

# Kent and Medway Lifelong Learning Network

Theme Two - Developing and Delivering Higher-Level CPD

## Practice-led Professional Doctorates: the potential for Kent & Medway

<b>Acknowledgements</b>	4
<b>Executive Summary</b>	5
<b>1.0 Overview of the Research into Practice Led Professional Doctorates and the Potential for the Development of such Provision in Kent and Medway</b>	6
1.1 Project Proposal	6
1.1.1 <i>Project Aims</i>	6
1.1.2 <i>Delivery of the Project Brief</i>	7
1.2 Research methodology and Outcomes	7
<b>2.0 Background to Professional Doctorates and Doctorates in Professional Practice</b>	8
2.1 Introduction	8
2.1.2 <i>Development of Professional Doctorate</i>	8
2.1.3 <i>Case Study of the Middlesex University Doctorate Professional</i>	10
2.1.4 <i>Further Development of Professional Doctorates</i>	11
2.2 The Wider Context	13
2.3 Clarifying the Distinctions: ‘taught’, ‘professional’ and ‘practice’ Doctorates	13
2.4 Regulation and Quality Assurance in Doctoral Education	15
2.5 Key Focus of Recent Debates and Evidence from Doctorates in Professional Practice	19
2.6 Frameworks for Professional or Practice Based Doctorate Awards	23
<b>3.0 Research Findings 1 – Perceptions of Practice Led Doctorates within the Universities based in Kent and Medway</b>	24
3.1 Introduction and Methods	24
3.2.1 <i>Entry Requirements</i>	25
3.2.2 <i>Taught Components</i>	26
3.2.3 <i>Recognition and Accreditation of Prior Learning (RAL or APL)</i>	27
3.2.4 <i>Supervision and Support</i>	27
3.2.5 <i>Assessment Strategies</i>	28
3.2.6 <i>Duration of Study and Research</i>	29
3.2.7 <i>Innovation</i>	30
3.3 Scope for the development of Practice Led Professional Doctorates	30
<b>4.0 Research Findings 2 - Evidence of Demand from Employers in Kent and Medway</b>	31
4.1 Introduction and Methods	31
4.2 Results of Survey	31
4.2.1 <i>Question One – Is there a need for a work-based Doctorate?</i>	31
4.2.2 <i>Question Two – What should be the key feature of a work-based Doctorate?</i>	32
4.2.3 <i>Question Three – What benefit would you like to see accrue from a work-based Doctorate in your work place?</i>	32
4.2.4 <i>Question Four – Would you be interested in helping to shape such a Degree?</i>	33
4.2.5 Recommendations and Conclusions drawn from interviews	33
5.0 Conclusions and Recommendations	34
5.1 Conclusions	34
5.2 Final Recommendations for Kent & Medway LLN	35

<b>Contents</b>	<b>Page</b>
<b>6.0 References</b>	36
<b>APPENDICES</b>	
1 - Summary of Most Common Types of Doctoral Awards in the UK	40
2 - Doctoral Level Programmes – What Skills do Employers Seek?	41
3 - Bologna ‘Third Cycle’ Descriptors	43
4 - Generic Level Descriptors for Professional Doctorates	44
5 - Questions for HEI Interviews	46
6 - Professional Doctorate Programmes in Kent & Medway	48
7 – Organisations Consulted in Survey of Employers in Kent and Medway	49

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## Executive Summary

1. The “knowledge economy” places a growing expectation on higher education to provide research and education that is more relevant to the needs of the work force and the competitive position of the economy in general. The Higher Education Academy report ‘Redefining the Doctorate’ (Park, 2007) draws attention to the need therefore to review the UK doctorate and evaluate whether it remains fit for purpose and effective in practice, meeting the needs of all the stakeholder groups.
2. Professional doctorates have been a significant area of development for universities in the USA, Australia and the United Kingdom since the early 1990s. These doctorates offer professionals in a range of sectors the opportunity to research and develop new approaches to sector and work-based practices. These “second generation” doctorates (*cf.* first generation, the “traditional” PhD) have been created and used by practitioners in the context of a reciprocal relationship between professional practice and new professional knowledge, where each informs the other. Existing Professional Doctorate provision in Kent & Medway universities (HEIs) includes education, clinical psychology and business administration.
3. An emerging “third generation” of doctorate, sometimes called the “practitioner doctorate”, or as in this report “practice-led” or “work based” doctorate gives the “professional student” control of content, context and assessment and these negotiated with the university and where appropriate a professional body or employer. This represents a learner-managed pedagogy which is compatible with national recommendations for cultivation of higher order transferable skills and continuing professional development. In the context of this report unless stated otherwise, the term professional doctorate is used generically to include both taught and work based, practice led doctoral study.
4. Research was undertaken in Kent and Medway to explore the potential demand amongst a sample of employers and other agencies for practice-led, work based professional doctorates. Some 22 senior staff from public services, private sector and professional bodies were interviewed to gain feedback as to the potential value of professional, including work based, practice-led doctorates for their organisations. Most were interviewed face-to-face, and a few interviewed by telephone. Although doctoral level achievement is recognized, valued and respected there is currently little interest in traditional PhDs taken by part-time mode. Employers however responded positively to the concept of a practice-led professional doctorates, and potential demand was identified the cases of a professional body, health service trusts, local government, education he commercial sector and. Several of those interviewed offered to co-operate with universities in helping to shape a likely programme.
5. Interviews with the of senior managers in the four Kent & Medway HEIs demonstrated interest amongst the majority in the concept of introducing practice-led, work based professional doctorates, providing compatibility of standards and achievement with traditional PhDs is ensured. An alternate view expressed by a minority of senior managers that existing PhDs could be customised to meet workplace needs at doctoral level. There were understandable concerns that any new programme developments should viable and cost effective and that sufficient expertise to help support and examine the provision must be identified. Given these reservations a number of senior managers felt that given sufficient demand, practice-led, work based doctorates could be developed, frameworks established and assessment procedures agreed.

6. For interested organisations and those HEIs in Kent and Medway who may wish to explore development of a practice-led, work based professional doctoral qualification further, the research makes the following recommendations:
- a meeting, brokered by the Kent & Medway LLN is set up between employer representatives and other stakeholders who have expressed interest in helping shape a practice-led, work based professional doctorate, with representatives from interested universities to discuss possible areas for development;
  - a draft framework for validation of practice-led, work based professional doctorates be developed;
  - each HEI considers the potential role of practice-led, work based professional doctorates within its broader postgraduate provision;
  - a standardised system of pre-registration support be developed to facilitate applications;
  - provision for professional bodies including health trusts, local government and selected national professional organisations be explored.

## **1.0 Overview of the research into Practice Led Professional Doctorates and the potential for the development of such provision in Kent and Medway**

### **1.1 Project Proposal**

The HE Academy document “Redefining the Doctorate” (Chris Park 2007) highlights the need to evaluate the fitness of purpose of doctoral level training in the knowledge economy driven HE environment. In recent years it is acknowledged that there is a fast-growing niche for a non-subject based (i.e. not a PhD) professional doctorate which takes an individual’s higher level achievement and CPD as its focus, but is unlike the Ed.D. and other “taught” doctorates. The University of Middlesex *D.Prof.* programme has several hundred registered students and these account for 20% of that university’s post graduate provision. Nationally this is recognised as a rapid growth area.

It is also recognised that Professional Doctorates have the potential to develop high level learning needed to support economic development. Within the South East there are few opportunities for study on a *D.Prof.* professional doctorate route and within Kent and Medway no provision. It is not known if this is due to the absence of the qualification or a lack of demand by the workforce. The project will aim to discuss the potential for a professional doctorate with employing organisations and employers to ascertain the potential of such an award to meet high level education needs of individuals and their employing organisations. The research conducted and report produced will aim to look at demand, the barriers to implementation, support mechanism required and likely numbers.

#### **1.1.1 Project Aims**

This project was carried out by the Centre for Work Based Learning at the University of Greenwich at Medway and funded by the Kent & Medway LLN Theme Two provision - developing and delivering higher-level CPD.

The overall Aims were to:

- research the potential for Practice Led Professional Doctorates in Kent and Medway;
- undertake the background research through review of literature to provide the broader context and understanding of the development and implementation of existing Professional and Practice based Doctorates;

- examine some of the regulation and debates associated with the development of Professional and Practice Led Professional doctorates to inform strategies for potential development of such provision to meet the needs of industry as part of broader lifelong learning and professional knowledge development and skills agendas;
- assess likely demand amongst employers and others working at senior levels, for doctorate level qualifications not necessarily a traditional PhD, related to a single traditional academic or vocational discipline. Such provision would take account of individual higher level achievement and CPD as a main focus, whilst also helping to develop high level learning needed to support regional economic development, and
- assess potential for development of 'third generation' practice-led professional doctorates by interview of senior managers from the Kent and Medway Universities.

A final report will summarise likely levels of demand for professional doctorate provision in Kent and Medway, and to review current professional doctorate models and best practice.

This will include consideration of professional areas where such provision has proved successful, as well as potential barriers and support mechanisms needed to successfully implement and deliver a professional doctorate programme.

### 1.1.2 *Delivery of the Project Brief*

The main work concentrated on research into the development of professional doctorates in meeting the changing needs of the work place for professionals, and identifying how professional doctorates have been structured and implemented in other universities. Models and regulatory provision were examined to support understanding of the professional doctorate provision and the tailored nature of the learning and recognition of achievement.

Key sectors and employers in Kent and Medway were identified and approached to discuss the programme and its value to organisations and individuals. This opportunity also included consideration of other CPD at higher levels that the organisations may have, and fed back to the University of Greenwich's Centre for Work Based Learning. Potential demand was identified for a negotiated, work-based learning professional doctorate should such an award be validated.

## 1.2 Research Methodology and Outcomes

The research was based on both primary and secondary sources of information including:

- web-based research and review of available literature to identify the scope and nature of existing professional doctorate provision and associated debates;
- web-based research and review of available literature to identify the scope and nature of existing professional doctorate provision and associated debates;
- meetings with Heads of Research and other senior management of the Universities in Kent and Medway;
- contact with employers, initially by telephone and letter, and, where possible, face-to-face meetings;
- meetings with individuals who may be interested in undertaking a professional doctorate.

