Practice as Research: developing the workplace project

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Abstract

This chapter highlights the potential for live pieces of work, rather than specifically designed research projects, to be used as the basis for the outputs of professionally-oriented doctorates. Drawing on some examples from a transdisciplinary 'practitioner' doctorate in an English university, it discusses how work that is designed to result in change or development can, if approached with sufficient methodological consideration, provide an intellectually robust basis for developing new knowledge that not only has application in practice but can also be worthy of academic dissemination. A case is made for what is here termed 'practice as research' being regarded as an archetypal model for the practitioner or 'Type 3' doctorate.

Keywords: Middlesex University; Practitioner Doctorate; Third-Generation Doctorate; Practitioner Research; Methodologies of Practice; Action Research; Soft Systems Methodology; Case Studies; Transdisciplinarity; Portfolios; Doctoral Narrative.

Introduction

The 'professional doctorate', a term that encompasses a wide variety of programme types and aims, is now well-established if not entirely uncontested in most English-speaking countries. Following Maxwell (2003), it is possible to identify a progression in the way that research is conceptualised in these doctorates that moves from traditional modes of researching as an impartial and detached observer to enquiry that is closely bound up with the doctoral candidate's practice. The logical conclusion of this progression is that practice itself becomes treated as a form of research, and valid, valuable and potentially generalisable or at least transferrable knowledge is captured through approaching and interpreting practice in a research-minded and methodologically considered manner. This practice-as-research approach is consistent with the idea of the practitioner, work-based or third-generation doctorate that has been posited by several authors, and it also provides a good fit with the motivation of many doctoral candidates to develop or confirm themselves as leading and scholarly practitioners rather than to become researchers. Analogous to practice in the arts, some of these more evolved doctorates accept outputs that are principally instances of practice rather than research projects in the conventional sense.

Practice-as-research nevertheless pulls against the current academic orthodoxy of doctorates being based on discrete research activity. It is probably also fair to say that within institutions, expertise in applying appropriate methodological considerations directly to practice is limited, so that while there

is now extensive guidance available for conducting 'practitioner' and 'insider' research, there is less that is geared to applying methodological conceptualisations and research-mindedness to practice activity. Despite evidence of its validity, practice-as-research in the context of professional doctorates can therefore still be regarded as to some extent experimental and contested.

This chapter examines the idea of the practitioner or 'Type 3' doctorate, explores knowledge-production through practice via consideration of projects from one of the first such doctorates in the United Kingdom, and continues by discussing methodological considerations and doctoral outputs. It concludes with a discussion of tensions between practice-as-research as an approach and conventional expectations of doctoral programmes.

The Practitioner Doctorate

The emergence, growth and to an extent normalisation of professional doctorates has been discussed by among others Bourner, Bowden and Laing (2001), Maxwell and Shanahan (2001), Scott *et al* (2004), Fell, Flint and Haines (2011) and Kot and Hendel (2012). However, the term 'professional doctorate' itself masks a wide range of doctoral forms and programmes, united by little more than a purpose that is other than to prepare future academics or recognise the scholarship of university staff. Within this broad arena are included full-time programmes intended to prepare students for specialist professional careers, for instance in clinical psychology or as research engineers; part-time programmes designed to support existing practitioners to undertake research connected with their practice; and more recent transdisciplinary programmes that draw on action research, action learning or negotiated work-based learning traditions. These doctorates may use one of a growing number of field-specific titles (e.g. EngD, DBA, EdD), the conventional Doctor of Philosophy, or (particularly for the third group) a generic professional title such as DProf (Doctor of Professional Studies or Professional Practice). Despite the tendency in the literature to compare professional doctorates and PhDs as if they were explicitly different, there is no clear binary line between the two whether in terms of programme structure, methodological approach, type of output, or (as indicated above) title, and the comparison can assume a relatively traditional PhD model as might be found in the natural sciences or the more nomothetic end of the social sciences and humanities.

By the turn of the century, a distinction began to be drawn between 'first-generation' professional doctorates concerned with conventional research (though often into matters defined by a professional rather than an academic field) and sometimes characterised as consisting of coursework followed by a shortened thesis, and 'second-generation' ones which had emerged from the 1990s onwards and were designed to support practitioners to address issues in their own practice contexts (e.g. Lee *et al* 2000, Seddon 2001 and most notably Maxwell 2003). Bourner *et al* (2001) comment that while the first have a similar ethos to doctorates designed for professional researchers (even if most of their candidates are, and remain as, practitioners), the second are geared to 'researching professionals' (*ibid*). Particularly in the last decade, a third generation of practitioner or work-based doctorates has been posited that could be described as oriented towards experienced and leading professionals *as practitioners* (e.g. Stephenson, Malloch and Cairns 2006), and these can have more affinity with the notion of the 'scholarly professional' (Gregory 1997) that with Bourner's 'researching professional'. Wellington and Sikes (2006) argue that the reality is better represented as a spectrum of approaches than as distinct generations of programme, and this certainly appears to be the case in relation to the posited second- and third-generation doctorates; additionally, as will be seen later, some doctoral

