more reflective comments posted on the programme's VLE (WebCT) on the issues. All staff and candidates have had access to all the reflective comments online and this

has proved to be a very powerful, effective and trustworthy source of data collection.

Candidate Reflections (Online and Face-to-Face)

The responses on WebCT could be sent privately via its email facility, or publically to the group via the discussion tool. Although the comments were public to the group, no outsider could see the comments. Candidates were encouraged to use the WebCT conference tool to facilitate open debate on issues. It was established from the start that all comment written on WebCT would remain confidential to the group. Staff supporting the programme also had access to the same facilities and often expressed their views along with the candidates. Questions asked were sometimes open-ended to give the opportunity to freely express views, or sometimes closed to focus attention on a particular issue. For example, a discussion on the effectiveness of the workshop format at the end of a workshop session could be followed up by specific questions regarding a change that had been made. The different formats for questioning, both in the workshop and online, would enrich the discussion. In addition, individual candidates were also asked in meetings and online their views and reflections on how the programme was meeting their particular needs. This engagement and collaboration formed a central part of the reflections in Step 6 of the action research cycle. Annually, candidates were asked to give their views to the University, to permit comments to be free from the influences of the support team. This then was feed back to the team to consider for the next year. Any candidates who prematurely left the programme were asked for their views in an exit interview.

Ethical approval for the work was obtained from the Faculty utilising the University's standard procedure. A copy of the ethical information an consent forms is located in Appendix 5.1. All participants were given these forms. These were also placed electronically on WebCT to provide open access. All candidates were made aware on registration that I was conducting research concerning the design and operation of their doctorate.

Interview Design and Protocols

A semi-structured interview technique was selected as the most logical research method to ascertain the tacit knowledge of participants. This form of interview would facilitate the generation of a rich data set of personal knowledge, values, preferences and attitudes (Cohen, Manion and Morrison, 2000). Staff and candidates on the DBA and EdD were selected as participants on the basis that they were well informed about the running of these doctoral programmes. Data from each participant was triangulated against each other and from documented sources to validate their responses and identify common themes (Creswell and Plano Clark, 2011). Questions were asked (see Appendix 5.3 for an example), to establish feelings and attitudes towards the quality of the programmes, which was not evident from the examination of the validation and course handbook documentation alone. In-depth two-way discussions provided clarification of issues and enabled the participants to articulate their tacit knowledge and make their views explicit (Arksey and Knight, 1999). I became 'an attentive listener' who endeavoured to 'shape the interview process into the familiar comfortable social

engagement' as advocated by Haigh (2008:112). I wanted them to feel at ease and enjoy talking about their individual experiences on the programmes to try and gain a true reflection of their perceptions, feelings and attitudes toward the quality of events that had taken place (Gray, 2009). The interview protocols were as follows:

1. Participants were selected on the basis that they were well informed about the DBA/EdD e.g. programme director, programme leader and candidates.
2. Ethical considerations followed the requirements of the Anglia Ruskin Ethical Approval Procedure in terms of ensuring 'informed consent', avoiding 'harm to participants', respecting their 'privacy', and avoiding 'deception' (Gray, 2009:73). See Appendix 5.4 for details.
3. Set questions were sent electronically to the participants in advance to give a good understanding of what was required and time for the participants to develop a considered and reflective view.
4. The interviews were largely based on these questions but were semi-structured to allow a two-way discussion and further probing of views and opinions, and permit the participants to provide additional information they felt important. Quantitative analysis of the data was not required.
5. The interviews were recorded to allow later interrogation and evaluation of the data. This provided further clarification and the identification of any issues that may have been missed during the interview.

6. The main points were then selected and transcribed and sent to the participants electronically so that they could confirm they were representative of the discussions that took place, and allow them to edit and add to the work to their satisfaction.

In this way a highly personalised view from each participant was achieved. The data generated is discussed in Chapter 6 and was used to inform the design and operation of the PrD (BE).

This chapter has built the case for the selection of action research to investigate the research question regarding the characteristics and support mechanisms appropriate to the operation of the PrD (BE). It has examined the strengths and weaknesses of such an approach and established it as a suitable strategy to consider the research questions. The importance of reflections from, and the involvement of, the candidates is highlighted as a central component of the action research model developed. Ethical aspects are discussed along with issues of the validity and reliability of such a methodological approach. The limitations of action research have also been examined in relation to the intentions and priorities of the research. The next chapter explores the conceptual issues considered in the design of the PrD (BE) and this research project.

Chapter 6 - Conceptualisation

Introduction

This is the first chapter of a series of four on data presentation. It provides insights into the conceptualisation of the research project together with the design of the PrD (BE). The evidence was gathered using steps 1 to 3 of the action research cycle described in Chapter 5. In doing so, the chapter establishes the current practice, in terms of the design and operation of the PrD (BE), at the start of the project. It provides a diagnosis of issues and potential problems by consulting the existing practice of other professional doctorates operating at Anglia Ruskin University at that time. The theoretical exploration in chapters 2 to 4 is also drawn upon to shape the research process. From this examination of the evidence, a conceptual framework was created and is also described here. The key practical aspects that formed the nature of the PrD (BE) are further established in this chapter by an examination of its 2003 validation documentation.

Since the PrD (BE) evolved from the established Doctorate of Business (DBA) in the Business School and the Doctor of Education (EdD) in the Faculty of Education at Anglia Ruskin University, further insights are also drawn from the validation and the handbook documents from these programmes. The validation documentation for the PrD (BE) had drawn heavily on the previous validations of the DBA, EdD and PrD in Health and Social Care. All three of these programmes had experienced difficulty in their early operation, so it was

important to gather data on these programmes in an attempt to ensure the success of the PrD (BE) and avoid similar difficulties being experienced. The examination of documentation was followed up by interviews with selected staff and candidates on these programmes to shed further light on the operational issues and problems to guard against. No interventions on the PrD (BE) are described here; the chapter simply serves to provide insights into, and a direction for, the practical interventions described in chapters 7 to 9.

Conceptualising the Research

A conceptual framework was constructed from the theory described in chapters 2 to 4 to provide the focus and set the boundaries for the research. The concepts are linked together to form a structure of practical and theoretical ideas that define the nature of the research investigation, as advocated by Rudestam and Newton (1992). Robson describes this structure as a conceptual framework which 'forces you to be explicit about what you think you are doing. It also helps you to be selective; to decide which are the important features; which relationships are likely to be of importance or meaning; and hence, what data you are going to collect and analyse' (Robson, 1993:150). This single statement from Robson highlights the importance of conceptual frameworks to doctoral level research and has helped focus my early intentions. The importance of this is also highlighted by Trafford and Leshem (2007), when they assert that the conceptual framework illustrates the relationship between stated theories that provide an abstraction of the topic to be investigated. They suggest it is a way of converting the abstraction into practical actions, linking practice to theory. This is

particularly important for a professional doctorate which must draw from theory but focus on practice.

One useful aspect of a conceptual framework is that it can be thought of as a method of expressing the 'current view of the territory being investigated' (Miles and Huberman, 1984:33). By determining the conceptual framework at the start of this project, it serves to set the boundaries and limitations for research. It has also formed the basis for the research design considered in Chapter 5 and clarified the focus of the fieldwork. However, the conceptual framework has also been used to guide the research throughout the investigation. In their definition of a conceptual framework, Miles and Huberman suggest that it is not static and may evolve as the research progresses. As such, the conceptual framework outlined here has been an integrating feature of the development of this doctoral research at various stages; it added structure at the start for organising ideas and has helped establish links between practical aspects explored and their theoretical context. Starting with a clear understanding of the conceptual framework for the research project has imposed 'meaning, order and coherence' to the work (Cohen *et al,* 2000:13). It has established the underpinning theory, and the practical ideas to be researched and, as a consequence, determined the research methods deployed.

The resulting framework that developed from the exploration of this conceptualisation literature is illustrated in Figure 6.1. The theoretical concepts are shown in yellow and the practical responses in blue. The PrD (BE) candidates would be experienced professionals drawing from a wide range of

disciplines including architecture, planning, construction management, surveying and engineering. These disciplines have their own cultural influences and agreed set of norms and standards. The PrD (BE) would bring them together as a group of people with a common interest in doing research. An understanding of the nature of the resulting community of research practice would be necessary. The candidates involved in the study were mature adults interested in learning how to undertake doctoral research, so aspects from Chapter 3 of educational theory and adult learning in particular, were considered. As the project developed, it became clear that the exploration of the literature on work-based learning (WBL) in Chapter 4 would be required. These three theoretical conceptual components informed the development of the practical aspects of the assessment, workshops and the virtual learning environment which were designed to encourage candidates' active engagement.

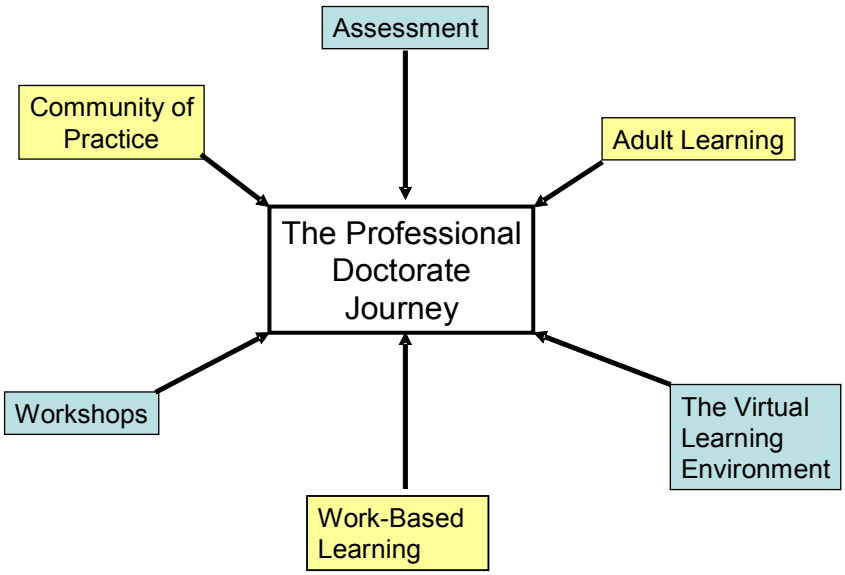

Figure 6.1 – Conceptual Framework to Support Doctoral Research

The built environment team had little experience of doctoral level work in 2004, so it was crucial to consult with other professionals as part of the action research cycle to gain an understanding of what was required of us. An insight into doctoral level work at Anglia Ruskin University was gained by an examination of other professional doctorate programmes. In particular, evidence was gathered from validation documents, candidate handbooks and interviews with selected staff and candidates regarding the design and operation of the DBA and the EdD during 2001 and 2002. This is discussed in the next section.

Consulting Professional Practice

Evidence from Stage 1 DBA and EdD Workshop Documentation 2001 to 2003

As part of Step 3 of the action research cycle, the existing practice of other professional doctorate programmes operating at the time of validation of the PrD (BE) was consulted to provide guidance on the design of Stage 1. The evidence discussed here is taken from handbook documentation of the Stage 1 DBA and EdD workshops and events 2001 to 2002. I wanted to explore how these programmes had supported the candidates towards their doctorate. The documents were influential in shaping the nature of the programme in its early stages.

Both the DBA and the EdD were validated as a two stage doctorate in 1996 and 1998 respectively. Stage 1 was supported by a series of workshops and examined by three 7000 word research papers. These papers were considered together at the end of Stage 1 along with a short research proposal as progression entry to Stage 2. Stage 2 focused on a final research project and was examined by a 60,000 word thesis.

A joint programme had been offered to the DBA and EdD candidates and was supported between October 2001 and December 2002 by a series of workshops. Each candidate was allocated a research advisor in Stage 1. The supervisory role was similar to a normal supervisory role at doctoral level with the intention

that the advisor would most likely formally become the supervisor in Stage 2 of the doctorate at the research proposal point. This approach had the attraction of enabling links to be made and continuity achieved between Stage 1 and 2 where candidates might be supervised by the same team over the whole programme. This would have been difficult to achieve with a modular taught Stage 1, followed by a supervised research project in Stage 2.

The DBA and EdD programmes were designed so candidates could complete Stage 1 within 16 months, supported by a fixed programme of training events. New candidates were to meet with their advisors between workshops so that they had regular monthly contact. An induction weekend was offered for new candidates only. New cohorts were to join on occasions with existing to provide an opportunity to meet, share experiences and network. The Stage 1 workshop activities were listed in the handbook as a set programme of events and included topics such as personal development strategies, essential characteristics of a doctorate, practitioner research, devising research questions, paradigms, methodologies and research. An examination of the list revealed that the workshops were not discipline-specific in that they did not relate to any specific business or educational related issue; they focused on aspects of doctorateness which could be applied to any professional discipline. The discipline knowledge came from the candidates and the examination of their own practice. The knowledge transfer was concerned with applying doctoral processes to professional practice issues. This doctoral process focus in the workshops was an important point established by consulting professional colleagues in Step 3 of

the action research cycle. The workshops on the PrD (BE) would focus on developing doctoral skills rather than on any specific discipline knowledge.

The DBA/EdD workshops also provided a mixture of opportunities for staff and candidates to present their ideas and to work on workshop activities. For example, in some of the workshops, staff presented topics from their own research interests, but it was not clear from the handbook documentation the purpose of these staff topics and how candidates would benefit.

It was also not clear what support was provided for the existing candidates in Stage 2; there was no programme detailed for them. Also there was no indication as to what would happen to candidates who had not completed Stage 1 within the strict 16 month timeframe. It seems that no extra provision was given to these candidates. This was to be a set programme that was run for each new cohort of candidates. It is also not clear how the next October 2002 cohort would mix with this existing group, if at all. As each year would add more candidates there was a risk that it would be difficult to staff all of the workshops. Clarity was later established on these issues by interviewing staff and past candidates working on the DBA and EdD.

However, the examination of the validation documentation and candidate handbook, as part of consulting professional practice in Step 3 of the action research cycle, did influence the early provision of the PrD (BE). Their examination did reveal that workshops could be used to develop doctoral level

skills in Stage 1 and that academic advisors in Stage 1 would provide continuity of supervision by moving with the candidates as they progressed to Stage 2 of their doctorate. The 16 month training programme of fixed events however raised concerns over how to support candidates who could not complete in this time and there seemed little or no provision for mixing candidates from different years.

At the time of conceptualisation of the PrD (BE) and my research project, the DBA, EdD and the PrD (H & SC) were all struggling to continue, so I was concerned about uncovering why problems were occurring. The simple DBA/EdD model held certain attractions but it was important to uncover potential problems at an early stage. The PrD (H & SC) was struggling to recruit and their current accepted candidates were re-registered on the standard PhD. In discussions with their programme director, it emerged that there was an issue with the professional doctorate fees being much higher than the part-time PhD fees. The main issue however, was that of recognition of the PrD (H & SC) award by the health authorities and it had been decided that they would not be recruiting further candidates for the foreseeable future. The lack of recognition was not the case for the DBA and EdD, which were also struggling, so I felt it was prudent for the success of the PrD (BE) that these programmes warranted further investigation.

Past Experience on the DBA and EdD

The examination of the DBA and EdD documentation had raised a number of questions which required further investigation. Evidence was captured via Step 3 of the cycle, Consulting Practice, by interviewing the programme director, the programme leader for Stage 1, and selected candidates from the programme on the DBA and the EdD. The intention here is to provide a deeper understanding of the original programmes and how they operated in practice, what the problems were and, most importantly, how this could inform the development of the PrD (BE). These aspects could not be established from the examination of the documentation alone. The outcome of this work is now discussed.

The Design Issues and Origins of the Programme

The next action taken was to interview the director of the DBA programme who was responsible for its creation at Anglia Research University in 1996. This was to establish the original concepts, intentions and aspirations. He was also responsible for the design of the EdD. An interview was set up and the protocols put in place in accordance with those described in Chapter 5.

The interview revealed that the development of the original Anglia Ruskin DBA stemmed from, and was coloured by, the experience (1990 to 1996) of the Master of Business Administration (MBA) in the Business School. The teaching team wanted to develop a doctorate to meet their development needs and those of potential candidates. Staff were under pressure from management to increase their publications and there was a desire to move from teaching on masters programmes to supervising at doctoral level work. There was a ready market for

the programme from successful MBA candidates wanting to extend their studies further. The director argued that the development team wanted a research degree, not a taught programme like the MBA, and had a shared understanding of both management issues and action learning processes they felt were suited to such a scheme. He said that there was a feeling amongst the team that the requirements of a modular taught programme would not result in a doctorate level programme. To this end, they decided to seek approval from the Research Degree Committee (RDC) responsible for doctoral programmes, rather than seeking approval from the University Quality Academic Office for taught programmes.

He argued that this proved to be the key decision which ensured that no part of the programme would be modular, taught or credit rated. When asked directly about this decision, the director responded by asking a range of questions:

> *How can you teach doctorateness, what is the level, how can you demonstrate that you are teaching at doctoral level to the University Quality Academic Office? Why should any part be a modular credit rated scheme? What would the candidates do with the credits? Stage 1 did not need to be classed as masters level, entrants already had a masters qualification so what would they do with another? We did not teach research methods, the programme was geared to the continuous professional development of the individual.*

His last phrase of ‘continuous development of the individual’ was significant to me. Would it be possible to develop an individual from masters level entry to doctorate level in three to four years, within the collective experience of the whole cohort, whether it was modular or not? That was an exciting challenge which opened up new possibilities for group learning.

The Business School team was very keen to establish the DBA as a qualification of equal standing to the more conventional and familiar PhD. Their approach was to ensure that the total output would be of the equivalent of an 80,000 word PhD thesis, matching the standards of the social science PhD with the additional requirements to develop and improve professional practice. An external viva examination would mean that the DBA would be directly compared, and be equivalent, to the PhD. It was very important to the team that the DBA would be accepted as a doctorate. The intellectual journey however would be different. For the director it meant:

> *Going from practice to theory to practice, rather than from theory to practice and back to theory; the more conventional route for the PhD.*

Starting with practice was considered to be extremely important for the candidates to develop their ideas from work-based issues. The team originally planned that candidate would be able to complete within three to four years; according to the director, the belief of the tutors was that the candidates were:

Part-time registered candidates but full-time researchers. Their work and doctorate being intertwined in each other.

This raised an issue for me in terms of how practical that would be. Could part-time candidates be full-time researchers within the context of their own professional practice? Would it be possible to develop the required synergy between the doctorate and day-to-day work commitments?

The director also felt strongly that there should be no sub-award. He stressed that team felt that there should be no sub-award to detract candidates from completing, although it was recognised as a high risk strategy in terms of the potential for non-completion. He also felt that by the end of Stage 1, candidates would have nothing to leave with. Any sub-award would have to be at masters level and that was not the intention of Stage 1; Stage 1 was simply seen as the preparation for Stage 2. This also was a significant issue for the PrD (BE) as I wanted it to be regarded as a doctorate from start to finish, not a masters programme followed by a doctorate.

Assessment

The interview revealed that the reason for developing a two stage model revolved around the fact that it was felt by the DBA team that an 80,000 word standard PhD format would be too long for professional practice issues. When asked to clarify why, the director responded by saying that candidates would not be able to write such a long thesis on professional issues. On the other hand, he said that less than 60,000 words would open up the possibility of the DBA being compared

to the MPhil rather than the PhD. Thus, Stage 2 was set as a 60,000 word thesis, freeing up Stage 1 to do something else at 20,000 words. According to the director, the design team were working in isolation here, and did not consult outside the core team. He said that:

> *We new what we wanted to achieve and did not believe that the UK modular model would be of value.*

When asked to clarify what he meant by Stage 1 doing something else with 20,000 words he said that:

> *Three 7000 word papers could be achieved in a 16 month period and that these could be developed into joint publications with the candidates, increasing the output of the Business School*.

One of their aims had been to increase research output in the School; these joint papers would be one way of achieving this. Candidates could select topics for papers 1 and 2 in consultation with their academic advisor, but paper 3 had to be on research design as final preparation for Stage 2. The 20,000 word limit was not based on any academic grounds.

Another interesting point made by the director was that he felt that:

> *The assessment should not follow the punitive model of summative assessment with a fail being awarded if the work was not up to*

standard or it missed a deadline. Doctoral supervision is not like that; it is about regular submission and supportive feedback which should point out the good things completed and what needed to be done to bring the rest up to that good standard.

This was a view that he felt would be difficult to get across to the Academic Office (AO) but would be fully understood by RDC. Thus, in the director's view, the design of Stage 1 of the programme was concerned with supporting the candidates toward gaining a doctorate. The main aspect of the assessment for Stage 1 was its formative nature, the focus of their study would be on their own practice and no aspect of Stage 1 would be taught, modular or credit rated. The director mentioned this several times, indicating his strongly held views. The principles expressed in this last quote sound very interesting and encouraging in terms of his view on supervision. However, an implication here regarding the focus on the formative nature of the assessment was that it would almost be impossible to fail during Stage 1. The formal summative assessment occurred at the end of Stage 1 at the same time as the research proposal, when considered by the Professional Doctorate Progression Board (PDPB). This was an issue that required further thought and investigation and was achieved later by interviewing other staff members and candidates.

The Operation of the DBA/EdD in Practice

The next part of the interview was to discover from the director how he felt the DBA/EdD had operated in practice. The first aspect discussed was that of the workshops.

Workshops

By engaging with the theory of adult learning in Step 3 of the action research cycle I had concluded that workshops could provide a key support mechanism. Workshops were used on the DBA/EdD, so I wanted to learn from the director his views on their operation. When asked how the candidates were supported when they met as a group he said that the doctoral candidates were supported by regular workshops, emails and telephone contact. His use of the word 'candidates' rather than 'students' was noted at this point. He wanted to establish that they were not students on a taught programme but candidates on a research degree. He felt that the word 'candidate' conveyed that difference, in that they would be known as research candidates and not associated with other students. He said that the workshops were held every six weeks and generally had 70 per cent attendance rate. The cohort nature of the programme operated with both candidates and tutors presenting and working together as a large group. He wanted to convey that they were all on a journey together and it was more of an equal partnership between candidate and supervisor. The supervisor's role was a facilitator of development. One of the purposes of the workshops was to help candidates to make their case following on from interrogation from others. He remarked that:

Candidates were learning the language of defending their work in a scholarly way. They were learning to be comfortable researchers.

What also came across in the interview with the director was that the workshops were also satisfying the tutors' need to present their ideas to a discerning group of professionals, something that was lacking in their other work. He said that tutors would often remark that the programme was the only one in the School that facilitated open discussion with equals on doctoral issues. He added that the workshops worked in practice, as the core supervisory team, who had been part of the original validation team, was very committed to the success of the programme. Any new staff that did not present well in a workshop were 'removed from the programme'. They were simply not invited back to present if their session was problematic; he said that some staff presentations were too long and not interactive enough. When asked about the content and operation of the workshops, he replied:

We learnt in the first year that it was not about content, it was about process. There were indicative agendas set which could evolve and change to meet the needs of candidates.

This was an interesting comment that conveyed that the workshops had evolved from staff presenting content, to focus more on the doctoral processes. Clearly, a form of critical reflection which resulted in changes to the programme had taken place in the first year. The first delivery of the DBA was in 1997 and, according to the director:

> *From 1998 onwards the focus of the workshops was on developing doctorateness, presentations were limited in length to make them more challenging. The supervisory team became a cohort just as much as the candidates. There seemed to be a sharpening of ideas on professional practice research. Staff were learning as well as the candidates.*

He felt they were all growing together and he was clearly making changes to the programme in the light of experience. This learning and growing together seemed an important aspect to develop on the PrD (BE). The next issue addressed in the interview was that of assessment of Stage 1.

Assessment

Our next topic to explore in practice concerned the role of assessment. I had formed views on the important role of assessment from engaging with the literature and wanted to know how the assessment had worked in practice on these programmes. Gray had stressed the importance of the assessment by stating 'there is no escape from poor assessment' (2001:5). McWilliams *et al*. (2002) suggest that the assessment of Stage 1 of a programme needs to be closely integrated with the research in Stage 2. This assessment should display rigour and care in judging and decision-making, and thereby candidates become a reflective informed individual (Morely and Priest, 1998). Manathunga *et al.* (2004) indicate that assessment should aim to develop candidates' academic or theoretical knowledge in the context of exploring their professional practice.

The PrD (BE) was going to use the same format of three research papers as the DBA/EdD. The director revealed that the candidates could choose their own topics for papers 1 and 2, related to their research focus, but paper 3 was on research design. There were no strict submission dates for the Papers for Stage 1, other than they were all to be completed within 16 months. When asked about candidates coping and keeping on programme, he said there was drift. He felt that candidates had to make their own way through at their own rate. It was felt that failing of candidates who did not submit work to a predetermined timescale, was not appropriate for a doctorate. This was largely because of a commonly held belief that some candidates improve at slower rates than others. A useful phrase used here by a director was:

Although the programme is general, individual learning is not.

He argued that you must be flexible and allow for a variation in pace and standard. Action had been taken to improve and change the operation of the workshops earlier in year one, but no action was taken at a later date to improve the submission rates of the candidates who were falling behind.

The papers were supervised and marked by a single supervisor in the same way as PhD work is supervised. However, a second marker was used to ensure quality. In terms of managing the DBA/EdD the director said:

There was no formal management of the programme; we just worked well as a team. New staff could be mentored through the workshops.

Again, there was mentoring in the workshops but no specific action was taken with staff on marking, nor was there a mechanism for dealing with candidates who were not making progress; candidates could drift. For me, these were important issues that had to be addressed in the design and implementation of the PrD (BE)

Quality Assurance

The quality of the programme was assured by the Professional Doctorate Progression Board (PDPB) which met once a year and reported to the RDC. The director of the DBA/EdD held this board in high regard and commented:

When the PDPB was dissolved in 2003, the Faculty Degree Research Sub-committee (FRDSC) became involved in quality assurance and things started to go down hill after that. It was the beginning of the end of the programme.

The director had not wanted the AO to get involved and had used the RDC as the approval route and to set up the PDPB. He did not believe that the FRDSC, who reported to the AO, should be involved and according said:

The FRDSC and the AO did not understand what the professional doctorates were about.

He said that there was a lack of trust and respect from his team who felt they knew what they were doing and did not want to embrace change and interference from outside the group. 2003 did not see any new candidates joining the DBA and the EdD stopped taking students from 2005.

An interesting point here was that politically, from the conception of the DBA, there was a great deal of effort made to work with the RDC to solicit their support in securing the DBA and the EdD at validation and during their early operation. This strong relationship was not extended to new members of the RDC as membership changed, nor was it extended to the FRDSC. No real attempt appears to have been made to develop a relationship with the AO. This lack of support from outside the School, contributed to the problems of the DBA and the EdD. In addition, and most importantly of all, the DBA and EdD programmes did not now have support from the new dean of the Business School at the start of 2002. According to the director:

> *We had 84 candidates on the programme in 2002. The new dean imposed supervisors and limits set on the number of candidates per supervisor. The intake on the DBA was stopped and the EdD moved to the Faculty of Education, staff left and things fell apart.*

There were questions over whether the DBS/EdD team had enough supervisory support for the candidates and the dean therefore imposed staff on the programme who were was not welcomed by the existing team. The dean felt the

programme was operating outside the normal quality assurance procedures and imposed his will on subsequent events.

Clearly a number of things had gone wrong and the potential of these programmes was not fully realised. An important lesson learnt from this was that, when developing and operating the PrD (BE) as a new and unfamiliar learning opportunity for a new group of students, it would be important for its success that support and understanding from the department, the faculty, the RDC and the AO was crucial. This is something that has to be continually addressed.

The director had felt his original design team had a very good understanding of the educational process at doctoral level and blamed outside influences for its downfall. With the lack of support from the University, both inside and outside the School, it was difficult for the programmes to continue. Despite this, the director said:

> *The DBA and EdD were very exciting developments; I am still excited about them now, which is all the more reason to feel sad about the way they have developed.*

The director was however pleased that the built environment was now taking things further and offered to help run some of the workshops.

To gain further insights into the operation of the DBA/EdD in practice, I then interviewed a member of staff who had been appointed in 1999 by the director as

programme leader for Stage 1 of the programme. The appointment was in response to candidate numbers growing and some quality issues with the standard of work from the candidates in Stage 1.

Further Insights from a Programme Leader of Stage 1 of the DBA

The second section of this case study review as part of Step 3 of the action research cycle was to gain further insights into the operation of the DBA and EdD in practice, from the perspectives of the programme leader of Stage 1 of these programmes. He was interviewed following the interview with the director to gather a range of views in an attempt to triangulate the findings. This was an important step to take to understand the issues and potential pitfalls that were to be avoided at the launch of Stage 1 of the PrD (BE).

The programme leader for Stage 1 had been appointed in 1999 to manage and develop the experience of the candidates in this early part of their research development as the programme grew and the DBA and EdD were managed together. He believed that the focus of Stage 1 should be concerned with the development of the research skills candidates required for the research in Stage 2. Even though candidates were entering with a masters qualification, the programme leader had established, by examining their submissions, that many did not have the required research skills they would need for doctoral level study. The focus of Stage 1 was on continued professional development in a research context but he expressed concern that the assessment was not achieving what was intended. He said:

> *In the beginning* (1999 for him) *the papers were a bit vague; there was little guidance with no specific objectives or outcomes. The papers could be virtually on any topic. The candidates had difficulty understanding what was required. No one was really failing the papers; there were no criteria specified. It did not appear to me that Stage 1 was preparing candidates for the research in Stage 2. I did not feel that candidates were operating at doctoral level by the end of Stage 1.*

These insights raise three important issues of value to the development of the PrD (BE), and are now discussed. Firstly, the programme leader clearly felt that the key to success was in the assessment and candidates needed more guidance on what was required than they were currently receiving. Candidates could select their topics for papers 1 and 2 and no specific guidance on them was given. He said that on a doctoral programme, whilst candidates need the freedom to explore their own specific practice, they also require guidance on what research skills they should demonstrate.

As a result of the intervention by the programme leader, changes were made on the DBA and EdD by the director so that the papers could help inform the candidates on the skills they should develop. For example, he stressed the importance of identifying questions, underpinning their case from theory and practice, and there should be a focus on good academic writing.

Secondly, he was also concerned about how the papers could inform the candidates about progress and that Stage 1 should be a preparation for Stage 2. He argued that:

> *The papers needed to be both formative with feedback at the time of submission and summative when formally submitted to the Board for approval. In addition, I encouraged draft papers to be submitted.*

This was noted for the PrD (BE).

The third point of interest to the development of Stage 1 of the PrD (BE) was regarding his view that the candidates were not operating at doctoral level by the end of Stage 1. This raises the question of at what point in a programme of study should candidates be operating at doctoral level, and whether this should or could be achieved by the end of Stage 1? Should they be operating at doctorate level as they entered Stage 2 or should they be at a level somewhere between masters and doctorate level? These questions are important to answer in this research as they relate to concerns raised in the introduction of this thesis regarding the appropriateness of the modular masters Stage 1 followed by the doctorate level Stage 2. These matters will be further examined in the next chapter on impact of the research.