The research explored potential demand amongst a sample of employers in Kent and Medway for practice based professional doctorates. In all some 22 employers and professional bodies were contacted, representing large, medium and small organisations across a range of sectors including health and social care, local government, private sector companies in the environmental consultancy, chemical and pharmaceutical industry, engineering and professional bodies. Contact was made with senior personnel at the levels of pro-vice chancellor, campus lead, heads of research, enterprise and employer engagement of the universities in Kent and Medway to discuss current provision and views of doctorate provision and future development. A range of published papers on professional doctorates and other doctoral provision including support elements and range of assessment methodologies have been reviewed.

The research has led to recommendations as to the potential demand for practice led professional doctorate provision in Kent and Medway and likely responses from HEIs.

It is intended that the broad findings will be shared with all the Lifelong Learning Network partners in the hope that this research may help inform future developments at doctorate level to further existing higher level professional development provision.

## **2.0 Background to Professional Doctorates and Doctorates in Professional Practice**

### 2.1 Introduction

The modern doctorate in the form of the Doctor of Philosophy (PhD) can be traced back to medieval Europe where it provided a licence to teach in universities. In the early 1800s it was revised in Germany to become a research degree which was then adopted in the USA in the 1860s before finally being introduced in the UK in 1917 by the University of Oxford. It is now broadly acknowledged in most countries, and seen by many as the research degree of choice (Park, 2005a)

#### 2.1.2 *Development of Professional Doctorates*

Professional Doctorates (see Appendix 1) often have taught as well as research elements, and are strongly sector related and seen as alternatives to traditional PhDs. They originated in North America initially in the field of education to enable teachers and lecturers to further their professional development at the highest levels. The use of the broad term Professional doctorate has increased over the past fifteen years in the UK, Australia, USA and elsewhere, attracting a wide range of professionals into work-related study, facilitating recognition of achievement at the highest academic level. The first of this genre of professional doctorates, often known as 'second generation' doctorates, were mainly in the fields of engineering, business and education (Scott et al, 2004).

Their acceptance has accelerated in the United Kingdom and elsewhere, to include further discipline areas including education, business, law, psychology, health sciences, humanities, design and architecture. The emergence of these doctorates has been linked to the production and use of knowledge in professional contexts, with increased demand from some professions for higher level skills and knowledge in workplace settings.

The wider acceptance of concepts of evidence-based practice, the role of the 'reflective practitioner' and the development of work-based learning, coupled with a perceived narrow focus of the traditional PhD, has further promoted these developments (Scott, Brown, Lunt and Thorne, 2004).

The Council for Graduate Education in the UK describes a Professional Doctorate as:  
*'..a programme of advanced study and research which, whilst satisfying the University criteria for the award of 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)

The Carnegie Foundation for the Advancement of Teaching ([www.carnegiefoundation.or/news/sub](http://www.carnegiefoundation.or/news/sub)) undertook a five year project re-examining core assumptions associated with doctoral education in the US. More than 80 doctoral programmes in six discipline areas were reviewed, including Education, English, History, Mathematics, Chemistry and Neuroscience. Their findings suggested that preparing students for careers as scholars, teachers and intellectuals in a rapidly changing world requires a shift from the goals independence of practice to one of collaboration, competence and skills development.

This second generation of doctorates has seen a shift of focus into the professional environment, and away from pure academic perspectives. Scott *et al's* (2004) study of twelve UK professional doctorates in 2004 identified 5 modes of knowledge present within the broad curriculum:

- disciplinary knowledge
- technical rationality;
- dispositional and trans-disciplinary knowledge;
- critical knowledge;
- 'hybridity'

The early Professional Doctorates were rooted in academic traditions very close to those of the research PhDs or taught master's degrees, with 'Mode 1' knowledge, namely, apparently objective knowledge that is generated by researchers about practice, and then applied to it. This process is described by Schön (1987) as related to a sequential philosophy with research being applied to practice in a one way relationship – hence 'Mode 1'.

'Second generation' professional doctorates are based more on Gibbons *et al's* (1994) 'Mode 2' knowledge, created and used by practitioners in the context of professional practice, where a cyclical relationship exists with practice informing new knowledge which in turn informs changes in practice, and so on.

The 'New Route PhDs' are a more recent, but parallel development to professional doctorates, where research gained is augmented with advanced training in discipline specific and generic skills. Such 'integrated PhDs "are 'of direct value to the world of work, whether in academia, industry or government", and were developed with support from the Higher Education Funding Council for England (HEFCE) and the British Council. New Route PhDs are currently offered by around 30 universities in the UK.

Taught courses to supplement the research programme are chosen from areas such as team building, enterprise and spin-out companies, technology transfer and language skills, as well as sector specific knowledge based courses.

An emerging 'third generation' of doctorate, sometimes termed a 'Practitioner Doctorate' envisages the control of content, research method, context, assessment and partnership with the university and the profession which lies with the 'professional student', within a generic framework of procedures and support offered by the university. This represents a learner-managed pedagogy, from which a number of assessment, supervision and support issues arise, and are addressed by the university management of programmes.

This third generation model doctorate is still essentially a research-oriented programme, often backed by a taught or seminar based element, but has a more situated view of the research process with the practitioner situated centrally within it. This approach would appear to be consistent with the recommendations of the Roberts Review (2002) requiring good quality support to meet candidates' needs, and the development of transferable skills and knowledge.

This third generation of the professional doctorate which has emerged in the UK and Australia in the form of the generic Doctor of Professional Studies or Professional Practice Doctorate, owes more to a negotiated, award-bearing work based learning qualification than to taught provision found in New Route PhDs. The Practitioner Doctorate model sits more firmly in the work-place with a focus on generating practical action which also represents high-level professional scholarship. Scott *et al* (2004) see this as a form of 'reverse colonisation', where universities move "much more into the territory of the practicum and adjust their ways of working so that knowledge is produced which has practical applications" (p23). It may be described as a practitioner, practice-led or work-based doctorate which is geared specifically to address complex professional, organisational and social issues.

### 2.1.3 *Case Study of the Middlesex University Doctorate Professional*

The Institute for Work Based Learning at Middlesex University has developed a pan-institutional doctoral framework, whereby individuals from public, private and voluntary sectors can negotiate high level customized programmes with a focus on their own professional and organizational needs, at both Masters and Doctorate levels. Candidates report gaining a deeper understanding of their own practice and to further develop their thinking and work at doctorate level.

The University of Middlesex has one of the largest Professional Doctorate intakes in the UK. Called the *D.Prof.* (Doctorate of Professional Studies) the model is a "third generation" doctorate, being learner-centred and experience-led. Those undertaking the programme come from a wide range of commercial and public sector organisations as well as independent or self-employed individuals. The D.Prof. concept is based on:

- recognition of individual professional experience and achievement;
- acceptance of a wide variety of final products/outcomes proposed by the doctoral candidate as the basis for final assessment including, for example, project reports, guidelines and regulations related to strategies to achieve impact on the work-based and professional context;
- a critical commentary by the candidate of own professional achievements in their work and the outcomes of their particular area of focus;

- assessment of all work, including critical reviews of previous learning and achievements, judged against generic levels of performance relevant to doctoral programmes as set out by QAA and the university;
- involvement of representatives of the appropriate professional field at key stages of the programme.

(University of Middlesex 2009)

The Middlesex D.Prof employs a modular structure which can accommodate a balance of weighting of credits negotiated by individual candidates between recognition of prior achievement and learning (RAL), experience and final products including primary research. The Middlesex model is 'essentially concerned with the individual and their own practice' (Scott et al).

The role of tutor support in practice-led doctorates has been much debated, but in the case of the Middlesex model, their role is to assist the candidate to focus on generic issues relevant to programme procedures and criteria for assessment, to formulate, articulate and justify their achievements and intentions and to be responsive to candidate led initiatives. Research into the motivation of those undertaking the Middlesex professional doctorate in 2004 identified that amongst those sampled were concerns with 'securing personal and/or professional credibility, developing their personal and professional credibility, and facilitating their continuing development'. *Credibility* was often associated with enhanced self-confidence through gaining of status with clients and colleagues and recognition from professional groups, whilst *capability* was expressed in terms of growth and evidence of high level intellectual skills and judgement. The continuing development aspect was evidenced in the continuation and application of the doctoral projects as real-time ongoing activities at work and productive engagement with the broader professional area.

Justification plays a major part in the structure of the professional doctorate as the candidate has to articulate and justify all aspects of the work included in the assessment profile, including RAL, plans, programmes and relevance to key academic and professional stakeholders, as well as integration of different strands of experience and achievements with final outcomes. This is quite distinct from other forms of doctorate – see Appendix 1.

A further Middlesex University model that has been developed and aimed at meeting the needs of high level professionals to reflect on and consolidate their achievements is the D.Prof. by Public Works. The candidate is required to show that their existing public works meets the doctoral standard through reflection and contextualization of their work within their professional arena, and to articulate where they have made a significant contribution.

#### 2.1.4 *Further Developments of Professional Doctorates*

Central to the practitioner led professional doctorate is the proposition that sees the candidate as the principal agent of control of the programme within the context of academic and professional demands. The process of justification is heavily dependant on critical self-reflection of past and planned achievements and outcome and requires high level positive engagement with the professional area of work, both in terms of key knowledge and thinking as well as identified constraints.



The Bologna Seminar on Doctoral Programmes in 2006 concluded that original research must remain the main component of all doctorates, no matter what their type or form, and should reflect core processes and outcomes that pass evaluation by an expert university committee with external representation.

## 2.2 The Wider Context

The UK Council for Graduate Education undertook a survey of its 129 member institutions in early 2005 with the aim of clarifying the range and nomenclatures of professional doctorates. The study built on earlier work by U K Council for Graduate Education (UKCGE 2002) on professional doctorates and practice-based doctorates. The following points summarise the findings of this report.

Key conclusions included:

- since the UKCGE report (EUA 2002) into Professional Doctorates in 2002 there has been a marked increase in the number of different Professional Doctorate Awards offered by UK universities.
- the number of titles is likely to continue to increase with the dominance of Engineering, Education and Business persisting. There are also indications of increasing differentiation in professional areas where such awards already exist, and the addition of awards in 'new' areas of professional work.
- there is some unease across the sector about the proliferation of titles and the increasing differentiation of awards that this reflects.
- one major distinction of the Professional Doctorates is the use of the professional area as part of the nomenclature. This stands in contrast to the 'traditional' PhD where no qualifier is used. Yet the nomenclature of professional doctoral awards is not routinely standardized. This lack of standardization in the nomenclature of academic awards is not, of course, restricted to Professional Doctorates though it may seem that here diversity is the rule rather than the exception.
- there is a tension between the usefulness of increased specificity and the confusion caused by increasing differentiation of titles – and particularly perhaps of the abbreviations of those titles that candidates are entitled to make use of in their professional work.
- new named awards combined with small numbers of students studying them imply that some students at least will be moving on through their profession with an award that very few other professional colleagues will have.
- to treat Professional Doctorate awards as synonymous with 'taught programmes' would seem erroneous given that comments indicate that for some institutions the amount of teaching within a Professional Doctorate programme is variable and may be minimal. The balance between 'taught' and 'research' components may be as much dependent on the nature of the professional area as on the institution and it may vary considerably in terms of whether or not the award of the doctorate is also a license to practice.