programmes can embody more than one approach. However, the three types proposed to date do appear have a pragmatic validity as archetypes or reference-points, even if they cannot be regarded as bounded categories (table 1). I have labelled them as 'types' rather than 'generations' to avoid the inference that the oldest generation might be due for retirement when it is likely to remain relevant for supporting research-focused specialisms within professions such as engineering, medicine and psychology.

Table 1. Professional doctorate archetypes

	Type 1	*Type 2*	*Type 3*
Objective	Develop professionals as researchers	Develop researching practitioners	Develop leading practitioners
Focus	Professional field	Practice as focus of research	Practice as change and development
Field definition	Professional discipline	Broad professional area	Transdisciplinary
Assumed candidate position	Researcher investigating a professional field	Practitioner-researcher	Practitioner as developer and change agent
Type of output	Thesis	Narrative, portfolio	Narrative, portfolio

I first put forward the idea of the 'practitioner doctorate' over ten years ago (Lester 2004), and similar ideas are reflected in the 'work-based' doctorate (Boud and Tennant 2006, Costley and Lester 2012) and in Stephenson *et al*'s third-generation programme. This kind of doctorate tends to attract people who are already highly experienced in their field, some with deeper knowledge of their specific area of practice than is likely to be found among university faculty; Wellington and Sikes for instance comment not atypically that most candidates on their programme are in their mid- to late 40s, while those in Stephenson *et al*'s study are all described as in senior positions of responsibility. Many of these candidates see the doctorate as a vehicle for personal development, professional extension and enrichment, and to aid their development as leading practitioners, rather than as one for doing research or becoming a researcher (Doncaster and Lester 2002, Costley and Stephenson 2008, Smith *et al* 2011). Although the macro-level rhetoric promoting professional doctorates is commonly linked to the idea of the 'knowledge economy' and focused on science, technology and commercial innovation (see for instance Usher 2002), programmes that have Type 2 or 3 characteristics often serve a different purpose concerned with advanced professional development (e.g. Servage 2009, Loxley and Seery 2012).

Conceptually, the practitioner doctorate tends to be both transdisciplinary and transprofessional in nature. Transdisciplinarity has been described as transcending and integrating academic disciplines to create more holistic knowledge concerned with addressing real-world matters (Nicolescu 2002, Montuori 2008), and as an antidote to the narrow specialisation that can characterise disciplinary knowledge (Manderson 1998). In discussions of doctorates it has become particularly associated with the production of 'Mode 2' knowledge (Gibbons *et al* 1994, Nowotny *et al* 2003), which is derived from a practice or industrial situation and is intended to be used directly to inform both existing practice and future developments. Although Gibbons and colleagues' work was concerned with the large-scale organisation of research – and 'Mode 2' knowledge does not exactly mirror Nicolescu's transdisciplinary knowledge – the idea of transdisciplinarity translates particularly well into the individual or small-scale practice context; drawing on Scott *et al* (2004), it is "concerned with adequacy for complex practical situations that resist analysis and routinisation; this kind of knowledge is reflected in expert practice and is essentially non-predictable, non-deterministic and not easily

amenable to being codified" (Lester 2012, p269). There is a correlation between transdisciplinarity and Lévi-Strauss's idea of the 'bricoleur' (Lévi-Strauss 1962), or person engaged with what is practically feasible (as opposed to the 'engineer' or scientist whose work is informed by more theoretical concerns), as well as with Schön's notion of working in the 'swamp' of indeterminate real-life practice rather than occupying the 'hard, high ground' of technical solutions (Schön 1983). Gibbs describes it as particularly apposite for situations that are "complex and heterogenous; specific, local, and uncertain; epistemologically pragmatic; (and involve) ethically-based practical action" (Gibbs 2015, p2). Transprofessionality is a related concept that implies transcending individual professional fields, avoiding limitations stemming from working within bounded specialisms and from purely specialist knowledge-bases; in Type 3 doctorates, it is normally reflected through a generic practice-oriented outlook rather than one based in a particular profession. While some programmes for educational and business fields fit with many of the posited characteristics of practitioner doctorates, it is notable that these fields are more multidisciplinary or clustered in nature than most of the other professions for which field-specific doctorates exist (Flint and Costley 2010).