The next part of the interview focused on the role of workshops on the DBA and EdD programmes. The programme leader was very positive about their role and said:

> *Whilst I was involved with Stage 1 I found that the candidates liked the real research culture and research community that we were developing at Danbury. I believe we had a very professional approach.*

He felt that the workshops were well managed and their role was more about developing the community and the research culture, rather than delivering any specific training content. He believed that Stage 1 should be concerned with shaping the research community, not teaching content. This was something that the whole team had learnt in the first year of delivery. He confirmed the director's view that the workshops should focus on process.

He went on to say that there were some overall management problems with the DBA and EdD which meant that some candidates were getting a better service than others, depending on their supervisor. There was no supervision of the supervisors.

Also, during our discussions, certain tensions were revealed that partly explained why the DBA and EdD were struggling during the very time I was developing the PrD (BE) programme. The programme leader said:

During my time there, as the programme developed, there was a growing tension between the team on the one hand and the Business School and the University on the other. There seemed to be a lack of support for what we were doing. There were registration problems centrally (no one seemed to know how many were registered) and there were political issues which effectively broke up the programme. There were problems on all sides.

This confirms what the director had said about the relationship between his team and other parts of the University. When asked what he meant by 'problems on all sides', he confirmed there was a lack of understanding in the Business School and the University about what they were trying to achieve with this new doctorate, but that there were local management issues in terms of candidate progression not being addressed by the team on the DBA and EdD. He believed that to concept of the two-stage programme was excellent but that it did not suit all candidates; they needed to be very motivated and determined to succeed. Those that were struggling to progress were not particularly good at self-management and required extra support from supervisors.

When asked about further advice he could give me he said:

I believe a successful programme requires self-managed and motivated candidates, strong leadership and support from the Business School. The principles of the programme are still good ones. The qualities needed for success are:

- *To be passionate*
- *Drive and motivation*
- *Time commitments*

These are needed from both candidates and supervisors.

In terms of my action research cycle, consulting with the director and the programme leader provided insight into how I should plan and design both the assessment and workshops for Stage 1 of the PrD (BE). Firstly, the comments from the director gave me confidence in the approach I was adopting for the workshop and the programme leader helped design the requirements of the assessment. His comments, in particular, were timely as we were having difficulty understanding the role and nature of the papers set for Stage 1 of the PrD (BE) and on how much guidance was required. His point concerning the role of the workshops confirmed the director's view of their importance in terms of process, community and culture. They both felt that they had developed a culture of research between staff and candidates which they believed was not present in other parts of the Business School.

An interesting question which emerged from the discussions was at what point candidates could and should be working at doctoral level. The programme leader's view was that candidates cannot start too early in addressing doctoral issues. The director of the DBA/EdD also felt that a masters level Stage 1 was not appropriate.

Another issue that needs to be considered in the development of a new and unfamiliar programme, is the importance of gaining and maintaining the support of colleagues at all levels in the University. Their support is vital to continued success. In addition, it would also appear from the interview data collected that a programme requires careful local management, responding to issues as they arise, in order to ensure its success.

As part of the triangulation of the evidence, interviews were arranged with candidates who had been registered on the DBA and EdD during 1997 to 2003. Their views on the operation of these programmes are discussed in the next section to provide further insights on the issues previously explored.

Further Insights from Interviews with Candidates on the DBA and EdD

This next series of interviews were undertaken to ascertain views from candidates who had experienced the DBA and EdD during 1997 and 2003. This action was in order to support the triangulation of the data captured from interviewing the director and the programme leader. It was to add further evidence which would inform the early development of the PrD (BE) and my action research programme. Five candidates were interviewed in total, three who had successfully completed the degree and two who had withdrawn from the programme. The views of two people who successfully completed and one who withdrew are explored here.

Candidate 1 (Started the DBA in 1998)

This candidate had completed an MBA at Anglia Ruskin University and had particularly enjoyed the research element of her studies and wanted to develop this aspect further. She had been attracted by the concept of the DBA in that she understood it was not going to be a modular taught programme and she would be developing what she referred to as 'soft skills'. By this she meant 'communication and negotiation skills compared to the hard technical discipline-related engineering skills' she possessed. Her career was moving towards management of engineering staff and she felt that a professional doctorate would help advance her career. In terms of the experience on the programme, she said that she liked some of the workshops which gave insights, tips and practical advice, although did not really engage with the other candidates in the cohort much.

> *I hated when I turned up to a workshop and other candidates had done more than I had and did not like having to sit and listen to what everybody else had done*.

This was a reminder that active participation in workshops did not come easily to all and that for some, extra support may be required. This candidate expressed the view that the workshops needed more structure with some input from staff on say, research methods, and an opportunity to have a tutorial with her supervisor. In other words, for her, teaching and supervision was a priority. Anything achieved had to be instigated by her; for example, all deadlines were set by her. She considered that the four workshops per year did not offer enough support and that there was a need to meet about once a month with her supervisor. She did not go to all the workshops and did so less and less as time went on. There was no need to go to them at all in Stage 2 when the sessions started to be repeated for new candidates. According to the candidate, the assessment guidance was very 'woolly' and that '*you could write on virtually anything in the papers for Stage 1'*, although she understood that they were there to support thesis developments. This confirmed what the programme leader had concluded about the vagueness of the papers.

In terms of feedback this candidate said:

> *I did not get feedback on the papers until they were formally submitted with the research proposal for Stage 2* (This was a two year period). *There were no deadlines for the papers. A busy*

engineer needs time limits and more structure. I was not supervised in Stage 1 and did not know who marked the papers.

Clearly, for this candidate there was a difference between what was intended by the programme and what she received. This evidence supports the views expressed by the Stage 1 programme leader who also felt when he joined the programme in 1999 that Stage 1 needed greater support, structure and organisation. The programme needed greater management to identify and deal with these types of problems and that the assessment required more guidance. These were very useful points to note for the PrD (BE). Despite her problems in Stage 1, she did progress to Stage 2.

In Stage 2, the candidate was not sure of the timeframe and drifted along until she was surprised that she had run out of time and had to submit her thesis at the last minute. At Anglia Ruskin, there is an overall time limit of six years. This maximum registration period should have been made clear to her. She said she was unprepared for the viva, no mock viva was undertaken and she did not know what to expect. She failed the viva and received one page of feedback which she felt was very vague. Straight after the viva she felt alone. This clearly was not a good experience for this candidate. A new supervisor was appointed and she completed her doctorate within the next year.

Despite this troubled experience, the candidate continued to be positive and would still advocate undertaking a professional doctorate by concluding:

The whole experience has helped me become a good operations director at work. I now question everything. It has taught me to like myself. It gives you a good platform and respect from other people in the organisation. It opens up a lot of doors. More money and better opportunities. The title 'Dr' as a woman in a man's environment helps a lot. The output also adds value to my company'.

This very strong desire to complete the doctorate was the motivating force when it came to successful completion - an important factor to note.

Candidate 2 (Started the EdD in 1999)

This candidate was inspired to study further after his masters course, which he said had increased his appetite for research. He first enrolled on a PhD at another university but was disappointed by the supervision and support he received. He remarked:

> *I found I was being asked to do what he* (the supervisor) *wanted to research, not what I wanted.*

This is an important issue for professional doctorates; the research must be 'owned' by the candidate and focused on their practice. It should not be concerned with meeting the research needs of supervisors or that of the host university.

He joined the EdD at Anglia Ruskin University as he understood it was a programme that would be more relevant to his needs, starting from his practice and drawing relevant theory.

He was also attracted by the notion that Stage 1 was not going to be taught; and he had looked forward to engaging in workshops which he felt would provide an opportunity for both staff and candidates to reflect on what they were doing:

> *My expectations of Stage 1 were that candidates would criticise each other's work.*

However, he was disappointed again as this did not happen as he would have liked; he expected more interaction. He said that some of the workshops were poorly structured, with tutors *'talking at the candidates'* with little opportunity to discuss issues. When commenting further on the experience he claimed:

> *The lack of structure on this programme meant that there was a loss of direction and a high drop-out rate. The Stage 1 assessment was open ended with no outcomes, objectives or assessment criteria specified. That was kind of spooky; you didn't quite know what to expect. Is it doctoral level; is it up to scratch?*

This was an issue worthy of consideration for the PrD (BE) in terms of linking the workshops to the requirements of the assessment. The balance between providing a suitable guiding structure and the freedom for the candidates to explore their own research may be difficult.

This candidate also emphasised that one of the most disappointing aspects of the programme was the intermittent feedback on his work from most of the team. For a while, this candidate was supervised by the new programme leader for Stage 1 who he regarded as very good:

> *His feedback was oral but challenging. He would document the supervisory sessions, state where they were and where they had to go to next as professional colleagues…unfortunately he left so the*

feedback stopped. I had three supervisors in Stage 1, not because they worked together, I just had a new supervisor as each one left.

Note this candidate referred to the programme leader's use of the word 'we' rather than 'you' when in discussion and the use of the term 'professional colleagues'. The candidate felt challenged yet supported and the relationship was more of an equal partnership than supervisor to student. This partnership was what the director had advocated in his interview. There were also issues to note here about the management of the candidate's experience with new supervisors.

There were deadlines for the papers set for the submission of work and this candidate felt that it was important and particularly helpful to submit on time, but there was no penalty if candidates did not. Those that missed the deadlines lost contact with the peer group. It appears that there was little contact between year cohorts and he was not given the opportunity to share experiences with others. He said that the programme of workshops was published in advance but was run as a series of disjointed events. Some of the Stage 2 events were cancelled. He felt there was a lack of leadership and poor management. He wanted to be more involved:

Management should involve students. I felt pretty isolated and lonely. Don't get me wrong, I am happy with self-management, it's essential, but I was looking for a relationship between professional practitioners who totally respect each other. Doctoral level study

needs tight professional programme directorship. It needs clarity both from the administration and the academic side.

The candidate often referred back to the fact that he felt he was not getting the support from the cohort, workshops and supervision that he desired. He mentioned a lack of feedback on what he was doing on several occasions. This candidate was studying at a time when the programme was disintegrating and there was a lack of leadership, staff leaving, and a lack of understanding and support generally from the University. For the PrD (BE) it appeared that there was a need to provide sufficient guidance yet the freedom to explore the issues in a supportive environment.

In accordance with the views expressed in the previous interview, despite his negative comments and the problems that were encountered, this self-motivated candidate believed Stage 1 of the programme was effective. It did bring about change:

It forced me to think about my own professional practice, colleagues I worked with and my students and their employers. All have slightly differing expectations. Stage 1 provided the time to firm up plans for the Stage 2 research. I was pretty comfortable by the end of Stage 1 that I was on my way.

The candidate was able to take stock at the end of Stage 1 and he believed he could operate at doctoral level. He managed to keep going through Stage 2 and completed the EdD in 2006.

There were many aspects of the doctorate that he enjoyed and found useful. He liked the strong link between the workplace and the doctorate, examining his own practice by action research, the authentication of his findings and the transferability of these finding to other situations. The EdD provided him with the opportunity to re-examine and question his strongly held views on education. He had enjoyed the experience of doing the doctorate, which had improved his practice and had given him new approaches to explore. He felt that the theoretical engagement had strengthened his teaching.

Three other candidates were interviewed, one successful completion and two who withdrew from the programme. These candidates had similar experiences and confirmed the views of the first two candidates reported here and will not be accounted further. However, there was one notable exception worthy of further discussion.

The fifth candidate interviewed withdrew from the EdD programme before completing Stage 1. Her experience was slightly different from what the other interviewees had reported. When asked about her experience of the programme and the workshops she reported similar views to the others in terms of structure and interaction. However, her account of the assessment was totally different. She had a supervisor in Stage 1 who provided prompt detailed feedback on her

work. This feedback focused on what was wrong with her submission and how it was not at doctoral standard. She showed me some of her work with the detailed comments from the tutor on the script. There were comments and corrections almost on a line-by-line basis, all of which were rather negative. I did not see any encouraging comments. She said he sent her paper 1 back five times with comments. This continued with paper 2 and she came to the conclusion that she was not making any progress. She reported that the tutor explained his approach by saying:

> *You have to be cruel to be kind at this stage. There is no point in passing something that is not up to doctoral standard. We would just be creating and storing up problems for Stage 2.*

She said:

> *I just lost heart. I felt I was not getting anywhere and there was no point in continuing.*

The candidate withdrew after 16 months with little or no progress made.

This interview highlighted a number of points to consider. It again raised the issue concerning the point at which candidates should be operating at doctoral level, but it also raised concerns on how feedback should be given to a candidate who is struggling. Prompt feedback is important but if it is too negative it can discourage

the candidate. There is also the question of how to ensure that all candidates on a programme can receive a similar quality of service, support and encouragement.

Conceptualising the Professional Doctorate for the Built Environment

We now turn to the conceptualisation of the PrD (BE) itself, which resulted from consulting professional colleagues. The details of the built environment doctoral programme, which was designed during the academic year 2003/2004, can be found by an examination of the validation documentation (January, 2003). The validation event was conducted by the University's Research Degree Committee (RDC) in place of the Academic Office (AO) which at the time was the normal validating body for all new programmes. This was because the PrD (BE) was to be regarded as a degree by research rather than a taught programme. The significance of this to the programme's conception was that it was not subject to the requirements of the taught modular schemes in terms of pathway specification forms, module definition, outcomes, credit rating, specific disciplinary knowledge, set texts and teaching methods; all of which were deemed unhelpful to the design of a research degree. It was the view of the validation team that the structure for taught programmes was inappropriate. This view arose from consulting the director of the DBA in the University at an early stage of the development of the PrD (BE) who remarked at the time that 'the AO would be asking the wrong questions'. He suggested that his validated DBA should act as a blueprint for all future professional doctorate validations.

Instead of working with the AO then, the programme had to satisfy the RDC who were guided by the requirements of a doctoral degree, as defined by the UK Quality Assurance Agency four Descriptors (QAA, 2001) and by their experience in all PhD matters. A diagram of the resulting overall approved programme is

illustrated in Figure 6.2. This simple conceptual diagram illustrates the structure designed to meet the four QAA descriptors, and formed the basis for the start of the research to examine how it was to be delivered.

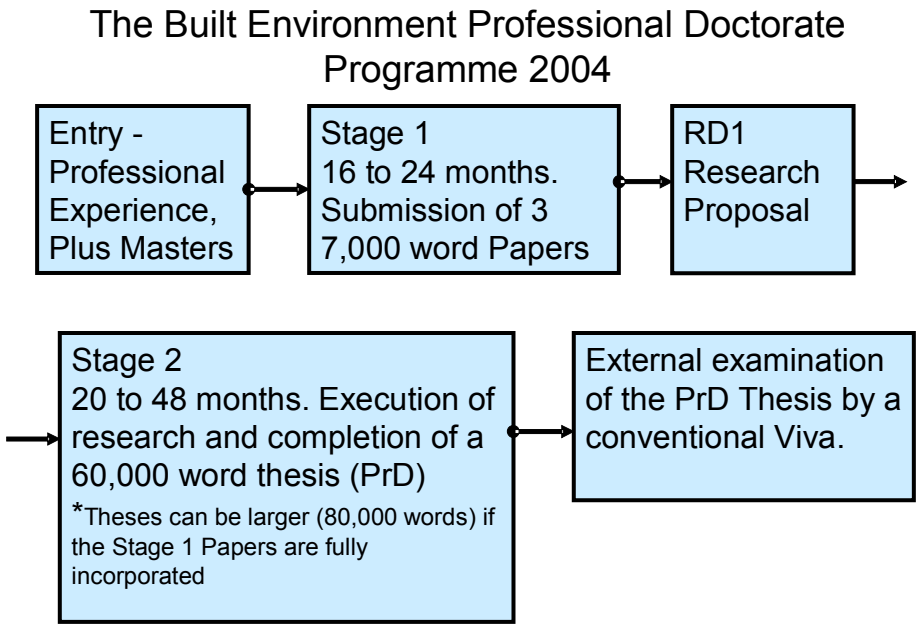

Figure 6.2 – Stages of the PrD (BE) as conceived in 2004

The diagram shows candidates entering with a masters degree and significant experience of their particular professional discipline. The programme is divided into a two-stage cohort approach with assessment of Stage 1 being by three 7000 word interrelated research papers. Each paper is assessed and candidates receive feedback on each one before progressing to the next assessment. An external moderator assures the quality of these research papers and reports to the faculty annually on the progress of the candidates. On successful completion of Stage 1, candidates then complete a three-page research proposal which is separate from Stage 1. It is the research proposal that provides the quality

assured progression point to Stage 2. This is a slight but significant change from the design of the DBA/EdD, which considered the three research papers and research proposal together at the end of Stage 1. The position of the research proposal is also significantly different from its normal position at the start of a PhD. This research proposal also provided an independent (faculty) quality check on the standards achieved. Stage 1 and the research proposal are designed to prepare candidates for the rigours of a conventional research project in Stage 2, which would meet the 2001 QAA requirements. This stage is examined either by a 60,000 word thesis and viva, or is developed together with the output of Stage 1 into one 80,000 word thesis so that all are examined at doctoral level in the final viva. It was not clear at the start of the programme in 2004 which might be the best option. The word limits are maximums.

Both stages were to be supported by weekend workshops to help the candidates develop the research approaches and skills appropriate to solution-oriented research and to the improvement of professional practice. The validation document did not refer to any online support. An early team decision in 2004 was to also employ a virtual learning environment (WebCT) to provide additional support.

The PrD (BE) was created for mid-career and more senior professionals who wished to study at doctoral level and who worked in organisations that potentially saw the benefits that might accrue from this form of educational experience. It was intended to attract applicants who were unlikely to want to undertake the conventional PhD or who had missed the opportunity earlier in their career. The

programme was to encourage a focus on professional practice from the start of the doctorate, set within the context of a structured learning programme. It derived its nature from the adult learning and WBL theories explored in Chapter 3 and 4. It was to have potential value to employers, with possible wider implications for professional practice in the discipline. As Armsby and Costley (2009) advocate, candidates would be working with real-time projects directly related to their place of work or practice and the high level learning that results would inform their future research and development needs. According to Costley, Elliott and Gibbs (2010), professional practice, rather than specific disciplinary knowledge, should become the content and context that shapes the nature of the experience of a professional doctorate, and this, in turn, shapes and provides new insights into the workplace.

It was hoped that WebCT would provide additional means of communication and mutual peer support, submission of candidate work electronically, tutor feedback, and access to a wide range of electronic resources, including the Anglia Ruskin Digital library. In addition, WebCT would be used to monitor and accurately record all progress, including candidates' submissions and academic advisers' (supervisors') feedback as well as providing good access to the candidates' work for the external moderator of Stage 1.

The candidates who required a masters level qualification to enter the programme would work together as a peer-supporting cohort, both at the workshops and online, exploring professional practice issues, theoretical underpinning and research design, using a variety of active learning formats, with support from their supervisors. Working as a small cohort, candidates would tackle such problems

and issues collectively by listening to the advice of the group and learning from their attempts to change things in an action learning environment (Gower, 2003). Candidates would present their case and identify problems to the group of non-specialist fellow candidates and staff, who would ask a series of simple but challenging questions. In this way, the candidates might learn to defend their case in a robust manner as a result of the challenging interrogation of the group.

This form of peer support was originally perceived as an essential component of the adult learning which was to take place in a Stage 1. Stage 1 would prepare candidates for Stage 2. Aspects of the QAA descriptors would be explored as a sound basis for the research in Stage 2. The nature of Stage 1 would enable candidates to examine and reflect on their practice, engage with a body of related knowledge to underpin their research, and finally design a research project capable of generating new insights into practice and theory in Stage 2. This first stage would be assessed by three research papers which focused, in sequence, on professional practice, theory, and research design. Stage 1 would be highly structured, with web support, staged workshops and submission dates designed to provide the maximum support, meet the needs of the candidates and maximise the likelihood of completion within the allotted timeframe. In 2004, the University offered some central training workshops for candidates in terms of an introduction to research at the University, presenting at conferences, writing for the thesis and preparing for the viva. This was compulsory for all PhD candidates but not for the PrD candidates. The argument presented at validation was that these skills would be explored and developed in the PrD workshops. Additional support would also

be available from web-based material. Accordingly, the candidates would be asked to take responsibility for the management of their own programme.

The professional doctorate in the built environment was to serve the needs of professionals in all fields associated with the built environment who may wish to undertake doctoral level study. Accordingly, the PrD (BE) validation documents specified the following characteristics. It would advance knowledge, theory and practice through the generation of original research and provide apprenticeship in appropriate research methodologies that enable the development of those research skills pertinent to construction practice and education. It was designed to enable candidates to display a high level of academic rigour and provide them with the capability to produce work that is acceptable for publication in refereed journals. It was assumed that candidates were to take increasing responsibility for strategic planning, decision-making and leadership, and to fulfil a developmental role in their respective organisations and improve the quality of their services as practitioners and leaders. Their understanding of educational, management and professional practice in the built environment profession would be expanded. The programme was to foster and develop inter-professional working and learning through a cohort promotion of research in practice. Candidates would evaluate the impact of interventions on professional practice by working in partnership with other professionals. Finally, the PrD (BE) was to have an impact for the candidate and their employer, increasing their esteem and that of their company (Submission for Approval Document PrD [BE, 2003]).

This chapter has illustrated how the development of the built environment professional doctorate has been informed by a review of the validation documentation and the handbook for the joint DBA and EdD. It has also drawn on the professional experience of colleagues within the University from past tutors and candidates for its design and operation in the early years of running the programme. It has provided guidance of the design and, more importantly on aspects of operation that are likely to lead to a successful programme.

The evidence suggested that the basic concepts of the staged professional doctorate were sound, but the operation of the programme needed careful consideration. In particular, the role of the workshops and the formal assessment in Stage 1 needs further thought and careful design. The DBA and EdD candidates interviewed had enjoyed the freedom to research their particular topic, be self-directed and self-managed, but did express strong views on the need for individual and collective structured support. Assessment with good, prompt, supportive and formative feedback proved to be important to them. Despite their particular difficulties, a key factor in their success was their strong motivation to complete.

Chapter 7 - Data Presentation: Operation of the Assessment Strategy

Introduction

This next chapter explores the operation of the PrD (BE) programme as problems and issues emerged related to the assessment of candidates. They were researched and explored through the action research cycles described in Chapter 5. They are presented here, through a framework that considers the nature of the problem as it was defined, the actions taken, and the key points of learning gained from the specific interventions. The interventions explored, involved both the candidates and staff on the programme in various decision-making processes. Data was collected by documenting and recording each action research cycle in response to specific problems as they occurred. Reflections, views and opinions were gathered from staff, and candidates via WebCT, workshop discussions and one-to-one interviews.

Getting Started

The first intake of candidates was supported by the three-pronged approach of assessment, workshops and WebCT. Such an approach provided a common structure to support and enhance learning and drew on the adult learning theories discussed earlier. These three elements were further supported through the provision of a supervisory team (five supervisors, known as academic advisors, were allocated to the programme but not to individual students at the beginning of Stage 1). The programme was organised in this way because of the belief that candidates required a range

of support mechanisms to be available at Stage 1. The assessment set the standards required for successful completion; the workshops provided face-to-face active engagement; and WebCT provided the information candidates required and a means of communication. This approach was designed to place the candidates in charge of their own learning (Knowles, 1990; Billington, 1998). That is, candidates were to use the assessment to shape their research, WebCT was continuously available to use at a time that suited their learning and work patterns, and the workshops were largely content free with a great deal of time devoted to candidate presentations and workshop activities related to candidate needs.

The programme started with five candidates entering Stage 1. Three of these candidates have now graduated, while one left the programme during Stage 1 having failed to make sufficient progress. It should be noted however, that this candidate was provided with extra one-to-one support but was unable to continue due to pressure at work and other personal circumstances. Unfortunately, the fifth candidate tragically died. During this early stage of the development of the programme, no new candidates were admitted to Stage 1. This was a deliberate strategy in an attempt to ensure that the programme was successfully launched and the first cohort of candidates would complete Stage 1 before new applicants were accepted. In 2006, a further four candidates were enrolled and from 2009 to the present day, numbers have slowly increased to the current number of 21.

During the initial phase of development, a number of concerns arose for consideration. Each was explored using an action research approach. The concerns and the interventions used to explore and potentially resolve assessment issues are discussed in detail below.

Support Mechanisms for Assessment

The first aspect of researching the operation of the PrD (BE) was to ensure that the assessment of Stage 1 met the learning needs of the candidates. The original concept, derived from consulting professional colleagues on the DBA and EdD (see Chapter 6), was that the formal assessment of three research papers would shape the requirements for Stage 1 which, in turn, would prepare candidates for Stage 2. Paper 1 was to be the starting point for the planning of a research project that would ultimately focus on practice. The initial problem that arose was concerned with the construction of the assessment brief for paper 1. Feedback from students and discussions between staff were utilised to determine that the original briefing document was inadequate in terms of the guidance offered. In formulating the original brief, it was hoped that a document that would not restrict the potential focus of any future research project would be produced. As a consequence therefore, its wording was deliberately very brief to enable candidates to mould it to their own specific requirements. The original wording of the document provided is outlined below:

The brief for paper 1

> *This will concern your role in your own practice, the professional and organisational context and will focus upon an initial consideration of a research area with some provisional research questions. To support your research focus, you will engage with theoretical and empirical studies germane to your professional context. (7000 words).*

No further advice was written into the brief. The intention was that the candidates' research questions should emerge from an examination of their practice and that they were required to undertake a limited initial exploration of relevant theoretical and research-focused literature. As part of the support for candidates, they were asked in one of the early workshops to present what they intended to explore in paper 1. It became apparent from their PowerPoint presentations, candidate questions on WebCT and discussions in the workshops, that they did not know what was expected of them. In addition, early drafts of paper 1, submitted on WebCT for confidential supervisory comment, were used to explore and clarify staff perceptions of the emerging problem. It would be fair to say that it had been some time since these mature professionals had written an assessed piece of work and they were at a loss as to what was required. A candidate summed up the difficulties thus:

> *I have read the brief many times but I still do not know what I should be writing about. Do I write about my practice* [meaning his company] *or my research topic? How do I write the research*

questions, and what theory and how much theory do I need to put in. I don't know what you are looking for?

Further explanation was clearly required on what was meant by the requirements of examining 'my practice', developing emerging 'research questions' and using specific elements of theory to underpin their research direction. This in fact set the early agenda for the weekend workshops which is discussed later in Chapter 8. The information offered by the candidates helped to clarify, from an action research perspective, the problems and dilemmas facing the group and subsequent conversations served to reinforce this perspective.

As a consequence of early misunderstandings, the first draft papers were disappointing. With hindsight, it is not surprising that the candidates tended towards producing a descriptive account of their organisation, their place in it, and their topic. They had interpreted the phrase 'your own practice' to mean their own company and in doing so the work produced focused too much on describing the nature of their employment rather than their research focus. The brief did not make it clear that the main aim of paper 1 was to make the case for the research question by reflecting on and examining their professional activities. In addition, candidates had difficulty engaging with theory to underpin their research, with the theory offering little more than a descriptive account of the topic. There was little critical engagement with the concepts and ideas underpinning specific theoretical perspectives. There was a lack of reflection on professional practice to identify issues to be resolved. It

became apparent that the brief was not fit for purpose and a range of interventions were required to resolve the problem.

Improving the Brief

A number of specific interventions took place over time utilising the action research approach described in Chapter 5. The first of which was immediate remedial action to support the first cohort.

At the next available workshop the team held an open discussion with the candidates and staff on what the problems were and what needed clarifying. Thus, the first action was to expand on the brief initially provided through: additional guidance in the workshop, PowerPoint presentations, and written text in WebCT as formative information. Formative information is defined here as information given prior to submission, rather than formative feedback after submission. These changes to the assessment brief, together with the use of the workshops and WebCT, helped to clarify the requirements for the assessment. The formative information was subsequently added to the brief for new candidates. Following submission of the initial assignments for the programme the action research approach continued with a detailed analysis of student work. Here again, the opportunity was taken to try and identify any commonly shared problems and issues in terms of content, presentation, use of literature, reference style and the ability of the candidates to reflect. On the basis of the data gathered, further amendments were made to the brief. Some of this formative information was given as expected learning outcomes, as illustrated below for paper 1.

The interventions undertaken at this point were influential in reshaping the learning outcomes. The new learning outcomes are outlined below.

This first paper is designed to enable you to:

1. *Critically reflect on your current professional activity within the context of your intended research topic, your organisation, your profession and its role in the production of the built environment. (The word activity was stressed rather than practice to help clarify what was required.)*

2. *Identify an initial idea, a research focus, and the main research question, all of which should emerge from this reflection on your practice. (This was added to help ensure that that a research question should be derived from their professional practice.)*

3. *Using your own practice, explore aspects of case study material as suitable vehicles for research.*

4. *Systematically formulate a preliminary set of possible sub-questions derived from your initial idea, research focus or the lack in current practice, which could guide your further research. (This was written in such a way to illustrate that the question could guide the work but they could also change as the research developed.)*

5. *Explore the opportunities and limits of your initial ideas against the backdrop of a very limited range of relevant theoretical and/or empirical studies (practice-theory engagement). (Candidates were encouraged to select a few key ideas from literature that might underpin their work.)*

6. *Write in an appropriate professional/academic style relevant to your particular form of investigation. (This was still quite a bland outcome which needed further clarification for each candidate. It was agreed to adopt the Harvard style of referencing.)*

Candidates have reported that adding the expected outcomes for each paper helped direct their work and provided a means of checking that they had addressed all the issues. These outcomes were developed by the programme team; this was achieved by first asking them to reflect on what had occurred and then to bring their ideas to a team meeting. There was general agreement that the assignments were key to the development of the candidates skills and that the brief for paper 1 had to be re-constructed, but there was argument over how this should be achieved without being too prescriptive. The agreed set of outcomes was the result of much discussion with some members of the team not wanting to give too much of a steer to candidates and certainly not wanting to use outcomes. They argued that outcomes were for taught programmes, not doctoral research. The following argument from one member is representative of the case made:

How can you specify outcomes in advance for a research project when you can't possible know in advance what will be produced? There is no point is researching something when you know the outcomes. They are not appropriate for doctoral work.

To resolve the impasse, I asked the team to specify what they were looking for in paper 1. I then later turned the team's comments into outcomes for clarification for the candidates as listed above. These were then given to the team for final comment. With one exception the team believed that the extra formative information would be helpful. The first three outcomes on critical reflection, identifying issues and examining practice, were regarded by the team as the most important for paper 1. In particular it was agreed that critical reflection was a key aspect that needed improving from the examination of the candidates' early work. The team then agreed that this formative information could be used as the criteria for future marking and providing formative feedback on their work. These outcomes were therefore changed into 'assessment criteria' and this satisfied all staff. This subtle change emphasised that they were to be used to judge the standard of the candidates' work rather than outcomes that must be achieved in all cases. This was to provide a more flexible approach to assessing doctoral research output. Both candidates and staff reacted positively to the changes. For example, a response from a candidate was:

I use the list of outcomes as a useful check that I have met all the requirements of the paper.

And from a staff member;

The brief for paper 1 is much improved and we are getting better submissions from students.

A similar action research approach was applied to the development of paper 2 on theory, and paper 3 on research design, as the programme developed over time. Improvements and adjustments have been made in this way as the first and subsequent candidates tackled each of the research papers. As before, the key actions were instigated from questions on WebCT and in the workshop discussions and activities. However, having learnt from the experience of paper 1, the interventions utilised were more concerned with 'fine tuning' rather than a radical restructuring of guidance. The full details of the current assignment are illustrated in the appendices of the Candidate Handbook, listed as Appendix IV in this thesis together with a structured feedback form. This includes a self-assessment section which provides an additional opportunity for the candidates to reflect on how well they are performing in relation to each assignment.