## 2.3 Clarifying the Distinctions: 'taught', 'professional' and 'practice' Doctorates

There is no standardization either of terminology or of educational model in relation to taught, professional and practice doctorates. However, the following broad categorizations may help to clarify the distinctions:

- a 'taught' doctorate may be defined as a programme involving substantial taught and assessed coursework – representing the better part of the first full-time year of study, as is the case in many areas of the social sciences and humanities. In a taught doctorate it is a programme requirement to pass the assessed coursework. A thesis or dissertation must also be undertaken, but this usually shorter than the coursework requirement of a traditional PhD.
- a 'professional' doctorate is a programme aimed at professional practitioners. In a few fields it is a requirement of the license to practice, whereas in others it is seen as an optional route to advanced status. Professional doctorates usually require a demonstration of advanced proficiency in the relevant field and a research thesis, which because of the advanced proficiency requirement is shorter than the traditional PhD (see Appendix 2).
- a 'practice' doctorate is commonly thought of as programme for practitioners, and whilst initially was more common in creative and artistic fields (cf. UKCGE 1997), is now found amongst a range of professions including science and public services. Once again the thesis element is reduced as compared to a traditional PhD. It should be noted that in some sectors there is an overlap with the professional doctorate.

This lack of a clear definition of Professional and Practice based doctorates stems for a lack of common understanding as to what may be reasonable criteria for the award. Some argue (e.g. Green and Powell, 2005) that all doctorates should be awarded for work that has a parity of level with the traditional PhD, whilst accepting that the routes to awards will differ as well as the learning experiences of the students. This could be construed as a matter of emphasis: where the PhD demands evidence that the candidate had made a substantial original contribution to knowledge and has the ability to continue to do so; the professional doctorate candidate will evidence similar contributions but in relation to professional practice.

There is, of course, scope for considerable overlap, and in some fields it may be difficult to differentiate the type of contribution, where practice may inform development of theory and vice versa. For example, Stuart and Powell (2005) cite the case of a doctoral student's research into the learning of children from ethnic minorities for whom English is a second language, and whose work may contribute to professional understanding of effective teaching of such children as well as generic understanding of the sociological impact of ethnicity on culture or about the psychology of learning in a second language.

Despite the lack of clear differentiation, assessment of PhDs is traditionally based on the completion of a substantial piece of written work (thesis) and examined by *viva voce*. For Professional or Practice based doctorates the assessment process may be very similar, though the submission might be presented as a portfolio, including research and practice based evidence that take account of the whole programme of study including any accreditation of prior learning (APL) aspects. As if to confirm the lack of differentiation, the Higher Education Statistics Agency (HESA) data does not differentiate between PhDs and other forms of doctorates.

In as much as the distinctions between PhD and Professional Doctorates are fuzzy, the question may be asked as to why a distinction in title is needed. It might be possible to envisage students following different pathways to the same levels of academic achievement and all receiving a singular award – the PhD. In other parts of Europe, for example in Scandinavia, some universities offer 'industrial PhDs', which in some ways are equivalent to Professional or Practice based doctorates, but not differentiated by title.

## 2.4 Regulation and Quality Assurance in Doctoral Education

The emergence of new forms of doctorate has been the subject of policy debate and academic analysis, with critical appraisals made of the traditional PhD and the new professional doctorates, along with the nature and role of supervision. The need for doctorates to support innovation and economic development has been actively promoted by governments. These factors are set against a background of significant growth in postgraduate student numbers and increased diversity of the student population, including the buoyant international student market.

At the same time there has been a more concerted drive by accreditation agencies, and funding and quality assurance bodies to regulate and control universities. This has resulted in universities putting in place centralized regulation and control over the activities of schools and departments. This has clearly been demonstrated by the number of Graduate Schools now featured within UK universities in an effort to control, regulate and measure core elements of doctoral education. This may be seen as part of a 'risk management' strategy in response to contemporary trends in graduate education, and doctorates in particular. McWilliam (2006) argues that this response in higher education policy has an impact on the management of higher degrees by research and the reluctance by some to stray too far from traditional PhD models. However, Tennant (2007) takes the view that this approach is at best contradictory in that it 'calls into question the risks necessary for creative and innovative doctorate work'.

The 'knowledge economy' places a growing expectation on the higher education system to provide research and education that is more relevant to the needs of the work force and the competitive position of the economy in general. This economy values innovation and entrepreneurship to remain competitive, and requires highly skilled individuals who are capable of being flexible, reflective and collaborative whilst maintaining high levels of self-motivation and self-management, with a broad perspective on domestic and global developments in their professional or discipline areas. There is a growing recognition of the work-place as a venue for knowledge production and innovation, which challenges the traditional role of universities as the 'gate-keepers' of 'legitimate' knowledge, which has given rise to the term 'working knowledge' (McIntyre and Symes, 2000). This working knowledge model calls for inter or cross-disciplinary strategies to produce practice based solutions, and has a direct impact on the nature of doctoral pedagogy to produce the relevant graduate attributes.

The United Kingdom has very clear precepts for research education as developed and set out by the Quality Assurance Agency for Higher Education (QAAHE) and utilized to evaluate performance and standards in UK Higher Education Institutions. The Foreword to the Code of Practice for Postgraduate Research Programmes states:

*'The Code supports the national arrangements within the UK for quality assurance in higher education. The Code identifies a comprehensive series of system-wide principles (precepts) covering matters relating to the management of academic quality and standards in higher education. It provides an authoritative reference point for institutions as they consciously, actively and systematically assure the academic quality and standards of their programmes, awards and qualifications.'*

*The Code assumes that, taking into account principles and practices agreed UK-wide, each institution has its own systems for independent verification both of its quality and standards and of the effectiveness of its quality assurance systems. In developing the Code, extensive advice has been sought from a range of knowledgeable practitioners.'*

(QAAHE, September 2004)

The Code also makes reference to other documents, most notably 'Skills Training Requirements for Research Students, Joint Statement by Research Councils/Arts/Humanities Research Board. This specified the 'skills that doctoral research students funded by research councils would be expected to develop during their research training', often referred to as generic skills. There are 35 separate skills listed, categorized under the following headings as:

1. Research Skills and techniques, e.g. To be able to demonstrate original, independent and critical thinking.
2. Research environment, e.g. To be able to understand the process for funding and evaluation of research.
3. Research management, e.g. to be able to apply effective project management through the setting of research goals, intermediate milestones and prioritisation of activities.
4. Personal effectiveness, e.g. to be able to demonstrate flexibility and open-mindedness.
5. Communication skills, e.g. to be able to write clearly and in a style appropriate to purpose.
6. Networking and team-working, e.g. to be able to develop and maintain co-operative networks, working relationships with supervisors, colleagues and peers, within the institution and wider research community.
7. Career management, e.g. to be able to appreciate the need to show commitment to continued professional development.

(QAAHE, 2004)

In addition, the Framework for Higher Education Qualifications in England, Wales and Northern Ireland published by QAAHE sets out qualification descriptors with criteria for doctorate level study that all candidates must be able to show they have met.

- i. 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;
- ii. 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
- iii. 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
- iv. a detailed understanding for application techniques for research and advanced academic enquiry.

Typically holders of the qualification will be able to:

- a. 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;
- b. 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:**

- c. the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex unpredictable situations, in professional or equivalent environments.  
(QAAHE – The framework for higher education qualifications, January 2001)

QAA places PhDs and Professional /Practice Doctorates all at level D. However it may be noted that Professional and other doctorates are given a clear credit rating (in the sense of “volume” of credit) in the Credit and HE qualifications guidelines, whilst PhDs are not credit rated in this way. This reflects the requirements that degree programmes are accompanied by explicit learning outcomes, which Professional Doctorates specify, whilst traditional PhDs do not have set learning outcomes.

These broad overarching skills and descriptors reflect the policy agenda in the UK. Other broader policies in Europe as well as in Australia reflect a similar position, and support the need to broaden the scope of doctoral programmes from a dissertation or thesis to the development of employment-related and transferable personal skills. The Report on the Review of Research Programmes: England and Northern Ireland (2007) based on the review of 86 doctoral awarding institutions indicated concerns around the management of doctoral programmes and safeguarding these in the face of internal and global demands, including competition for international students.

In France university awarding and management systems are state controlled through legal regulation with national reporting mechanisms and audits. There are more than three-hundred doctoral schools with common admission, examination and awarding procedures.

Conversely, in Germany the picture is very different, with each of the 16 states with universities with doctorate awarding powers meeting the requirements in their own way. Doctoral education is highly decentralised and individualised, though there are signs that this may be about to change, with the peak body of rectors and presidents having recommended the establishment of doctoral schools and the Science Council has also recommended reform to doctoral education. Whilst there are 283 graduate colleges in Germany, there are a range of different approaches reflected in their management of postgraduate provision, and a growing opinion that a more structured and transparent system for doctorate education is needed to allow them to participate more globally.

By contrast in the Netherlands a task force was set up to look at Professional Doctorates by the Association of Dutch Universities, VSNU, at the request of the Minister of Education in 2005. The investigation has included consideration of which areas would be appropriate for Professional Doctorates and the relationship of such qualifications to traditional PhDs.

In Dutch higher education, the PhD is a four year programme, whilst the Professional Doctorate is envisaged in the Netherlands as primarily a three year programme aimed at research in a professional or workplace setting.

As a result of this distinction, it is possible that distinct descriptors may be developed which would relate to the third cycle descriptors, but would benchmark a Professional Doctorate as equivalent to a PhD, with the distinction being around purpose and emphasis. There is evidence that this thinking is also being reflected in the USA, though it must be noted that the Professional Doctorate in the US is somewhat different in form and content to those in the UK and Australia (Powell and Long, 2005).

In the Republic of Ireland work has been undertaken to review the place of Professional Doctorates alongside more traditional PhDs, and to address the need for 'radical modernisation of PhD and post doctoral training' to meet the needs of the knowledge society (National Qualifications Authority 2006). Whilst the number of professional doctorates is small at present, they are being classified as equivalent to PhD level achievement.