If professional doctorates generally are sometimes seen as problematic, particularly in being different from or from some perspectives less credible than the traditional PhD (e.g. Seddon 2001, Lee *et al* 2009, Costley 2013), the practitioner doctorate presents a further challenge for the university in that although its aims are usually couched in the language of research, its primary purpose is otherwise; it could for instance be described as a doctorate oriented towards development rather than research (Lester 2004). As Costley (2013) illustrates, most countries have a single official conception of 'doctoralness' that helps to maintain the parity between doctorates with different titles, structures and purposes, and this normally centres on reference to research even if other aspects of professional capability are increasingly appearing. An issue for the practitioner doctorate is that it needs to maintain sufficient focus on research to meet national expectations and university regulations, while retaining its ability to provide senior practitioners with an appropriate source of high-level professional development that is not overshadowed by the need to 'do research'. To some extent precedents for this exist in the form of practice-based doctorates in the arts (e.g. Candlin 2000), although the analogy is not unproblematic, these doctorates are also subject to pressures to become more explicitly research-focused (Lycouris 2011), and there has been less of an exchange of ideas between the two arenas of development than might have been expected.

A solution to this problem can be found by bridging between the ways that practice and research are each conceptualised. The purpose of research, at least in the sense of research that is regarded as academically valid and worthy of dissemination in peer-reviewed publications, is to generate knowledge that is original in a sense that is non-ephemeral, has if not necessarily universal value then relevance beyond the situation in which it is developed, and stands up to external scrutiny. The main purpose of practice on the other hand is action, i.e. to create some form of change, which could involve largely repetition and replication, could be unique in a highly specific way but without resulting in anything with potential to advance practice elsewhere (unless perhaps taken over a very large number of instances), or could offer some lessons that are of more general interest for the field of practice, whether locally or in a way that is more far-reaching. This last has the potential to develop knowledge that is as applicable and valid as that generated through deliberate research, although in the normal course of events this knowledge may do little more than remain tacit, become part of the theory-in-use of a small part of the practitioner community, or percolate gradually into the wider profession or industry. Bernstein's distinction between particularised, contextual knowledge

and general, principled knowledge (Bernstein 2000) is useful here in the sense that much practice-based knowledge remains contextual and exists alongside the formalised and more general knowledge of professions, industries and academic disciplines without influencing it or even interacting with it to any great extent. Treating practice as a form of research, through applying to it equivalent methodological consideration and rigour in scrutinising its outputs, provides a means of bringing contextual and theoretical discourses into proximity and enabling the former to contribute to and influence the latter. The next section describes a particular doctoral programme where this has taken place.

Knowledge-Production through Practice

In the United Kingdom, one of the earliest programmes that has claims to being a generic 'practitioner doctorate' in the sense described above is the DProf (Doctor of Professional Studies) at Middlesex University in London, which dates from 1998 (see Portwood and Thorne 2000 or Costley and Lester 2012). This programme recruits from established professionals without any limitations as to field, embodies a transdisciplinary approach, and is methodologically eclectic. It is organised around a structured initial phase that develops methodological competence, supports reflection on practice, and guides candidates to put forward a project proposal, while the main output of the doctorate is normally a major piece of work grounded in the candidate's area of practice. The Middlesex DProf was developed as a logical extension of the university's negotiated work-based learning framework, which enables individual learners and small cohorts to negotiate personal programmes based around their work activities and needs, and leads to a variety of higher education awards from certificates of credit to full master's degrees (Osborne *et al* 1998, Lester and Costley 2010). The DProf has proved highly successful with a steady rise in enrolments, field-specific variations run in conjunction with individual faculties and external partners, and satellite programmes in a number of overseas locations.

In a study of Middlesex DProf outputs (Lester 2012, and summarised in Costley and Lester 2012) I examined thirty-three theses or narratives produced between 2000 and 2009, with the aim of analysing the overall approaches and more detailed methodologies that candidates were using, identifying the type of knowledge that was being produced, and where possible identifying how it was being used and disseminated. The outputs fell roughly into four groups, as classified in the original paper: (A) *practice as research*, where knowledge is produced from taking an enquiring approach to activities that are primarily intended to create development or change; (B) *research within practice*, where a distinct research activity takes place alongside and closely connected to practice (the classic practitioner research model associated with Type 2 doctorates); (C) *research for practice*, where research is pursued outside of the immediate practice environment but with the intention of informing it or making policy recommendations (a purpose that would be within the scope of Type 1 programmes); and (D) *synthesis*, a mixed grouping where previous activities (often knowledge-generating themselves) are synthesised and reflected on to produce new theories, knowledge and insights. It is the practice-as-research approach that is of principal interest here. If Type 1 doctorates are concerned with research for practice and Type 2 with research within practice, then practitioner, work-based or Type 3 programmes might be distinguished by moving beyond this into a conception that while equally robust academically is not concerned primarily with 'doing research': logically, this is what is provided by the practice-as-research approach, posited half a century ago as involving the organisation of day-to-day practice so that it is also a form of research (Goldiamond, Dyrud and Miller 1965).