Formative Feedback

The second major issue that needed to be addressed was concerned with the range of opportunities available to candidates to receive formative feedback

on their work. Discussions with candidates revealed that some of them were anxious to receive the kind of formative feedback from which they could ascertain how well they were doing and how their work might be improved. Following on from the discussions, and as part of the action research approach, a specific intervention was introduced. The intervention involved allowing candidates to submit draft work on WebCT using its 'dropbox' option. Candidates could submit drafts of their work online from their office or home and receive prompt feedback and advice from staff. Time was allowed for the returning of comments so that the formative feedback could be used to improve work before final submission. The draft submissions also helped candidates to keep on track within their intended timescale. Draft submissions are requested no later than three months, with the final submission three months later. A few candidates, who were struggling with particular issues or problems, were given the opportunity to submit extra draft submissions.

This facility was subsequently extended with additional formative submission points being added at critical points in the assessment writing process. For example, one candidate was having difficulty constructing arguments that connected theory and practice. In particular, he was having difficulty with understanding the difference between inductive and deductive reasoning. An additional dropbox submission was created called 'Developing the Arguments from Practice, Theory'. Illustrations of these exercises are shown in the appendices of the Candidate Handbook, in Appendix IV. This helped the candidate and was subsequently made available to all. These formative

opportunities continued to benefit from further action research interventions, with extra options for poster presentations and the development of ideas being added between the formal assignments. The dropbox strategy has grown from small beginnings in Stage 1 to the current list of 20 items that now includes Stage 2 submissions. Candidates can submit and receive feedback on these as required. The full WebCT dropbox list of current formative and summative assessment is illustrated in the Candidate Handbook, Appendix III.

Building Confidence

A key problem that emerged for some candidates at Stage 1 was concerned directly with their lack of confidence to be involved in work at doctoral level. The nature of the problem was discovered through both individual and group discussions and online activities. This problem arose from conversations with subsequent first year candidates who were reluctant to submit their first piece of assessed work. This is illustrated by two of their comments:

> *I have not submitted my work yet as I really don't think I can write at doctoral level. I don't understand what you mean by critically reflect.*

> *I think my work is just not good enough yet. How do I judge whether it is doctoral standard?*

Even with the more detailed brief and details of the assessment criteria documented, the work was so different to what they were familiar with in their work context, they were unsure of the standard required.

As a result, an intervention to improve the quality of the assignments and promote future candidate confidence was introduced. This involved posting examples of candidates' work from the first cohort (formal assessed papers and Powerpoints) on WebCT to illustrate how they had responded to and tackled the assignment briefs. The work was made available in this way for the convenience of the next group of candidates coming through, to put them in control of their own learning and to help them make judgements concerning the standard of their own work. The reaction to this was very positive. One candidate wrote on WebCT:

> *I have had to change my writing style from accepted industry expert format to academic paper writing with much patience and support from my supervisors. Having access to previous candidates work through WebCT has been invaluable along with the numerous presentations that are available to view when I have time available, and not at set times.*

WebCT enables this to be achieved without printing or sending text by email to individuals; the work was permanently available online for all to access at a time that suited them. There are some ethical issues worthy of comment here. Permission to use selected candidates' past work in this manner was

secured before it was loaded onto the VLE to ensure they felt comfortable about fellow colleagues examining their work. Asking to use their work had an added positive effect of increasing their confidence. This provision was also possible as each past candidates' research project was specific to their particular problem and practice, so there could be no question of any plagiarism taking place. The examples posted illustrated the process nature of the assignment in terms for example of style used, how they developed arguments from both theory and practice, the evolution of a question - the particular subject matter was of little consequence to the reader. These examples of past work were a way of providing additional advice and gave new candidates increasing confidence about the standards expected.

Understanding the Purpose and Direction Assessment

As each candidate successfully completed Stage 1, they were routinely asked to reflect on their whole experience to date. This was done for two reasons: for the benefit of the candidates in that it helped them to examine what they have achieved before they embarked on Stage 2; and from an action research perspective, it allowed reflection on the individual interventions that had been employed to improve the programme. For example, when the first cohort of candidates completed Stage 1, they were asked to reflect on their experience and think about what advice they could give to both staff and future candidates. One common thread from this action was that they had not understood the purpose of Stage 1 until they had completed it. A candidate reflecting on Stage 1 said:

*……I think looking back what you have is right, but at the time I was not sure what the three papers were leading to, we didn't know where we were going, you did, but we didn't. Consider helping new candidates to see the whole picture and the end goal of the RD1 (*RD1 is the research proposal) *at the end of Stage 1 and how this will lead and be useful for Stage 2.*

I have liked the involvement in the development of the course. You have created a feeling of 'we are all learning together'. I think we all (meaning staff as well as candidates) *now have a greater understanding of what doctoral study is all about.*

Another said:

I initially found the papers frustrating as I wanted to get on and do my research. I felt that the papers were holding me back. However, having completed Stage 1 I can now see the benefits and I am in a much stronger position to tackle Stage 2.

These comments led to the next intervention, which was to provide further details at the start of Stage 1 for new candidates joining the programme on the purpose of Stage 1 and how the three papers tackled different aspects of the research proposal. Detailed guidance was provided on what was expected in the research proposal as illustrated in the Candidate Handbook.

This has served to clarify the direction and purpose of Stage 1, point usefully illustrated by the following comment from a candidate completing Stage 1:

> *I found the research proposal template extremely helpful. My supervisor advised me to complete this at the same time as paper 3* (paper 3 is on research design*). I went from one to the other many times, with one giving direction to the other.*

A further intervention during Stage 2 of the programme was introduced, as it became clear that a further interim summative assessment would aid candidate progress towards their doctorate. Stage 2 could take between two and four years and some candidates were again not sure if they were making enough progress and reaching the right standard. A 'confirmation of candidature' was added to the assessment, inline with the requirements of the PhD. Candidates present in front of two independent assessors who also examine two examples of their work and a draft abstract; this acted as a further external quality assurance point for the programme and has helped to guide candidates towards what is required in the thesis. Guidance on the confirmation of candidature process was developed for candidates in the light of candidate experience. This has helped candidates in Stage 2 of their doctorate and they, along with staff, have reported positively about the process. For example from a candidate after the event:

I found the confirmation of candidature very difficult and was disappointed with some of the assessor's comments. However, looking back it has improved my work and I am glad I did it.

From staff:

I have changed my mind about the confirmation of candidature. Back at the validation event it was not a requirement and I think we all felt strongly that it was not required. Having supervised a candidate in Stage 2 I am now in favour of it.

The formal summative assessment of candidates now consists of the three papers in Stage 1, the research proposal as progression to Stage 2, and the confirmation of candidature part way through Stage 2, followed by the final thesis. Draft output from this assessment is used as activities in the workshops to improve understanding of the requirements and encourage incidental and peripheral learning for the whole research community. The formative use for all of pending summative assessment for an individual has become a key feature of the PrD (BE). See Chapter 8 on workshop design for further information.

Reflections on Interventions

The early papers revealed a lack of understanding from the candidates on what was required. The scripts generated also provided early indications of the quality of the writing skills of the candidates. Although professional people are skilled and possess occupationally-related expertise, it proved to be the

case that they were largely unfamiliar with the requirements of academic writing, despite entering with a masters degree. It is also fair to say that a level of conflict existed between the concern of staff working on the programme that the assessment should not be too prescriptive, the limited scope and clarity of the emerging research projects, and the lack of clarity contained within the original assessment brief. It is my view that the assignments briefs were the key to supporting the development of the candidates' ideas and it was important to respond to the issues presented by students in terms of meeting their specific and collective needs. The action research cycles facilitated the development of the assessment briefs and their specific assessment criteria. It also supported the development of their iterative nature with feedback between papers and the formative advice given on drafts. Action research identified the required additional formation information and advice which included posting examples on WebCT and was able to give direction for Stage 1 towards the formation of a research proposal. The action taken has increased understanding of the requirements of Stage 1.

As the programme developed the assessment strategy became central in supporting and shaping the development of the candidates' research project and research skills in Stage 1. To this end, the action research approach facilitated the involvement of both staff and candidates in developing solutions to problems as they arose. By involving candidates and staff in the original evaluation of the effectiveness of the papers, a sense of collegiality was constructed. Two-way discussions were encouraged that helped to establish

a strong sense of collective involvement in the resolution of specific problems and issues. This approach to solving problems was continued as each issue arose concerning the effectiveness of the assessment.

The introduction of generalised assessment criteria for each paper has had two effects. They have worked well not only in clarifying the nature of what was required, but also raising the level of critical thinking above the candidates' particular projects. The addition of the self-reflection feedback on each of the assessment criteria helped to guide the candidates and encourages them to think about what they have achieved. Candidates found the drafting opportunities and the posting of past examples of work on WebCT extremely helpful in giving them confidence when it came to submitting the final paper. They were using other candidates' work to support their own learning and the drafting opportunities, in partnership with their supervisors, strengthened their final submissions. The action research cycles confirmed the importance of, and defined the nature of, the assessment as a support mechanism. As a result the quality of research proposals produced at the end of Stage 1 has been high with only one application being sent back by the faculty committee for major revisions to date. The assessment of Stage 1 has emerged as an integral part of the development of the Research Proposal which has prepared candidates for Stage 2. It has enabled candidates to develop their knowledge and academic skills and improved the rigour of their work.

Chapter 8 – Data Presentation: Workshop Support Mechanism

Introduction

This chapter is concerned with exploring the nature of the workshop format in supporting candidates as they developed their doctoral skills during Stage 1 of the programme. In turn, it discusses how it evolved over time through the consistent application of a range of action research cycles. The belief, from the start, was that the format, construction and content of the workshop would be crucial in providing support to individuals and groups of candidates. Building on the work of Billington (1988), the intention was to create an educational setting which provided a safe and supportive environment, capable of responding to individual and collective needs, which respected the past life achievements and current abilities of the candidates. The primary intention was to give candidates control of their learning by encouraging and fostering intellectual freedom, experimentation and creativity, as the candidates tackled the requirements of the Stage 1 papers. The formal assessment elements of the papers, discussed in Chapter 7, served to provide the structure for the workshops.

Conceptualising the Workshop

It was hoped that the workshop setting would provide a forum where adult learners would be treated as peers and equals and give them the belief that their opinions were valued (Knowles, 1990; Cowan, 2006). It was hoped that an equal partnership could be created between candidates and the supervisors by working together towards common goals. We wanted to create a community of researchers that would develop a research ethos which had not been present in the department before. This community would be concerned with issues of improving aspects of the professional practice of the built environment. It was envisaged that supervisors would adopt the role of a critical friend. The workshops were to be a place for active engagement, where candidates and supervisors could work together to collectively solve individual problems in relation to specific aspects of research. One major difference between a young PhD candidate and the more mature PrD (BE) candidate would be that the latter possessed a wealth of professional experience. Reflection on this experience was to be the starting point of their research. The workshop environment had to take account of this prior experiential learning by emphasising the importance of context learning, as advocated by Lee *et al.* (2004), and give candidates the freedom to express and expose their ideas to the scrutiny of others. That is, learning would take place in the context of the specific issues that candidates would bring to the discussion.

The concern was that both staff and candidates would not be familiar with this form of education. They would be more familiar with modular taught

programmes that delivered content. The role of the workshops had not been conceptualised in this way. It was important from the start of the programme and the commencement of the research project upon which this study was built, that all understood what was intended and how the programme and research would develop together in an action research setting. I had concluded from personal experience that, all too often, the workshops I attended failed to measure up to my expectations. They usually deteriorated into a lecture presentation with little or token involvement of the participants. I was usually disappointed not to be actively engaged in workshop activities. Did the candidates have similar experiences and would they know what to expect for these workshops? The first action research activity was therefore to establish the essential characteristics of the workshop and this is addressed in the next section.

Action to Establish the Nature of a Workshop

The first action taken, therefore, was to establish in the minds of both staff and candidates what was meant by an educational workshop. A workshop activity was designed to establish what the candidates wanted from the programme and to define what was required in the workshops in terms of active engagement and supporting each other. As a common starting point, both candidates and staff were encouraged to explore what they saw as the distinctive nature of a workshop, as opposed to other forms of support for learning. To begin with, the group was hesitant to express their views but did agree that they did not want to be taught (or teach) in a traditional manner. One candidate summed up the feeling of the group by saying:

> *I am not looking for a taught programme, I have already got a masters degree, I want to do research.*

When challenged as to how that related to what we would do in the workshops, he responded:

> *I am here to learn about how to undertake my research and complete my doctorate.*

It was encouraging to hear him talk about the need to take ownership of his doctorate and wanting to be proactive in terms of assuming responsibility for his own learning. This desire not to be taught, in a conventional sense, was confirmed through other interviews with DBA and EdD candidates carried out

at the conceptualisation stage of the PrD (BE) programme development (see Chapter 6). When asked about the nature of the workshops on the EdD the candidates were dissatisfied, for example one remarked:

> *Workshop often didn't work as a workshop; we were talked at by an external speaker talking about his favourite topic, which did not relate to what I was doing. I did not want to hear about 3-dimensional interactive data analysis. It was a turn off after 10 minutes. Some times we did not know in advance what the workshop was about. Plus they needed to be more interactive, we were a room full of professionals with a view.*

This last sentence regarding 'professional with a view' struck a chord in discussions with the PrD (BE) candidates. They did not want to be treated as students in need of instruction, but wanted to be treated as fellow professionals doing research with a potentially relevant contribution to make to their field of study. The statement from the EdD candidate encapsulated perfectly what I wanted to avoid. It was important to capitalise on the desire to be active and do research with this new built environment cohort, so it was agreed in this first activity that their individual research would be the focus of all subsequent activities. In essence, all collective activity in the workshop should be contextual to their research; candidates would be asked to apply the activity in the context of their own topic. In other words, the workshop required input from the candidates as a catalyst for events; they needed to bring their ideas and concerns to the workshop to add meaning to any activity

undertaken. I added to the discussion that, at the end of the workshop, there needed to be an end product; something for us each to take away of particular value. A workshop would therefore have three components: an input, an activity and an output. So for example, a workshop would result from the identification of a particular issue to be resolved, such as the need to publish a poster at a conference. The activity would involve small groups of candidates and staff working together as a research community to identify the key aspects of what they regarded as the essential features of a poster. Then, in a final feedback session, the output would be the agreed advice on a poster format.

At this early point, details of the activities were sketchy but I explained it would involve candidates working together to solve problems. I largely took responsibility for the design of the activities with the help of the team and input from the candidates. There was no set content for the workshops or a set of training events published in advance; the content for each workshop would emerge from the contextual issues identified at the time. For example, as candidates presented their early ideas on their topic and what they intended for paper 1, I encouraged the cohort to challenge their ideas. If the candidate had not identified a question, they were asked what sort of questions they wanted to answer. This was then developed into a general discussion on identifying research questions that, in turn, could be related by staff to the literature on formulating such questions. Candidates were then asked to read established texts on identifying research questions in preparation for the next workshop.

In the next workshop one member of staff felt strongly that each research project must have a hypothesis, so this then became the centre of the activity to explore how each candidate could establish a research focus. The appropriateness of identifying an hypothesis, research questions, aims and objectives, or hypothetical propositions were examined. The strengths and weaknesses of each approach were explored by the research community. The views and opinions of the candidates were regarded as of equal value to that of the staff. Arranging the workshops in this way gave meaning and context to the work for the candidates. One of the early problems identified was that the candidates were having difficulty with the focus of Paper 1, so this became a workshop activity. This is discussed in the next section.

Action to Align Workshops with the Assessment

The next specific element of action research undertaken was in respect of the assessment for Stage 1. Although candidates were keen to get on with their research, I wanted to align the individual assessment in Stage 1 with the workshop group learning to guide the development of their particular research projects. The aim was that the workshops would be designed to support the assessment and it in turn would act as the focal point to direct the candidates. The workshops were to help candidates develop the research skills they required to complete their research. It was helpful that the first cohort of candidate were very well motivated to succeed.

There was, therefore, a need to build on their desire to do research and encourage the use of their selected topic as a catalyst for activity. The candidates were first asked to present their ideas for their research and paper 1 in the workshops before formal submission. The assessment directed the content of the workshops. This action revealed problems of interpretation of the requirements of paper 1. This action has been discussed earlier in Chapter 7, the Operation of the Assessment, so will not be discussed again here. However, what became clear by the action was that the assessment and workshops were working together to support the candidates. The workshops were supporting the development of their assessed papers and they in turn were acting as contextual material for workshop learning.

Action to Build the Community of Practice

I wanted the group to work together in the workshops with a common sense of purpose. The action taken was to simply state at the start that all should contribute, be critical but supportive and that staff and candidates should have equal status. The agreed format for presentations in the workshops was that both candidates and supervisors would present their ideas using PowerPoint, with each presentation lasting no more that 20 minutes followed by discussions and criticism of the presentations. Candidates were first asked to present a case for their research and provide an overview on how they were tackling the particular Stage 1 paper. Staff were asked to present their ideas on the particular topic related to the candidate presentations.

The action research element here was to establish whether candidates and staff would be able to work on an equal basis with each member being able to express an equally valid view. At the end of each workshop all were asked to comment on its effectiveness in terms of working together. Data was collected by a feedback sheet submitted at the end of the workshop, followed by a general focus group discussion to sum up the main points and give individuals the opportunity to express their views and give advice on how things could be improved or changed for the next session. This was then followed by questions posed by me on WebCT after the event. This had the advantage of giving time for further reflection by individuals on the issues and gave further opportunity for individuals to express views. This option of using WebCT is discussed in the next chapter. One candidate commented in the feedback session that:

Knowing that the tutors didn't always agree on ideas was interesting and reassuring.

Candidates liked the fact that we, as staff, did not always agree and felt that this added to the intellectual discussion rather than detracted from it. As professional people engage with doctoral level work, an important aspect is to build confidence and help them become critically aware by judging the evidence. Candidates were finding the open discussion between staff who expressed views on issues from different perspectives helpful rather than a concern. One commented:

We seem to be learning together. I find you lot (other candidates) *are more critical than the staff, but it's all very helpful.*

It is also reassuring to see how others are dealing with similar problems

Staff also found the discussions of value; one guest member of staff expressed the view:

I like the way we are working together. I am really enjoying discussing these issues concerning how to do research. We don't often get an opportunity to do this as members of staff in an open forum. I have learnt a lot from this group.

Others staff members had similar comments. Normally when there is a department event on a Saturday you have to work very hard to persuade staff to come and support the activity; it is always a struggle on open days, for example. There is no such problem with this programme. Staff note the dates in their diary at the beginning of the academic year and there has always been good attendance. Candidates appreciate this too, with one commenting in an online WebCT discussion:

> *I am so impressed by the number of staff who attend the workshops and help me even though they are not my supervisor. The support is outstanding. I learn so much in the discussions. Even over lunch they are helpful.*

Another said:

> *I agree, sometimes there are more supervisors there than students!*

A staff member replied:

> *It is our pleasure to work with you. The professional discussion we have on a Saturday is an uplifting experience for us too. We get such a good response from you.*

The first cohort of candidates working through Stage 1 worked very well as a group supporting each other. There was a feeling of 'we are in this together'; they were pioneers and were very happy to expose their practice to the scrutiny of others. For example, one candidate reflected:

> *I liked the mix of disciplines. I came away from each workshop buzzing with ideas and I am sure the others were the same. We talked about subjects that were alien to us. It is a testing process, if someone asked you a question that looks at your subject from their perspective, it makes you think. It is like having a good graduate in the office, they will always keep asking 'why do we do it that way'. They ask the obvious questions that are not always easy to answer, you have to sit back and think. It is the same in the workshops.*
>
> *These workshops have changed the way I think about problems!*

This willingness to openly challenge and ask the simple 'why' and 'so what' questions was a very important aspect of the workshops I wanted to maintain and develop through the action research process. New candidates joined the same cohort which grew with time. That is, we did not start a new cohort to work on their own in isolation from the established group. As new candidates joined, some were more guarded with their comments than others and were not sure how much to reveal to others about their research. I felt that these candidates would not get as much out of the workshops with this approach.

There was a feeling of the new candidates being different to the more established. As part of the overall intervention to develop a strong community of practice, I set up a workshop focus group with a mix of old and new candidates to establish the rules of engagement for the workshops. This discussion revealed that self-confidence was an issue that needed to be explored as candidates were more familiar with 'guarded conversations' to protect themselves and their company from litigation. The overall discussion can be encapsulated by the view expressed by one of the newer candidates:

> *I have not come across an environment like this where you can openly express your views and get constructive feedback on your ideas. In our industry, because of its blame culture, you have to keep your guard up at all times. To be able to discuss problems with other professionals from different disciplines is challenging but very refreshing.*

There are a number of issues from an action research perspective that emerged from the workshop discussions. A clear difference emerged in the workshops regarding the accepted behaviour of the research community, compared to the normal behaviour of the professional community from which they belonged and they were more familiar with. There was a feeling of trust and openness and closeness in the research community which they did not generally experience in their professional life:

I am surprised how critical students are of each other's work. I found it painful the first time but got so much out of it. This would not happen at work.

Candidates appeared to have a genuine high regard for each others' opinion and wanted to support each other. There was a need to ensure that candidates could feel comfortable about exposing their practice to the scrutiny of others and that feedback on ideas should be critical but supportive. This feeling of being at ease with each other in a research community was established by the intervention of asking the group to consider what rules of engagement for the group might be. Small group discussions produced the following list:

1. Work collectively to help solve each others problems
2. Give and receive constructive criticism and advice
3. Respect each other's views and opinions
4. Support each other by being open and honest
5. Keep all matters confidential to the group

This list was uploaded to WebCT for further comment after the workshop and is now a permanent record.

When asked about the nature and relevance of the workshop, candidates reported very positively in the feedback sheets that were made available. The

comments below serve to demonstrate the features and elements they found important to them:

> *The interactive nature of the workshops in sharing experiences was very helpful.*

> *The ability to chat with fellow candidates and share experiences.*

> *Meeting other students at different stages and discussing how they have the same concerns and anxieties.*

A common theme here is the shared experience expressed. Candidates seemed to rate this higher than any specific content. I felt this to be an extremely important aspect of the programme and the workshops served as a particularly good support mechanism for the development of individual and collective learning.

Another important aspect to note here was that they appreciated being able to work together even though they were at different stages in their own research. Hearing that they were able to discuss concerns and anxieties and how each had tackled problems was very encouraging. This is an aspect which would not be easily facilitated on a modular programme with cohorts at different stages. On a modular programme there might be limited scope for cross-fertilisation of ideas from different cohorts.

Further comments on the feedback sheets were concerned with the importance of getting the balance of activities right and how they were having an impact on candidates:

> *The way the workshop was conducted in terms of presentations, group work and opportunities to discuss/interact with other fellow cohorts.*

> *I find the workshops inspirational and I leave reinvigorated and motivated to restart my research*.

It has not always possible to get the balance of activities to match the candidate needs on every occasion, so gathering such feedback is essential in order to adjust the programme in the light of experience. In practice, balancing types of activities and trying to ensure aspects are covered to meet the needs of the candidates is extremely difficult and one that constantly requires adjustment in the light of feedback. I have found from experience that it is therefore important to reflect-in-action (Cowan, 2006), to make small changes in the light of events. For example, when a candidate or member of staff takes too long over their presentation and you see evidence of others losing interest, intervention is required. This can be done tactfully by saying:

> *If I could just stop you there because you have made some very interesting points that need discussing. What does the group think on this issue?*

On other occasions planned activities were changed or removed altogether in the light of problems or issues that arose and the programme was changed to suit.

Asking for feedback after a workshop can sometimes reveal other issues. For example on one occasion, when asked, a candidate reported that he left the workshop *'reinvigorated and motivated to restart* (his*) research'.* Whilst this was a positive comment it also revealed that the candidate was getting behind with his work. This was followed up by a visit to the candidate's work place to see what issues were holding him back from his research. As often is the case, other work duties were preventing a focus on his research. I discussed with the candidate and his employer what the issues were and how they might be overcome. I have found this technique of involving the employer helps and can be essential in bringing about change; leaving it to the next workshop results in the problem continuing. It is a time-consuming but worthwhile role for a director.

The data gathered allowed a deeper understanding to be gained of the structures and processes that needed to be in place to develop a vibrant community of practice. For example, peer-supported learning was highly valued, opportunities for reflective group work proved to be important and the sharing of experience in a non-threatening environment was vital. The various interventions made to establish sound practice and the consistent use of feedback to evaluate those interventions proved to be essential.

Action to Improve the Standard and Content of Candidate Presentations

We now turn to the issue of the interventions that were undertaken to improve the standard and content of candidate presentations as part of the action research process. Early analysis of workshop activities revealed that there was a general tendency for candidates to present and explain their research topic rather than justifying their research approach. They focused too much on the 'what' questions instead of 'why' and 'how'. There was a lack of reflection and criticality. At this point in their studies they were required to present arguments, with supporting evidence from their work experience, that there was a practice-based case to consider, problem to resolve or issue to be explored. Whilst their ability to do this varied, a significant proportion of the candidates found it difficult. They were not familiar with reflection or being critical and were more comfortable with presenting detailed content on their topic. What emerged from a systematic examination of their presentations was that there was too much contextual and background information. There views and opinions were being expressed with little or no evidence presented for the research community to be able to make judgements about the validity of their case. Clearly they were very knowledgeable about their topic and they had very strong views, probably formed over many years of practice, but there was a lack of understanding about the notion of defending their research ideas with evidence. Knowing how to capitalise on their experience and strongly held views was a challenge to them and the team. The staff met to discuss the issues. What emerged from the discussion was, as one member said:

Candidates are introducing their topics quite well, but they spend too long on the context. They don't really provide a deep discussion of the problems or issues they are going to research. Others provide far too much detail. We will need to publish general advice on WebCT

This was discussed and the agreed advice from staff is shown in Figure 8.1 below.

Supervisors will be looking for doctoral level thinking, your defence and scholarship:

1. A clear research focus
   - The case for the research (from practice)
   - Boundaries and limitations
   - Topic paradigm
   - Research questions to be answered and or objectives to be achieved
2. Engagement with the literature
   - Topic literature
   - Theoretical underpinning of your research
   - Research literature, philosophy and paradigms
3. The research process (very important)
   - Selected research paradigm
   - Methodological issues
   - Research techniques for data gathering
   - Explicit links to the research focus, questions and or objectives
4. Current findings, direction and conclusions so far
   - Critical review of what you have done
   - Judgements based on the evidence
   - What next

During Stage 1 you may not be able to present and defend all of these at any one time, but present what you can at your current stage. A good presentation towards the end of Stage 1 will address all of them

Figure 8.1 – Advice from Staff on Candidate Presentations

When candidates were asked in the workshop, they reported that they were dealing with the 'familiar' in essentially 'traditional ways'. They were not used to having their views critically evaluated. The general discussion was usefully captured by one candidate thus:

When I report at work I am not expected to provide all the evidence, I just report the facts and my judgement is respected. I give my views on what needs to be done and we go with a solution. In business we don't have time to gather the required evidence and discuss all the issues. We have to make decisions quickly on limited information. Having to justify everything with evidence is too time-consuming.

There were a number of issues to unpack and reflect on to make changes to improve candidates understanding and performance. Although experienced professionals who possessed substantial knowledge, the candidates had little or no experience at making the case for their research. They did not have the skills to construct the arguments for research. What were missing were more precise research statements that were tightly bound and capable of being researched. For example,

researching the impact of computer technology on construction processes

is just not focused enough to be researched on a doctoral programme.

An examination of their PowerPoint presentations revealed that the views of candidates were not being supported with evidence, either from their practice or from the literature. They were giving their opinion rather than citing

evidence from their work, often not focused enough and there was a lack of citations and references in their PowerPoints. In one sense, their PowerPoint presentations were effective in identifying these issues.

Following on from the initial intervention of issuing advice, a further series of actions were taken to improve the standard of presentations and to help change the way candidates thought about resolving work-based problems. To begin with, a workshop was organised to discuss and develop ideas on how the lack of focus on research issues could be resolved so that we could have a common basis for what was required in the PowerPoints. It was organised as a workshop activity so the candidates might come to a consensus as to the appropriate content of a presentation. In this way, candidates would be actively involved in developing, and have ownership of, the workshop output. This output was then generated, reflected on, and stored on WebCT for future reference and access by candidates and staff.

The cohort was divided into small groups to discuss their ideas on how to select evidence and build arguments, particularly from practice. At least one member of staff was allocated to each group. The output from each group was then presented back to the whole cohort on completion. Based on this feedback we were then able to develop a general case which I then put into a PowerPoint presentation, summarising the findings from the group. The agreed output is illustrated in Figure 8.2

What should you present?

1. Start with a **very short** statement about your topic (details of which can be found elsewhere e.g. on your poster) so don't give detail
2. Identify the problem/issues/question to be addressed by the research
3. Present your **current position/ findings** - justifying the methods (product and process)
4. **Make the argument** with just a few points
5. Support and contrast these points with **evidence** drawn from:
   - your live investigation (data analysis)
   - theory (the literature)
   - professional practice (can you link all three?)

Figure 8.2 - Output from a Workshop Activity on Presentations

The outcome of such activities is very interesting. As in this case, collectively, the group produced solutions to the issues that individual candidates had not been achieving on their own. That is, none of the candidates had been presenting all of these five points in their earlier presentations yet, when asked as a group, they were able to generate a collective and carefully considered response.

Subsequently, a PowerPoint derived from the staff discussion and the candidate input, was presented in future workshops to remind candidates of the collectively agreed requirements at a time when candidates were due to present. Candidates always had the latest version on WebCT to refer to before they presented. This helped new candidates joining the programme

and gave further action research opportunities for candidates to become involved in reflecting on the content and make improvements.

This reflective process of involving the candidates in solving problems in workshop activities as they arose proved to be very effective. Collectively, the group could make a more comprehensive analysis of the issues to be resolved, than any individual. It also helped to generate a workshop structure through which a learning community could be established. It was at this time that some key elements of an effective learning community began to emerge. These included: the need to identify common problems; collaborative inquiry with each participant having an equal voice; and the ability to criticise each other's point of view. In effect the group, when questioning and giving feedback to a candidate on their presentation, were acting in a supervisory capacity. Collectively, they could give a comprehensive account of the effectiveness of the presentation and any issues to be resolved. The use of WebCT after the workshop also encouraged reflection and permitted comments to be captured and further discussed as necessary.

Further Action to Improve Candidate Presentations

Despite the sound advice generated and placed on WebCT concerning what candidates should present, some candidates still presented too much contextual information about their research topic and it was clear that they had not grasped the notion of needing to support their research with evidence. In addition, candidates' expressed the view that the critical verbal feedback and discussion that occurred at the end of their presentation was very helpful,

but they had difficulties in remembering and reflecting on key themes and issues. Sometimes in the heat of the discussion they failed to record the comments and questions for future reflection.