In the broader context of Europe, higher education has been influenced by the Bologna Process, started in 1999 and the creation of the European Higher Education Area (EHEA) and the Lisbon Strategy with the objective of building the European Research Area (ERA). The Bologna Process now has 46 member countries and is an influential instrument for promoting reform in higher education across Europe. Whilst the early work concentrated on the structuring of higher education studies into two cycles, Bachelors and Masters, the Berlin Communiqué in 2003 extended the process to include the third cycle of doctoral study. The inclusion of doctoral study in the Bologna process has been linked to the policy objectives of the European Union Lisbon Strategy (2000) with its focus on making Europe a competitive knowledge based economy and society through increasing the number of researchers and enhancing research capacity, innovation and economic growth. However, demographic factors and evidence of decreasing interest amongst young people in research careers, alongside increasing global competition for the best talent, have provided the key drivers for change in doctoral education towards a more flexible profile. The conference of education ministers in Bergen in 2005 led to a statement on doctorate education being issued which included clear reference to applied skills:

*'We urge universities to ensure that their doctoral programmes promote interdisciplinary training and the development of transferable skills, this meeting the needs of the wider employment market'*

(Communiqué of Conference of European Ministers Responsible  
for Higher Education, 2005:4)

Given there is considerable diversity in the way doctoral provision is organised not only across different countries across Europe and beyond, but also across different institutions within the same country, diversity of education traditions can be considered a strength. The Bologna process may prove to be a useful tool in managing diversity of doctoral traditions to meet the needs of stakeholders including governments, industry and academia, bringing together commercial and academic interests.

Finally the role of professional bodies in Professional doctorates merits consideration. Scott et al (2004) looked at the ways in which professional bodies are involved in Professional Doctorates in engineering, education, business administration and clinical psychology.

In the case of engineering and clinical psychology in the UK, the professional bodies have been the main drivers behind professional doctorates, where completion of such a programme can confer not only status but may be linked to the right to practice in specialised areas. Where this is the case, the role of the professional body in the design, delivery and assessment of the award may be significant. This in turn can lead to questions of ownership and responsibility for quality and standards, where the need to maintain confidence in both the profession and the academic aspects may require examination by both parties. Where universities and professions may have different views on core characteristics of professional doctorates key challenges may arise.

## 2.5 Key Focus of Recent Debates and Evidence from Doctorates in Professional Practice

Since the development of professional doctorates in the UK and Australia there have been a range of debates around the approaches and strategies adopted in relation to work based and work related learning. These include aspects around the forms of knowledge, definitions as to what constitutes academic achievement and as mentioned above, the tensions in defining quality and responsibility for standards between the demands of the professions and the requirements of academic rigour and excellence demanded by higher education institutions (Costley, 2000). The question of the role of the candidate in defining and directing the programme has also been raised, different models being more or less candidate driven. McWilliam et al (2002) identified a shift to candidate development as part of a wider movement towards vocationalism and professionalism in higher education, centred around work place activities.

The Middlesex University D.Prof. (Doctorate of Professional Studies) puts forward a number of criteria for the assessment of candidates within the framework of the usual QAA driven criteria for doctoral level work.

These specific additional criteria call for the candidate to demonstrate the ability to (Stephenson et al 2006):

- review and appraise their previous education and professional experience;
- engage their professional colleagues in collaborative ventures capable of achieving significant impact in the professional arena;
- articulate and justify to the university the plans for their final projects;
- deliver the outcomes that have achieved or are capable of achieving professional impact;
- present, at the end, a critical commentary of the doctoral expertise as a whole, including its relevance to what might follow.

The generic criteria applied are consistent with national standards for doctorate level work and include the higher level cognitive and personal transferable skills demonstrated in a professional context. The criteria can serve to help guide candidates through the process of preparing their programme plans, learning reviews and final assessment materials. Candidates have full responsibility for negotiating and managing their own learning, supported by academic and professional staff as appropriate.

Final assessment is undertaken by both professionals with experience and expertise in the professional field of work as well as experienced university examiners.

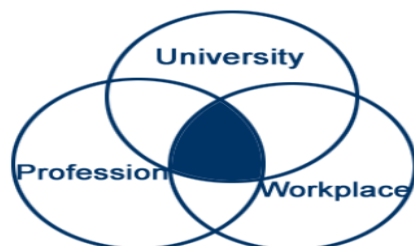
It is the responsibility of the individual to link the academic and professional constituencies and to justify their focus of interest and research, exposing their status and professionalism to comment from colleagues and for critical evaluation.

Many of the debates that focus on the balance between institutional and professional responsibility gloss over the critical aspect of the candidate's role as the primary agent of control. This aspect is underplayed in the hybrid curriculum model often cited in connection with work-based learning programmes (Lee *et al*, 2000) as shown in the figure below. In Middlesex University model, each sphere is evident but it is the candidate who creates the programme, builds the alliance between the university and the profession and defines the workplace elements.

Where the candidate is the primary agent of control, the outcomes which align with the academic and professional environments can provide benefits to both the individual learner and the profession.

## THE SECOND GENERATION PROFESSIONAL DOCTORATE

- Lee et al  
Hybrid curriculum model which places Mode 2 knowledge at the centre of learning



Note: this model retains the universities' certification function and market

**Figure 2** – Relationships between the key elements with the candidate at the centre represented by the shaded area.

The Economic and Social Research Council (ESRC) has provided guidelines in relation to Professional Doctorates in the field of social sciences to encourage innovation and support for diversity within this qualification, whilst providing a general framework to indicate the training requirements and help assure standards. As a key feature of the doctorate is the undertaking of an original piece of research, a sound understanding of research methods is considered an essential component. The Framework provides a kite mark that sets the standard for quality and innovation and supports the development of professionally orientated research training and research methods.

As Professional Doctorates aim to develop an individual's professional practice and to provide them with the opportunity to contribute to professional knowledge, it is important to indicate how professional knowledge is infused within the programme. One feature that the ESRC considers will become common to all Professional Doctorates is an independent piece of research in the form of a dissertation or thesis to be examined by an expert in the field of the research. Through this piece of original work the ESRC sees the focus of the Professional Doctorate as being a dual one – 'to make a contribution to both theory and practice, and to develop professional practice through making a contribution to (professional) knowledge' (ESRC website).

The research would be expected to involve real issues of work-based practice and, that through this work, individuals would have opportunities for personal and professional development. A measure of this development would form part of the assessment for the doctoral award.

The ESRC has identified the following requirements similar to those set out in the *Postgraduate Training Guidelines*:

- a. research training – to include a range of methodological approaches;
- b. clear rationale as to how the research contributes to the development of practice in a professional context – through a reflective statement showing the contribution to professional learning;

- c. adequacy of supervision – to demonstrate support for part-time students from a range of different organisations;
- d. the presence of an active research environment so that participants can benefit from interaction with experienced researchers to help develop thinking and critical awareness skills;
- e. critical mass of students to provide peer networks and activities;
- f. satisfactory submission rates and procedures to monitor student progress;
- g. examination and Assessment processes to include the professional voice to help assess the impact of the doctorate work on practice and professional knowledge;
- h. consideration of ethical issues related to research in a work-place environment.

The Engineering and Physical Sciences Research Council (EPSRC) initiated the Engineering Doctorate (EngD) in 1992 as ‘a radical alternative to the traditional PhD, being better suited to the needs of industry, and providing a more vocationally orientated doctorate in Engineering’ (EPSRC website). Like the ESRC, Best Practice Guidelines for the EngD were put in place to ensure the quality and standards of programmes, specifying the aims of such programmes as:

- to provide research engineers (REs) with experience of rigorous, leading edge research in a business context;
- development of competencies which equip REs for a range of roles in industry;
- provide a mechanism and framework for high quality collaboration between academic groups and a range of companies;
- contribute to the body of knowledge on a particular discipline, industrial sector or multidisciplinary theme.

This statement of purpose is followed by a statement of the competencies to be achieved which include: ‘expert knowledge, an appreciation of ... engineering culture, project and programme management skills, teamwork and leadership skills, communication skill and the ability to apply skills/knowledge to new and unusual situations, the ability to seek optimal solutions to complex and multifaceted problems’ (ibid), a list not dissimilar to that produced in the Joint Statement of the Research Councils and the Arts and Humanities Research Board. These competencies are aimed at meeting the requirements of the world of work outside academia.

A fundamental precept of Professional Doctorates is that candidates must demonstrate their capability to solve problems relevant to their own professional practice and through this make a significant contribution to current professional knowledge and practice.

The identification of problems and issues in the workplace provides the starting point for any research. The Professional Doctorate follows the notion of Schon (1991) when he argues that when practice gives rise to new professional knowledge, this in turn informs and improves practice. Thus the central requirement for a Professional Doctorate is to have significant organisational and professional impact in the workplace, and this sets it apart from the PhD (Lester, 2004). Bourner *et al* (2000) further defined this distinction of the Professional Doctorate from the PhD as the former being ‘researching professionals’, whilst the latter could be defined as ‘professional researchers’.

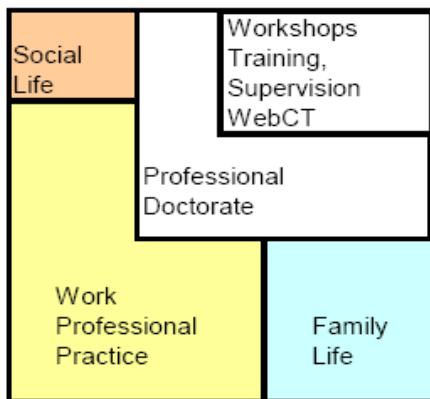
Drawing on their factual conclusions, Professional Doctorate candidates must articulate conceptual conclusions of value from their work-based investigation to widen professional practice (Trafford and Lesham, 2007).

Anglia Ruskin University have developed a Professional Doctorate designed to provide a part-time route for professionals working in the construction industry (Frame et al 2007). The main focus for the programme development was to enable candidates to complete their doctoral research largely in the workplace. The Built Environment Professional Doctorate was designed specifically for those who have significant professional experience in the industry together with the ability and opportunity to undertake research within their own organisation. The work-based programme is divided into two distinct stages:

- Stage 1 (minimum 16 months), outcome led, examined externally by three papers which develop the candidates' research focus, literature review and research skills in the context of their own professional practice. This does not represent a formal taught programme and is not modular or credit rated. Papers taken are tailored to meet the requirements of each candidate;
- Stage 2 (minimum 20 months) a research proposal which is considered by the Research Committee alongside other part-time and full-time PhDs.

