Conceptualising the practitioner doctorate

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Abstract

Professional doctorates now form an established alternative to the PhD, both in the UK and Australia. Recent developments have seen the emergence of what some commentators call second-generation doctorates, more closely geared to the needs of professional practitioners. The current culmination of this development is represented by what might be termed practitioner doctorates, based on development projects which result in substantial organisational or professional change and (to paraphrase the widely-used criterion for a PhD thesis) a significant contribution to practice. These programmes pose a challenge to traditional notions of doctoral work based on research. They can however be conceptualised in a way that is both robust academically and represents a high level of adequacy for the complex and far-reaching problems encountered in contemporary society.

Introduction

The development of doctorates designed for practising professionals, as opposed to would-be academics or researchers, has proceeded from two main directions. One of these is the modification of the PhD to accommodate more practical forms of research, candidates who identify themselves as full-time professionals more than part-time students, and in some cases cohorts of candidates from broadly similar work contexts. The other is the development of professional doctorates, a term which embraces a wide range of programmes most of which have field-specific titles such as EdD (education), MD (medicine), DBA (business) or EngD (engineering). These range from programmes that are indistinguishable from the PhD other than being run on a cohort basis in a single faculty, to those that are closer in structure and approach to modular master's degrees (sometimes called 'taught doctorates', but see Lunt 2002). They may have a specific career purpose (many EngDs and some MDs), or be concerned with professional extension (most EdDs and DBAs). Long-established in the United States, professional doctorates have over the last decade experienced rapid growth in Australia and New Zealand (Maxwell & Shanahan 2001) and in the UK (Bourner *et al* 2000).

Although designed for professionals, what Maxwell & Shanahan call the first generation of professional doctorates are rooted in similar academic traditions to research PhDs or taught master's degrees. In the terms of Gibbons *et al* (1994), widely cited in the literature discussing professional doctorates, this kind of programme is concerned, like the typical PhD, with 'Mode 1' knowledge: apparently objective knowledge that is generated by researchers about practice, and applied to it. In Schön's terms (Schön 1987), they are based in a sequential philosophy that sees research as being applied to practice in a one-way relationship. According to this analysis first-generation professional doctorates approach professional practice from the perspective of the researcher working on a practice situation, rather than from that of the practitioner working within it.

Some of the more recently developed or revised professional doctorates represent what Lee *et al* (2000) term a second generation, more equally rooted in the contexts of the academy, the profession

and the workplace or practicum. These doctorates are more accepting of Gibbons *et al*'s Mode 2 knowledge, which is created and used by practitioners in the context of their practice, and of Schön's constructionist notion of knowledge, where research and practice coexist in a cyclic or spiral relationship: practice gives rise to new knowledge, which in turn informs changes in practice, and so on. The second generation doctorate is still essentially a research-oriented programme (often backed by a taught or seminar-based component), but it takes a more situated view of the research process and the centrality of the practitioner within it. However, in their study of professional doctorates in the UK, Scott *et al* (2002) suggested that the disciplinary approach to knowledge in the university could at times be "so powerful that it subsumes other forms of knowledge," so that the academy "acts to colonize the practicum and impose its ways of working on the workplace" (p23). As a footnote, it should be added that while second generation professional doctorates have been seen as creating an alternative to the predominantly positivist philosophy of the PhD (Bourner *et al* 2001), a parallel movement has occurred in the PhD where some programmes are now explicitly geared to practitioner research and embody clearly non-positivist forms of enquiry.