It became evident that this important learning data needed to be captured in some way. In response, the staff team developed a written feedback sheet, based on candidate feedback, to be completed in the workshop at the end of each candidate presentation. The effectiveness of this was tested by a further action research cycle. The feedback sheet (provided in the Candidate Handbook) was made available to all candidates via WebCT. Having it in advance helped candidates to focus on what was required and they could see what judgements would be made about their work. For example, the feedback sheet asked if the candidate had supported the argument with evidence from practice or research. At the end of an individual presentation these feedback sheets were collected and given to the candidate as a confidential record of comments for their personal use at a later date. The usefulness of the feedback sheet is illustrated through the quotations presented below:

> *The feedback sheet is very helpful at improving my work. It tells me what I am doing well but also highlights things that need improving and aspects I had not thought of.*

> *It is good to take away the feedback to read privately later. Some very useful questions are posed.*

I find I can write the more critical comments on the sheet that I would find more difficult to say in front of the group.

The feedback sheet also encouraged a good level of participation, as candidates were encouraged to add comments during the presentation as well as at the end and make judgements about what was being presented. This also reinforced the requirements for them when it came to their turn to present. A version of the feedback sheet is also used to comment on staff presentations. It was considered important to treat staff the same as candidates so they, too, could learn from feedback. This intervention has had an effect on staff presentations. For example, staff are now more careful to add citations on slides and include a reference list on the last slide.

The forms of activity and interventions described above were proactively employed as part of the action research process. The intention was to undertake a specific intervention and then receive structured feedback from students as to its effectiveness. Through the action research cycles, it proved possible to improve both the operation of the workshops and the quality of the learning experience of the candidates. A format was established that required a high level of active engagement with activities focused on meeting the demands of the assessment specification of Stage 1. This has subsequently been extended from the Stage 1 papers, to include the requirements of the research proposal, the confirmation of candidature and aspects of the thesis. In this way, the formal summative assessment has been aligned and

incorporated into the workshop deliberately to enhance the learning experiences of the candidates.

Action to Improve Research Proposals

The development of the research proposal is now discussed as one further example of how this alignment of assessment and active workshop engagement was utilised to inform the development of the candidates' work. This summative assessment document is a University requirement to enter Stage 2 of the doctorate on successful completion of Stage 1. Experience as a member of the Faculty Research Degree Subcommittee (FRDSC) had revealed that a high proportion of part-time PhD research proposals were being rejected on first submission for their poor quality. This perhaps is not surprising as at Anglia Ruskin, our PhD candidates are required to submit their research proposal within the first six weeks of registration. They work, normally with a single supervisor, over this short period in preparation for the submission. Professional doctorate candidates, on the other hand, submit their proposal to the FRDSC after Stage 1 is completed. This provided an opportunity to increase their chance of first time success by involving all the candidates and staff on the PrD (BE). Their involvement served to also strengthen the professional doctorate research community and help develop a common understanding of the requirements of the research proposal and thereby gave direction and purpose to the three research papers in Stage 1. Other candidates would be able to see how their current paper could be used to work towards the final proposal. Any delay between completing Stage 1 and entering Stage 2 to rework a rejected proposal would be problematic for

candidates, both in terms of time wasted and lowering their confidence or morale. If candidates were first asked to present their proposals in the safe workshop environment before formal submission, any required reworking to strengthen the proposal, which is a valuable exercise in itself, could take place before formal submission.

Since the research proposal is limited by the University Research Degree Regulations (2011) to just 1000 words, it proved possible for each candidate to table a draft research proposal document at the workshops for examination before formal submission. This action was designed to improve the quality of the final submission to the FRDSC and to involve and inform all as to what was required. The size of the document facilitated group discussion and the activity proved to be manageable in a short timeframe. This activity ensured that the individuals' proposed research provided the focus and common purpose for the whole PrD (BE) community to become involved in its production, increasing understanding and the feeling of working together. This workshop exercise proved to be extremely informative for both the candidate presenting and the other candidates examining. For example, it not only informed the particular proposal, but also provided an opportunity for all involved to learn from the experience. Criticising other candidates work can inform their own.

Small groups which included staff members, examined the written submission and then gave an agreed group feedback to the candidate. This facilitated group discussion on the important points that should be covered in a

proposal. Each member of the group had an equal voice and could give their views on what they felt was good and what could be improved. In addition, each member of the group annotated the scripts with comments and questions for consideration by the candidate later. This examination served to provide a wealth of feedback from both staff and candidates and helped in exploring the coherence of the individuals' proposed research. From the verbal and written feedback provided to the candidate, they were able to amend their proposals for later consideration by the faculty. When asked about how they found the experience of undertaking the activity and did they mind tabling their proposal in front of the others, one candidate remarked:

> *No not at all, I have found the whole process extremely helpful. The students are more critical than the university staff. I have now made a better link between my question and the method used to answer it. I think my proposal has a much stronger focus than it had before*.

Another student, who was still to submit their proposal, made the following observation:

> *Although we are not at this stage yet, it is really helpful to see ahead and what is expected.*

The intervention had two major outcomes and had two major consequences. First, it served to increase the possibility of candidates proceeding to Stage 2

(only one candidate has been required to amend their proposal to date) without further alterations to the proposal. Second, the process of tabling the draft research proposal helped other candidates, still to submit their work, to learn what was required to refine their proposals to the same standard. There was clear cross-fertilisation of ideas with a significant degree of incidental learning taking place. It also reinforced the requirements of the three Stage 1 papers as preparation for the final research proposal. It gave them insights into the end goals of Stage 1. This had been lacking for the first cohort of candidates and was one of the reasons for doing the activity. Third, we were able to come to a group consensus regarding the essential features of a successful proposal and crucially, all of the activity helped in developing an interactive learning community where teaching, learning and assessment were aligned and underpinned by mutual support and collegiate interactions. The candidates were involved in the development of the requirements. These agreed requirements are now listed on WebCT for future reference and are amended as and when new information comes to light on the examination of the next proposal. This has become a major role for the workshop in supporting candidates and similar activities have been designed for the various aspects of the Stage 1 and Stage 2 work. For example, the requirements of the University confirmation of candidature, abstract writing, identifying research questions, selecting research methods, ethics, literature searches, inductive and deductive reasoning, engaging with the literature, and developing a poster presentation, have all been addressed in this way. Both staff and candidates have reported very positively about the approach.

As the workshops have developed over the lifetime of the project, they have proved vital in helping candidates improve their work. What has emerged from the research is that their value was not derived from any particular content or topic, e.g. ethics, research or methods, but from the active engagement in experiential learning. We have come to realise that the workshops are about process. The workshop could be organised to provide a variety of activities to engage the candidates and meet their collective and individual needs. For example, time could be allocated for individual tutorials with supervisors; external speaker could be introduced to stimulate critical thinking in response to a candidate request on a particular issue. As the candidates are asked to present on a regular basis, the workshops provide the opportunity to check on candidate progress, and candidates can benchmark their progress against their peers. The workshops have proved valuable to candidates who have reported that they inspire, encourage progress, motivate and generate new ideas.

Final Reflections on the Actions taken to Develop the Workshop Support

The action research approach designed for this project has had a significant effect on the development of the workshop as a support mechanism for candidates. Each action taken has been in response to a particular issue that has come to light. The alignment of the formal assessment as the focal point of activities in the workshop has worked well, with one informing the other. It has provided the context for the workshops as candidates worked through their papers. The general approach of involving the candidates in forming the solutions to particular problems and asking for reflections and feedback on the effectiveness of action taken, has helped create a research community of practice. The use of WebCT in storing the output from the workshops and permitting further comment on what was agreed has added to the success. Thus the approach has revealed how the three components of support, assessment, workshops and the VLE work together to support the candidates.

The action research has enabled the nature of the workshops to evolve with the changing nature of the cohort in-take and their specific needs. For the first two years of the programme which focused solely on the first cohort of candidates, an outsider looking in may have had difficulty in telling the difference between a conventional set programme of training events and the community of learning focus I was trying to create. As time passed, with new candidates joining the single community of Stage 1 and Stage 2 candidates, the workshops could not follow a set path of training events which focused on

Stage 1. Instead, the workshops had to respond to a range of needs of candidates working at different stages. The activities changed from focusing on problems with a specific paper, to more general topics such as examining evidence from experience, engaging with theory, exploring research methods, and recognising bias, all of which could be applied by, and be of value to, candidates at all stages. The workshops employed a form of experiential learning to build the programme in ways that reflected emerging needs. The action research approach facilitated this development. Candidates were presenting their work from the stage they were at, with the whole cohort engaging with their work and learning from each other. Specific needs were met by offering parallel sessions for particular interests and the use of WebCT became more important to provide the essential information required by individual candidates at times that suited them. I have come to the conclusion that action research involving others in workshop activities in the form of a Problem – Activity – Reflections – and Agreed Output is a very powerful tool for bringing about change and meeting the needs of candidates. It formalises and identifies good practice.

We developed the notion that the workshop was a place for presenting and defending work and discussing problems, issues and ideas together with potential solutions (candidates and supervisors). Candidates were encouraged to expose their practice to the scrutiny of others. Candidates have learnt that the more they exposed their practice to criticism, the better they become at presenting their case. The workshop has become a place to work together on common problems using candidate material as case studies

in order to gather collective feedback from candidates and supervisors. In addition, workshops facilitate small group research activities that support social interaction and opportunities to learn from each other. The workshops have helped staff establish a common understanding of the requirements of doctoral education. All of this workshop development and evolution has been brought about by action research.

Chapter 9 – Data Presentation: The Operations of the Virtual Learning Environment (WebCT)

Introduction

This is the last of the three chapters which examine the operation of the PrD (BE) from the perspective of the main support mechanisms of assessment, workshops and the virtual learning environment (VLE). This section explores the operation and effectiveness of WebCT as the selected VLE to support the candidates. The structure of the chapter follows a similar format to the other two, that is, the identification of issues and problems followed by action taken and final reflection. The chapter discusses the use of WebCT in its main roles as an enabling tool for the other support mechanisms. WebCT had a number of features to be explored which might make a separate but valuable contribution to supporting the candidates in terms of communication, a forum for discussion between workshops, and access to a variety of resources which could direct and support their learning. The WebCT platform was chosen as this was supported by the University at that time (2004) and had been available to support all Anglia Ruskin students since the late 1990s. I was an experienced user of WebCT to support undergraduates and felt strongly that it had an important role to play at postgraduate level. At the time, no other faculty was using WebCT to support doctoral work.

The Issues

The VLE was included from the start of the programme delivery to resolve a number of problems and concerns. The validation event had approved just four workshops per year and resource constraint at the time meant it would be unlikely that we could offer any more; I had concerns over the lack of contact and support for the candidates' work between workshops. There was a perceived danger that candidates might not complete all that was required between these events and that they would lose impetus as well as contact with each other and the University. This would make it difficult for them to manage their study. I wanted to develop a community of research practice and felt that this might prove difficult for busy professional candidates to work together, network and provide mutual support throughout the year without additional support from a VLE. The VLE provided a common method to keep in contact with all the candidates and staff via its conferencing facilities. In addition, WebCT provided the normal email on a one-to-one basis. These two facilities needed to be explored in terms of communication between candidates and staff. These communication opportunities also provided another channel for candidate and staff reflections between workshops.

Candidates also needed to be provided with access to information when they needed it, not just when it was available in the workshops, or when it was provided by the support team. Independent learners need the tools to take responsibility for their own learning. Therefore WebCT was also included as a means of access to resources required for individuals, providing information transfer at a pace that would suit each candidates' intellectual challenge

(Billington, 1988*)* and put them in control of their learning (Cowan, 2006). This use of WebCT was also to be a key design feature of the PrD (BE) to free up the workshops so they could concentrate on learning activities, rather than just information transfer. With only six weekend workshops planned for Stage 1 over 18 months, there was a risk that these workshops would be filled with transferring essential information to the candidates. This was not the role that I had conceptualised for the workshops. It was important to find another way to provide the candidates with the information they needed. WebCT was to provide a single repository for all the required resources. WebCT would also provide access to electronic material in a variety of formats which could not easily be provided any other way. For example, it gave easy access to digital resources such as the Anglia Ruskin Digital Library, a digital reference manager such as Refworks, and bespoke support software such as Epigeum.

The next problem to be resolved was concerned with the ease of submitting work for professionals without posting or visiting the University to physically hand it in. All students on taught programmes were required to submit formal summative assessments centrally to the student i-centre. This then was subject to the University modular quality assurance procedures which resulted in a long delay between student submission and feedback on progress. Submission of electronic work was not accepted by this hand-in office. I felt it was inappropriate to ask PrD candidates to act in this way because of the poor rate of return of feedback, candidate work commitments and their geographical location. A faster, more responsive method of submission and returning feedback to candidates was required. WebCT could facilitate the

submission of work from any location and the return of rapid feedback. Quality assurance could be achieved by giving the external moderator for Stage 1 access to the site. In addition there was an opportunity to share staff experiences of giving feedback to candidates. The way WebCT was set up, although the feedback was confidential to each candidate in that they could only see feedback comments on *their* work, staff had access to all the work and all feedback comments. This would enable comparisons to be made and also give me, as director of the programme, a management tool to monitor the quality of the feedback. To this end, it also provided an accurate record of all assessed work with the submission dates and the date of feedback. This also allowed for standardisation and moderation of work and feedback. WebCT had facilities to record and monitor all candidate activities on the site which enabled me to track what candidates were doing and take action if candidates were not making sufficient progress.

The important features of the initial system of WebCT included: the communications tool offering normal email and conferencing facilities for group discussion and networking between workshop meetings; access to resources and support in the development of candidates' papers; and online submission of work for formative and summative assessment. In addition, the control panel offered a management tool to monitor how the VLE was being used by candidates and staff.

Summarising the main concerns, I wanted to be able to make available a repository of resources, information and support software gathered in one

place for easy access at times that suited the candidates. The programme needed to provide a convenient means of electronic communication and reflection to support candidates between workshops. This communication needed to be stored both for candidates use at a later date, but also for the benefit of this research project. In the same light, I needed a management tool that would enable the monitoring of candidates progress and examine the effectiveness of the VLE in terms of its use by individuals. The programme required a rapid and secure method of the submission of assessed work and providing both summative and formative feedback. To this end, WebCT was to support the assessment and provide follow up activities to the workshop activities. A number of specific interventions are now discussed.

Communication

As part of the action research intervention strategy, the VLE (WebCT) was designed and tested over the summer and introduced at the first workshop in October. The first action was to provide face-to-face sessions to familiarise candidates with the technology, and each other, in a friendly supportive environment. These were included throughout the year at each workshop to try and ensure it was being used to good effect. I believed that collaboration online would only occur if, firstly, the candidates understood the technology, and secondly, they had met face-to-face and grappled with their learning together. I had been on a totally online course prior to starting the PrD (BE) and had to learn in isolation from the other students who I never met. I found this very difficult and assumed other professionals would find a similar experience difficult. I wanted the candidates to be comfortable with the

technology and comfortable communicating with other candidates online. The face-face sessions in the workshops were designed to achieve both goals. The face–to-face sessions proved to be effective in identifying how quickly each candidate could master an activity. Problems could be identified and individual strategies developed for each candidate.

The second action was to ask candidates to log-on at least weekly to begin with, in order to socialise and discuss issues related to the programme between workshops. The main vehicle used to stimulate discussions were question and answer sessions using the conferencing tools. This had an advantage over the normal one-to-one email in that it enabled all to become involved; a single candidate question and my answer could be seen by all staff and candidates who logged on at any time. These questions would act as a catalyst for further discussion. My role was to act as a facilitator to encourage participation. In addition, any staff or candidate member could add to the discussion. As their confidence grew, candidates could answer questions by other candidates without my involvement. This was to provide an efficient method of communication for me as I could communicate, in theory with all, rather than sending individual emails. However, it did rely on everyone using the system regularly. The successful discussions happened naturally either directly before a workshop, when I was asking what candidates felt their needs were, or directly after the workshop when I and/or the candidates wanted to reflect further on issues raised. Any attempt to artificially generate discussion midway between workshops simply did not work. As part of the action research cycle, in a facilitating role, I posted topics

on the site to increase activity and encourage candidates to think about issues between the workshops. No aspect of this discussion was made compulsory or was part of the formal assessment. The topics evolved around the discussions in the workshops. However, this facilitating role of posting topics to stimulate and generate intellectual arguments online has not been very effective. The following discussion illuminates the nature of the problem.

Discussions with candidates in the workshop revealed that the most de-motivating aspect of the online communications was not receiving a response quickly enough after posting a message. Often discussions died very quickly with only one or two responding. It was difficult to maintain meaningful interaction with such small numbers.

One regular user wrote:

> *I regularly open up WebCT in the morning at work along with my work email, just to see what is going on. It is disappointing that not all of the students seem to do the same. I am disappointed by the lack of response.*

Another agreed with this sentiment by saying:

> *The discuss tool in WebCT is so frustrating. Using it is a bit like putting a question up on the notice board at work and coming back*

later to see if anyone has answered it. You are disappointed when there is no response and this puts you off.

Another justified the lack of use by replying:

It would be helpful if we were notified when a discussion is taking place, sometimes I miss it.

WebCT does not have that facility.

Another gave this reason for the lack of use:

I haven't the time to discuss things and answer questions on the WebCT; I am too busy at work. The workshops are much more useful.

These are typical responses and represent the two main views expressed: frustration or little interest in seeing the value of the activity. Any attempt to generate discussion by all had failed.

Further workshop discussions revealed that the discussion tool was not deemed to be a major part of the programme. It was useful for some and not used by others. However the established practice is that it remains the main form of communication between workshops by acting as a common forum. It is a convenience tool for me to communicate: one to the many. All candidates

have accepted this and know there will be messages from me before and after workshops. Deep intellectual argument does not occur on WebCT, candidates prefer to have that type of discussion in the workshops face-to-face. This is supported by Salmon (2004) who makes the point that meaningful discussion will be limited when a VLE is used in a blended way. Meaningful discussion is more likely to occur on a totally online programme.

However this action research has revealed that the conferencing facility in WebCT does provide a forum for candidates to support each other. Once the candidates become confident in its use, they use it to pose questions of their own relating to particular issues they have at the time, or use it to tell others of something that they may find useful or interesting. For example:

Posting

> *I have just been to the training session on academic writing run by* (lecturer X) *and it was extremely useful. I would recommend that you all go.*

Reply

> *Yes, I went to that last year and he was excellent. I liked the way he uses humour to get across his ideas. He has very strong views on the use of the 1st person doesn't he!*

Thus, the discussion tool has not been used for deep discussion but has been useful as a forum for the exchange of ideas. This has worked effectively.

Facilitating Online Submission of Assessed work

A key concern at the start of the programme was the way in which candidates would submit work and receive timely feedback. In 2004, the standard procedure at Anglia Ruskin University for the submission of assessment work was to submit typed work manually to a central point on the campus. As PrD (BE) candidates would not be attending the University on a regular basis and lived some distance away, this procedure was considered to be inconvenient. It would also not facilitate timely feedback to the candidates from the academic team. In addition, it would be difficult to keep a permanent record of candidate progress.

The action taken was to set up the facility in WebCT for the submission of work by candidates and the subsequent feedback from academic staff. A key feature identified in WebCT was its facility to permit this online submission of work in a secure and confidential matter. Candidates submitted their work electronically to a secure dropbox from anywhere and at any time. All that was required was access to the Internet. Candidates were made aware that they only had access to their own dropbox but staff, and the external moderator for Stage 1, had access to all. This could be accessed immediately by any of the team for marking and feedback for the candidate. An annotated version of the work was uploaded to the system by the tutor and additional comments made in the comment box. A permanent record was

kept of all the original unmarked submissions, the submissions with annotations and the feedback, without the need for any administrative support. This work and feedback was also made available to the external moderator for Stage 1 of the programme for quality assurance purposes.

This electronic submission of the formal assessed work has been a strength of the programme. Although on first use, candidates have been concerned about the process; once used, they found it very supportive. In response to the following comment from one of the early candidates when asked to reflect on the online submission approach, a dummy submission option was made available for candidates to practice using the system before submitting formally:

> *I found it very difficult the first time I had to upload my coursework, pressing the send button was stressful. But now I find it very convenient and getting the comments back quickly is encouraging.*

Once a candidate has submitted for the first time no further problems occur. Each candidate has commented that they find the rapid feedback has been very helpful:

> *WebCT is extremely useful and an ideal way to engage with other PrD research students, supervisors and tutors. The feedback has been very constructive, timely and it is reassuring that the work I am doing is moving in the right direction.*

Another key feature of the selected VLE was that it permitted total transparency of all activity. This included the timing and quality of feedback to candidates. This could be accessed by any of the academic team to learn from each other. The transparency of the online submission and feedback allowed me to take prompt action when required and intervene if any member of the team fell below acceptable standards. That is, all of the support team was required to provide quality feedback in a timely manner. We had agreed that we would try and read and comment on submitted work normally within two weeks, but no later that four weeks. The fact that each of the team members had access to the feedback from all has meant that very few problems now occur as they can learn from each other in a private and confidential way. WebCT did reveal some early problems with a few staff in terms of the timeliness, quality and detail of feedback and are discussed late in the section on Monitoring.

Another consequence to the action taken on giving open access to all staff to the VLE was that the transparency of WebCT has enabled me to be a more effective mentor to new members of the academic advisors as they joined the programme. This is another example of the research and PrD (BE) development working together to realise improvement. I could access the work of new staff and refer them to the good practice of others. One new member of staff emailed me and said:

Thank you very much for your support this year. I am totally sold on WebCT and have learnt a lot from you. I am really impressed with its use for assessment and feedback. I would like to use it on all my modules. Do you know if online submission is permitted on the undergraduate programme? Thank you.

Other consequences have arisen because of the action taken on monitoring and are now discussed in the next section.

Transparency of WebCT

Part of my responsibility as director was to update the learning environment and this required me to log-on at regular intervals. WebCT records all student activity, so it was easy to monitor how often candidates were using the facilities and what they were in fact doing. This monitoring role was an effective method of identifying issues as they arose, as part of the systematic action research cycle.

Evidence from WebCT records shows those candidates who recorded the most activity on the site made excellent progress and submitted work on time. Candidates who were less involved with the use of WebCT fell behind in activities and submitted work late. There is also evidence that the use of WebCT influenced the quality of work by candidates, with those using it frequently producing the better work. Whilst there can be no absolute link between the use of WebCT and progress, lack of use can give an indication that a particular candidate may be experiencing problems.

Within the system there is a facility to further explore a candidate's use of the site – for instance, on interrogation it identified that a candidate had only recorded 12 visits to particular contents pages over a period when they were expected to do much more, and this provided an indication that insufficient progress was being made. Although the system could not identify the nature of the problem, it did identify there was a problem enabling further investigation. In this case extra meetings and tutorials revealed that the candidate was very busy at work and that there was poor synergy between his work and his doctorate. It became clear that he could not make sufficient progress and had to withdraw from the programme, despite the offer of additional support. WebCT can therefore enable an early indication of a problem, allowing for further investigation and action. Another candidate who used the site more often, with 307 visits to the contents page over the same period, gave me more confidence that progress was being made. This candidate completed Stage 1 on time and has subsequently completed his doctorate.

This monitoring enabled the identification of candidates who were using the resources available and those that were not. The candidates, who were not using the site between workshops, could then be contacted and encouraged to make more effective use of the resources available. Their progress could then be further monitored. This action was not 100 per cent effective. It helped some candidates by making them aware of their inactivity and that they could do something about it, while others failed to change. Candidates

were made aware that I was monitoring their use of the system in this manner. None have ever expressed dissatisfaction with the approach. The key point is that WebCT enables this monitoring to take place and work rates can be identified. It is a useful facility in identifying potential problems early and that can be helpful in encouraging some candidates to become more active. Facilitators have a difficult balancing act to follow in deciding when to intervene. Mature adults need to take responsibility for their work and work best at a pace that suits them. They have many pressures at work and extra pressure from the director was not always effective.

Monitoring Staff Performance

The performance of the staff team could also be monitored using WebCT in terms of their feedback on assessed work. WebCT records the time and date of submission as well as the details of the feedback. This enabled any problems to be identified as they occurred. WebCT would record if supervisors were late with feedback; staff were encouraged to provide feedback as soon as possible but no later than two weeks after submission by the candidate. The transparency of WebCT meant that candidate submission and staff feedback times were recorded and action taken if required. It would also identify if feedback was of poor quality. For example, one staff member wrote as feedback on paper 1:

> *Dear* (Candidate X*),*
>
> *Pleased to inform you that your first coursework has met the required standard and can be submitted at the end of Stage 1.*

The team was impressed with the improvements made following the earlier draft.

Discussion with the candidate in the following workshop revealed that, whilst he was please to be making progress, was disappointed that there was no detail provided on what was working well and what needed to be developed further for the next papers. An opportunity was missed to give formative information to the candidate. In both instances, of timing and quality, timely action could be taken to bring about a solution to the problem.

Improving the Quality of Feedback

To improve the quality of feedback I organised a workshop for staff to focus our attention on the essential features of good feedback. This took the form of the workshop format developed for the candidates, that is, identification of an issue, designed activity to address the issue and final agreed output. Candidates were invited to the workshop to make their contribution to the debate. The activity was to divide the participants into small groups and ask each group to identify the key features of good feedback on assessed work.

They produced the following points:

Group 1

What is wrong

What is right

What students need to do to improve

Group 2

Constructive, positive, tailored to individual learning style, advice on future work

Group 3

Formative

Something good, room/areas for improvement, constructive personal, specific feedback

In time

Group 4

Good points, poor points to improve on, indication of failing or passing

Group 5

Strengths, weaknesses and what they need to do to improve

Group 6

What they did right

What they did wrong

What they need to do to improve it and how

The final part of the workshop was to discuss these lists and produce a common set of guidelines for staff to use. The similarity of the points is

striking. Collectively we can agree on what is required, yet individually, staff had not always been providing these points in their feedback. The agreed final advice was as follows:

Start the feedback with positive comments about the work. Explain what they have achieved and done well, emphasising the strengths of their work.

Then highlight issues that need to be strengthened further and what they need to work on to improve the quality and the standard. Provide constructive comments and give helpful advice, rather than concentrating on being negative about what is wrong.

Finish the feedback with a positive look to future work and what is expected in the next assessment.

All the output from the groups and these final points were sent round to all the staff in the department.

There was also a degree of staff self-monitoring in that all could see each others comments. Good and bad practice could be identified and improvements could be made by learning from the best feedback practice of others. This could be achieved by individual staff in a confidential manner. The issue of the standard and frequency of feedback to candidates is something that has needed to be readdressed a number of times over the

lifetime of the project. WebCT, with its open transparent structure for tutor access, has enabled these issues to be identified and dealt with. Periodic meetings are held with the staff to confirm and agree our practice. It has been very difficult to find times when all staff can be present, so the transparency and the availability of material on WebCT has proved valuable.

Provision of Interactive Resource Material

One of the strengths of using a VLE to support an educational experience established by this research project has been its ability to facilitate access to resources at a time that suits the candidates' needs. The strategy was to build a repertoire of suitable resources over time as the first group of candidates worked their way through Stage 1. Any new material added would then be available for future candidates when they came to a similar stage. As new material came to light, it was added and older material deemed less useful was removed. Candidates were consulted to establish the effectiveness of the changes made.

All staff were invited to identify and add material. Candidates were not permitted to add material directly, only because WebCT could not be set up in that way. The candidates did not have the same access rights as staff. However, they were encouraged to identify resources they found useful and these were added to the site so that all could derive benefit. WebCT has facilitated a sharing of resources for all. In addition, material developed as output from the workshops could be stored online for future use. A key resource was that of the work produced by candidates themselves. Examples

of good practice papers were placed on the VLE, with the permission of the candidate, for future candidates to use.

The actions taken revealed that the VLE was more than a repository of resource material. By asking the candidates how they wanted the material presented, two different methods were selected. The first approach was to use the VLE as a means of establishing an online programme of learning for Stage 1, and later Stage 2, by organising and presenting the material required for each stage of their research. In this manner, candidates were presented with learning material just when they needed it. It gave them control over their learning and they could work through the material in sequence. Interactive web pages were designed to facilitate their learning. For example when a candidate was writing their research proposal, they were presenting with word documents, textbooks, some of which were linked to web pages, questions with hyperlinks to answers, multi-choice questions, PowerPoints, videos, links to external web pages which candidates and staff had identified of value, the interactive Epigeum software on research methods, a template for a research proposal, and examples of past candidates' work.

The approach provided a variety of methods of learning from which candidates could select what best suited their needs and their particular style. Organising the interactive material in this way proved suitable for candidates as they tackled a particular stage, but became confusing for candidate access when out of sequence. For example, the material on ethics was available for aspects of Paper 1 and Paper 3. Candidates who required access to this

ethics material at a later time in Stage 2 found difficulty in remembering where it was stored. This problem grew as the site became more complex each year.

As the programme developed with time, it emerged that candidates also needed access to the material in a series of folders. For example, all the material related to ethics was placed in one folder. The intervention of adding these folders helped candidates find material as they required it, out of sequence from the programmed approach described above. This action of arranging the material in two ways solved two problems. The programme of learning helped candidates gain access to electronic material just when it might be useful and not be overwhelmed by the wealth of learning material available on the site, and the folders helped them find material at a later date.

Reflections

It became clear from monitoring the online activity on WebCT and in discussions with focus groups of candidates in the workshops that those that used WebCT regularly were benefiting greatly from it and were making good progress. That is, they were working between workshops, using the resources and submitting the papers on time. They took charge of their own learning. They liked the fact that they could decide on when to use WebCT and what to study. A typical response from new candidates joining the programme is represented by the following comment on WebCT:

I am amazed by all the resources that are available. It is very helpful to be able to access them just when they are needed. On the negative side, sometimes they are difficult to find, there is so much there I get a bit lost on occasion. Could we have a link from each paper to the relevant material?

It was comments like this that shaped the reorganisation of the material to give access by the programmed learning method and via the folder described above. Asking for feedback in this matter, built confidence in what was on offer and the actions taken and, as in this case, new ways of presenting the material were developed in response to candidates' comments. The learning material has been added to the site as it was created and discovered and was not always presented in the most convenient way for the candidates. Its use by candidates has helped shape the website's structure and format with better links between assessment and supporting resources. This is reviewed by the team periodically to enable improvements to be made.

At the start of the programme, discussions online were very limited. As more candidates have been added, this has improved but my original expectations were that candidates would make better use of this than the evidence suggests. The potential for rapid interaction has been very slow and made it difficult to develop any useful dialogue and discussion on doctoral issues. Comments have often been limited to a question asked by a candidate and answered by me with perhaps one other adding a view. When this was raised in discussion forums in the workshops the conclusion was that some

professional people were just too busy to sit at a computer and discuss research issues. One candidate summed up the discussion by saying:

> *I like the access to the material, the feedback on my coursework, but the discussions leave me cold. I don't find them valuable. I do log-on before a workshop to find out what is happening next, but that is it.*

The methods employed for encouraging effective intellectual discussion online have not been particularly successful. If the programme was totally online, discussion would have to be more meaningful, but the other advantages of face-to-face would be lost. However what has emerged from the use of WebCT was that it provided a forum for candidates to support each other, give advice and communicate between workshops.

Another issue which the data reveals is that WebCT gives the candidates control over their own learning, resulting in a varied pace of progress for each candidate being established. They proceed at their own pace with the information available online. It is not surprising, therefore, that the candidates' progress rate varied. Having given them that control it proved impossible (and was not seen as desirable) to keep everybody working at the same rate.