Successful completion of Stage 1 does not allow automatic progression to Stage 2, as Research Proposals must meet the requirements of an independent committee, external to the Professional Doctorate tutoring team. As with all doctorates, the research must be based on originality and make a contribution to the knowledge and professional practice.

Support for the programme is through a series of workshops throughout the year delivered by a multi-disciplinary built environment research team. In addition candidates have individual tutorials with their supervisor and are invited to all the university training events. Candidates also support each other as multi-disciplinary cohort, with each year cohort supporting the next. The University' WebCT makes available research resource material, the tutoring team and interaction with other candidates. Finally, where possible, candidates have access to a workplace mentor who provides an additional professional practice dimension to their research. The diagram below illustrates the conceptualisation of the Professional Doctorate.



**Figure 3.** Essential Elements of the Anglia Ruskin University Professional Doctorate (Frame, I).

Expectations of employers are also an important feature, and their involvement in defining the product places the Professional Doctorate in a different category from the traditional PhD. The Professional Doctorate may be seen as being more attuned to the needs of employers, and may go some way to redressing the concerns identified in relation to PhD graduates.

Employers, according to Vandrup (2006) seek people with multi-disciplinary experience, a flexible approach and an understanding of business models. In effect employers are looking for those with doctorates to add value to their business, not only through their technical or subject specific knowledge, but their approach to work and ability to take responsibility for improving processes.

Broader approaches to research training reflect the greater range of employment opportunities for those with doctorate level qualifications, including research activities in the workplace. However, the rewards of undertaking a professional doctorate tend to be intrinsic, often motivated by the desire on the part of individuals to improve professional practice and organisational performance in combination with personal enhancement or advancement and job satisfaction (Green et al, 2001).

## 2.6 Frameworks for Professional or Practice Based Doctorate Awards

Several UK universities have frameworks for Professional Doctorates and Doctorates of Professional Practice. It is interesting to note that in the UKCGE Report (UKCGE 2002) Professional Doctorates originated predominantly in pre-1992 universities. The report also noted that following these early beginnings, growth has been largely in the post-1992 universities.

Australia has been at the forefront of developments in Professional Doctorates and the University of South Australia has developed clear guidelines for examiners of Professional Doctorates by Research. This award is defined as a 'careful, rigorous and sustained work demonstrating that the candidate is a scholar of standing in professional and academic spheres'. The guidelines are designed to assist examiners in their consideration of research work submitted for Professional Doctorates.

In this context, research work is defined as 'any combination of the following: thesis, dissertation; portfolio of work; exegesis; artefact; published articles; and others specified in the Award'.

The Professional doctoral programme at the University of South Australia consists of two components, course work and research, both of which must be successfully complete. The research component accounts for two-thirds of the overall programme and produces research that makes '*a significant and original contribution to knowledge about professional practice and a contribution to knowledge of fact and/or theory*'. Originality or innovation is seen as being evidenced in a range of ways:

- identifying a new problem with current practice;
- framing an existing problem in a new way to improve systems and performance;
- investigating previously ignored material;
- offering new and significant insights into issues which have been examined by other researchers;
- developing new techniques for investigating issues;
- applying appropriate techniques to a new set of problems;
- developing new ways of applying existing knowledge to practice.

In the Australian model additional criteria that are stated as being assessed include:

- a critical appreciation of the literature relevant to the research project;
- a well designed and structured investigation (or set of investigations);
- information presented in a manner consistent with the relevant discipline(s);

- a critical appraisal of own work relative to that of others;
- evidence of independent and critical thought.

Frameworks for Professional Doctorates reflect the key descriptors and criteria for doctorate awards published by the QAA with additional specifications for the assessment of course work elements and professional knowledge and practice. All include reference to use of background literature and knowledge and research methods appropriate to the discipline. Independent critical judgement and original contribution to the body of knowledge are also common, though set against the practice or professional context. A number also make reference to the Bologna 'Third Cycle' Descriptors (Appendix 3) and the Generic level descriptors for professional doctorates (level 8) published by SEEC in 2003 (Appendix 4).

The length of Professional Doctorate programmes vary from university to university, as do the entry requirements. Many will register candidates with a good honours degree or equivalent level of qualification for a Masters/Professional Doctorate, with some components being set at M level. Others require a Masters Degree or equivalent for registration directly on to the doctorate programme, subject to approval of the research proposal. As mentioned earlier, programmes are credit rated, with a full doctorate requiring 540 credits, some components of which may be at M Level. The majority of Professional and Practice Doctorates are classified as research degrees, with titles for specific awards related to the relevant subject or discipline area, subject to agreement by the university approval mechanisms. Where there is formal cooperation with one or more external bodies, including professional bodies, as in the case of Practice Doctorate Nursing Practitioner, collaboration agreements regarding specific competency requirements and joint supervision with the external body or establishment are formalised.

There is no single framework for professional doctorates agreed within the UK, but documents reviewed including those for the University of Northampton, the University of Cardiff and the University of Northumbria and the University of Greenwich all reflect the same basic precepts.

### **3.0 Research Findings 1 - Research into Perceptions of Practice Led Professional Doctorates within the Universities based in Kent and Medway**

#### **3.1 Introduction and Methods**

Kent and Medway region has 4 universities, exclusively or partially located in the region:

- The University of Kent, including campuses in Canterbury and Medway;
- Canterbury Christ Church University, which has campuses in Canterbury, Broadstairs, Folkestone and Medway;
- University of Greenwich at Medway, whose centre is based outside of the region in SE London, and also has a campus at Folkestone;
- University for the Creative Arts (UCA), which is dispersed university with centres throughout the South, but including campuses in Medway, Canterbury and Maidstone.
- The Open University also operates in the region. However it was not included in this survey.

It should be noted that currently two of the universities have research degree awarding powers through partner institutions, the University of Kent in the case of Canterbury Christ Church and the University of Brighton for the University for the Creative Arts.

All the universities offer doctorate level study and have experience in working with a range of professional bodies and employers

Senior managers in all four of the universities based in Kent and Medway were approached with a request for a meeting to discuss their views on Practice Led Professional Doctorates. In total 9 senior managers were interviewed, two from the University of Kent, two from the University of Greenwich, four from Canterbury Christ Church University and one from the University for the Creative Arts.

Interviews utilised a common set of questions (Appendix 5) and took place in the offices of the senior managers. The questions sought to explore their views regarding professional doctorate in relation to:

- entry requirements;
- taught components
- recognition and accreditation of prior learning;
- supervision of doctoral candidates;
- assessment strategies;
- duration of study and research;
- scope for the development of Practice Led Professional Doctorates

The sections below represent a summary of the opinions and comments expressed, but are not in any sense a transcribed account.

### 3.2.1 *Entry Requirements*

Entry requirements for postgraduate doctoral study would normally require candidates to register for a Masters/Doctorate programme, based on having already achieved a good first degree or equivalent. This allows candidates to complete designated research and subject based elements to gain credit at Masters Level, and then upon successful submission of a research proposal, progress to research at doctoral level. Some senior managers felt that through a practice based model approach there would be less need to differentiate in terms of a 2:1 Honours degree or other such minimum evidence of previous achievement. Individual candidate's professional knowledge, experience and expertise should be taken into consideration. For those professionals who are already handling complex information and solving problems, working at a strategic level, a portfolio of evidence could meet entry requirements. This would be within the ethos of work-based and lifelong learning and meeting the professional and skills development agenda. This said however, in all cases there would need to be clear *prima-facie* case for admission to doctoral study.

It was suggested that the transition from pre-registration to registration would need to follow consideration of individual cases, and some charge made for supporting candidates in compiling and submitting the required pre-registration evidence, possibly in the region of £500 - £750 per candidate. The key and essential element would be whether the candidate could demonstrate their capability of working at doctorate level.

As part of a pre-registration process, it was suggested that candidates would need to demonstrate 'exceptionality', that is, what makes the work they have been undertaking new and innovative, with the potential to take it forward to doctorate level.

Candidates would need to be able to demonstrate that they are advanced practitioners working at levels that have sufficient autonomy to take forward complex investigations and research. In the Health Service, for example, the Careers Framework is linked to academic levels, applying to health practitioners and managers. Those applying for doctoral study would need to demonstrate that their decision making and autonomy was at least at Masters Level. It would be essential that candidates had the authority and freedom to take forward new developments. In addition, all candidates would need to demonstrate they have the requisite level of communication skills, including written communications.

Finally, careful management of the relationship between the workplace and each university through a formalised agreement articulating responsibilities and any necessary indemnities was identified as essential. This should include a clear understanding of the nature of doctorate work and statement of support from the employer, where appropriate.

### 3.2.2 Taught Components


There was broad agreement that a taught research skills and methods component would be needed to support candidates in undertaking Practice Led Professional Doctorates or indeed any Professional Doctorate award. This would ensure that candidates were equipped with the understanding required to undertake research at doctorate level including choices around research methods, statistical analysis, ethics and requirements for academic content to place the work in the broader theoretical and professional context.

Some subject content may be needed, depending on the professional area and existing knowledge and expertise of the candidates.

Elements of leadership and management could also be central to furthering individual development at doctoral level.

A number of interviewees felt that Research Methods could be offered flexibly with the use of on-line and distance learning materials supported by tutorial and/or seminar provision. Candidates, who had recently undertaken study at Master Level could, where appropriate, claim APL (accreditation of prior learning) for this aspect, provided they could demonstrate that all relevant learning had been completed and assessed. In one university the current research methods module had been offered very flexibly, while in other institutions this aspect would need to be formally assessed and credit awarded. Other taught modules could be formally assessed or awarded credit through critical reflection as is the case in some existing work-based awards.

Discussions with one senior manager led to identification of a possible model which might comprise:

1.Taught Components			Project Research
Research Methods	Subject Based	Subject Based	Research Project – circa 40,000 words
Distance Learning	 Could APEL against existing Knowledge & Experience evidence		To be undertaken in the workplace with mentor and academic tutor supervision and support
Delivered and assessed including portfolio			Examined as for other doctorates

This model would cater for a range of professional needs including progression for those candidates who may have existing Masters Level qualifications or equivalent professional and experiential learning and evidence.

However, there were doubts expressed about the cohort nature of many Professional Doctorates, as group work elements could lead to a fragmentation of the learning experience where candidates may be constrained in taking forward elements of their research until subject or other modules had been completed. This aspect has not been evidenced in the literature reviewed.