In my study, eight of the 33 doctoral projects could be regarded as primarily practice-as-research, and a further two as practice-as-research in combination with research within or for practice (making 30% overall). These projects included work to establish systems and processes associated with professional regulation, a new methodology for evaluating commercial training, proposals for establishing a new public agency, systems and software development for agricultural processing, developing organisational systems, and improving the effectiveness of business coaching (see table 2). Most of these could be described from a research perspective as grounded in an action research or soft systems approach, although grounded theory and phenomenological influences also featured and most of the project narratives could also be framed as case-studies. In terms of knowledge production, most focused on what can be termed knowledge of a system or set of practices, rather than knowledge of phenomena (Lester 2012); using Scott *et al*'s (2004) classification, this resulted principally in the production of transdisciplinary knowledge, although most projects also produced technical-rational knowledge (i.e. process knowledge that contributes to the formal knowledge-base of a profession or industry), and perhaps more surprisingly several produced knowledge that contributed to applied academic disciplines such as education and organisation studies.

Table 2. Practice-as-research projects and outputs from the Middlesex DProf

Field	*Methodological approach*	*Project type*	*Output format*
Development of a profession	Action research and soft systems methodology, case-study	Development project including trialling and evaluation	Narrative with a portfolio of academic and client papers
Organisation development	Action research	Describes and theorises a development project	Narrative
Process engineering	Modelling	Development of a process model and associated software program	Portfolio (including software) and narrative
Education and training	Action research and soft systems methodology	Three investigations within an overall development project	Narrative with substantial examples from practice
Coaching	Phenomenologically-informed	Development of theoretical model from own practice	Conventional thesis
Coaching	Action research	Exploration and theorisation of own practice	Narrative – close to conventional thesis – with explanations of theories appended
Education and training	Action research informed by grounded theory	Trialling of different approaches for use in practice	Narrative with some appended papers
Public administration	Soft systems methodology and case-study	Feasibility study and exploration of options	Narrative with single appended paper
Education and training	Action research	Investigation and development of new procedures	Narrative – close to conventional thesis
Development of a profession	Action research	Feasibility study and development project	Narrative

While all four groups of outputs contained what might be termed both 'weak' (just meeting the doctoral criteria) and 'strong' (meeting them comfortably) examples, the practice-as-research projects were on balance no less strong than the three other groups (in fact the weakest group comprised the research-for-practice projects, although the sample size was too small and localised to make any generalisable conclusions). All the practice-as-research projects, with one possible exception, made

an original contribution to knowledge or practice that was likely to have a lasting impact beyond the immediate practice context. Perhaps surprisingly they also resulted in the greatest academic output, with half producing multiple refereed papers; most were disseminated via professional or industry publications and conferences, and all within their more immediate communities of practice. Some of the projects from this group showed a deep and scholarly level of engagement with practice that demonstrated methodological fluency, and these were among the strongest theses of all those examined. This study indicates unequivocally that certain kinds of work activities – principally though not exclusively those concerned with high-level change or complex new developments – provide fertile ground for generating new knowledge that has both academic and practical validity.
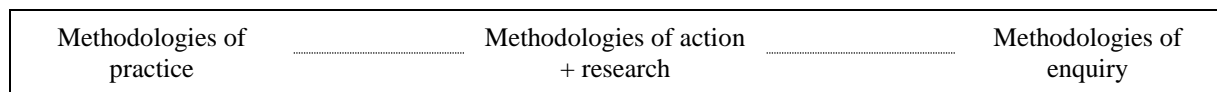
Evidence of the potential for certain kinds of practice to produce 'researched' knowledge can also be gained by applying doctoral-level criteria to products of work that are produced without, or prior to, registration on an academic programme. Two sources that illustrate this are firstly a small-scale study of professional practice projects in the cultural heritage sector (Lester 2007), and secondly more recent experience at Middlesex with the DProf by Public Works (Armsby 2012). The first study examined work put forward for the assessment of professionally qualified status in heritage conservation, generally by practitioners with between five and fifteen years' experience. This involved a detailed application with summaries of five or six work projects or major activities, followed by a searching on-site assessment and interview by two assessors appointed by the professional body. Most of the work submitted was clearly at postgraduate level, several pieces would potentially qualify as master's dissertations, and one had the potential to be written up as a doctorate. The DProf by Public Works, which was introduced in 2008, provides an opportunity for established practitioners to put forward significant pieces or collections of pre-existing work, accompanied by a detailed explication, for assessment at doctoral level. It has similarities to the PhD by publication, but does not require 'public works' to be in academic journals or even to be in written form; in this sense it also has some parallels with practice-based doctorates in the arts. Most 'public works' submissions have consisted of a collection of previous work that coheres around a particular theme (such as taking forward an aspect of a profession or industry, or producing a significant organisational or similar change that has wider relevance), accompanied by a narrative that explains the context, relevance and significance of the work. These doctoral portfolios are not generally research in the conventional sense (though they may contain examples of research), but come closer to the category identified in my study as synthesis projects.