The feedback from candidates online, as part of the reflection in Step 6 of the action research cycle (Figure 5.1), has been helpful and instrumental in

bringing about change and improvements to the programme. This is illustrated here with a selection of their comments:

> *The resources available on WebCT are amazing. You are to be congratulated on putting such material together.*

> *I like the resources available; it's a sort of one-stop-shop for all I need.*

That was the intended use of the VLE.

> *The student homepage is useful to contact students outside WebCT and it is useful to see details of their background and the link to their company website. Not all staff have uploaded details on their homepage!*

> *The email tool is not easy to use, better to use normal email.*

> *It would be helpful if we were notified when a discussion is taking place, sometimes I miss it.*

Not using normal email was a deliberate ploy from the start of the PrD (BE). To engage with the PrD (BE), candidates had to log-on to WebCT. Candidates have reported that they receive too many emails from the

University as doctoral students and are not sure whether they need to respond to them or not. Most appear to be written for PhD candidates. On WebCT all communication is relevant to the PrD (BE).

> *WebCT is extremely useful and an ideal way to engage with other PrD research students, supervisors and tutors. The feedback has been very constructive, timely and it is reassuring that the work I am doing is moving in the right direction.*

> *I like to be able to reflect on issues after the workshop and then give my more considered view online.*

> *Having access to previous candidates work through WebCT has been invaluable along with the numerous presentations that are available to view when I have time available, and not at set times.*

> *I much prefer the workshops for discussion*

> *I found the University all day workshop on ethics much more useful that the ethics software*

These comments give an indication of the mixed reception the VLE received, highlighting its limitations as well as its strengths. Extra help was provided in the workshops to support candidates' experiencing difficulties that could not

be resolved online. The blended learning approach was an advantage in this respect. WebCT can provide learning opportunities that the workshops cannot, such as giving access to interactive web-based material when the candidates require them. Salmon (2004) argues, however, that a blended approach only encourages a lack of use of the VLE. For some of these professional doctorate candidates, this has been true but has not been so in every case. The experience on this programme has demonstrated that there was a need to combine different aspects and approaches to learning to support the needs of a varied group working in different ways at difference times. WebCT has enabled this to occur.

The VLE is an important part of support for the PrD. Its role of putting the candidates in charge of their own learning at a pace that suits them was very effective for those who took advantage of the facilities available. It is an excellent place to store information and enable information transfer to take place. Therefore, this information transfer did not need to take place in the workshops which were freed up to concentrate on learning activities which were more suited to this environment and would support the candidates' progress and develop their collaboration. Thus, WebCT enabled the workshops to focus on their strength of engaging candidates in group learning activities.

However, an important issue was also highlighted in terms of the failure of some candidates to access this VLE. Meaningful discussion between workshops has been very limited and largely ineffective, although it has acted

as a forum for the exchange of ideas and information. This needs to be explored in much more depth to uncover the reasons for this and to challenge any assumptions that students share comparable skill levels to use the VLE effectively. In contrast, the action research approach to the use of WebCT did facilitate access to resources in a variety of formats to suit different methods of learning, the submission of assessed work, the feedback to candidates, and the shared experience of staff marking the work.

Chapter 10 – Reflections and Discussion of the Findings

Introduction

This chapter provides a synthesis of the contribution this research has made to knowledge and professional practice in terms of the conceptualisation, operation of the Professional Doctorate for the Built Environment. It reviews the research questions posed in the introduction of the thesis and examines the degree to which they have been adequately answered. This thesis has explored the development of a non-modular doctoral programme to meet the requirements of a mature professional audience of built environment candidates who wish to complete their doctorate on their own professional practice. The effectiveness and limitations of the model are now discussed.

Review of the Research Questions

The Key Question:

> What are the essential components and support mechanisms that need to be in place for the development of a non-modular professional doctorate that can facilitate successful candidate completion within a realistic timeframe?

Following an initial review of theory in chapters 2, 3 and 4 and practice in Chapter 6, and using an action research methodology I identified that, in

addition to the role of the supervisor, the key components for a successful non-modular doctoral programme for professional practitioners were:

- A flexible two-stage programme which acknowledges an individual's subject focus, ability and experience; fosters intellectual freedom, experimentation and creativity and encourages peer learning and scrutiny.
- A curriculum designed to offer intellectual challenge through active involvement in self-directed learning at a pace that suits individual candidates within the collective experience and support of a doctoral community.
- Assessment and feedback which facilitates successful candidate completion within a realistic timeframe.

From this, I developed the three subsidiary research questions which I address below.

1: How can a learning environment be created for mature candidates which acknowledges an individual's subject focus, ability and experience; fosters intellectual freedom, experimentation and creativity and encourages peer learning and scrutiny?

In this research, the key components of the learning environment were the VLE and the workshops. The VLE provided a range of interactive learning material related to the process-based curriculum which was accessed by

candidates at any time during their study period to suit their needs and pace of study. This provided a consistency of advice and support for the candidates (Schooley, 2009). The curriculum on the VLE was arranged and linked to each of the assessments that were required by the programme. Candidates first engaged with this curriculum in the order presented at a pace that suited their particular needs. The material was also arranged so it could be assessed in any order out of sequence and could be adapted for a variety of learning styles (Allison, 2007). Candidates were therefore able to access and review the material over and over again (Santos, 2010). This material which included readily available web-based interactive sources from other universities and companies was regularly updated to provide a flexible, cost effective and safe learning environment (Bell, 2007).

The workshops emerged through action research as a space for participants, who had shared interests in research learning, to come together to solve a given set of problems. These problems often arose from questions from individuals via the VLE and in face-to-face discussions. Solving these problems required the application of the combined skills and capabilities of the group, through experiential learning in designed activities, to produce a collaborative output of value to the participants. Through the sharing of individual experiences and intellectual argument, new knowledge and understanding emerged, as demonstrated in the findings. The issues and problems were solved by the discourses of participants (staff and candidates) from a range of backgrounds and experience who all felt they had a valuable role to play.

After a workshop event the input, the designed workshop activity, and resulting collective output of the group was enhanced and agreed by further discourse in the VLE. This permitted further group reflection.

Aspects of the candidates' assessed work were presented to the other professional doctoral candidates and the staff team for scrutiny in the workshops. This helped form a community of research practice.

This collaborative learning blurred the boundaries between the role of the staff and candidates in knowledge production. Observations in the workshops and feedback from candidates and staff indicated that they were learning together more as a community of researchers than as supervisors and candidates. It also blurred the boundaries between academic and practice-based knowledge. A key role for staff was to design effective group activities for the workshops to facilitate learning.

The workshop was also utilised as a learning space for candidates to present and defend their individual subject and research to the scrutiny of the PrD (BE) research community. Peer review was a powerful and effective tool to enhance each project presented by the candidates. Learning took place for the individual presenter and there was evidence of group learning from the rest of the community as they challenged the arguments presented. However, some candidates had difficulty learning the required skills to present

and defend their research; they were much more at ease presenting the subject matter of their research.

In order for the two key workshop activities of small group work and presenting to take place, set research training material, for example on ethics, research methods, knowledge production, literature review, was transferred to the VLE. That is, these topics were not taught as separate workshop training events. Experience by the candidates on the DBA and EdD had found that once they had attended all of the set workshops in Stage 1, they felt there was no need to attend them again. Opportunities for community learning were lost. This VLE approach was much more effective at information transfer to individuals than in the workshop. An early decision was to provide as much information as possible on the VLE rather than in the workshops. If the important information could only be obtained via the workshops, many more workshops would be required in order to allow time for group participation and scrutiny of candidate work. Peer learning and scrutiny became a key feature of the workshops.

The first cohort of candidates had expressed strong views that there they could only attend a limited number of weekend workshops. In practice, one extra workshop was added to the original four planned. In addition, it was not always possible to provide the information in the workshops just at the right time for each of the candidates; the VLE however could be accessed at any time and anywhere (Allison, 2007). This became more evident as the numbers of candidates grew. Candidates progressed at different rates

depending on a range of circumstances. The use of the VLE was essential in handing the control of candidate learning in terms of timing and pace over to the candidates, and freed the workshop for more active engagement.

2: How can the curriculum be designed to offer intellectual challenge through active involvement in self-directed learning at a pace that suits individual candidates within the collective experience of a doctoral community?

As suggested from my evaluation of current practice in Chapter 6, the curriculum for the PrD (BE) was divided into two stages which could be completed over a flexible time period of three to six years to suit the individual candidates.

Stage 1 provided the time for the candidates to develop their research skills and demonstrate achievement by completing three research papers concerning practice, theory and research design over an 18 to 24 month period. The focus of Stage 1 was on process and the development of candidates academic and research skills (Rhodes and Shiel, 2007).

Having had their research proposal approved by the faculty post-Stage 1, candidates then entered Stage 2 to complete their study. The University imposed a 1000 word limit for the research proposal, which has caused difficulty for professional doctorate candidates. Having effectively worked on their proposal for up to two years, this word limit was restrictive. Professional doctorate candidates need to make the case from a reflection on their

practice, in addition to an examination of the literature. A small increase in word limit would therefore be beneficial.

The course of study was organised such that candidates could bring their individual research issues and problems to the research community (made up of Stage 1 and Stage 2 candidates and staff) at a time that suited their particular development needs. As the community attempted to solve the problems and resolve the issues, these acted as case study material for the whole group to learn from. The PrD (BE) curriculum focused on doctoral processes rather than on disciplinary content, as the specific content for each research project was derived from the candidates' own workplace (Armsby and Costley, 2009).

The conceptual model facilitated the creation of a research community of practice, drawn from both Stage 1 and Stage 2 candidates. The development of this community of research practice was highly appreciated by the candidates. The non-modular approach enabled Stage 1 and Stage 2 candidates to be brought together to work in the workshops and online which facilitated a significant degree of incidental and peripheral learning to take place. This was particularly evident in the workshops. All the candidates who did not drop out of Stage 1 and those that progressed to Stage 2, recognised the importance of this cross-fertilisation of ideas for their development and did not wish to study as separate cohorts. They felt that the work required for each stage was valuable to the other. Candidates could support each other even though they were at different stages on their doctoral journey. New

candidates found it a valuable experience to learn from others who were at a more advanced stage on the programme. Equally, Stage 2 candidates wanted to, and could benefit from, new candidates asking simple but often awkward and challenging questions. The make up of the community of staff and candidates at different stages and with different backgrounds was a key factor in creating a functional community.

Involving potential supervisors for Stage 2 to act as academic advisors in Stage 1, worked extremely well. In most cases, the same members of staff worked with their candidates throughout their doctorate. These staff members benefited from working with the candidates in the workshops, online, and in normal supervision. Relationships can be built-up during Stage 1 and maintained during Stage 2. Where the relationship does not work, changes can be made to the team during Stage 1 to ensure a good relationship is formed and agreed before the research in Stage 2. Candidates appreciated the wide-ranging support from the academic advisors and supervisors who regularly attended the workshops.

3: How can assessment and feedback be developed and managed to facilitate successful candidate completion within a realistic timeframe?

The assessment was developed throughout the programme with the aid of the candidates themselves. Discussions in the workshops and online helped to clarify the requirements of each piece of assessment and these discussions informed and developed future assessment briefs.

The findings in Chapter 7 revealed that the formal assessment of candidates requires a detailed brief, together with the provision of formative information and advice and a list of specific, skill-related and process outcomes. These outcomes were used as criteria for each assessment. Further discussion with the candidates in the workshops was required to clarify what was expected for each paper in Stage 1. The use of carefully selected examples of past candidates' work provided further clarification of these requirements.

The standard and timing of feedback from the staff academic advisers was enhanced by the transparent nature of the VLE as discussed in Chapter 9. Since all work was submitted via the VLE, this facilitated the sharing of good practice where staff learnt from each other's feedback comments. New supervisors benefited from this transparency of feedback.

The three Stage 1 paper briefs designed by this action research project prepared candidates for Stage 2. The focus on practice first (paper 1), then theory (paper 2) and finally research design (paper 3) suited their development needs. They provided direction for the candidates during Stage 1. Candidates had most difficulty reflecting on their practice and learning the language of research design. Once they could use the research language in the context of their own work, they had a better understanding of its meaning.

The preparation role of Stage 1 was identified by consulting the professional practice of colleagues on the Anglia Ruskin DBA and EdD. It had also been

identified as a key requirement in the literature. For example, McWilliams *et al*. (2002), argued these should be closely integrated with the research developed in Stage 2 and the early development of the skills required in Stage 1. Manathunga *et al.* (2004) also argued that candidates should develop the required skills in Stage 1, ready for the research project in Stage 2. However, they did refer to Stage 2 as the research component, implying that Stage 1 was not concerned with research. Reflections from the PrD (BE) candidates indicated that, although they regarded Stage 1 as preparation for Stage 2, they felt it was a valuable part of their research journey. In other words they regarded both stages as a research component and, for those that graduated, the entire thesis was better because of the early research preparation they undertook.

Progression for each candidate was incremental. The three papers facilitated this upward improvement in manageable steps, with each paper building skills and challenging the candidates a little further. As Billington (n.d.) had argued, stretching them too far, too, soon, would be problematic. The staged development had drawn on Vygotsky's zone of proximal development theory by establishing the current understanding of each candidate and using the assessment to refine their understanding and stretch them a little further.

The transparency of feedback online was able to identify any problems quickly and action could be taken to remedy them. In addition, specific staff workshops on the quality of feedback and the sharing of this feedback online have improved its quality as discussed in Chapter 7. The quality of brief for

each of the three papers in Stage 1 and the quality of feedback were identified as key elements in promoting candidate development needs.

The research proposal was used as a summative progression point as entry to Stage 2. The position of this research proposal between Stage 1 and Stage 2 was crucial in ensuring a sound proposal was developed by the candidates during Stage 1. Candidates benefited from being able to present this first to the professional doctorate community in the workshops before formal submission. This dry run approach was also adopted when candidates presented their confirmation of candidature (C of C) during Stage 2. The C of C was not part of the original concept but was adopted from the PhD as an extra assessment point in Stage 2 as a measure of progress. In both cases, presenting the assessed work to the research community in the workshops before formal submission enabled the whole community to learn together as they assessed and gave feedback to each candidate.

The text from the papers in Stage 1 was reworked by candidates in Stage 2 and formed the starting point for the thesis introduction, theory chapter(s) and the research methods chapter. Reflection on these Stage 1 papers supported the development of the thesis in Stage 2. This also enabled Stage 1 and Stage 2 candidates to work on similar issues even though they were at different points on their journey.

Discussion of the Support Mechanisms

Assessment

Assessment was the key to setting standards and directing candidates' development. The development of the assessment briefs was crucial in defining what was required. Since students could not escape from poor assessment, as Gray (2004) had argued, it was very important to get it right. The findings in this thesis revealed that the assessment required careful attention to the brief, the formative advice, and a list of specific outcomes. The original briefs for the papers in Stage 1 were written as short questions to give the candidate the freedom to develop their research ideas without being too restricted. There was a strong feeling from the academic advisers at the start of the programme that we should not be over prescriptive. This was not to be a taught programme but one of candidate-centred research. However, the first set of candidates experienced great difficulty in understanding what was required from each Stage 1 brief. Additional formative information, advice and learning outcomes were added to the assessment specification. The outcomes were also used as the assessment criteria for the work. This behaviourist approach to learning proved crucial in supporting the candidates' understanding of what was required from each assessment. This formative information continuously evolved throughout the programme through action research. The latest version is available in Appendix I of the Handbook attached to this thesis.

Candidates reported that publishing the assessment criteria for each paper in advance helped them formulate what was required in each. The findings

revealed that for some candidates, publishing the outcomes alone was not enough; they required additional formative advice and support to interpret these assessment criteria. The criteria, originally written as learning outcomes, required specification in terms of the academic research skills to be demonstrated rather than any disciplinary content, but were also open to interpretation by the candidate to explore the assessment in the context of their own particular topic and discipline.

There was a general upward development through each Stage 1 paper, the research proposal and the confirmation of candidature with each informing the next. The findings also identified that reflection was important between as well as during assessment, and this was aided by the creation of a self-assessment pro-forma to guide the candidates' reflections on how well they had performed. Space was provided for candidates to add their own, sometimes unexpected, outcomes as part of a self-assessment exercise. This pro-forma also provided evidence that, in the early stages of their doctorate, candidates found reflection difficult. Their reflections documented at the end of Stage 1 were more evaluative that at the end of paper 1.

The opportunity for candidates to submit drafts of their work was welcomed by all candidates and gave them confidence that they were progressing in the right direction. Candidates also benefited from being given access to past candidates' work, again, increasing their confidence. Both interventions strengthened their work before final submission.

Workshops

The findings revealed that workshops were a key factor in developing a community of like-minded candidates who worked together to collectively solve individual problems. Five workshops per year every two months between October and June proved to be adequate in meeting the needs of candidates. Candidates who needed extra support met with their academic advisers between workshops and also communicated online and by email.

The nature and format of the workshops evolved through action research from a set programme which focused on the needs of the Stage 1 papers for the first cohort, to more conceptual issues relating to both stages as the research community grew. This was difficult to manage but worthwhile in terms of the development of the research community and helping candidates see the connections between the two stages. Small group activities supported the candidates' learning and promoted active learning.

The workshops provided an opportunity for candidates to work together, supporting each other as they solved individual problems. They were not used as a fixed set of training events published in advance, e.g. ethics, research methods, knowledge production, but would evolve to meet the particular needs of the candidates at any one time.

A key aspect was that the workshops provided an opportunity for candidates to present and defend their work at various stages with active participation from the other candidates. When presenting for the first time, candidates

often did not possess the skills to do this well and needed support from the VLE, fellow candidates and staff to develop the required skills. This was an important role for Stage 1 and a number of interventions were required to develop their presentations skills. A shared framework for presenting and defending research was developed. Verbal feedback in the workshops and written comments on feedback sheets, provided anonymously to presenters proved effective in improving performance. The more the candidates exposed their research to the scrutiny of others, the more effective they became at making their arguments and the case for their research.

Solutions to Individual problems could be explored and developed collectively by the community in a similar manner to action learning. Workshop participation promoted active learning, advocated by Knowles (1990).

Virtual Learning Environment

The VLE was effective at giving candidates a single point of access to the information they required. It put them in charge of their own learning and enabled them to be actively engaged in their development (Knowles, 1990; Billington, n.d; Cowan, 2006). By giving them access to the information they required, just when they needed it; they did not need to wait until it was presented by the supervisory team in the workshops. Candidates did need a considerable amount of advice and this could be provided by the VLE. It provided a single source of information which could be updated regularly as

new information came to light; for example, when the University regulations changed.

Staff needed to be proactive in ensuring the VLE was used by all. Well-motivated candidates used the VLE on a regular basis and this helped their progression. Discussion online has proved supportive for some candidates but not all found the discussions helpful. Any deep discussion on doctoral issues had limited value for most candidates. It proved difficult to generate a sustained debate amongst staff and candidates online. However, the VLE did prove successful at providing a forum for information exchange between candidates and between staff and candidates. The findings revealed that this forum facility proved to be the most important use of the conferencing tool.

The VLE evolved through action research from a repository of resource material to a more interactive learning environment in supporting candidates. It permitted the development of web pages and content specifically designed to help candidates learn at different stages in their development. It gave the team an opportunity to influence what was being studied by the candidates. The material was organised in two ways. First, as a carefully programmed set of interactive materials which could be accessed in the order it was needed. For example, a section was created for formal assessment in terms of paper 1, paper 2, paper 3, the research proposal and the confirmation of candidature. Candidates could select these web pages as they tackled each assignment. Second, the material was organised as a block set of documents and online material which could be accessed in any order. This second

option facilitated access to and easy location of past material to be used again by candidates who were at a later stage. The VLE also enabled a single point of entry to other websites and interactive material, such as the Epigeum software, to support the candidates. These bespoke packages added to the quality of the candidates' experience.

The VLE facilitated the submission of assessed work and rapid feedback to candidates. Its transparency aided staff development and the sharing of good practice amongst staff. Any problems could be identified early and dealt with quickly. The administrative load of the programme was reduced as administrators, academic staff and the external moderator all had access to the assessed work; this avoided unnecessary copying and sending to various groups.

Discussions in the workshop could be followed up with more reflective comments on the VLE. The blended approach adopted meant that the discussion online was limited but helped some of the more motivated candidates to keep going between workshops. It provided a useful means of communication between workshops and therefore helped maintain contact. Lack of use by any of the candidates was one indication of a lack of progress and was acted upon by contacting the candidate and taking further action.

Contextualisation of Work

Candidates reported that they obtained a better understanding of the particular issues being studied or skill developed when they could apply it to

their own situation and topic. In other words, they found contextualisation aided their study (Boud, 1998). This contextualisation was facilitated by the fact that the curriculum was defined by the individual work practice of the candidate and could be tailored to their needs. This supports the findings of Nixon *et al*. (2006). When there was a good match between the candidates' workplace practice and their doctorate, good progress was made.

The starting point for all the candidates was set by paper 1's examination of the candidates' past experience, as had been advocated by Lee, *et al*. (2004). In this way they were asked to examine their Mode 2 knowledge (Gibbon *et al.,* 1994). The findings revealed that candidates had more difficulty with reflecting on their current and past experience than expected. The intention was that they would be starting in the comfort zone of their own practice and this would act as a sound platform to explore and develop their research ideas.

In practice, all candidates found the action of reflection rather difficult. Some candidates, who had not undertaken a detailed reflection of their work before, experienced difficulty re-examining and challenging established principles. Some experienced difficulty identifying the sources of their well-established Mode 2 knowledge. They could express strong opinions on issues but did not always have the evidence readily available to back up their claims. Intervention on how to improve their skills of reflection became an important aspect of both the workshop and VLE activity during Stage 1. The work of Cowan (2006) was particularly helpful in terms of describing precisely what

they had achieved, analysing how this was achieved, and evaluating how well it was achieved. Reflections from candidates at the end of Stage 1 revealed that the interventions were effective as they were able to identify key aspects of their learning.

The New Conceptual Framework

Figure 10.1 illustrates how the conceptual framework has developed and evolved from that shown in Figure 6.1 in Chapter 6.

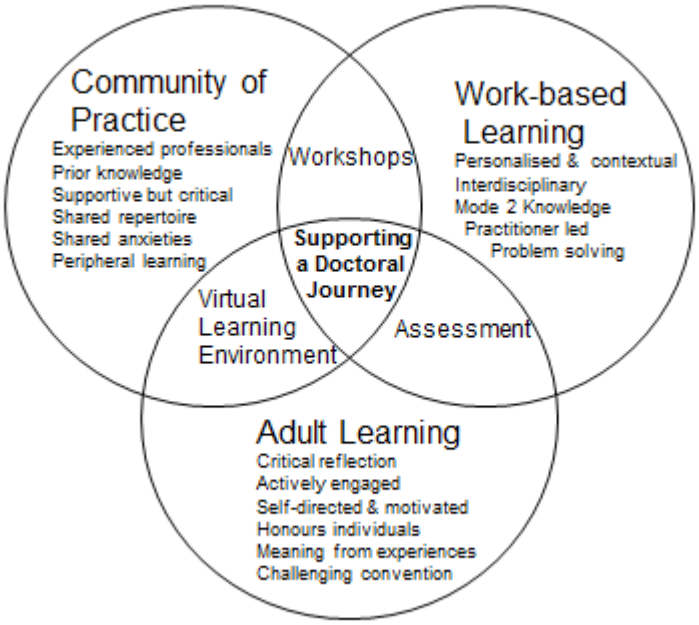

Figure 10.1 Conceptual Framework Revisited in detail

The supporting mechanisms developed from a sound theoretical and practical basis over the lifetime of the project. A very important aspect of this was the community of practice which emerged. A key characteristic of this professional community was that, whilst individually candidates lacked confidence in academic matters, collectively they could perform at a very high

level. As each candidate presented their work for the scrutiny of others, the collective judgements of the community on the quality of the work were of the highest quality. Often the candidates were more critical than the staff present. All candidates who have completed their viva have commented that the community was influential in preparing them for the rigours of the viva. It was clear also that the whole community could benefit from each candidate presentation with considerable incidental learning taking place.

The Emerging Doctoral Journey

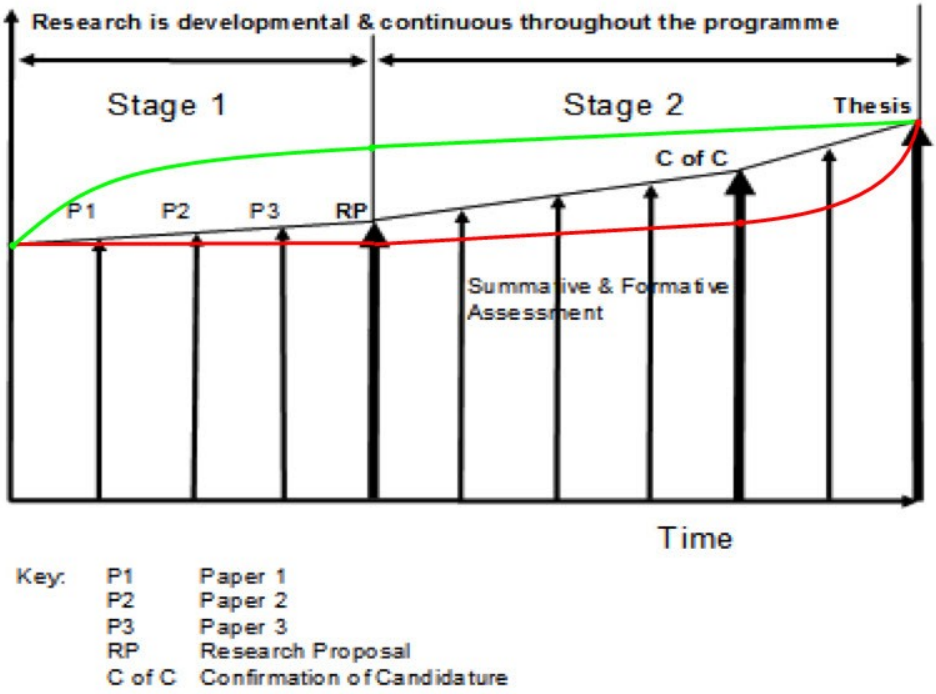

Figure 10.2 The Doctoral Journal from Masters to Doctorate

Figure 10.2 represents the range of doctoral journeys experienced by successful candidates on the programme. The area between the green and red line outline the boundaries of the cohort experience at doctoral level. Each candidate had their own individual journey with some developing more

quickly than others. The flexible nature of the programme facilitated this variation. Candidates regarded the whole process as a doctoral journey, entering at masters level and leaving at doctoral level on completion. Key aspects which supported their incremental development of doctoral skills were the formative nature of the assessment, the creation of the research community and the convenience of well-resourced VLE.

Criticism of the Conceptual Model

The two-stage flexible model was designed for self-managed professionals who could take responsibility for their own learning. The support mechanisms of assessment, workshops and the VLE worked extremely well for these candidates. They used the formal assessment to guide their research, set their own deadlines, submit work on time and receive feedback, access the required learning material from the VLE at a time and pace that suited their particular needs, present their ideas at the workshops and adapt their work in light of criticism from a well-informed research community of practice made up of fellow candidates and staff. In the relationship between these candidates and their supervisors, the candidates were proactive and the supervisors could therefore be reactive. These self-directed candidates have or are on track to successfully complete within three to six years. In Stage 1, the main role of the academic advisers was to give timely feedback on assessment, putting the candidates in a position to take charge of their learning. In addition, since there is no set programme of content in the workshops, with all the information and learning material available online, candidates can join the programme at any time during the academic year. This flexibility is a real strength of the programme's design.

However, this strength is also its main weakness. Just as some candidates can make rapid progress, some fall behind. These candidates, who perhaps are less motivated or have difficulty managing the balance of study and work, failed to make sufficient progress. Currently, there is no penalty for late submission of work, as might be the case on a modular Stage 1. For the

system to work, candidates need to actively use the assessment to direct their studies, access the VLE when required, and attend the workshops regularly to present at critical times. When candidates do not engage as described above, problems occur. On this programme, providing extra one-to-one support had little effect on these candidates. Lack of attendance by some at the workshops can also limit the group dynamic of the research community.

In Stage 2 of the original model there was no formal assessment between the research proposal at entry and the final thesis. This has proved problematic for some candidates. For the self-managed candidates, this lack of assessment poses no danger and they can still complete Stage 2 in the minimum timeframe of two years. Candidates who take longer than two years needed a formal summative assessment to measure progress. A confirmation of candidature, similar to that required for the PhD, was added to Stage 2 as an intervention and has proved helpful to candidates to focus on what they have achieved and what they need to do for completion. This has been incorporated into a revalidated version of the programme.

Chapter 11 – Conclusions

Introduction

This chapter summarises the main conclusions to the thesis. The effectiveness of the selected methodological approach of action research is re-examined and reflected upon as a suitable vehicle for bringing about change in an educational setting. The chapter concludes with the key messages in this thesis and suggested future research which could build on the findings.

This action research project made a modest but significant contribution to curriculum development at doctoral level. The research developed a flexible non-modular two-stage curriculum model which enabled academic practice to support the professional development of candidates as they strived to improve their professional practice by engaging in doctoral level work. Self-managed and largely self-directed candidates require appropriate support mechanisms to complete a professional doctorate within a realistic timeframe. Carefully constructed synergy between their doctorate, its supporting mechanisms and their own professional practice are crucial to their success.

The Conceptual Development of the PrD (BE)

In response to the concerns raised in the introduction over the limitation of the part-time PhD and the modular professional doctorate, a professional doctorate programme was conceptualised and validated as a staged process, as illustrated in Figure 10.1.

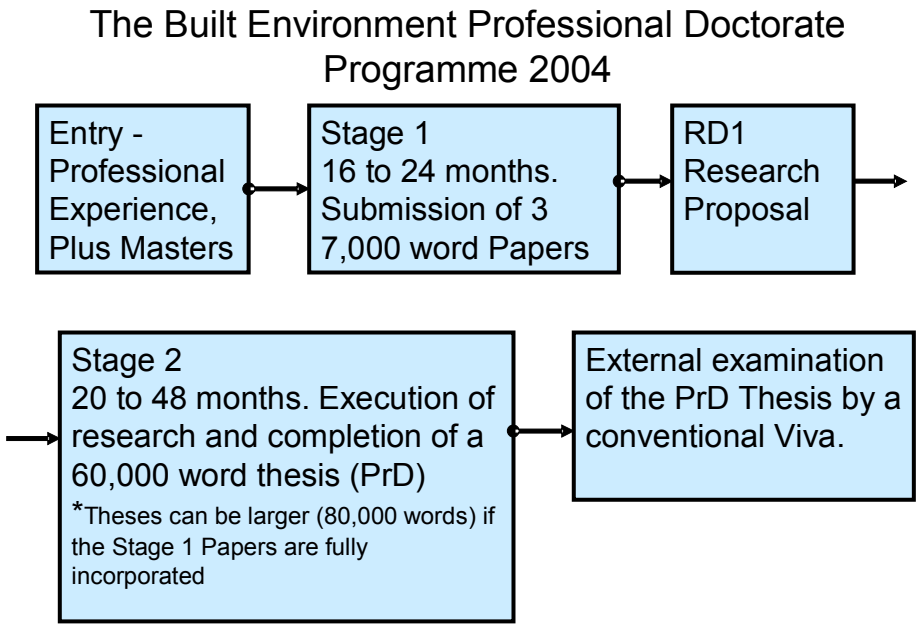

Figure 10.1 - The original Conceptual Model for the PrD (BE)

Candidates were regarded as being enrolled on a doctoral programme from the start of their registration. The questions and concerns over how much of the programme was modular and at masters level were therefore removed. That is, since the candidates were regarded as being registered on a doctorate in both stages, this removed the need to specify how much of the programme was concerned with doctoral issues. This did not mean that all candidates were working at doctoral level in Stage 1, but were exposed to, engaged with, and working toward, the QAA (2011) doctoral requirements throughout their study. The summative assessment, namely the three research papers in Stage 1, the research proposal between the stages, with the addition of the confirmation of candidature during Stage 2 in 2008, directed the draft formative assessment opportunities and the design of active learning for the candidates. This programme required a number of support

mechanisms, in addition to the normal supervisory provision, to help ensure candidates were actively engaged in their learning.