### 3.2.3 *Recognition and Accreditation of Prior Learning (RAL or APL)*

Different disciplines may have different requirements so it was felt that this aspect needed to be treated on a case by case basis. In clinical psychology, for example, very specific limitations are set, to ensure currency of learning and evidence of capability.

Some senior managers felt that the individualised approach to RAL/APL was strength and could appeal to those operating at a strategic level in organisations, by offering an opportunity to bring together a body of knowledge and professional practice. Such work put together in a portfolio could form the empirical base for further development, and link to the doctoral research aspect with the opportunity to demonstrate innovation in professional practice. In the case of those with substantial existing peer reviewed work, demonstrating contributions to the body of professional knowledge through linking of work and critical reflection may be a route to doctoral achievement, similar to the methodology of the PhD by Publication (*cf* Middlesex University's D.Prof by Public Works).

### 3.2.4 *Supervision and Support*

Supervision was seen as being a key element to successful learning experiences for candidates. Where research or development work was undertaken in the workplace, a mentoring role would need to be carefully managed, particularly if undertaken by someone external to the university, so as to avoid any conflict with the tutor/supervisor role within the academic context. A lead supervisor role would need to be established to take responsibility for the overall support of the candidate, working alongside any external advisors who might be brought in to reflect particular areas of expertise relevant to the practice base of the research. In the case of the University for the Creative Arts, all supervisors must be trained and registered with the University of Brighton. In the case of external mentors or advisors, this could perhaps be managed differently, but measures would need to be put in place to ensure there was sufficient registered supervision to meet requirements.

A question was raised as to who would be undertaking the judgements about whether candidates had met the doctoral standard, along with the management of such a process. A list of staff (internal or external) who were experienced in this practice-based approach, and who could serve as externals on committees, would be useful, and add weight from the point of view of the university in taking forward the Practice Led Doctorate.

The need for on-line support was also identified to support accessibility for those undertaking part-time and workplace study. In most institutions additional development work would be needed to meet the support needs of doctoral students in the workplace. Such mechanisms would sit within a regular seminar approach which would add value in terms of peer referencing.

Support mechanisms were seen as essential for doctorate study, which can be a lonely route, particularly where a non-cohort approach is adopted. Academic supervision would ensure that candidates received good quality support in accessing and utilising sometimes disjointed on-line resources and in addressing own learning challenges.

### 3.2.5 *Assessment Strategies*

It was broadly felt that a clear rationale for the doctorate work would be needed in the pre-registration phase, and that such a rationale would need to demonstrate complex problem-solving, innovation and integration leading to the development of practices and solutions at the right level. Ensuring the appropriate nature of prior knowledge, experience and learning would be a key challenge for academic supervisors, along with supporting candidates to develop the required critical evaluation and analysis skills, not only in relation to their own work, but also within the context of the broader picture in their field of work.

To clarify the justification element, an example was provided by one senior manager in the context of engineering as:

- if the focus was on technical aspects – justification must demonstrate that much of the new work is at the right level, i.e., capability of a system in an R & D context, and innovation;
- if the focus were on management aspects, then justification should include consideration of such elements as efficiency and be based at the right level of management – producing credible evidence to monitor, evaluate and assess impact of new systems or strategies, as well as demonstrating innovation.

The justification or rationale would need to be very robust, and candidates would need to submit proposals for a significant piece of project work, in addition to evidence of existing achievements at postgraduate level in most cases. Experience of working with applications for PhDs by research, as cited by one senior HEI manager, was that candidates often have to rework their first submissions with guidance from the university to meet the requirements. There would also need to be a clear indication in any submission as to the quality and nature of the 'own experience' portfolio, and where the candidate has led work in their area of expertise. An example of Nursing Practitioners was given, where much of the work is built around analysis of the reflective practitioner and perceived impact on the quality of service and how this has led to improved practice.

Innovation in Health and Care Management was seen by one Head of Faculty as linked to service improvement. The key aspect that must be demonstrated for 'doctorateness' is what is being added to the body of knowledge, and what benefits or insights are being advanced. For candidates with a large existing body of knowledge and experience, and where evidence could be assembled, a commentary on how this body of work meets the doctorate criteria would be needed, not only in its own right, but also in relation to the broader discipline area – demonstrating how the work adds to the greater body of knowledge. Another way of viewing this would be to consider how the practice led doctorate would transparently develop practice for the application of theory, and how new theory may evolve from it.

In the case of the Creative Industries, where much of the work is visual or performance based, review is by peer and public acclamation.

This however, can be difficult to quantify, unless some other external measures such as sales or market success are applied.

In the case of artists (painting or visual arts), candidates could take forward a body of work, but they would need to develop a clear argument as to the innovation or uniqueness of the work in the context of the broader field, and how the work was making a contribution to extending knowledge and/or practice.

One of the main challenges of undertaking doctoral level study was seen as lying in the development of the thinking skills needed, which should go beyond the specific organisation based thinking. One manager interviewed felt that in some ways it is necessary to 'de-professionalise' individuals, in order for them to really perform at doctoral level.

Most of those interviewed felt that a new project or research based element for a practice led doctorate must ensure that the achievement could stand up to the same level of scrutiny as any PhD thesis, and thus confirm the robustness of the award. Such work could be linked to existing roles in organisations, particularly where individuals were working on new products or processes. In the Aeronautics or pharmaceutical industries, for example, work is frequently linked to new systems and products at the cutting edge of technology which require not only innovative thinking but also careful consideration of applications.

Action Planning and Action Learning are also skills that candidates would need to develop and demonstrate.

Finally, a commonly identified aspect was the need to have clear articulation of the assessment process to doctorate criteria and university frameworks for awarding of doctorates. Staff would need to be developed to support any new practice led models, and the availability of examiners who could undertake the level of scrutiny required established.

### *3.2.6 Duration of Study and Research*

Most of those interviewed felt that time-scales for completion of a practice led doctorate would be dependent on the RAL/APL element and any attendance requirements for completion of taught modules. Many felt the time-scales would need to be flexible to reflect the basis of the individual candidates work. In one institution the view was expressed that there would be no minimum timeframes for completion, as there are currently no minimum time-lines as such within the university regulations. However, maximum periods would be covered by issues of currency of the work being undertaken. In this case the reality would dictate completion within a maximum of 6-7 years.

One aspect that may influence minimum completion periods are validation issues, which for example, within the University of Kent there is specified a minimum period for which candidates must be registered – currently 2 years and 2 terms, before submission for doctoral examination. This aspect was seen as being linked with an economic imperative, in the case of existing PhDs and New Route Professional Doctorates, such that programme costs must be seen to be economically viable. To some extent this could be addressed through the setting of fees which would reflect the university costs in relation to supporting candidates undertaking work-based learning.

In summary time-limits were seen as needing to be flexible to accommodate a candidate led programme, and able to reflect the portfolio of existing work and the period needed to complete the research element.

### 3.2.7 *Innovation*

The ways in which innovation can be demonstrated is a critical challenge for all doctorate students. Views expressed by the senior HEI managers included candidates being able to demonstrate:

- ‘newness’ of the work being undertaken;
- development of complex analysis and problem solving rather than just applying a process;
- new knowledge and understanding has been achieved, and being able to defend how and where new ground has been broken in the context of the work-place setting, as well as in the broader context of relevant literature review and theoretical framework.
- innovation through moving forward the frontiers of knowledge;
- development of experiential work which in turn informs the body of knowledge – e.g. in Social Work where knowledge is generated through practice;
- adding value to practices.

### 3.3 *Scope for the development of Practice Led Professional Doctorates*

The majority of those interviewed felt that there would be an interest in developing practice led doctorates given evidence of sufficient interest from employers and quantifiable evidence of demand. A Framework for the doctorate model would be needed such that this could be incorporated into the university regulations, as for example, the PhD by Publication has been. Where universities have existing Professional Doctorate provision (see Appendix 6), a distinction between this and a practice led doctorate may be needed.

A view was expressed that very good examples of practice based PhDs exist, for example in areas of the Fine Arts, Media and Music, where the thesis can accommodate practice-based work and analysis of the contribution to the body of knowledge. Further it was felt that the PhD can embed practice-based work, and accommodate RAL of the existing body of work, and therefore could not see the value of introducing a practice led doctorate, as existing PhD models could support a customised approach to the needs of the work-place. This view, however, was not shared by the majority of those interviewed. What was clear is that a well articulated case set against potential investment costs would be needed, which would include the costs of validation and delivery of the programme.

The concept of a pre-registration process with charges in the region of £500 - £750 attached to support applicants through the rationale and justification requirements was seen as having merit. However, it would need to be made very clear that no guarantees of success were attached to this pre-registration support, but that the candidates would receive good quality guidance and feedback.

In some areas managers felt the practice led doctorate would offer a progression route from existing work-based or work-related learning provision, and would complement existing Professional Doctorates which are largely in the fields of education, clinical psychology and business. Areas identified as potentially having an interest included engineering, health related professions, architecture, management and graphic design.

A learning agreement would be an important aspect of any doctorate success, setting out the skills and knowledge areas and commitment from the employer and the candidate.

However, there was agreement that the most critical factor would be the rigour of the award, and the methods by which candidates could demonstrate they had met the standard for doctoral achievement. There could be no doubt as to the rigour of the award, and measures would need to be put in place to ensure transparency. There could also be no question of a practice led professional doctorate being seen as an easier option or a second rate doctorate.

The assessment and examination process would be critical to maintaining standards and reputation.

## **4.0 Research Findings 2 - Evidence of Demand from Employers in Kent and Medway**

### **4.1 Introduction and Methods**

TRC Consultancy was commissioned to carry out interviews with employers in Kent and Medway, with the objectives to:

- assess potential need for a work-based Doctorate with key employers who currently invest in Continuing Professional Development (CPD) for their personnel. This may be due to mandatory requirements, professional requirements, to meet government requirements or for business development.
- develop a dialogue with staff at senior level who are knowledgeable of their organisation's staff, their CPD requirements, business trends and strategic plan.

In order to complete the work within the time-lines, TRC contacted a sample of businesses and organisations the company already had ongoing relationships, and also consulted government bodies to find whether they had previously identified a need for a work-based doctorate qualification. Preliminary discussions suggested that professional bodies should also be included in the survey as to be meaningful CPD often must be recognised or approved by such bodies. The research included interviews with 19 representatives from public and private organizations (Appendix 7).