Methodologies of Practice-as-Research

An almost universal feature of doctoral programmes is their emphasis on the use of appropriate methodologies to generate and capture knowledge. In discipline-based doctorates, particularly in the natural sciences, this may be relatively tacit as enculturation into the discipline includes learning the relevant principles and processes for conducting research. In the social sciences and in many professional doctorates, the attention given to methodological matters is often more explicit and either geared to enabling candidates to develop appropriate approaches, methodologies and techniques for their research, or to ground them in a specific broad approach or 'family' of methods such as action research, ethnographic, statistical or phenomenological approaches. Type 2 doctorates tend to emphasise 'insider' and 'practitioner' research, geared to candidates who are researching within their own organisations or on their own practice. Both of these terms predate the majority of second-generation doctorates by several decades, with insider research typically referring to enquiry within a

community in which the researcher is in some way situated (Merton and Storer 1973), while practitioner research is associated with a professional researching into some aspect of his or her practice (e.g. Cook, Hovet and Kearney 1956, Hope Simpson 1958). The two things are not synonymous – 'insider' research can of course be conducted on phenomena that are of more general academic interest and practitioner research can be done as at least a partial outsider to the organisation or context being considered, for instance as an external consultant or evaluator – but there is substantial overlap, and methodological textbooks written in the context of professional doctorates tend not to make a strong distinction between them (e.g. Costley, Elliott and Gibbs 2010, Drake and Heath 2011). For the purposes of this discussion however, both are concerned with framing activities that, while closely linked to and sometimes intertwined with practice, can be separated off as 'research', while practice-as-research concerns approaching practice so that it simultaneously *becomes* research (e.g. Goldiamond *et al*, *op cit*).

Figure 1. A methodological spectrum

Methodologies of practice	Methodologies of action + research	Methodologies of enquiry

A feature of more complex kinds of practice is that they too have methodologies, although they will tend to be methodologies of action rather than knowledge-generation, and particularly where practice is individual and 'expert' in nature (Dreyfus and Dreyfus 1986) they can be largely tacit. However, creating the kind of change or development that might contribute to a doctorate suggests among other things knowing why and to whom change is desirable; whose and what kind of knowledge and information will inform the change; what specifically to change; what the implications might be, what alternatives are possible, and how they relate to one another; how to cause the change in a way that is effective, ethical and has both fitness for and of purpose; and how to evaluate what has happened, what the effects are, and what might need doing next. Practice methodologies – for instance methodologies of organisational change (e.g. Senge 1990, Kettinger, Teng and Guha 1997, Cox and Schleier 2010), of learning (e.g. Revans 1980, Flood and Romm 1996), of envisioning and modelling different scenarios (e.g. Ringland 1998) – tend to be given little attention on most doctoral programmes because they are perhaps rightly assumed to be part of the action-oriented knowledge of practitioners, but in a practice-as-research context they still influence the kind of knowledge that is produced and the perspective it is viewed from. Methodologies such as these can be viewed as one end of a spectrum, with those concerned purely with capturing knowledge (such as statistical research, ethnography and phenomenological research) at the other end (Figure 1); towards the centre are those that have as their objective the generation of both knowledge and change, from various kinds of action research through to action-oriented processes that involve a significant investigative or evaluative element, such as soft systems methodology (Checkland 1981) and the PDSA (plan-do-study-act) cycle (Deming 1986).