Support Mechanisms

For self-motivated candidates to take responsibility for their own learning, a learning environment was created which provides the resources and support they require. Individuals need access to resources and training material at a time that suits them. Their learning requires sound assessment briefs which focus on high level cognitive skills and a safe environment that facilitates collaborative learning. The workshops and the VLE together proved to be effective at providing this environment.

The essential support for this programme was provided by a combined use of the following carefully designed and well managed mechanisms:

1. Assessment briefs containing formative information combined with rapid formative feedback from the advisory team on progress and opportunities for candidates to reflect on their work.
2. Workshops which could introduce new ideas and concepts, focused on the active engagement of the candidates in small group activities and in presenting and defending their work.
3. Interactive VLE which put the candidates in full control of their learning and provided access to information and challenging

activities at a time that suited the candidates. It also facilitated the submission and rapid feedback on assessed work.

The three support mechanisms were selected to develop individual and collaborative learning (Figure 10.2). The action research strategy permitted these to develop quickly to support the candidates.

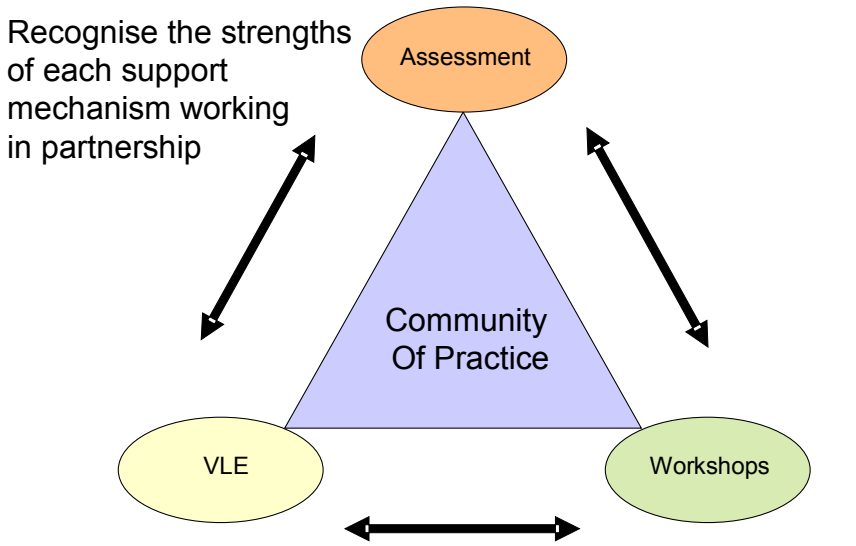

Figure 10.2 - The Three-Pronged Support Strategy

These support mechanisms were most effective when combined together, drawing on the particular strengths of each one. It emerged from the findings that each was required to support the effectiveness of the other two mechanisms The variety also suited the range of learning styles preferred by the candidates.

The assessment directed their work by specifying the higher level skills required for doctoral work, the workshops provided the space for candidates to develop a research community and explore ideas together, and the VLE supported the development of this community as well as providing access to the resources and training needs under the control of the candidates.

Effectiveness of the Model

The assessment briefs were the key to directing the candidates' research and learning in the early stages of their doctorate. This set the agenda for the content of the workshops which in turn generated discussion on the VLE. It acted as a repository for learning material, and permitted the submission of the assessed papers in Stage 1 together with timely feedback from staff. This VLE grew from a repository of information to a programmed set of content pages containing learning activities that directed the candidates' progress.

Doctoral skills take time to develop and working with these skills in Stage 1 helped prepare candidates for Stage 2. This was strongly supported by reflections from candidates who felt that their skills were developed from their masters level entry, to being able to understand the requirements of doctoral level work by the end of Stage 1. This development and progress continued during Stage 2. Thus, Stage 1 and Stage 2 was focused on the continuous improvement of skills in a similar way to that now advocated by the Vitae Researcher Development Framework.

The interview with the director of the DBA at Anglia Ruskin University revealed that, although his programme was general, individual learning was not, with some candidates progressing slower than others. This was confirmed by this research. The non-modular Stage 1 of the PrD (BE) facilitated this variation of pace. Level of attainment at any one time varied for each candidate but was a continuous trend upwards for successful candidates. Candidates learn at different rates depending on a range of circumstances, ability, motivation and self-direction, and the programme needs to be flexible to accommodate this variation. For the well-motivated, self-directed candidate, minimum supervision was required in Stage 1. For these candidates, the support mechanisms put in place for Stage 1 were sufficient to aid development and progression.

However, without the aid of strict deadlines which might be imposed by a modular structure, the slow pace of progress by some candidates resulted in failure to progress from Stage 1. An exit qualification at the end of Stage 1 has been added at revalidation of the programme.

For this flexible system to work, candidates need to take charge of their learning and engage with the support available. The operation of the workshops, in particular, required good candidate engagement. Regular attendance by all is required, not only to present, but to form the critical research community. Strong local management by the support team and maintaining good contact with the candidates were also required to replace the more formal modular structure.

Candidates make better progress when there is a strong synergy between their doctorate and their work. In one extreme case, a candidate completed his doctorate in less than three and a half years because, although registered on the PrD (BE) as a part-time student, he and his employer regarded his role in the company as a full-time researcher improving the practice of the office. Some candidates and their employers failed to recognise the time commitment and had difficulty obtaining the required match between work and study. As a result, these candidates failed to progress from Stage 1.

The multi-disciplinary mix of candidates proved to be a real strength in helping to create a learning community. Action research revealed that the workshops provided an ideal forum for such cross-fertilisation and that candidates positively benefited from the discussions. Often it was the non-specialist question or comment from the group that stimulated thought and generated deep debate. The literature on work-based learning supports this cross-discipline approach to problem solving. Candidates expressed very strong support for the workshops to be used as a forum to explore, examine and test issues related to their professional practice.

Bringing Stage 1 and Stage 2 together, both on the same VLE and in the workshops was very effective in supporting the community and creating opportunities for incidental and collaborative learning to take place.

Review of the Methodological Approach

Action research has proved to be an effective research methodology to capture the concerns, nature and development of the PrD (BE). It has facilitated changes by encouraging the input and reflection of the candidates and staff. Its fundamental premise of group collaborative learning has been a complex but rewarding experience for staff, candidates and myself. Drawing on theories of social constructivism, action research on this project created a safe working environment in which staff and candidates felt they had an equal, democratic voice and could contribute to the development of their own learning. In fact, the use of action research was an early factor in the development of the research community where candidates and staff could take ownership and collaborate to create an agreed set of principles for the assessment, workshop activity and the use of the VLE.

The action research cycle created for this project offered an epistemology which crucially included, in Step 3 (see Figure 5.1 in Chapter 5) a contribution from existing academic knowledge in the literature, and experiential knowledge from a consultation with professional colleagues; consulting the wisdom of others before planning actions and observing them, supported their design.

Collaborative reflection with others (Step 6 of Figure 5.1) after actions taken was also a key step in evaluating the effectiveness of change before a final reflection on my own. This increased the validity of the findings and actions taken. The validity of the findings was further enhanced by the prolonged

nature of the research. That is, intervention which arose from the interaction with one set of candidates could be tested again and confirmed as new candidates jointed the programme.

The progress of the research was determined by the progress of the PrD (BE). Changes were always made for the benefit of the candidates and the programme and not solely for the benefit of the research. Action research can be rather messy with no opportunity to isolate variables. Nevertheless, it is a very powerful tool to bring about change. It also had an unexpected positive influence on the development of an active research community of practice.

Clarification of the Contribution to Knowledge

A masters degree entry non-modular and non-credit rated professional doctorate can provide for the needs of built environment professional candidates who wish to examine their own professional practice at doctoral level. It offered an alternative to the masters/doctorate model which operates at other universities in the UK. Although the programme was divided into two stages, the whole experience could be regarded by staff and candidates as a continuous doctoral research study. This model enabled candidates to work on and develop doctoral skills throughout their programme using their own research topic as contextual material. Stage 1 does not have to be taught, modular or credit rated. The three research papers in Stage 1 can be quality assured by an external moderator who can report annually to the University in a similar fashion to that on taught programmes. The research proposal, sandwiched between Stage 1 and Stage 2, can provide an additional quality assurance point satisfying internal faculty scrutiny. It also acts as a progression point. During Stage 2 a confirmation of candidature process, similar to that required for the PhD, adds an additional progress point for scrutiny external to the programme.

This model provides both opportunities and challenges. Candidates were not constrained by a set modular timetable and could progress at a rate that suited there particular talents and circumstances. However, candidates do need a certain amount of structural support, self-discipline and self-management to keep within a reasonable timeframe.

A non-modular programme also provides the opportunity for Stage 1 and Stage 2 candidates to work together as a single research community of practice. This, although difficult to manage, provides opportunities for candidates to learn from each other as they expose their practice to the scrutiny of others. Almost all candidates reacted positively to this scrutiny from their fellow candidates.

Assessment, workshops and a VLE, with each one supporting the other two, were essential ingredients for successful completion, in addition to the normal supervisory role. It is an advantage for candidates to work with their supervisory team throughout both stages of their doctorate. The model developed could also be adopted for other university qualifications.

Future Research

The conceptual model required further refinement to help ensure that it is more effective for all candidates, not just those who are well motivated and self-directed. The effectiveness of a strict maximum time limit for Stage 1 could be explored.

The model is now being validated to operate across all five departments in the Faculty of Science and Technology. This will create a community of practice from a wide range of scientific and engineering disciplines. This will create opportunities to research the effect this might have on the cross-fertilisation of ideas and the multi-disciplinary approach to doctoral education. An optimum size for research communities could be explored.

Research into the impact that the professional doctorate has had on the graduates and their companies would add to the pool of knowledge on the effectiveness of this form of education.

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APPENDICES

APPENDIX I

Examples of the Action Research Cycle in Practice

Table 5.1 A Blank Action Research Cycle Table

Systematic Experiential Improvement through Action Research		
Topic:		**Action Research Cycle:**
Aspect		**Action Taken**
1	**Current Practice** Constraints, Understanding & Skill level.	
2	**Diagnosis** Recognising the need to improve. Formulating concerns, posing problems	
3	**Consult Theory & Practice** Theory (literature) Professional Practice (Colleagues)	
4	**Design & Plan** Reflection-for-action, new practice, innovative ideas and interventions.	
5	**Act & Observe** Testing implications in new situations & context.	

	Record, observe, feedback, evidence.	
6	**Reflection-in-action** Critically examining & interpreting – with colleagues and self-reflection.	
7	**Reflection-on-action** Make sense of the innovation. Reforming practice. Accommodating. Assimilating. Incorporating. Reject. Conclude. Record.	

Table 5.2 Action Research Cycle 1 in Practice

Systematic Experiential Improvement through Action Research		
Topic: Assessment. Improving the brief for Paper 1 of Stage 1 of the PrD.		**Action Research Cycle: 1**
Aspect		**Action Taken**
1	**Current Practice** Constraints, Understanding & Skill level.	Candidates were to use the formally assessed Stage 1 Papers to shape the research project to be undertaken in Stage 2. A very short brief was prepared by me to give limited guidance which would not be too prescriptive and restrict the focus of their individual research. The wording was deliberately very brief so candidates would be free to mould the paper to their requirements. The key aspect of the paper was to facilitate reflection on their practice to generate an initial research question derived from that practice.
2	**Diagnosis** Recognising the need to improve. Formulating concerns, posing problems	The initial concept was that, since this was a research degree and not a taught programme, a detailed brief, with specific guidance and outcomes was inappropriate. Candidates would need the freedom to explore their own context specific problem in their workplace and not be distracted by meeting the requirements of an academic assessment brief. The content of each paper would be individual to the candidate and should not be prescribed by tutors. It should be a work-based assessment rather than a university-based one.
3	**Consult Theory & Practice** Theory (literature) Professional Practice (Colleagues)	There is general consensus in the literature on Work-based Learning (WBL) (Boud, 1999, 2001; Costley 2000; Lee *et al.,* 2004) that the starting point for a WBL study is the candidate's own past experience and current work context. Boud, for example, believes that the WBL curriculum is defined by an examination of the nature and context of each candidates work setting. From an epistemological standpoint, WBL is concerned with what Gibbons *et al.* (1994) describe as Mode 2 knowledge, which emerges from practice. This Mode 2 knowledge is both generated from and used in the workplace.

		When staff on the DBA and EdD were consulted there was a strong feeling expressed by the team that candidates should start in practice before progressing to examine theory. The staff on the PrD felt strongly that we should move away from the outcome driven modular approach to assessment.
4	**Design & Plan** Reflection-for-action, new practice, innovative ideas and interventions.	The following brief was written by me, based on the advice given above. *The brief for paper 1* *This will concern your role in your own practice, the professional and organisational context and will focus upon an initial consideration of a research area with some provisional research questions. To support your research focus, you will engage with theoretical and empirical studies germane to your professional context. (7000 words).* No other advice was provided at the start of the programme for the first cohort of candidates.
5	**Act & Observe** Testing implications in new situations & context. Record, observe, feedback, evidence.	The brief was given to the candidates in workshop 1 Oct 2004. Candidates were then asked to present their initial ideas in the next workshop as a PowerPoint presentation and upload to WebCT. It became apparent from their PowerPoint presentations, candidate questions on WebCT and discussions in the workshops, that they did not have a good understanding of what was expected of them.
6	**Reflection-in-action** Critically examining & interpreting – with colleagues and self-reflection.	As a consequence of early misunderstandings, the first draft papers were disappointing. With hindsight, it is not surprising that the candidates tended towards producing a descriptive account of their organisation, their place in it, and their topic. They had interpreted the phrase 'your own practice' to mean their own company and in doing so the work produced focused too much on describing the nature of their employment rather than their research focus. The brief did not

		make it clear that the main aim of paper 1 was to make the case for the research question by **reflecting on and examining their professional activities**. In addition, candidates had difficulty engaging with theory to underpin their research, with the theory offering little more than a descriptive account of the topic. There was little critical engagement with the concepts and ideas underpinning specific theoretical perspectives. There was a lack of reflection on professional practice to identify issues to be resolved.
7	**Reflection-on-action** Make sense of the innovation. Reforming practice. Accommodating. Assimilating. Incorporating. Reject. Conclude. Record.	It became apparent that the brief was not fit for purpose and a range of further interventions were required to resolve the problem. A level of conflict existed between the concern of staff working on the programme that the assessment should not be too prescriptive, the limited scope and clarity of the emerging research projects, and the lack of clarity contained within the original assessment brief. The brief needs expanding to ensure the candidates know what is required. This must be the first requirement of any subsequent brief.

Table 5.3 Action Research Cycle 2 in Practice

Systematic Experiential Improvement through Action Research		
Topic: Improving the brief for Paper 1 of Stage 1 of the PrD.		**Action Research Cycle: 2**
Aspect		**Action Taken**
1	**Current Practice** Constraints, Understanding & Skill level.	The first cycle of assessment revealed that the current short brief did not provide sufficient information to help the candidates understand the requirements of the brief
2	**Diagnosis** Recognising the need to improve. Formulating concerns, posing problems	Candidates were struggling to understand what was required in the assessment. They need sufficient detail in the brief to provide formative guidance as to what is required and to what standard. Although candidates are to take responsibility for their own learning they do need help and guidance as to the requirements.
3	**Consult Theory & Practice** Theory (literature) Professional Practice (Colleagues)	Sadler(1989) identified three conditions than are required for students to effectively learn from assessment work. Students must know: 1. What standard to aim for 2. How their current performance relates to that standard 3. How to act to close the gap between 1 and 2 Taking the behaviourists view, learning tasks should be subdivided into objectives to be learnt or outcomes to be achieved (Brown, 2004), so that candidates had the information to make judgements concerning Sadler's three points. Some of the staff team had reservations about using outcomes in this way. They argued that outcomes were for set taught programme and were not appropriate for a research degree.
4	**Design & Plan** Reflection-for-action, new practice, innovative ideas and	A focus group of candidates and staff was formed to develop the briefs for Stage 1. Candidates were asked to clarify misunderstandings and staff were asked to specify what they were looking for.

	interventions.	
5	**Act & Observe** Testing implications in new situations & context. Record, observe, feedback, evidence.	A set of formative information was created. It was agreed to add this formative information to the briefs, some of which was in the form of learning outcomes. It was also agreed that an opportunity would be created to submit a draft of their work prior to the formal submission, to allow formative feedback to assist in the development of the candidates' work.
6	**Reflection-in-action** Critically examining & interpreting – with colleagues and self-reflection.	Candidates reported that the addition of the outcomes to the brief helped direct their work and provided a means of checking that they had addressed all the main issues. Staff found that the outcomes helped form the basis of assessment criteria when marking the work. These outcomes were therefore changed into 'assessment criteria' and this satisfied all staff. This subtle change emphasised that they were to be used to judge the standard of the candidates' work rather than outcomes that must be achieved in all cases. This was to provide a more flexible approach to assessing doctoral research output. Both candidates and staff reacted positively to the changes.
7	**Reflection-on-action** Make sense of the innovation. Reforming practice. Accommodating. Assimilating. Incorporating. Reject. Conclude. Record	The formative information in the briefs improved the candidate performance and gave them a better understanding of what was required. However, most candidates were still having difficulty interpreting what exactly was meant by each outcome. Further action is still required to help candidates obtain the most out of the assessment. It was becoming clear that the assessment had a strong formative role as well as a summative one. The draft submission opportunity was originally introduced to be used with a few candidates that required extra support. However, very quickly, almost all candidates used this draft facility.

Table 5.4 Action Research Cycle 3 in Practice

Systematic Experiential Improvement through Action Research		
Topic: : Improving the brief for Paper 1 of Stage 1 of the PrD.		**Action Research Cycle: 3**
Aspect		**Action Taken**
1	**Current Practice** Constraints, Understanding & Skill level.	The Stage 1 papers now consist of a task brief, with additional formative information and specific learning outcomes (See the Appendix 6.1 Programme Handbook)
2	**Diagnosis** Recognising the need to improve. Formulating concerns, posing problems	Although the addition of the formative information was helpful to both staff and candidates, the standard of early work was generally lower than expected, despite masters level entry. Stage 1 was designed to help candidates develop the skills they required to operate at doctoral level so a way must be found to accelerate their development. In particular candidates were not being critical enough.
3	**Consult Theory & Practice** Theory (literature) Professional Practice (Colleagues)	The assessment criteria for a research degree, by its very nature, are complex and difficult to articulate. They may be readily understand by academic but less so by students. As Yorke (2003:480) expressed it: > Statements of expected standards, curriculum objectives or learning outcomes are generally insufficient to convey the richness of meaning that is wrapped up in them. Orsmond *et al.* (2002) provides a possible solution to this problem by suggesting that exemplars of student work are effective in complementing outcomes because they make explicit what is intended. Students can see how others have tackled the same assignments. As students make judgements about others' work they begin to develop evaluative skills which they can then apply to their own written material. McDonald and Boud (2003) have demonstrated that self-assessment can improve student performance.

4	**Design & Plan** Reflection-for-action, new practice, innovative ideas and interventions.	Two actions were planned at this stage in the third cycle to improve the performance of candidates and help them more rapidly develop the required skill set. Examplars of good practice assignments were made available to all candidates via WebCT and a self-assessment form was designed to encourage reflection between papers.
5	**Act & Observe** Testing implications in new situations & context. Record, observe, feedback, evidence.	Selected candidates, who had produced good work, were asked if their work could be made available to others by uploading it to WebCT. None of the candidates objected and were generally happy for their work to be used in this way; some were honoured that their work was being used as examples. Good examples were also discussed in the workshops in terms of reflections about the criteria and the standards required. The self-assessment form was added to the assessment section of WebCT
6	**Reflection-in-action** Critically examining & interpreting – with colleagues and self-reflection.	The candidates found the exemplars on WebCT extremely helpful in clarifying what was required in each paper. Discussions in the workshops on the assessment helped align it with workshop activity, as it was used as contextual material. The workshops, WebCT and the assessment worked well together, drawing on their strengths to support the candidates. One candidate encapsulated the view of the cohort by saying: *I have had to change my writing style from accepted industry expert format to academic paper writing with much patience and support from my supervisors. Having access to previous candidates work through WebCT has been invaluable along with the numerous presentations that are available to view when I have time available, and not at set times.*
7	**Reflection-on-action** Make sense of the	The use of examples had a positive effect of the work and was more influential in bringing about change than the addition of outcomes alone. As a bare minimum, candidates had a better

	innovation. Reforming practice. Accommodating. Assimilating. Incorporating. Reject. Conclude. Record	understanding of each assessment as a result of the past candidate work being made available. Asking to use their work as examples had an unexpected positive effect of increasing the confidence of individual candidates. The self-assessment tool has been less effective, but has provided a basis for discussion of the feedback, more as a dialog than the simple transmission of information.

APPENDIX II

PARTICIPANT INFORMATION SHEET

Section A: The Research Project

1. Title of project:

AN EVALUATION OF A PROFESSIONAL DOCTORATE FOR THE BUILT ENVIRONMENT

2. **Rationale**: The professional doctorates (PrDs) have been running at Anglia Ruskin University since the mid 1990s from when the DBA was first introduced. Anglia Ruskin University now offers five PrDs. Little research has been undertaken or published on the effectiveness of these programmes. The Built Environment version of the Anglia Ruskin PrD model has been operating since 2004. The design, operation and evaluation of this version are being investigated.

3. **Invitation to participate**: As a candidate or supervisor of the Professional Doctorate for the Built Environment you are invited to take part in a research project to evaluate the programme.

4. **Who is organising the research**: Ian Frame is completing this research as part of an award of Doctor of Education from the Faculty of Education, Anglia Ruskin University.

5. **What will happen to the results of the study**: They will be published in my final thesis, conference papers and journal articles.

6. **Source of funding for the research**: The research is funded by the Faculty of Science and Technology.

7. **Contact for further information**: I can be contacted via the VLE for the ProfD (WebCT), by email: ian.frame@anglia.ac.uk, or Tel: 01245 493131 x3936

Section B: Your Participation in the Research Project

1. **Why you have been invited to take part**: You have been invited to form part of the action research group to develop the Professional Doctorate for Built Environment candidates and may be invited for interview.

2. **Whether you can refuse to take part**: As part of each cohort you will experience the evolution of the programme with time. You may refuse to give advice and feedback and to take part in the interviews.

3. **Whether you can withdraw at any time, and how**: You can withdraw from the research at any time by informing me in writing, by email or on WebCT.

4. **What will happen if you agree to take part**: You will form part of the action research group and will be periodically asked for your views on the effectiveness of each aspect of the programme. You may be asked to complete a tape-recorded interview.

5. **Whether there are any risks involved**: You may feel from time to time that the development of the programme is unduly being influenced by the needs of this research project. Please bring this to my attention ASAP to resolve any issues. Candidate chances of success on the programme are not influenced by their willingness to take part. The programme is externally monitored by the Faculty of Science and Technology and the standard of work is verified by an independent external moderator at Stage 1 and by independent external examiners at Stage 2.

6. Agreement to participate in this research should not compromise your legal rights should something go wrong.

7. Whether there are any **special precautions** you must take before, during or after taking part in the study: None.

8. **What will happen to any information**/data/samples that are collected from you: They will be stored securely and used as evidence to support the research.

9. **Benefits from taking part**: You will be instrumental in bringing about improvements to the ProfD programme.

10. **Confidentiality**: All records will be securely stored and will be destroyed at the end of the project. Some information may be stored for short periods on a password protected laptop. All processes involved in the gathering and storage of information will comply with the eight principles detailed in Schedule 1 of the Data protection Act 1998.

YOU WILL BE GIVEN A COPY OF THIS TO KEEP,
TOGETHER WITH A COPY OF YOUR CONSENT FORM

APPENDIX III

RESEARCH PARTICIPANT CONSENT FORM

NAME OF PARTICIPANT:

Title of the project: AN EVALUATION OF A PROFESSIONAL DOCTORATE FOR THE BUILT ENVIRONMENT

Main investigator and contact details: Ian Frame. I can be contacted via the VLE for the PrD (WebCT), by email: ian.frame@anglia.ac.uk, Tel: 01245 493131 x3936

Members of the research team. Supervisors: Dr Jaki Lilly and Professor Vernon Trafford.

1. I agree to take part in the above research. I have read the Participant Information Sheet which is attached to this form. I understand what my role will be in this research, and all my questions have been answered to my satisfaction.

2. I understand that I am free to withdraw from the research at any time, for any reason and without prejudice.

3. I have been informed that the confidentiality of the information I provide will be safeguarded.

4. I am free to ask any questions at any time before and during the study.

5. I have been provided with a copy of this form and the Participant Information Sheet.

Data Protection: I agree to the University[1] processing personal data which I have supplied. I agree to the processing of such data for any purposes connected with the Research Project as outlined to me.
Name of participant (print)……..Signed……..….Date……

YOU WILL BE GIVEN A COPY OF THIS FORM TO KEEP

If you wish to withdraw from the research, please complete the form below and return to the main investigator named above.

Title of Project:

I WISH TO WITHDRAW FROM THIS STUDY

[1] "The University" includes Anglia Ruskin University and its partner colleges

APPENDIX IV CANDIDATE HANDBOOK CONTAINING CANDIDATE ACTIVITIES.

Anglia Ruskin University

Faculty of Science and Technology

Professional Doctorate in Science and Technology (DProf)

Professional Masters (MProf)
Postgraduate Diploma in Professional Research (PGDipProf)

Draft
CANDIDATE HANDBOOK
2013

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WELCOME

Welcome to the Professional Doctorate in the Faculty of Science and Technology. This is a new programme which is specifically designed for professional people who wish to complete a doctorate while researching their own professional practice. A very special welcome to you from Anglia Ruskin University, the Faculty of Science and Technology, and from the support team.

We believe this is a very exciting new development, but it is inevitable that at first it can be a confusing and disorientating experience. There is a great deal to take in and absorb in a short space of time. You may feel you are moving from a confident professional to a novice researcher but, don't worry, you are in very good company. You are joining a research community of like-minded people seeking to improve their professional practice by completing a doctorate. It is a challenging, but very rewarding journey.

This handbook has been designed as a quick guide to your study and provides helpful information about the programme. Other information is readily available on our Virtual Learning Environment (VLE), which acts as a central source of information and our main form of communication on the programme. Please make full use of all the resources available to you.

I wish you all the best on your doctoral journey, and look forward to working with you.

Ian
Programme Director

The Professional Doctorate

The nature of the Professional Doctorate in Science and Technology (DProf Sc & T) along with all other doctorates in the UK is shaped by, and must comply with, the standards set by the UK Quality Assurance Agency for Higher Education in their description of doctoral characteristics (QAA, 2011).

They specify that:

Doctoral degrees are awarded to candidates who have demonstrated:

1. *the creation and interpretation of new knowledge, through original research or other advanced scholarship, of a quality to satisfy peer review, extend the forefront of the discipline, and merit publication*
2. *a systematic acquisition and understanding of a substantial body of knowledge which is at the forefront of an academic discipline or area of professional practice*
3. *the general ability to conceptualise, design and implement a project for the generation of new knowledge, applications or understanding at the forefront of the discipline, and to adjust the project design in the light of unforeseen problems*
4. *a detailed understanding of applicable techniques for research and advanced academic enquiry*

Typically, holders of the qualification will be able to:

- *make informed judgements on complex issues in specialist fields, often in the absence of complete data, and be able to communicate their ideas and conclusions clearly and effectively to specialist and non-specialist audiences*
- *continue to undertake pure and/or applied research and development at an advanced level, contributing substantially to the development of new techniques, ideas or approaches*

and will have:

- *the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex and unpredictable situations, in professional or equivalent environments.*

The DProf (Sc & T) however, has additional characteristics which set it apart from the others and make it a very special educational experience.

According to QAA (*ibid*), key features include: *'a practice base rather than an exclusively institutional focus; candidates are working while completing their doctorate and already possess* ***significant professional experience****. Successful completion of the degree normally leads to professional and/or organisational change that is often direct rather than achieved through the implementation of subsequent research findings'*.

Thus, the Professional Doctorate in Science and Technology is a work-based or practitioner-based doctorate. It is taken largely as a part-time study, although it is possible to complete Stage 1 of the programme on a full-time basis. In either case, there must be a very strong synergy between your doctorate and your professional practice. It provides an opportunity to re-examine and accredit your past professional experience. It provides a confidential multi-disciplinary forum for open discussion of ideas that concern the improvement of professional practice. The programme provides a collective experience of individual research projects supported within a doctoral research community. Your research output however, must contribute to improving and changing your own professional practice.

This DProf (Sc & T) is therefore designed for experienced professionals who wish to study at doctoral level to improve their practice, and who work in organisations that appreciate the benefits that accrue from this special form of education. The Professional Doctorate serves the needs of professionals in all fields associated with science and technology who may wish to undertake doctoral level study to:

1. advance knowledge, theory and practice through the generation of original research
2. provide apprenticeship in appropriate research methodologies which enables the development of those research skills pertinent to construction practice
3. enable candidates to display a high level of academic rigour, and the capability to produce work that is acceptable for publication in refereed journals
4. reflect on and self-accredit prior learning gained from their existing professional experience
5. improve the quality of their services as practitioners
6. expand their theoretical understanding of professional practice
7. foster and develop inter-professional working and learning through a community promotion of research in practice
8. evaluate the impact of interventions on professional practice
9. work in partnership with other professionals
10. potentially increase their esteem and that of their company

The Professional Doctorate programme concentrates on collective development of doctoral processes through a community of practice, which in turn helps your individual professional development.