The following questions were used to frame discussions:

1. Is there a need for a work-based Doctorate?
2. What should be the key features of a work-based doctorate?
3. What benefits would you like to see accrue from a work-based Doctorate in your work place?
4. Would you be interested in shaping such a degree?

### **4.2 Results of Survey**

#### **4.2.1 Is there a need for a work-based Doctorate?**

All those interviewed were enthusiastic about work-based learning. Employers can see learning benefits and outcomes very quickly and this influences their decisions when considering supporting employees' CPD. All commented that professionals are becoming more qualified. One professional body has noticed a difference over the past seven years, with over 50% of their members now having Masters qualifications.

Although there is recognition of the value of doctorates the demand for traditional PhDs in the workplace is currently very low. This low demand may be explained by the perception that heavy burdens over and above work would be placed on those embarking upon a part-time PhD. 90% of those interviewed felt there was a need for a work-based Doctorate in Kent and Medway provided that it is different from what is currently offered.

However, those interviewed commented on significant barriers to meeting their needs:

- Time is a key issue as staff struggle to fit in post-graduate studies with the demands of their job.
- Finance for the individual who needs to earn a living while studying and for the employer who needs to see value for money from their investment.
- Universities need to be more responsive to what employers want and more flexible in their provision.

#### 4.2.2 *What should be the key features of a work-based doctorate?*

*Any proposed degree should:*

- Make it easier for students to study alongside carrying out their work.
- Recognise their achievements at work
- Place the learner together with their workplace central to the programme
- Be flexible and responsive to the learner's needs
- Support work-place projects which develop the individual and provide significant change for the employer
- Carry out critical research and evaluation
- Develop collaborative and partnership working locally, nationally and for some employers internationally
- Provide progression for students internal (i.e. within company) and external CPD courses

*The academic institutions should be:*

- Flexible and responsive to learners needs
- Able to accredit work-based learning, other courses and qualifications
- Able to provide expert academic supervision, an academic home and resources
- Facilitate development of the skills and 'professionalism' required by the student
- Ensure that the work is 'cutting edge' but appropriate
- Ensure the quality of the qualification.

#### 4.2.3 *What benefits would you like to see accrue from a work-based Doctorate in your work place?*

*Benefits for the individual:*

- Empowerment and increased motivation
- Recognition of value of work
- Recognised qualification
- Enhancement of professional skills and membership of professional bodies enhanced
- Shared practice, feedback and judgment from peers
- Networks developed
- Improved collaboration with colleagues and customers/service users.

*Benefits for the workplace*

- Bring focus to the organisation's developmental needs
- Potentially address workplace problems and challenges
- Change practices
- Help Develop new services or policy
- Inspire a culture of innovation
- Facilitate knowledge transfer and research
- Develop and model senior leadership for the organization
- Improved recruitment and retention of senior staff
- Inspire greater collaboration
- Facilitate sharing of good practice and developments.

*Benefits for academic institutions*

1. Increased use by local people of the academic facilities and resources in Kent and Medway
2. Continuous interaction with employers at strategic level

*4.2.4 Would you be interested in helping to shape such a degree?*

There was significant interest expressed in working with a university to help build and shape a practice led professional doctorate. Of those interviewed, twelve have indicated they would like to engage in this area of development. Thirteen of those interviewed would like to help shape the degree.

- One professional body does not have an accredited Professional Doctorate. They would see a work-based learning D.Prof as helping their senior professionals gain fellowship status of the Institute as this is based on achievement.
- One NHS Trust would like a work-based Doctorate that would help them develop service provision, improve patient care and provide academic support and qualifications for the individual. A work-based doctorate could help them retain key staff.

*4.2.5 Recommendations and Conclusions drawn from interviews*

- Eighteen of the 19 of those interviewed were interested in a work-based doctorate. Fourteen had ideas how it could work with the staff they manage. There is a desired model emerging from their ideas and this has been reinforced by each interview. No conflict of perceived needs has yet emerged, although their comments may well be seen as challenging to Universities.
- The academic institutions need to respond quickly as to how they perceive a work-based doctorate, whether they would support it and how flexible and responsive they would be to meet candidates' and employers' needs. This may require them to collaborate closely to provide the range of expert supervisors, resources, facilities, and open access to current courses required by potential students.
- Real opportunity now seems to exist for collaboration to develop a work-based, practice-led professional doctorate (e.g. a D.Prof) and to develop substantial engagement with key employers in Kent and Medway at senior professional and strategic management levels.

- Kent Police, for example, envisaged a potential need for a work-based doctorate, possibly to provide a progression pathway for their in-house Leadership Programme. Several health professionals suggested that a work-based doctorate would help develop service provision, improve patient care and provide academic support and qualifications. Local government also sees a case for doctoral provision, which could perhaps link into broader civil service provision.

## 5.0 Conclusions and Recommendations

### 5.1 Conclusions

What has clearly emerged from this piece of research is that the field of doctoral studies is undergoing significant changes, driven by external factors including the needs of employers and practitioners. These changes have clear implications for research supervision, programme development, policy formation, academic leadership and indeed the role of universities in doctoral provision.

Recent decades have seen significant shifts in modes of knowledge and its applications, from the traditional focus on disciplinary research (Mode 1 learning) to more secular and work focused research and practice based knowledge (Mode 2). Linked to this is a growing body of work linked to the concept of the knowledge economy. Knowledge is becoming a commodity, desirable as much for what it *is* as what it *does* (Green,2008). Increased interest of governments in the development of knowledge, skills and applications, has helped to drive forward new initiatives in doctoral level education. There has been a strong re-valuation of the concept of practice and what has been called practice-theory and the advanced work-based knowledge of the professions.

Parks in his paper 'Redefining the Doctorate' (2007), draws attention to the need to review the UK doctorate and evaluate whether it remains fit for purpose and effective in practice, meeting the needs of all the stakeholder groups. Nyquist (2002) conclusions based on studies in the USA, may hold equally true for the UK, in that "rapid and transformative changes are under way in all aspects of our society: in business and in industry, in government and politics, in our society as a whole, and certainly within education. These circumstances require us to address the question, 'How can the PhD meet the needs of the society of the 21<sup>st</sup> century?'....changes in society create new requirements, and we need to honestly assess the efficacy of the PhD now to ensure that its recipients continue to make the kinds of contributions in public and private spheres that the nation needs to remain strong".

Professional doctorates including practice-led, work-based professional doctorates offer new ways of looking at the doctoral qualification, and the creation of new kinds of knowledge. In doing so, there are challenges to thinking around notions of the learning processes that lead to doctorates.

One key challenge for those institutions offering professional and practice-led doctorates is linked to the confidence of the academic establishment and of the professions that the award is at the same level as the PhD.

These new types of doctorate need to be seen and treated as research degrees in that they intend to produce graduates with doctorate level thinking skills as well as doctoral level knowledge of applications to practice.

The primary research undertaken by this project has indeed underlined the need for robust systems to ensure parity of practice-led professional doctorate research with PhD outcomes. There is a broad acceptance that work-based learning is here to stay, and that doctorate provision must be able to accommodate the needs of the professions and employers.

However, there is justifiable caution around the demand for new kinds of doctorate provision, which must be sufficient to warrant the investment by institutions in their validation and support. Any new doctorate must have robust application systems, clear rationale and justification demonstrated on the part of candidates, and assessment strategies that examine candidates against the generic doctoral criteria. A research methods and skills element is seen as a central requirement to ensure appropriate methodologies and analysis, with other taught or credit assessed modules as appropriate. There is also broad agreement that experienced professionals should be able to put together a portfolio which can demonstrate work at post-graduate level, with a reflective commentary to further justify admission to doctorate study.

Evidence gained from employers indicated that there is potential interest in a practice based doctoral award, undertaken through the work-place, which would inform new practice and products. The award would need to be flexible and candidate led with APEL to recognise and existing knowledge and qualifications with academic credit, ideally and where appropriate recognised by professional bodies. Such programmes would target senior managers or professionals and include opportunities for the further development of leadership, management, professional and inter-disciplinary working skills. It is encouraging that there is interest from across a range of sectors, all of whom see the development of doctoral thinking and research as having value for their organisations.

## 5.2 Final Recommendations for Kent & Medway LLN

- All the employer representatives interviewed expressed interest in a practice-led, work-based professional doctorate, and could identify value for their staff. There is therefore a potential demand emerging which is worthy of further exploration.
- Within individual HEIs the provision of a practice-led doctoral provision should be explored within the broader strategic plan and mission of each university.
- Twelve of a total of 19 organisations sampled offered to help shape a practice based doctoral degree. This represents a real opportunity for collaboration to develop substantial engagement with key employers in Kent and Medway at senior professional and strategic management levels.
- Kent and Medway LLN could broker a meeting with representatives from interested universities and employer representatives to take this initiative forward.
- Further discussions should be held with professional bodies to discuss the need and potential development of practice led doctorates and how these could be informed and endorsed by these bodies as a way of framing higher-level CPD for members.
- If established there would be a need for a clear shared regional framework to support practice-led professional doctorates, which ensured parity and shared vision of intention within the region and beyond.
- A system of pre-registration support and guidance would ideally be developed to assist candidates with the application to professional, practice-led doctorate provision.
- New doctorate developments may be piloted in two or three sectors where employer interest and numbers of potential candidates make this viable.

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## APPENDIX 1 - Summary of the most common types of doctoral awards in the UK

Award	Characteristics
Traditional PhD	Based largely on the supervised research project, examined on the basis of the thesis.
PhD by Publication	Based largely on the supervised research project, but examined on the basis of a series of peer-reviewed academic papers which have been published or accepted for publication, usually accompanied by an overarching paper that presents the overall introduction and conclusions.
New route PhD	Contains significant taught elements (which are examined and must be passed), and initially developed in 2001 to provide international students with an integrated doctoral training scheme including programme-related research training and personal and professional development.
Professional Doctorate	Includes a significant 'taught' element, and as such most have specific 'learning outcomes'. Based on a combination of taught modules (which are examined and must be passed), and the supervised research project, which is often smaller than the traditional PhD, is more applied and is work-based or work-focused.
Practice-based doctorate	Based on a supervised research project, usually in the performing arts, where the output involves both a written piece (which is usually much shorter than the traditional PhD thesis, and includes both reflection and context), and one or more other forms, such as a novel (for the Creative Writing), a portfolio of work (for art & design), or one or more performance pieces (for theatre studies or music), Both forms of output are examined.