Mapping for instance the approaches discussed in Costley *et al*'s book (taken as an example as it was born partly out of the Middlesex DProf) on the spectrum in Figure 1, it can be seen to cover the centre and research-oriented end (it discusses phenomenological approaches, hermeneutics, grounded theory, action research, soft systems methodology, survey research, case-study method, and bricolage), but not the end concerned specifically with practice. Whether it is appropriate in a doctoral programme geared to established professionals to devote time to the detail of practice methodologies is debatable,

but if the programme claims to support practice-as-research, it cannot afford to ignore them. Any discussion of methodological choices, perspectives and paradigms needs to encompass the full spectrum of methodologies relevant to a project or undertaking, not only those concerned with capturing knowledge. This does not necessarily mean that doctoral programmes should provide training in practice methodologies, but it does suggest that as well as developing research-mindedness (Costley and Armsby 2007) doctoral candidates need to subject methodologies of change to the same rigour in terms of perspective and fitness for purpose – including epistemological, ontological and ideological considerations – as research methodologies.

It is perhaps relevant to note that of the ten practice-as-research projects that I examined in the study referred to above, seven drew primarily on action research or soft systems approaches, one took a grounded theory perspective on what could in effect be described as an action research project, one used mathematical and process modelling, and the final one was essentially a phenomenological study of the candidate's own practice. The dominance of action research is unsurprising, as it offers a cyclic framework that can simultaneously be about creating change and generating knowledge. It supports intimate connection between practice and data-collection, use of an eclectic range of research methods and tools, and opportunities for close involvement of participants in the practice situation as contributors to the research or as co-researchers (e.g. Heron and Reason 2006). Although more oriented towards creating large-scale change, soft systems methodology (SSM) is in some respects a variant of action research (Checkland and Poulter 2006), and appeared as such in the three DProf projects that employed it (in one of these, several cycles were used each with a different balance between soft systems and more general action research principles). Both broad approaches are particularly relevant to any development or change project that involves a process of initial investigation or mapping, implementation or trialling, review or evaluation, and adjustment or decision-making as a result of the review. However, evidence from the public works DProf suggests that not every practice-as-research project needs to be framed in this cyclic way, and it can be equally valid to structure activities primarily using methodologies of development, evaluating them *post-hoc*. A potential drawback of this retrospective approach for real-time projects within doctoral programmes is that if the research aspect is not adequately considered in advance, the project may lose some of its potential for generating usable knowledge; it may be easier to apply when activities are already in progress and it is clear that they are producing something significant and of interest.

The majority of the practice-as-research projects can also be interpreted as case-studies, as they are generally single or small-scale instances of practice activities that have relevance to other cases of the same broad type. The advantage of applying a case-study perspective to practice-as-research is that it asks what the piece of work is a case or instance of (Yin 2003), which leads into consideration of the value and significance that it might have outside of the practice context. Activities often have value as an example of more than one thing, so for instance a project to make structural changes within a profession could provide an example of professionalisation, of process or systems consultancy, and of managing organisational and political change; an exploration of the project as a case-study can assist in assessing where it might provide new insights of a more widely applicable nature, and therefore which aspects to emphasise through its role as a piece of research.

The Doctoral Output

The most common form of output from the doctorate in modern times is the thesis, or to be accurate the dissertation that sets out the grounds for, and puts forward, a thesis. However, this has not always been the case, and older forms of doctorate were also awarded in recognition of significant, independent scholarly work rather than the single supervised research project that is common for the PhD and for Type 1 professional doctorates. More recently a wider range of outputs have become encouraged or accepted across the spectrum of doctorates, in particular narratives that depart from the format of a research report, collections of work drawn together by an overarching explication, and practical outputs supported by an explanatory narrative or exegesis (Clerke and Lee 2008, Christianson *et al* 2015). The portfolio approach – a collection of works connected by a narrative – is familiar from the PhD by publication, but it is also appearing in some doctorates to draw together work undertaken post-registration, or in some cases to combine both pre-registration and new work.

Returning to the Middlesex DProf outputs, a variety of formats were encountered ranging from theses that would not have been out of place in a social sciences PhD, through to portfolios backed by narratives. As Table 2 indicates, the practice-as-research examples spanned all of this spectrum, with the modal model being a narrative often with a small number of published papers or practice documents appended. Two examples were more obviously portfolios, one consisting of development work (including a software program) and the other of client reports and academic papers, both backed by a shorter (25-40,000 word) narrative. The fourth category of synthesis projects were unsurprisingly portfolios of various kinds; these included a collection of three in-depth evaluations connected by a more reflective and scholarly paper, a project report and associated materials supported by an exposition, a newly-developed set of papers on a single theme again with a connecting narrative, and an organisational review that incorporated a large number of short reports written by the author and others, with the narrative drawing them together in a considered discussion. Taking the portfolios collectively, there were differences between the extent to which individual portfolio items could stand on their own as pieces of work at doctoral level (e.g. peer-reviewed articles or professional reports of a similar standing), or whether they needed to rely on the narrative to draw out their significance and contribution to knowledge and practice. The style of the narrative could therefore vary between being the primary document in the collection, with the others in effect forming appendices that illustrated, enlarged on and authenticated particular points, and an overarching and connecting explanation that contextualised the major pieces of work making up the portfolio. This somewhat eclectic approach to the portfolio is supported by Maxwell and Kupczyk-Romanczuk (2009), who comment that it needs to be flexible enough to allow different forms of scholarship and include pieces that communicate with different audiences, while demonstrating a coherence that is reinforced by the narrative.