You have registered on a doctorate which is divided into two distinct stages and has three exit qualifications:

Stage 1 - Skill development assessed by three research papers

1. Exit qualification - Postgraduate Diploma in Professional Research (PGDipProf)

Stage 2 - Doctoral Skill development assessed by a final thesis

2. Exit qualification - Professional Masters (MProf similar to MPhil) or,

3. Exit qualification - Professional Doctorate (DProf)

Support for the Doctorate

The programme is supported by:

1. A pre-entry Understanding Research (UR) programme where necessary
2. Five workshops per year delivered by a strong multi-disciplinary research community (the definition of which includes candidates as well as staff)
3. 24/7 virtual learning environment (VLE)
4. A well structured formative and summative assessment programme
5. Candidates themselves – self-motivated and self-managed researchers supporting each other in a community of practice
6. Individual tutorials with Stage 1 Academic Advisers and Stage 2 Supervisors
7. Compulsory Central University Training (Stage I, II, III and Research Ethics)
8. Online training software such as Epigeum
9. University-wide workshops and conferences
10. Candidates' employers - who commission and support the research

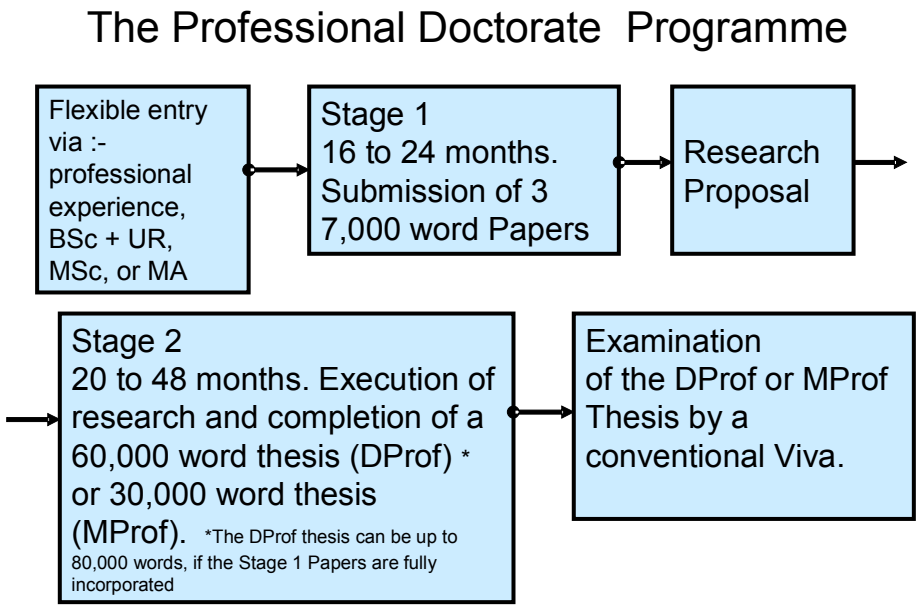
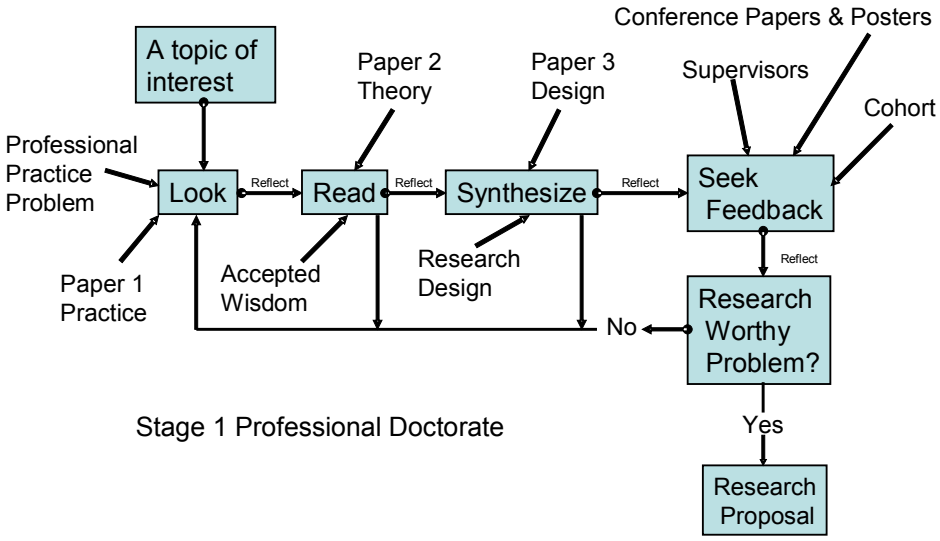


Figure 1 – The Staged Approach to the DProf (Sc & T) as validated in 2012

The overall structure is illustrated in Figure 1 and represents the staged approach to success. A key starting point for you is the professional experience you already possess. Stage 1 reflects on and explores this experience and provides the time and guidance to develop it into a sound research proposal. Your journey will take you from your strongly held views and opinions to well defined research statements which can be defended, and specific research questions which can be answered.

Stage 1 – Conceptualising Research



Process of Finding a Research-Worthy Problem (Adapted from Ellis and Levy, 2008)

Figure 2 – The Focus of Stage 1 – Defining the Research Problem

Figure2 illustrates that Stage 1 is concerned with finding a research problem worthy of doctoral study. This intellectual journey will take you from an initial topic of interest to a precise Research Proposal. Stage 1 is assessed by three 7,000 word research papers, see Appendix I for details. This first part of your journey to doctoral success, provides the opportunity to answer the what, why, when, how, where and who questions.

As a Stage 1 candidate, you will be asked to answer such questions as:

1. What is the current practice being addressed by the research?
2. How well does it currently operate?
3. What are the shortcomings of this current practice?
4. What evidence from practice is there to suggest there is a need for this new research?
5. What change to professional practice is needed?
6. What does the literature say about the topic?
7. Who are the leading authors and key voices on the topic?
8. What theories underpin the research?

9. What are the documented problems associated with the currently available professional practice?
10. Why has this problem arisen?
11. Why is this research important?
12. Why do I want to do it?
13. When and where did the problem become apparent?
14. How, where and when will the research be carried out?
15. Who will be involved in the research?
16. What are the ethical issues to be addressed?
17. How will this work contribute to professional practice?
18. Who will benefit from the research?

Stage 1 recognises that it takes time to formulate and justify the answers to these sorts of questions but, they are well worth answering before developing the research further in Stage 2. You will also need time to develop your powers of reasoning using evidence from both theory and practice to justify your arguments. The experience can be very different to the fast decision making intuitive processes you may be more familiar with at work. To support your development in Stage 1, you will be asked to expose your practice to the scrutiny of our research community in a critical but very supportive environment.

In Stage 1 you will begin to build and explore the following aspects of the QAA characteristics (2011):

- *a systematic acquisition and understanding of a body of knowledge (from practice and theory) much of which is at the forefront of an academic discipline or area of professional practice*
- *the general ability to conceptualise and design a project capable of generating new knowledge, applications or understanding at the forefront of the discipline*
- *an understanding of applicable techniques for research and advanced academic enquiry*

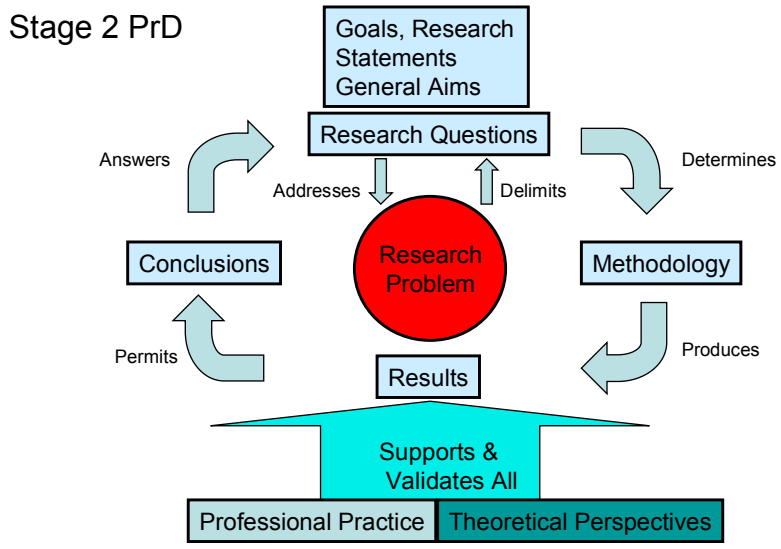
Stage 2 –Execution of the Research Project

These QAA characteristics, explored in Stage 1, will be further developed and enhanced in Stage 2 of the programme to doctoral level (see page 4), as you continue on your journey. Stage 2 will additionally examine at doctoral level:

- *the creation and interpretation of new knowledge, through original research or other advanced scholarship, of a quality to satisfy peer review, extend the forefront of the discipline, and merit publication*

- *the implementation of a project for the generation of new knowledge, applications or understanding at the forefront of the discipline, and to adjust the project design in the light of unforeseen problems.*

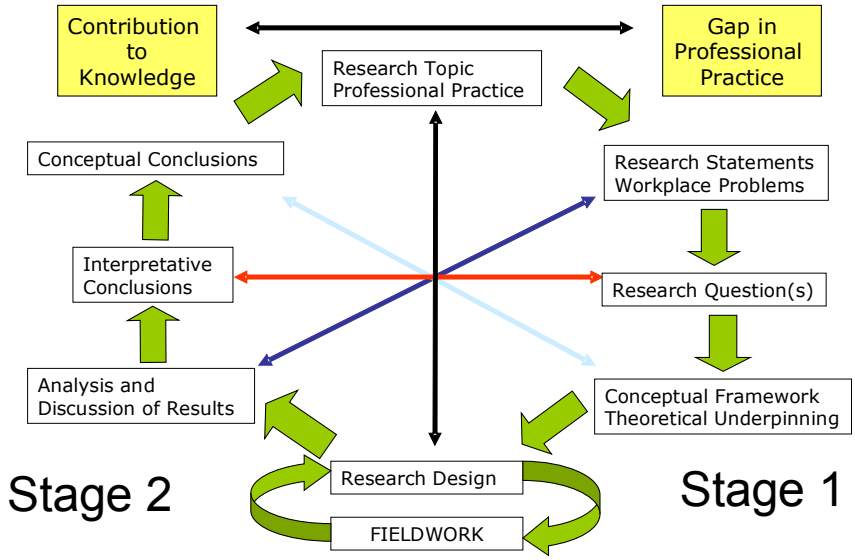
Stage 2 focuses on the implementation of research conceptualised in Stage 1 to improve your professional practice. Figure 3 shows the important aspects involved and how they link together. Note the clockwise flow of the diagram and how the research questions should **determine** the methodology, which in turn **produces** the results which **permit** the conclusions which **answers** the questions. Note also the strong synergy between Stage 1 and Stage 2. Much of the work completed in Stage 1 will be re-examined in Stage 2 as you put your research strategies into practice and adjust them in the light of experience, as you develop your doctoral skills.



Conceptual Map of Problem-Based Research (Adapted from Ellis and Levy, 2008)

Figure 3 – The Focus and Processes of Stage 2

In fact Stage 1 and Stage 2 of the Professional Doctorate are all part of the same doctoral journey, where each aspect is interrelated and visited many times during your research (Figure 4). Your employer, who may be the client for the research, may want you to identify workplace problems and produce factual results, but as Figure 4 illustrates, your doctorate is much more than that. Working at doctoral level requires conceptualisation which raises your level of thinking above and beyond the particular investigation.



Visualising Professional Doctoral Research Journey
Adapted from Source: Trafford and Leshem (2008:170)

Figure 4 - The Doctoral Research Journey

One of the distinctive features of a Professional Doctorate, that sets it apart from many PhDs, is that you will bring substantial professional experience to bear on the investigation in addition to the academic study. You will be working with real time projects directly related to your professional practice and the high level learning that results will inform your future research and development (Armsby and Costley, 2009). You will be undertaking a great deal of thinking, reflecting and analysing over the next few years. In doing so, you will be drawing on academic theory as well as the wealth of professional experience you possess. That wealth of professional experience can be to your advantage, but be careful to recognise the risks of unsubstantiated biased views and opinions. Figure 5 illustrates how you will need to support your doctorate from both theory and practice.

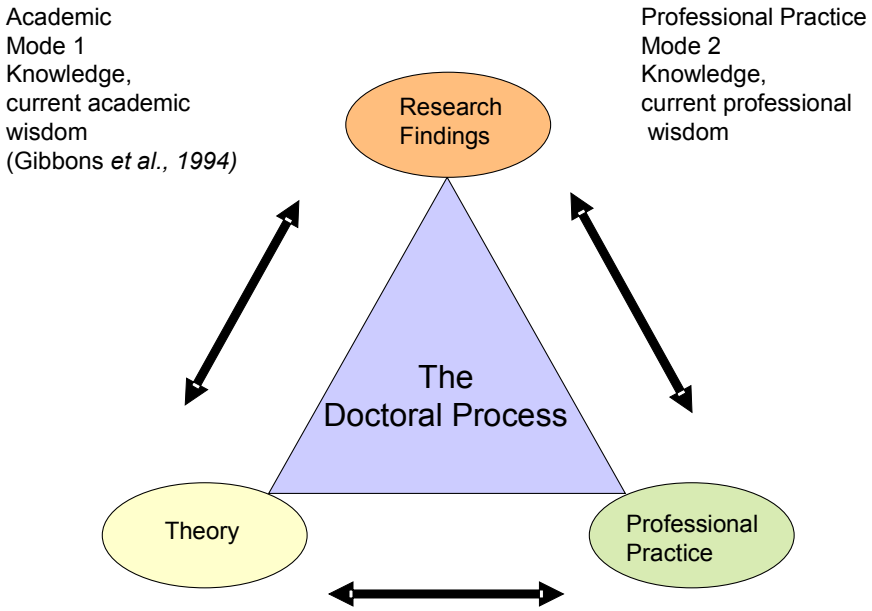


Figure 5 - Engaging with Academic and Professional Practice

Those candidates that complete in the shortest time fully engage with an active learning approach to their doctorate. When you examine Figure 6 you will see that the tutors on the programme have an input in the workshops and online in the feedback. This, however, is your research. Thus your input is by far the greatest contribution to your success. Successful candidates are self-motivated and self-managed, and engage with the whole cycle of events. They take responsibility for their own progress and do a considerable amount of work between workshops. Note that your place of work is your research laboratory; Anglia Ruskin's role is to provide the support mechanisms to help you achieve your doctorate. If you complete this cycle between each workshop you will maximise your chances of completing your doctorate in the minimum time expected. Please take full advantage of all support and skills training relevant to your research.

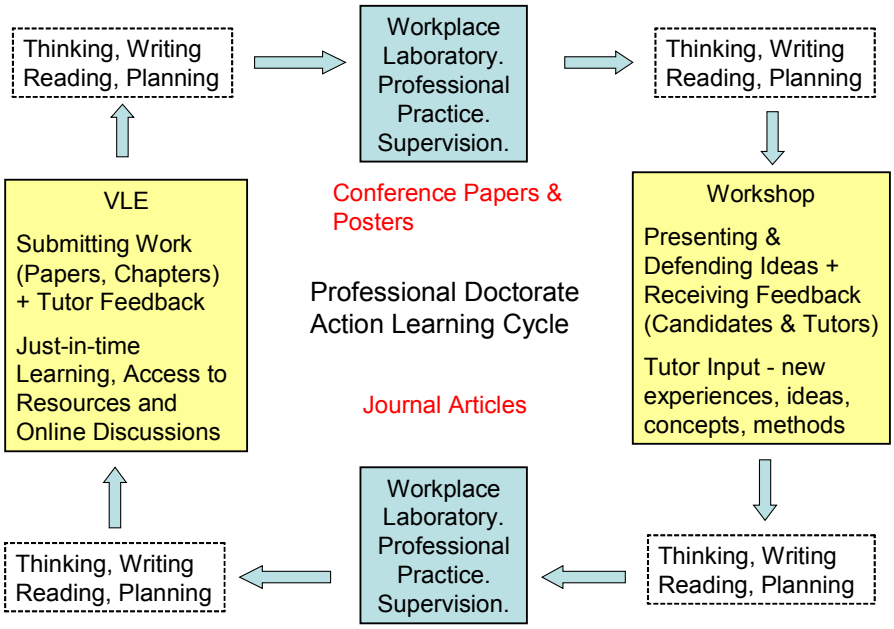


Figure 6 – Action Learning Cycle to Maximise Success

The DProf (Sc & T) is founded on fundamental principles of Adult Learning (See Billington n. d.; Knowles, 1986)

Adult learning is stimulated by:

1. An environment where candidates feel safe and supported, where individual needs and uniqueness are honoured, where abilities and life achievements are acknowledged and respected
2. An environment that fosters intellectual freedom and encourages experimentation and creativity
3. An environment where candidates are treated as peers and respected as intelligent experienced adults with a contribution to make (equal partnership)
4. Self-directed learning, where candidates take responsibility for their own learning
5. Pacing the intellectual challenge to meet the needs of the individual
6. Active involvement in learning (Action Learning)
7. Regular feedback mechanisms (both from staff and candidates)
8. Interesting and fun activities

This stimulation is provided by a blended learning approach of assessed papers, workshops, a virtual learning environment, and individual supervision. Learn to recognise the strengths of each support mechanism available as they act as temporary scaffolding for your research (Figure 7).

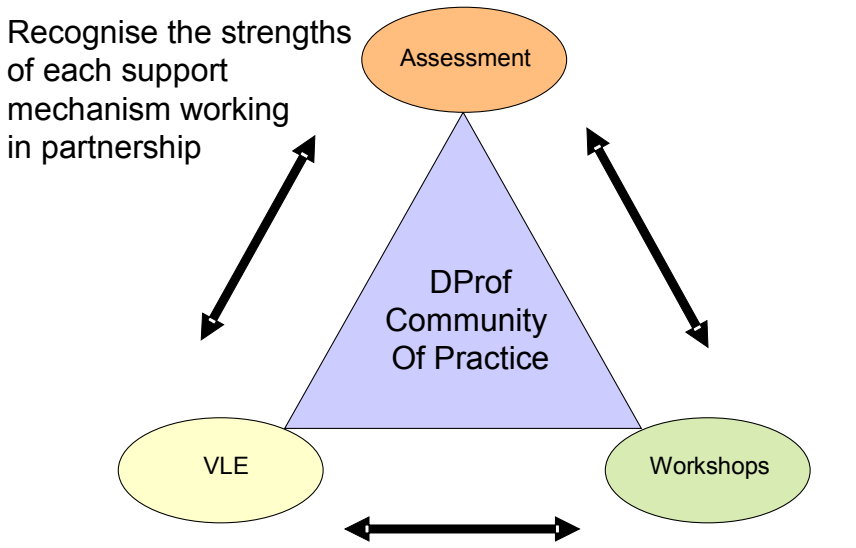


Figure 7 - Supporting the DProf Community of Practice

You are now part of a community of practice, joining members at various stages on their doctoral research journey. Figure 8 illustrates that the support is not a taught programme with set content at set stages. The workshops and the VLE provide a platform to discuss and scrutinise your practice and that of your peers. These provide valuable opportunities to enhance your understanding of conducting research, help focus your own research and become critically reflective of your own research and that of others. This means that, although it is not compulsory to attend every workshop and be online every week, it is important that you use them on a regular basis.

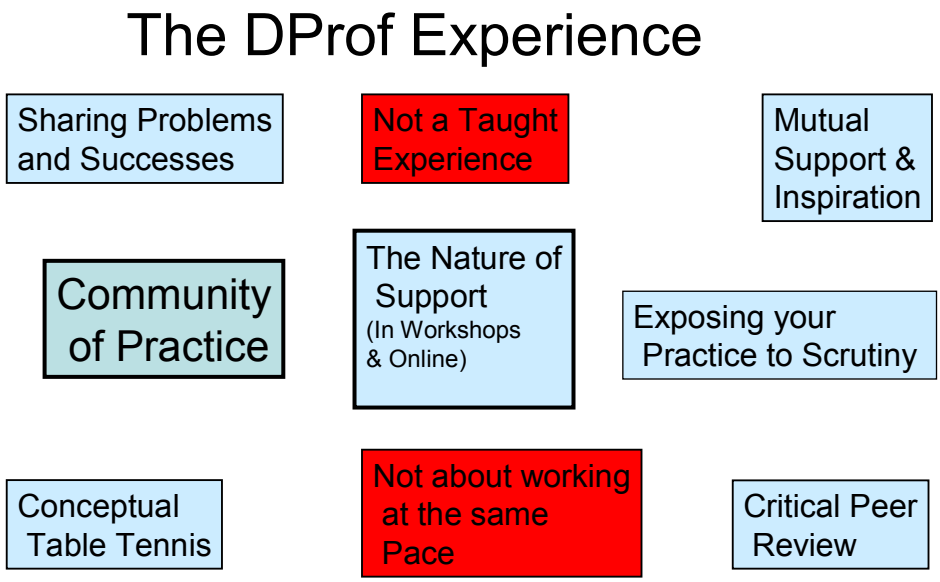


Figure 8 - The Cohort Experience

To complete the doctorate there must be a strong relationship between your doctorate and your professional practice (Figure 9). Your doctorate is much more than that provided by the University. It will interfere with other aspects of your life, but if it is not an integral part of your professional work practice, it is not working and will be difficult to complete in 3 to 4 years. Your employer needs to recognise the benefits that will accrue as your doctorate becomes part of your professional practice.

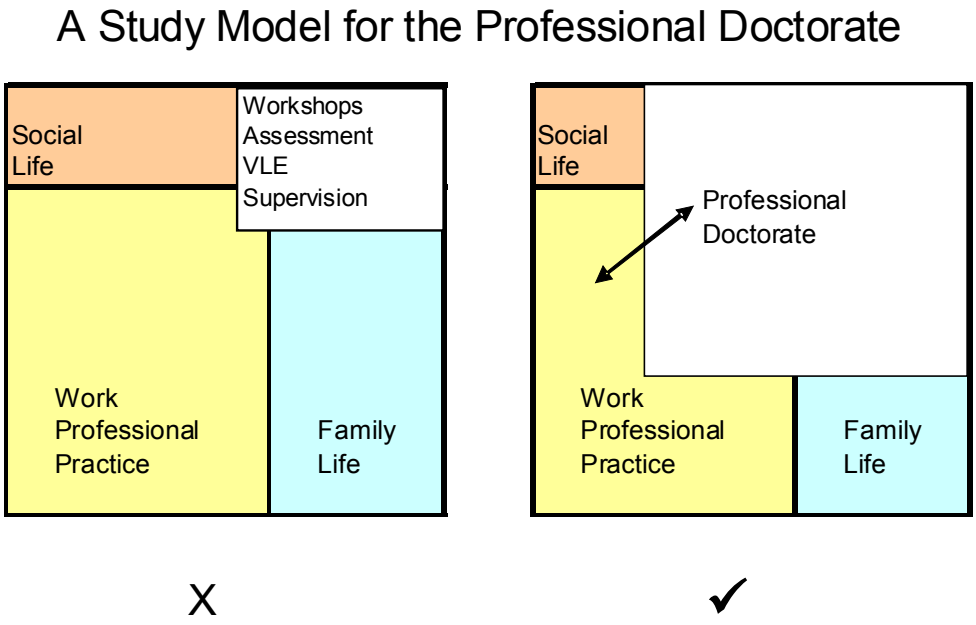
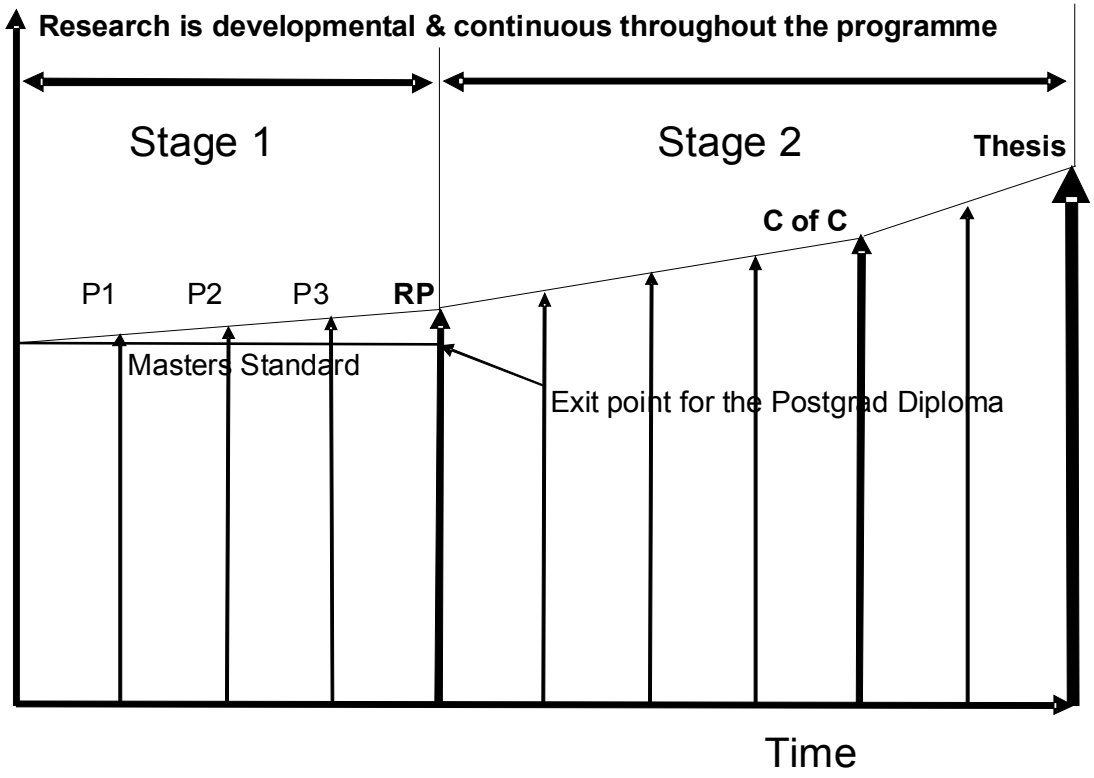


Figure 9 - Making Space for your Doctorate

The next illustration in Figure 10 shows the idealised upward intellectual journey you are about to embark on. Your individual journey may vary from this and you will have your high and low points. However, it is our commitment to take you from where you are now to doctoral success.



Key:

	P1	Paper 1
	P2	Paper 2
	P3	Paper 3
	RP	Research Proposal
	C of C	Confirmation of Candidature

Figure 10 - The Doctoral Journey

To help you develop and document the research skills as they are acquired on this journey please refer to the Vitae Research Development Framework. A record can be kept on the Vitae spreadsheet available from the VLE.

The most important things to do

1. Write - Don't get it right, get it written!

This old adage has some real truth in it, and the most important thing you can do as a doctoral student is get writing from day 1. In the first instance this may be writing your research journal (reflective diary), but very soon you should be writing your papers. Part-time candidates have between 16 and 24 months to complete the 3 Papers at Stage 1. As a rule of thumb you should look to submit papers as follows:

- Paper 1 - Professional Practice, during the first 6 months with a draft in three to four months
- Paper 2 - Engagement with the literature, during the first year
- Paper 3 - Research Design, within 18 months from starting then,
- Research Proposal and Ethics Application to proceed to Stage 2 on completion of Stage 1

You can work faster or slower than this if you wish. One of the great strengths of the DProf is its flexible nature. It is not a set taught programme. You write at your pace and get feedback on your writing, in manageable sized chunks. In addition to this summative assessment there is also a range of formative assessment to help guide your work. For example you are encouraged to submit drafts of each paper for comment as well as producing a poster of your work. All formative and summative assessment work is submitted via the VLE (See the online submission tool in the VLE for details). Please take the opportunity to learn how to submit work online as soon as you commence your studies for a doctorate. Feedback is also provided via the VLE so it is a vital tool to master.

The Role of Assessment

1. Focused on the continuous professional development at the highest level (for staff as well as candidates)
2. Focuses on process (individual intellectual journey) rather than end product
3. Explores doctoral level work in the context of professional practice (strong overlap between work and doctorate).
4. Focused on prompt formative feedback
5. Paces the intellectual challenge for each candidate
6. Encourages reflection in and between papers/chapters
7. Each assessment builds towards the next
8. Final thesis draws on the experience of Stage 1 and the regular submission of draft chapters in Stage 2
9. The only real summative assessment is the final thesis and viva

The full specifications for the various papers which make up this doctorate are given as Appendix 1, but the following is a useful overview of what is required.

- Paper 1 essentially addresses two things – reflecting on your own professional activity and past experience to help formulate your research questions, and engaging, to a limited extent, with literature to underpin your research. Don't forget this is a doctorate related to your professional discipline, so somewhere, discipline voices should be heard.
- Paper 2 is about demonstrating a critical knowledge and understanding of the theoretical perspectives and published empirical studies related to professional practice and your research focus. It is about your ability to engage with the literature and consult wisdom (professional and academic) to inform your research and sharpen you research question/s further.
- Paper 3 is a critically defended account of the research design for Stage 2. It should explore the nature of research paradigms, methodologies and justify techniques appropriate to your investigation.

Some past candidates' papers from Stage 1 are available to download from the VLE (See Section 3 on page 19 for further details concerning the VLE); it is often helpful to see what, and how, your predecessors have written. Please note that the University library offers a full detailed guide to academic practice and referencing which you should follow. Further guidance is also available on VLE on difference styles of citations and referencing work.

Stage 2 is assessed by the final 60,000 to 80,000 word thesis which you defend in the viva. You will be examined by two examiners external to the DProf doctoral team, one of which will be external to the University. It is important that your doctorate is peer reviewed and accepted by practising professionals.

Appendix 1 contains further information about what is expected for the Stage 1 and Stage 2 Assessment.

Appendix 2 contains the marking criteria for the papers. Appendix 3 lists the planned schedule of submission of all of the assessment.

2. Read

Read as much as you can in Stage 1 focused around your topic. Reading will be to a large extent different for everyone but there is also a range of literature in common to all! There is a list of generically helpful books on research on the VLE, but here are some keys general texts to help you get started on research as a Professional Doctorate candidate:

Costley, C., Elliott, G. and Gibbs, P. (2010) *Doing Work Based Research*. London: Sage.

Lee, N-J. (2009) *Achieving your Professional Doctorate.* Maidenhead: Open University.

Trafford, V.N. and Leshem, S. 2008. *Stepping Stones to Achieving your Doctorate*. Maidenhead: Open University Press.

Collis, J. and Hussey, R. (2003) *Business Research.* Basingstoke: palgrave macmillan.

The first two titles will give you a good general understanding of the requirements of the DProf and the third of general doctoral study. Vernon Trafford is a valued member of our support team for this DProf, and more details of helpful work can be found on his website http://vernontrafford.com/.

The fourth, by Collis and Hussey, is just one of many books on research methods that you must read throughout your doctorate, but is particularly important during Stage 1, as you are formulating your ideas. A further list of helpful text is provided on the VLE. You will be specifically addressing research methods in Paper 3 of Stage 1, but please read as much on research methods as you can throughout the whole of Stage 1. This will serve you well in Stage 2.

3. Log on to the VLE Regularly.
The virtual learning environment (VLE) is central to the support we provide. It contains a wealth of information and is our main communication vehicle. All assessment is submitted via the VLE. Access the site ASAP and familiarise yourself with all its features. It is up to you to access this regularly.

The Role of the Virtual Learning Environment (VLE)

1. Means of communicating between workshops (email and discussion board)
2. Shared experience for staff as well as candidates
3. Submission of assessment with prompt feedback
4. Storage of assessed work with feedback
5. Provides the best environment for information transfer (just-in-time learning) 24/7
6. Provides a wealth of resources
7. Frees up the workshops to focus on research activities.

4. Attend all the workshops
These are designed to support your needs throughout the year. The programme of workshops is available on the VLE. They do not represent a taught or training element of the programme. They are run like mini conferences where candidates, staff and external keynote speakers present their ideas and work together on research related issues. They do not have a fixed programme of content but are flexible, so you will have the opportunity to shape them to meet your needs. Professional practice, rather than specific disciplinary knowledge, becomes the content and context that shapes the nature of the experience on this Professional Doctorate, and this, in turn, shapes and will provides new insights into your workplace (Costley, Elliott and Gibbs, 2010).
See Appendix 4 for a typical schedule of planned workshops each year.