Source: Parks, C. (2007) Redefining the Doctorate – Discussion Paper. The Higher Education Academy

## APPENDIX 2 – Doctoral Level Programmes – What Skills do Employers Seek?

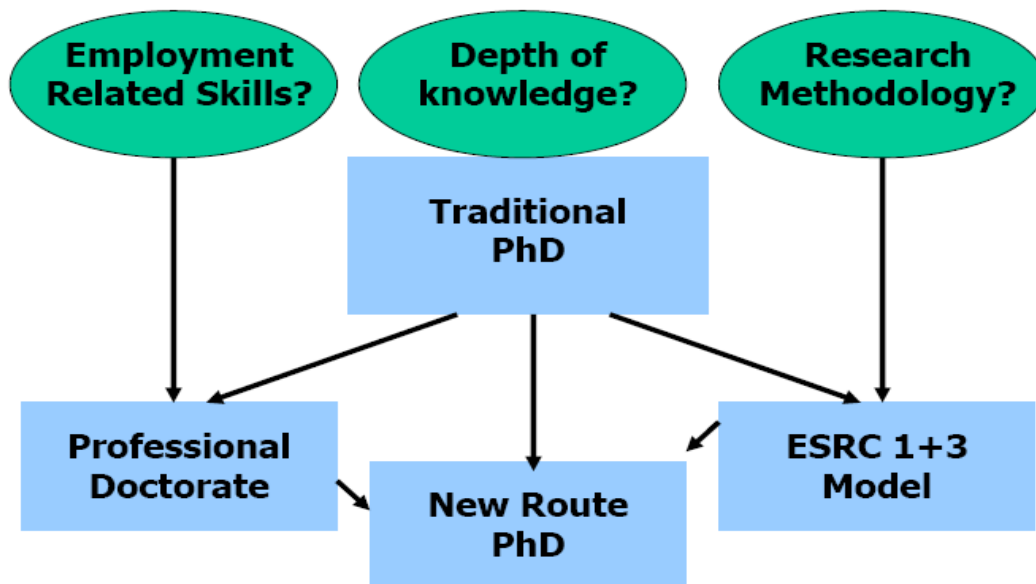
### Doctorate Level Programmes - What Skills to Employers Seek?

The following are based on a UK study of doctoral graduates.

- Proven ability to learn and utilise information;
- High levels of concentration and assimilation;
- Speed in acquiring new skills;
- Lateral thinking – making connections ‘out of the box’;
- Problem solving;
- Analytical thinking;
- Critical judgment;
- Autonomy and confidence

Traditional PhDs were based mainly on research with the students working within the academic departments of Universities. However, new post-graduate qualification models including ‘Taught PhDs’ and ‘PhDs by publication’, as well as Professional Doctorates. The Professional Doctorates offer a more flexible framework which can combine some taught elements, as required, with work-based applied study, undertaking research projects of value to the individual’s career development, and to the employer.

#### Diverging Models, 1992 onwards



Increasingly the need for applied learning which will benefit the knowledge economy has been recognised, which has led to the expansion of Professional Doctorates and what are known as ‘New Route PhDs’. The differences between the Professional Doctorate and a more traditional PhD model can be summarised as shown below.

## DIFFERENCES BETWEEN PROFESSIONAL DOCTORATES & PhDs

### **The Professional Doctorate**

Modular, Credit Based  
Usually part-time  
Usually cohort based  
Explicit Criteria  
Focus on practice

### **The PhD**

Integral, not credit based  
Full or Part-time  
Individual (or team)  
No explicit criteria  
Focus on Theory

The next generation of Professional Doctorates are increasingly employer and practitioner led, such that the knowledge and skills developed are meeting the needs of the work place and of benefit to the career progression. As Tom Maxwell has highlighted these second generation doctorates have features which include:

- Training in research and applied studies
- A Portfolio
- Inclusion in the programme of seminars, meetings and conferences
- Assessment requiring a broader context based judgement about the scope and quality of the award
- A learning environment that provides support to facilitate learning
- A negotiated compromise between the demands of the workplace and the requirement for academic rigour.

## APPENDIX 3 – Bologna ‘Third Cycle’ Descriptors

### Bologna ‘Third Cycle’ Descriptors.

Qualifications that signify completion of the third cycle are awarded to students who:

- Have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;
- Have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;
- Have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication;
- Area capable of critical analysis, evaluation and synthesis of new and complex ideas;
- Can communicate with their peers, the large scholarly community and with society in general about their area of expertise;
- Can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society.

Source: Bologna Working Group on Qualifications Frameworks (2005)

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## APPENDIX 4 – Generic Level Descriptors for Professional Doctorates

### Generic level descriptors for professional doctorates (level 8)

From SEEC (2003)

#### *Development of Knowledge and Understanding*

##### The learner:

- **Knowledge base:** has great depth and systematic understanding of a substantial body of knowledge. Can work with theoretical/research knowledge at the forefront of the discipline at peer reviewed standards/publication quality.
- **Ethical issues:** can analyse and manage the implications of ethical dilemmas and work proactively with others to formulate solutions.
- **Disciplinary methodologies:** has a comprehensive understanding of techniques/methodologies applicable to the discipline (theory or research based).

#### *Cognitive and Intellectual Skills*

##### The learner:

- **Analysis:** with critical awareness, can undertake analysis, managing complexity, incompleteness of data or contradictions in the areas of knowledge.
- **Synthesis:** can synthesise new approaches, in a manner that can contribute to the development of methodology or understanding in that discipline or practice.
- **Evaluation:** has a level of conceptual understanding and critical capacities that allows independent evaluation of research, advanced scholarship and methodologies. Can argue alternative approaches.
- **Application:** can act independently and with originality in problem solving, is able to lead in planning and implementing tasks at a professional or equivalent level.

#### *Key/Transferable Skills*

##### The learner:

- **Group working:** can lead/work effectively with group. Can clarify task, managing the capacities of group members, negotiating and handling conflict with confidence.
- **Learning resources:** is able to use full range of learning resources.
- **Self evaluation:** is reflective on own and others' functioning in order to improve practice.
- **Management of information:** can undertake innovative research tasks competently and independently.
- **Autonomy:** is independent and self-critical as learner; guides and supports the learning of others and can manage own continuing professional development.
- **Communication:** can communicate complex or contentious information clearly and effectively to specialists/non-specialists, understands lack of understanding in others. Can act as a recognises and effective consultant.
- **Problem solving:** can continue own professional study independently, can make use of others professionally within/outside the discipline.

## ***Practical Skills***

### **The learner:**

- **Application of skills:** can operate in complex and unpredictable/specialised contexts that may be at the forefront of knowledge. Has overview of the issues governing good practice.
- **Autonomy in skill use:** can act in a professional capacity for self/others, with responsibility and largely autonomously and with initiative in complex and unpredictable situations.
- **Technical expertise:** has technical mastery, performs smoothly with precision and effectiveness; can adapt skills and design or develop new skills/procedures for new situations.

## APPENDIX 5 – Questions for HEI Interviews

### Questions for HEIs

1. What is the view held by the University of Professional Doctorates and their place in future research and development?
2. What 'taught' or other set elements would the university consider as essential in an MProf or DProf programme eg. Research Methods.
3. What percentage of existing evidence could be brought forward as 'Recognition & Accreditation of Prior Learning' (RAL)?
4. What would the university accept as the minimum time frame for the completion of a Professional or Practice Led Doctorate?
5. Would the University be prepared to be flexible in relation to entry requirements/criteria, or would all applicants need to be graduates or hold a post-graduate qualification?
6. Costs – is this calculated per credit or on a set fee structure. What would the costs be?
7. Would the university be willing to accept 'peer reviewed' or 'peer revered' evidence as part of the recognition of prior learning?
8. What rationale/justification would the university expect from learners for an M/D Prof Doctorate?
9. Given that those undertaking a Professional Doctorate would need to demonstrate 'innovation' – how would this be defined in a work context?
10. How much on-line support/resources would be available to students?
11. Would identified interest amongst employers and individuals be responded to by the university to facilitate a work-based learning approach?

## APPENDIX 6 – Professional Doctorate Programmes in Kent & Medway

### Canterbury Christ Church University

Doctorate in Clinical Psychology – D. Clin Psychol.	3 yrs full-time
Doctorate in Education – D.Ed	3 or 4 yrs part-time

### University of Kent

Anthropology – *New route PhD	4 year full-time
Accounting and Finance – New route PhD	4 year full-time
Industrial Relations – New route PhD	4 year full-time
Management - New route PhD	4 year full-time
Management Science - New route PhD	4 year full-time
Operational Research - New route PhD	4 year full-time
Economics – New route PhD	4 year full-time
Politics and Government – new route PhD	4 year full-time
International Conflict Analysts new route PhD	4 year full-time
International Relations - new route PhD	4 year full-time
Cognitive Psychology/Neuropsychology - new route PhD	4 year full-time
Developmental Psychology - new route PhD	4 year full-time
Forensic Psychology - new route PhD	4 year full-time
Health Psychology - new route PhD	4 year full-time
Psychology - new route PhD	4 year full-time
Social Psychology - new route PhD	4 year full-time

*\*The New Route PhDs (NRPhDs) are equivalent qualifications to traditional PhDs, but integrate some taught subject specific and skills modules with the research element. As with the PhD, NRPhD students normally register initially for a master's and upgrade after a period of study. The thesis is upto 100,000 words.*

### Open University

Doctorate in Education – D.Ed	3 years part-time
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### University of Greenwich

#### Professional Doctorates

- Doctorate in Education - EdD
- Doctorate in Business Administration (Leadership and Management), DBA

## **APPENDIX 7 - Organisations Consulted in Survey of Employers in Kent and Medway**

Organisations consulted included:

### **Health Sector**

Medway Foundation NHS Trust  
Kent and Medway NHS Partnership Trust  
Eastern & Coastal Kent Primary Care Trust

### **Local Government**

Swale Borough Council  
Medway Council  
Kent County Council (2 departments)  
SOLACE (Society of Local Authority Chief Executives and Senior Strategic Managers)

### **Public Services**

Kent Police

### **Education**

Hartsdown Technology College  
Department for Innovation, Universities and Skills (DIUS)

### **Professional Bodies / Skills Councils**

Royal Institute of Chartered Surveyors  
Royal College of Veterinary Surgeons  
SEMTA (Sector Skills Council for Science, Engineering and Manufacturing Technologies)

### **Chemical / Pharmaceutical Companies**

Pfizer  
Fuji/Sericol

### **Others**

British Rail Consortium  
Saga Group  
Bramley Associates (Environmental Consultancy)