Following the introduction of the DProf by Public Works at Middlesex, the portfolio approach became less used in the mainstream programme with outputs tending to follow the large-narrative or thesis model. Some other British universities including Northumbria and Sunderland specifically encourage the use of portfolios in their professional doctorates, with Sunderland incorporating a requirement for a portfolio, backed by a relatively short narrative of 10-20,000 words, into its regulations (University of Sunderland 2011). Practice-based projects do not however follow any one format, and to impose a particular type of output will favour some kinds of activities over others. Even the small sample from the Middlesex study suggests that different kinds of output will be

appropriate to different working contexts and types of practice undertaking. A piece of work that is largely investigative or individual in nature, resulting in changed practice at a personal or small group level, may not necessitate any significant written outputs and therefore will need to be carried by the narrative, which may not be much different in style or length from a conventional thesis based in an action research, grounded theory or case-study tradition. Even some larger-scale change or development projects may not produce any particularly significant documents in their own right, with the detail perhaps being recorded in short summaries, committee papers and minutes; again, the emphasis will need to be on the narrative with potentially a few appended papers to illustrate key points and authenticate what is being said (a danger of the portfolio approach here is that it descends into a collection of obtuse documents that do little to impart any sense of activity at the level of a doctorate). This narrative-plus-appendices format shades into one in which there is a portfolio of substantial materials but where much of the depth and connecting tissue is provided by the narrative, and finally to a format where the portfolio content stands largely on its own and the narrative provides explanation, context and methodological background.

The common factor across all these formats is not one of structure, but is concerned with providing a coherent and authentic piece of work that is both intelligible and demonstrates something significant and original that is worthy of a doctorate. Fulton *et al* (2013) for instance suggest that the purpose of the narrative includes reviewing the literature, summarising the overall methodological approach, outlining the aims of the work and the questions it addresses, summarising and contextualising the results, and making a case for its contribution to knowledge and practice. Not all of this need however be within a connecting narrative; for instance, the aims of the work may have been explained within a scoping document included in the portfolio and therefore may only need to be drawn out in summary, and the bulk of the literature review could be more appropriately located in a journal article, technical document or conference paper (or series of such documents). It is however fairly rare for portfolio content to include more than a superficial discussion of methodological considerations, or set the project in its wider context *as a piece of knowledge-production* – i.e. to explain its relevance and importance to the wider world, and these are areas where the narrative will normally be critical. In the context of practice-as-research, it is also the place where methodological discussion can be extended to methodologies of practice. The narrative may also need to reflect something of the messy, divergent and contested nature of practice that is often suppressed in practice documents, while providing a version of events that the reader can follow towards a reasoned outcome or set of implications.

Practice-as-Research in the Context of the University

Challenges in establishing professional, and by extension practitioner, doctorates as different from but of equivalent level and value to conventional PhDs has been referred to above. The present dynamic of this situation can be regarded (to draw on a practice methodology) as subject to structural tension (Fritz 1994), where the agency associated with local efforts to introduce and normalise alternative doctoral formats is in tension with the structural norm provided by more traditional academic paradigms and ways of working. In terms of professional doctorates in general, there is some evidence in the UK of the beginnings of a shift towards a position based on wider 'doctoralness' rather than specific 'PhD-ness', while in Australia there has been a stronger pull back to a more conventional research model (see Evans *et al* 2005 and Lee *et al* 2009 for different perspectives on the latter). The concept of structural tension suggests that until a structural change takes place, any let-up

in the effort to maintain a position other than the dominant one will result in fairly rapid reversion to the *status quo*. While not concerned with doctorates, this is well-illustrated by the fate of the independent study programme at what is now the University of East London, which provided learner-negotiated higher education that in retrospect could be regarded as maybe two decades ahead of its time (O'Reilly 2001). Even in the UK it is clear that the balance has not yet moved particularly far, with for instance Bourner and Simpson (2014) commenting that changes in the way that the Doctor of Business Administration is being framed are threatening to pull it back into a first-generation or Type 1 model.