The Role of the Workshop.

1. Presenting and defending work, problems, issues, ideas, solutions (candidates and supervisors)
2. Exposing your practice to the scrutiny of others
3. Working together on common problems using candidate material as case studies, providing collective feedback from candidates and supervisors
4. Small group workshop research activities
5. Social interaction – learning from each other
6. Individual tutorials with academic advisors (Stage 1) and supervisors (Stage 2)
7. External speakers to stimulate critical thinking
8. Check on progress, benchmarking
9. Inspiration, encouragement, motivation, ideas
10. Raise your level of thinking above and beyond your particular research investigation

Appendices VI to XII illustrate some of the workshop activities you will be engaged in.

5. Make good use of supervision

You will be allocated an Academic Advisor for Stage 1. They will act more as a critical friend rather than the conventional supervisor. They will also be involved in marking the Stage 1 Assessment. This person will normally be someone from the core team of DProf supervisors, whose expertise may be more generic, in terms of the requirements of the Professional Doctorate, rather than in the specific subject area of your research. At Stage 2 you will have a supervisory team of at least two academics, which may include this Academic Advisor.

You should expect to see your Academic Advisor approximately every month, in and between each workshop, and to have done some substantial work to hand into them in advance for discussion in the supervision. Supervision can be face to face, by Skype or adobe.connect. All supervisions should be written up by you on the proforma shown in Appendix 3 (available electronically via the VLE).

Each year at some point in the process of supervision you should both set goals for the coming year in a Personal Development Plan, and check your skill level against the national Researcher Development Framework. Both of these processes are explained, and spreadsheet forms to support this work can be found, on the VLE. There is also further detail on the Research Development and Commercial Services (RDCS) website.

See: http://web.anglia.ac.uk/anet/rdcs/research/index.phtml

Your Personal Development Plan will be monitored centrally each year in April/May via the Central Annual Monitoring process.

Your academic advisors and supervisors are key personnel in helping you to succeed in the doctorate. Do make good use of this support team, who can help you so much more if you produce work for them and hand it in well in advance. If you have any difficulties with your supervisory relationship then please talk to Ian as Programme Director. Dr at faculty level or Professor at University level(see below under Key Personnel) are the key people to talk to if you need further help and guidance.

6. Find a mentor

You will normally nominate an Internal Mentor from your professional context at the beginning of your research. Please note however that *Internal Mentors will neither be involved in the assessment of the Stage 1 papers or the thesis of 'their' candidate, nor will they be involved in the viva voce examination.* They also do not have an academic supervisory role. This should ensure that the normal working and professional relationships between Internal Mentor and candidate are unaffected by the assessment process associated with the programme.

The role of the Internal Mentor is to provide guidance on the practice/organisational value of your proposed research, provide advice on organisational issues that might influence the progression of your work. S/he will normally be:

- a senior practitioner, manager, educationalist or trainer within the candidate's place of work;
- sympathetic to the notion of personal and organisational development through in-house investigations and the dissemination of research findings;
- willing to assist the candidate in the undertaking of in-house investigations through the use of personal influence to provide access to certain types of locally held information or access to specific personnel;
- prepared to accept managerial ownership – in the organisation – of the issues which are agreed to be investigated by the candidate

8. Attend the Anglia Ruskin University Generic Staged Research Training

Anglia Ruskin University requires all its research students to attend generic university-wide research training. This normally involves you in one meeting per year. It is essential to do this in order to proceed through the degree. Some flexibility has been negotiated where students have prior learning in certain areas. See the RDCS Website for further details on:

http://web.anglia.ac.uk/anet/rdcs/research/index.phtml

There is also very helpful research skills training available through online Epigeum Training software – please see

http://www.anglia.ac.uk/researchtraining .

In addition, it is **essential** and in fact compulsory that the proper processes of seeking Ethics permission are undertaken if you want to do any research with human subjects. It is wise therefore to put such procedures in hand well in advance of the date you need to start your research. There is advice available on ethics via two routes; the Epigeum software and via the Central University Training. You can complete either or both. The Anglia Ruskin Research Degrees Regulations give clear guidance on the requirements for ethical approval of research activity. Pleas read this carefully.

9. Engage in the University Annual Monitoring procedures

Anglia Ruskin University requires all research students to engage with Annual Monitoring procedures each year. This currently involves both an on-line element and a face to face meeting. It also requires you to produce your Personal Development Plan based on the Research Development Framework in addition to a record of supervisions. This provides an independence check that all is well with you and your research.

Key Personnel

Programme Director Ian Frame

Details have been removed for confidential reasons

Individual supervisors will give you their contact details as appropriate but you can contact the team via the VLE

Finally, you will access copy of the Research Degree Regulations and a general Research Student Handbook via the RDCS website. These documents have sections on DProf and sets out the regulatory framework which you need to become familiar with. It is vital to have these documents for reference as you work through your career as a doctoral candidate.

References:

Armsby, P. and Costley, C., 2009. *Developing Work Based learning at Doctoral Level.* In Work based learning. edited by Garnett, J., Costley, C. and Workman, B. Middlesex: Middlesex University press

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[Accessed 12 September 2011]

APPENDIX 1

Assessment Requirements for the Professional Doctorate

The Requirements of Stage 1 of the Professional Doctorate in Science and Technology

Aims, Learning Outcomes and Assessment Criteria

AIMS

1. To advance understanding within a specific profession.

2. To provide participants with opportunities to deepen understanding of their professional and/or voluntary practice.

3. To enable candidates to develop an understanding of research skills relevant to professional practice.

4. To assist in the personal development of professionals and their ability to reflect on and examine critically their own professional activity.

5. To develop research skills and understanding to enable the design of a research project capable of generating new knowledge and understanding of professional practice.

ASSESSMENT CRITERIA

Successful candidates for the award of Professional Diploma will be expected to demonstrate:

1. A systematic acquisition and critical understanding of knowledge, that is mostly at the forefront of the academic discipline and area of professional practice.

2. The ability to reflect on and examine critically their own professional activity.

3. The ability to conduct research in accordance with academic and professional ethical standards.

4. An understanding of techniques and/or methodologies applicable to practitioner research.

5. The ability to design a research project that is capable of generating new knowledge and understanding of professional practice.

6. The ability to conceptualise understanding so as to evaluate critically current research in the discipline and area of professional practice.

7. The qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and, where appropriate, autonomous initiative in planning tasks at a professional or equivalent level.

8. The ability to communicate findings clearly and effectively.

Stage 1 Assessed Papers

Stage 1 is formally assessed by the submission of three Papers which are designed to develop your critical thinking skills and help you formulate your ideas for the intended research project in Stage 2. In Paper 1, you are asked to identify your research topic, problems and issues, all in the context of your own professional activity and practice. Paper 2 is intended to raise your level of thinking beyond the particular issues in a broader theoretical context, and Paper 3 focuses on conceptual issues and research design. Each Paper should be approximately 7000 words although this may reduce with the use of more graphical material. For example, when architects engage with a critical review of their professional activity, the evidence will be drawn from the more visual material of photographs, drawings and sketches. The challenge for these candidates will be that the critical review must be judged to be equivalent to the conventional 7000 words.

Taking onboard formative feedback from each paper is central to this development. On completion of Stage 1 you are then in a strong position to formulate the Research Proposal to gain entry to Stage 2 of the doctorate. However, we strongly recommend that you consider the requirements of the Research Proposal at the start of Stage 1 and develop a draft throughout this formative period. The ideas and text you generate in Stage 1 can form the basis of chapters of your thesis in Stage 2. For example, some material from Paper 1 could be developed into an introduction to the thesis, defining the problem from practice, Paper 2 can be developed into a number of theoretical chapters, and Paper 3 can form the basis of a research methods chapter.

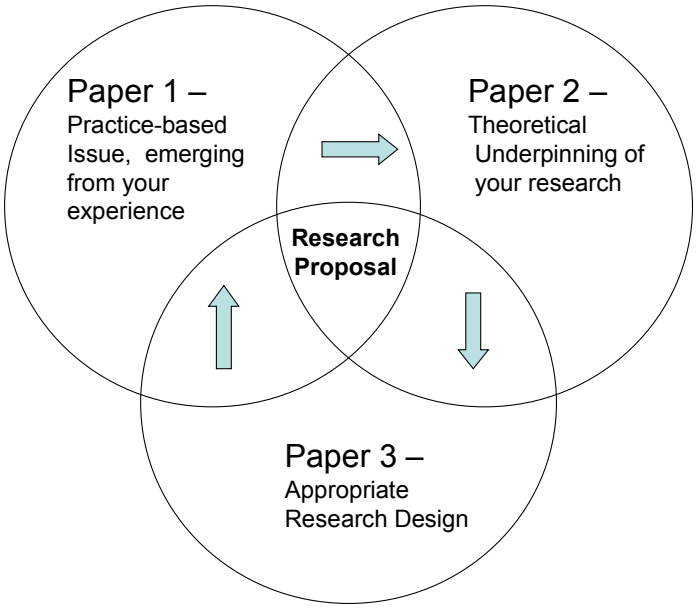

Figure 1 The linked Papers in Stage 1

There should be a common thread flowing through the work presented in Stage 1. Figure 1 illustrates the purpose and role of each Paper and how they should be linked to develop a case for the proposed research in Stage 2.

Paper One – Exploring Professional Activity within your own Organisation

Intended Learning Outcomes

This first paper is designed to enable you to:

1. Critically reflect on your current professional activity within the context of your intended research topic, your organisation, and your professional role.

2. Identify an initial idea, a research focus, and the main research question, all of which should emerge from this reflection on your practice.

3. Using your own practice, explore aspects of case study material as suitable vehicles for research.

4. Systematically formulate a preliminary set of possible sub-questions derived from your initial idea, research focus or the lack in current practice, which could guide your further research.

5. Explore the opportunities and limits of your initial ideas against the backdrop of a very limited range of relevant theoretical and/or empirical studies (practice-theory engagement).

6. Explore the possible ethical implications of your research project.

7. Write in an appropriate professional/academic style relevant to your particular form of investigation.

Brief for Paper 1

The starting point for your research project is an analytical and evaluative reflection on your own professional activity within the context of your intended research area and your own organisation. This paper is designed to facilitate the exploration of your current knowledge and skill by systematically reflecting on that activity and will focus upon an initial consideration of a research area with some provisional research questions. The key question and sub-questions should emerge from your past experience and current practice. To support your research focus you could use your own professional activity and practice as evidence to generate ideas and questions. Select aspects of your practice which support or question the research focus. This may suggest a theoretical basis for the work so you will also need to engage with a limited range of theoretical and empirical studies germane to this professional context. However, this does not mean a detailed review of current theory or a description of what you do in your daily routine. It is not a description of your career so far or an extended CV. Paper 1 is a critical reflection on your professional activity to make the case for the research from practice. The

examination of that practice should suggest the possible theoretical underpinning to be explored in Paper 2 (7000 words).

Paper Two – The Broader Context of Professional Practice and Published Work

Intended learning Outcomes

This second paper is designed to enable you to:

1. Examine and critically review the theoretical perspectives and published empirical studies related to professional practice and your research focus.

2. Examine the broader national and international context of your research topic by engaging with published work pertinent to the research topic and your organisation.

3. Explore possible conceptual relationships between practice and theory by inductive and deductive reasoning.

4. Develop your research questions in the light of the broader context and the wider implications for professional practice.

5. Take on board the feedback from Paper 1.

6. Write in an appropriate professional/academic style.

The Brief for Paper 2

This second paper builds on your findings in Paper 1 and places them in the broader context of perhaps relevant local, national and international professional practice. You may want to explore how this external environment constrains or facilitates the work within your own organisation. You must however, demonstrate a critical knowledge and understanding of the theoretical perspectives and published empirical studies related to professional practice and your research focus. In short, the formative assessment focus of this paper is the degree to which you can engage with published work to inform your doctorate. You should not be expressing your opinion. The paper should show evidence of an increasingly sharpened understanding of the research question or set of questions and the conceptual boundaries of the research to be investigated in Stage 2. This may suggest possible research design strategies and methodologies that will be explored in Paper 3. During the construction of Paper 2 you may like to explore the use of reference software to aid its production (e.g. Refworks, EndNote or Reference Manager). As with Paper 1, it should be approximately 7000 words.

Paper Three – A Research Proposal for Practitioner Research

Intended learning Outcomes

This third paper is designed to enable you to:

1. Develop the analytical and conceptual framework for the design of your Stage 2 research project.
2. Explore a range of research paradigms and critically review the theoretical basis and limitations of practitioner research.
3. Discuss, justify and explain the likely effectiveness of appropriate research methodologies and techniques with a focus upon practical issues related to practitioner research.
4. Design a proposed research project with the characteristics capable of generating significant new knowledge and understanding of professional practice.
5. Explain how you will deal with the ethical issues arising from your research.
6. Test aspects of validity and reliability of the research with a small preliminary study for the proposed research in Stage 2.
7. Take on board the feedback from Paper 2 and demonstrate how your work has involved.
8. Write in an appropriate professional/academic style.

The Brief for Paper 3

This third paper is designed to enable you to explore your analytical and conceptual framework for the design and execution of the proposed research planned for Stage 2 of the Professional Doctorate. You will need to demonstrate that you can conceptualise and design a project for the generation of significant new knowledge and understanding of issues relating to professional practice and its improvement. Paper 3 will need to refine the research questions that you identified from your professional activity examined in Paper 1, drawing from the published literature in Paper 2 and justify the research to be undertaken. There should be clear links between the research statements, research questions, conceptual framework, research design and data to be collected. You will be expected to demonstrate a critical knowledge and understanding of the practical considerations of

research methodology with a focus upon issues related to practitioner research (7000 words).

On successful completion of Stage 1 you may graduate with the Postgraduate Diploma in Professional Research (PGDipProf) or apply to the Faculty Research Degree Sub-committee (FRDSC) to enter Stage 2 of the programme. To do this you submit a Research Proposal to the Committee for consideration along with other PhD and MPhil proposals. Candidates submit their Research Proposal, any published papers and a reflection on their intellectual journey on Stage 1 in support of the application. Thus, the successful completion of Stage 1 does not automatically gain the candidate entry to Stage 2. The Research Proposal provides the University with an external quality assurance reference point, independent of the programme. It also provides the Faculty with a cross-reference opportunity to compare current standards of research proposals for the PhD/MPhil and DProf/MProf programmes.

In Stage 2 a Confirmation of Candidature procedure performs a similar external quality assurance role. Eighteen months after the commencement of Stage 2 you will submit documentation to the Faculty to demonstrate what you have achieved, your current position and level of study, and what still needs to be realised to complete the thesis.

The Requirements of Stage 2 of the Professional Doctorate in Science and Technology

Professional Masters

AIMS

1. To further advance understanding and practice within a specific profession.

2. To provide participants with an increased range of opportunities to deepen knowledge and understanding of their professional and/or voluntary practice.

3. To enable candidates to enhance their research skills especially relevant to professional practice.

4. To enable candidates to display academic rigour and the capacity to produce publishable work.

5. To assist in the continuing personal and professional development of reflective practitioners across a range of contexts and institutions and contribute to the development of competencies in a range of professional occupations.

6. To develop awareness of research as a vehicle to integrate theory and professional practice.

ASSESSMENT CRITERIA

Successful candidates for the award of MProf will be expected to demonstrate:

1. Systematic acquisition and critical understanding of knowledge, that is mostly at the forefront of the academic discipline and area of professional practice.

2. The ability to reflect on and examine critically their own professional activity.

3. The ability to conduct research in accordance with academic and professional ethical standards.

4. A comprehensive understanding of techniques and/or methodologies applicable to practitioner research.

5. A critical and contextually appropriate application of techniques for original research, effective communication, critical and independent reasoning appropriate to advanced academic enquiry.

6. Originality in the application of knowledge or methodology in the discipline and/or area of professional practice.

7. The ability to conceptualise understanding so as to evaluate critically current research in the discipline and area of professional practice.

8. The qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and, where appropriate, autonomous initiative in planning and implementing tasks at a professional or equivalent level.

9. The ability to communicate findings clearly and effectively.

Professional Doctorates

AIMS

1. To advance significant knowledge and practice within a specific profession.

2. To provide participants with opportunities to deepen knowledge and critical understanding of their professional and/or voluntary practice.

3. To enable candidates to develop comprehensive research skills including those relevant to professional practice.

4. To enable candidates to display a high level of academic rigour and the capability to produce publishable work in appropriate peer-reviewed journals and conferences.

5. To assist in the continuing personal and professional development of reflective practitioners across a range of contexts and institutions and contribute to the development of competencies in a range of professional occupations.

6. To develop a holistic awareness of the research process including its value as a tool for integrating theory and professional practice.

ASSESSMENT CRITERIA

Successful candidates for the award of DProf will be expected to demonstrate:

1. *the creation and interpretation of new knowledge, through original research or other advanced scholarship, of a quality to satisfy peer review, extend the forefront of the discipline, and merit publication*
2. *a systematic acquisition and understanding of a substantial body of knowledge which is at the forefront of an academic discipline or area of professional practice*
3. *the general ability to conceptualise, design and implement a project for the generation of new knowledge, applications or understanding at the forefront of the discipline, and to adjust the project design in the light of unforeseen problems*
4. *a detailed understanding of applicable techniques for research and advanced academic enquiry*

Typically, holders of the qualification will be able to:

- *make informed judgements on complex issues in specialist fields, often in the absence of complete data, and be able to communicate their ideas and conclusions clearly and effectively to specialist and non-specialist audiences*
- *continue to undertake pure and/or applied research and development at an advanced level, contributing substantially to the development of new techniques, ideas or approaches*

and will have:

- *the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex and unpredictable situations, in professional or equivalent environments.*

Appendix 2

Marking
Stage One papers will be considered by two markers, one of whom is your Academic Advisor. In common with other academic programmes, an External Moderator is appointed to provide an external assurance that the work is of an acceptable level. A candidate who does not gain a pass in an item that has been submitted for assessment is entitled to re-submit that item.

Feedback
Written feedback and an Unratified Result will be provided by the two markers using a standard template. Verbal feedback can also be provided in the workshops and the one-to-one tutorials

General evidence will be sought within all papers (and indeed any submissible material at any stage of the programme of study) to show that:

- an intellectual grasp of the scope and possibilities of the topic under consideration is displayed;
- coherence of argument is evident within the written work;
- comprehensive coverage is given to the appropriate literature;
- the text is presented according to the best practice of academic writing.

Certain characteristics therefore are displayed within the written work. The following guidelines might be helpful to review your work.

For all assessed work:

Intellectual grasp would be apparent where a candidate:

- grasps the scope and possibilities of the topic through appreciating its wider significance, and subjects alternative possibilities to critical examination;
- explores the advantages and limitations of prevailing theories, showing rigour in their comparative analysis;
- maintains a clear and apparent link between theory, practice and the process of interpretation;
- presents a reflexive, self-critical account of the relationship between inquiry and methodology.

Engagement with the literature would be apparent where a candidate:

- displays confidence in the selection and use of appropriate sources;
- acknowledges the intellectual and professional traditions of the selected literature;
- demonstrates confidence in exploiting the particular strengths and potential limitations associated with ideas contained in that literature;

- successfully critiques traditional and established theoretical positions to arrive at modified, or new, interpretations;
- draws upon literature from outside the research focus to illustrate the applicability of findings in that other field;
- respects the academic conventions for citations and referencing.

Coherence in written work would be apparent where a candidate:

- displays a clearly defined research intention;
- presents an explicit and appropriate structure.
- enables the reader to appreciate the process of discovery through which the writer has passed.

Additionally for Paper 3 (Research proposal):

Methodological design would be apparent where a candidate:

- informs readers of the research statement and the research questions which have been chosen to guide the research act;
- presents an explicit account for the choice and design of the research;
- provides clear linkages between the external, theoretical and internal validity of the proposed piece of research;
- explains any technical and process considerations associated with interventions which were made, and notes their outcomes;
- offers insight upon the chosen methodology and provides a critique of its relevance to the issues being investigated.

Appendix 3

Schedule of Formative and Summative Assessments for Stage 1 and Stage 2 of the Professional Doctorate available on the VLE

On commencement of the programme you are asked to upload a plan of action to VLE to complete the assessment for Stage 1 between 18 to 24 months, depending on your circumstances.

Later, Stage 2 is planned to be completed between 20 and 48 months. The VLE records the actual date of your submission and the date of feedback from your academic advisor. It is recommended that you complete all of the assessment available to you. This record is available at all times during your doctorate.

Formal Summative assessment is shown in capitals.

Entry to Stage 1

Plan of Action for Stage 1

Availability: Immediately – Unlimited

Maximum grade: 1

Result: Submissions

Draft of Paper 1 (Max 4000 words)

Availability: Immediately – Unlimited

Maximum grade: 1

Result: Submissions

Draft Poster Presentation

Availability: Immediately – Unlimited

Maximum grade: 1

Result: Submissions

FORMAL ASSESSMENT PAPER ONE – EXPLORING YOUR PROFESSIONAL ACTIVITY

Availability: Immediately – Unlimited

Maximum grade: 1

Result: Submissions

Poster Presentation

Availability: Immediately – Unlimited

Maximum grade: 1

Result: Submissions

Draft of Paper 2 (Max 4000 words)

Availability: Immediately – Unlimited

Maximum grade: 1

Result: Submissions

FORMAL ASSESSMENT PAPER TWO – THEORETICAL PERSPECTIVIES

Availability: Immediately – Unlimited

Maximum grade: 1

Result: Submissions

Draft of Paper 3 (Max 4000 words)

Availability: Immediately – Unlimited

Maximum grade: 1

Result: Submissions

Developing the Argument

Availability: Immediately – Unlimited

Maximum grade: 1

Result: Submissions

FORMAL ASSESSMENT PAPER THREE – A RESEARCH PROPOSAL FOR PRACTITIONER RESEARCH

Availability: Immediately – Unlimited

Maximum grade: 1

Result: Submissions

Entry to Stage 2

Developing Research Design Ideas

Availability: Immediately – Unlimited

Maximum grade: 1

Result: Submissions

Draft Research Proposal

Availability: Immediately – Unlimited

Maximum grade: 1

Result: Submissions

FORMAL ASSESSMENT - RESEARCH PROPOSAL FOR ENTRY TO STAGE 2

Availability: Immediately – Unlimited

Maximum grade: 1

Result: Submissions

Stage 2

Plan of Action for Stage 2

Availability: Immediately - Unlimited

Maximum grade: 1

Result: Submissions

Stage 2 Preliminary Study Papers - 6 Months in

Availability: Immediately - Unlimited

Maximum grade: 1

Result: Submissions

Draft Material for Confirmation of Candidature: 12 months into Stage 2

Availability: Immediately - Unlimited

Maximum grade: 1

Result: Submissions

FORMAL ASSESSMENT CONFIRMATION OF CANDIDATURE: 16 to 18 months into Stage 2

Availability: Immediately - Unlimited

Maximum grade: 1

Result: Submissions

Draft material for the Stage 2 Thesis: 20 to 24 months into Stage 2

Availability: Immediately - Unlimited

Maximum grade: 1

Result: Submissions

Draft of Thesis for Submission

Availability: Immediately - Unlimited

Maximum grade: 1

Result: Submissions

Appendix 4

Notes of a Meeting

Date		**Venue**	
Time and Duration			
Participants			
Scope and Purpose			
Main Issues Discussed			
1			
2.			
Decisions Taken			
1.			
2.			
Next research tasks		**Deadlines**	
A		**A**	
B		**B**	
Additional Remarks			
Next meeting			
Date		**Time**	
Place			

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Appendix 5

ANGLIA RUSKIN UNIVERSITY

Faculty of Science & Technology

Professional Doctorate in the Faculty of Science and Technology (DProf)

Provisional Workshop & Supervision Programme for the Academic Year 2013/14. MAR012

University-wide Professional Doctorate Workshop 22 September 2013

1. **Workshop 1** - Saturday 13 October 2013 at 9.30am to 5pm

2. Individual supervision and submission of work – November 2013 (To be arranged by candidate)

3. **Workshop 2** - Friday 7 December 2013 at 2pm to 6pm

- Evening Meal 7pm

- Saturday 8 December 2013 at 9.30am to 5pm

4. Individual supervision and submission of work – January 2014

5. **Workshop 3** - Saturday 16 February 2014 at 9.30am to 5pm

6. Individual supervision and submission of work – March 2014

7. **Workshop 4** – Friday 11 April 2014 at 9.30 am to 5pm
Writers Retreat

- Saturday 13 April 2014 at 9.30am to 5pm

8. Individual supervision and submission of work – May 2014

9. **Workshop 5** - Saturday 21 June 2014 at 9.30am to 5pm

10. Individual supervision and submission of work – July or August 2014.

Appendix 6

Developing the Argument from your Experience in Professional Practice

Use the following table to help build the case for your doctoral research from your specific practice. It is easy to express your opinion or make bold statements but, can you support them with sufficient evidence to underpin your research? What evidence is there from practice to help you make the case for your research? Can you convince the reader that this is worth researching?

1	Research Statement or Assertion – What is the problem or issue?
2	Supporting Evidence or Justification from your Practice
3	Evidence from Professional Colleagues – Do you have any supporting evidence from your colleagues?
4	Evidence from the Literature - Is there any evidence from one or two key authors on this issue? Cite arguments from their work.
5	References – List the references you have used (Harvard Style)

Appendix 7

Developing the Argument - from theory and the literature

Use the following table to help build the case for your doctoral research from the literature. Can you support arguments with sufficient evidence to underpin your research from theory? What evidence is there published to help you make the case for your research? Can you convince the reader that this is worth researching?

1	Research Statement or Assertion – What is the problem or issue?
2	Supporting Evidence or Justification from published work
3	Counter Arguments in the literature which might need to be addressed
4	What is the Gap in Professional Practice?
5	References – List the references you have used (Harvard Style)

Appendix 8

Developing Research Ideas

*Use the following table to focus your research design ideas and **justify your approach**. There should be clear and obvious connections between sections with each one logically following on from the previous. Write so the reader can clearly see what you are doing and why you are doing it.*

Candidate:

Topic:

1	Research Question/s
2	Research Paradigm
3	General Methodological Strategy
4	Specific Research Methods or Techniques
5	Ethical Issues
6	Data to be collected
7	Analytical Techniques
8	References

Appendix 9

Checklist of Questions for the Research Proposal

Candidate: Date:
Title:
Table 2 – Criteria

1.	Knowledge	Tick Box
1.1	Does the title encapsulate the proposed research?	☐
1.2	Does the project identify a professional practice problem/issue and have a research purpose?	☐
1.3	Does the project have clear/strong/precise focus?	☐
1.4	Does the proposal have an explicit research question or questions developed from practice?	☐
1.5	Has a gap in professional practice been identified?	☐
1.6	Are there achievable outcomes specified?	☐
1.7	Does the research proposal engage with current literature and have relevant, referenced theoretical perspectives?	☐
1.8	Will the outcomes have an impact on professional practice?	☐
1.9	Can the research outcomes be transferred to the workplace?	☐
1.10	Does the research have originality?	☐

2.	Research Process	Tick Box
2.1	Does the proposal discuss an appropriate research paradigm?	☐
2.2	Are the methodologies selected appropriate to the project and professional practice?	☐
2.3	Are the methods for the collection of data suitable and is the data readily available?	☐
2.4	Is it clear that the research is generating or testing theory (induction or deduction)?	☐
2.5	Have the issues of internal validity and reliability been addressed?	☐
2.6	Have steps been put in place to triangulate any research findings?	☐
2.7	Have the risks of bias been addressed?	☐
2.8	Will the research output have external validity?	☐
2.9	Are there ethical implications for the research and have they been addressed?	☐
2.10	Is the research well planned and achievable in the time available?	☐

Ian Frame Oct 2012

Appendix 10

The PROFESSIONAL DOCTORATE RESEARCH PROPOSAL

INDICATIVE TITLE: This should be as short as possible (less than 10 words) encapsulating the research

RATIONALE

- Context and scene setting
- Professional practice basis of work with evidence emerging from your practical experience
- Possible theoretical basis of the work
- Intellectual grasp of the literature (well cited)
- Justify and make the case for the research project
- Potential value, importance to whom, and impact on professional practice

RESEARCH FOCUS

Any one of the following:

1. One key question then a list of sub-questions to be answered
2. Aims and objectives to be achieved
3. Hypothetical propositions to be explored
4. Hypotheses to be tested

Conceptual framework – theoretical and practical concepts and boundaries.

RESEARCH DESIGN

- Research paradigm
- Inductive or deductive approach
- A justification of methodological issues and data collection techniques to be employed strongly linked to research focus
- Data to be collected
- Analytical framework
- Validity and reliability
- An account of how the work is going to be completed
- What, why, how, where, when, who
- Resources required
- Table – Research focus/data to collect/ techniques/analysis

ETHICAL ISSUES

- Specific ethical dilemmas relating to your research project e.g. power relationship with fellow employees/interviewees

- General issues e.g. consent, data storage and confidentiality
- Explain how they will be dealt with

POSSIBLE OUTPUTS

- Publications
- Contribution to or change in practice
- Policy or Professional body implications

KEY REFERENCES (about 10)

- Cite in text using the Harvard method
- List these references at the end of the text in alphabetical order

Do not write a long bibliography

WORK PLAN (This can be attached as a separate document)

- A plan of action containing, processes, actions and products, with time-scales, milestones and critical points
- Perhaps a Gantt chart or flow diagram (float time)
- Writing strategy

(Version 4 Oct 2012. Ian Frame)

Appendix 11

Feedback sheet for Doctoral Presentations – Built Environment

Name of Candidate:

Title of Presentation:

Date:

Your name (optional):

The thing(s) I enjoyed most about your presentation was/were:

Place a tick in the box - 1 being room for improvement, 4 being excellent

	1	2	3	4
Time keeping, pace, engagement with the audience				
Was the case made for the research from practice?				
Was there a clear research question identified?				
Was the research underpinned by theory?				
Were the methods/findings adequately defended?				
Response to questions and criticism				

Something(s) about the content or presentation which could have been improved:

Appendix 12

Checklist for the Confirmation of Candidature

Candidate: Date:

Title:

Criteria 3 = Good 2 = Fine 1 = Needs some attention

Table 1 Please Tick

1.	The presentation:	3	2	1
1.1	Does the title encapsulate the research?			
1.2	Has the case for the research been made from professional practice?			
1.3	Have explicit research questions been addressed?			
1.4	Is there evidence of engagement with current literature and are there relevant, well cited, theoretical perspectives used?			
1.5	Is there a clear conceptual framework?			
1.6	Is there a critical review of the research undertaken to date?			
1.7	Are the research methods appropriate and have they been critically reviews?			
1.8	Is there a realistic plan to completion?			
1.9	Was the length of the presentation about right? (20 minutes)			
1.10	Did the candidate answer questions well?			

Table 2 Please tick

2.	As an assessor give your judgement on:	3	2	1
2.1	Scope and depth of the research			
2.2	Context			
2.3	Independent critical thinking			
2.4	Contribution to knowledge			
2.5	Originality			
2.6	Research skills and techniques			
2.7	Realistic programme			
2.8	Potential for success			