Looking specifically at the Middlesex DProf, it is notable that while it was one of the first examples of a Type 3 or practitioner doctorate in the UK, there is nevertheless evidence that some features of the mainstream programme have reverted to a Type 2 model. The DProf was originally developed within a small academic unit which was one of several across the UK that were pioneering the use of individually-negotiated work-based learning at higher education level (see Duckenfield and Stirner 1992). Programmes within this unit were initially regarded as work-based and therefore outside of the normal division into taught and research programmes, and this view carried over into the doctorate. As the unit grew into the Institute of Work Based Learning (IWBL) and its programmes became more normalised within the university, the DProf became classified as a research degree and therefore subject to broadly the same regulations as the PhD. Shortly afterwards the split occurred between the standard route and the DProf by Public Works. On the former, experience from the initial, undifferentiated DProf had led to incremental improvements to the early stages of the programme, geared particularly to improving candidates' research capability and the quality of their project proposals. While on balance this has improved the standard and consistency of outputs, it has also created a stronger focus on specific research activities and, at least in some of the standard-route examples that I examined in my study, a tendency to agonise over methodological choices rather than demonstrate fluency as a researching practitioner. In an internal report for the IWBL I commented that:

> *… some of the more creative projects are earlier ones. Does this indicate that the guidance for DProf projects has, in an effort to induct candidates more thoroughly into research-based thinking, become too structuring and moved them away from more creative ways of approaching their 'projects'? Perhaps ironically there were at least two candidates who passed over the opportunity to use major change or development projects in favour of a more contrived piece of research designed to inform their work.* (Lester 2009, p6).

This is confirmed by more recent DProf outputs, with the standard route dominated by a thesis-style or large narrative output and a practitioner research approach. Of the first sixteen outputs from 2014 on the university's research repository, only two could be regarded as having elements of practice-as-research, while all but three were presented in the form of a fairly conventional thesis. This points to the DProf becoming less diverse over the last decade or so, both in the way that the relationship between research and practice is viewed and in the style of output, with the emphasis moving to research-within-practice.

The above suggests that adoption of practice-as-research as the main approach within a doctoral programme may be constrained by a second factor, stemming from the fact that most academics are primarily researchers and teachers rather than practitioners in the sense of being active in professional,

management or consultancy roles outside of the university. Adding to this the growing pressure on university staff to undertake research and to publish, it is not difficult to envisage that the effort involved in developing and sustaining a doctorate that is not a research programme in a conventional sense is perceived as challenging and unrewarding. On the other hand, both the idea and the implementation of practice-as-research is markedly underdeveloped in what might be called the professional sector as compared with the arts; a quick library or internet search will reveal that use of the term is almost completely dominated by art and design disciplines. There is ample room to explore practice-as-research as a focus of academic study in its own right, examining areas that include the application of methodological principles and research-mindedness to different aspects of practice, the generation of knowledge directly from practice activity, and the dynamics between contextual practice knowledge and the formalised knowledge-bases of industries, professions and academic disciplines.

Conclusion

In table 1 I propose that one of the major distinctions between Type 2 and 3 doctorates is the use of practice-as-research rather than a discrete practitioner- or insider-research project. Setting out the ground for a doctorate based on practice-as-research does however require considerable clarity and balance. Too pragmatic a focus can underplay the need for appropriate methodological framing and intellectual rigour, and run the risk of candidates producing extended management reports or the kinds of portfolios more associated in the UK with vocational qualifications rather than outputs that are worthy of a doctorate. On the other hand, overemphasising the research aspects can divert attention away from the practice itself and squander the opportunity to explore a live piece of development or change. While there is a growing literature on practitioner research, there is also a need for literature and induction processes on practice-as-research particularly in the sense of envisioning, planning and applying methodological considerations to practical undertakings so that they are simultaneously knowledge-producing. The tendency for most academics not to be deeply involved as practitioners in contexts outside of the university – which perhaps ironically can be greater in the kind of generic units often associated with Type 3 doctorates than in some profession-specific departments – is one factor that may have acted to inhibit this. Nevertheless, moving from practitioner research to practice-as-research does not require a major conceptual leap, as the latter still necessitates understanding things such as paradigmatic perspectives, claims to validity and rigour, ethical issues, key methodological approaches, and specific methods and tools for guiding practice and for capturing verifiable information from practice situations. Where it differs from more conventional practitioner research is in being able to apply these principles to an ongoing practice situation in real time rather than to an activity that is planned and separated off as 'research', and in framing them in terms that are geared to development and change as much as to enquiry.

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