A slightly different conception of the professional doctorate has also emerged in the UK and more recently Australia, in the form of the generic DProf (Doctor of Professional Studies or Professional Practice). Pioneered by Middlesex University in London, this owes more to the tradition of negotiated, award-bearing work-based learning than it does either to the PhD or to extending structures akin to those of the modular master's degree. It is more clearly located in the domain of Mode 2 knowledge or knowledge-in-use than even the second-generation doctorate, and seeks to sit more firmly in the workplace; its focus is on generating practical action which also represents high-level professional scholarship. According to Scott *et al*, the DProf involves a form of 'reverse colonization' where universities move "much more into the territory of the practicum and adjust their way of working so that knowledge is produced which has practical applications" (p23). While it could be argued that the DProf represents a third generation of professional doctorate, where the focus is driven *primarily* by practical issues and Mode 2 knowledge or knowledge-in-use, it may be better described as a different kind of programme - a practitioner or work-based doctorate which is geared specifically to addressing complex professional, organisational and social issues.

The Middlesex DProf

The Middlesex version of the DProf was the first doctorate to have been developed out of the negotiated work-based learning model pioneered by several UK universities during the 1990s. Essentially, this model allows people in work to build up a customised and largely self-managed higher education programme focused around their work, in which the majority of assessed material takes the form of work projects or portfolios of work activities (see for instance Foster 1996, Osborne *et al* 1998). Middlesex extended this approach to doctoral level in 1998, developing a generic framework managed by a central unit and capable of application to any field through the choice of appropriate academic consultants (or supervisors in PhD parlance; see Doncaster 2000, Portwood & Thorne 2000).

As well as the generic DProf, there are currently three specialist pathways, in health (in conjunction with the university's school of health and social sciences), psychotherapy, and environmental management (the latter both through partnerships with external organisations). However, one of the DProf's major strengths is its generic nature. By operating outside of any academic or professional

discipline it promotes work of a transdisciplinary or post-disciplinary nature, geared to adequacy for the 'swampy lowland' (Schön 1987), 'mess' (Ackoff 1974) or 'wicked problems' (Rittel & Webber 1984) of real practice situations. It also opens up access to groups for whom there are currently no profession-specific doctorates in existence, as well as to those who are clearly professionals but do not belong to easily-defined professions. While health professionals and academics and managers in higher education made up over half the initial enrolment, other candidates included a commercial lawyer, an economist and entrepreneur, a practitioner in dispute resolution, a senior minister in the Church of England, the head of cemeteries and crematoria in a public authority, educational and organisational development consultants, a manager in an examining and awarding body, and a leading developer of driver training.

The DProf is structured so that candidates enrol as part of a cohort, and attend a series of monthly seminars that support the submission of two pieces of assessed work: a reflective review of previous learning that demonstrates readiness to undertake doctoral-level work, and a programme plan and learning agreement for the project(s). Parallel with this, they must either take a taught or distance course in practical research and development methods and complete a small-scale project, or demonstrate equivalent prior learning. The major part of the doctorate comprises professional project work, which may take the form of a single large project, two complementary activities, or a project supported by a portfolio of relevant previously-completed work. This stage of the process is supported by optional seminars by leading practitioners and academics on a range of current issues and process-related topics. Academic consultants and examiners may be drawn from professional and industry sources as well as from the university, and candidates are required to obtain relevant employer or other appropriate professional support for their project proposal.

The DProf requires high-level practical action, resulting for instance in significant change or development in an organisation or community of practice. The doctoral project cannot be purely an academic study or reseach project in the conventional sense, but it does need to reflect a high level of practical thinking and what might be termed professional scholarship of at least an equivalent level to that required for a PhD. It requires easy conversance with academic conventions, literature and research, but also requires practical leadership and professional maturity; a central requirement for the DProf project is that it has a significant organisational or professional impact.

A practitioner perspective

The traditional purpose of the PhD, to provide what is essentially the professional training and credential to be an academic researcher, is clearly not shared by the professional doctorate or for that matter by the practitioner-oriented PhD. As Bourner *et al* (2000) note, there is a difference between professional researchers and researching professionals which is reflected in the two broad kinds of doctorate. However, what is known of the motivations and needs of candidates for practitioner doctorates such as the DProf suggests that idea of the researching professional is less important *per se* than that of the practitioner capable of leading high-level development and change.

Drawing on the reviews produced by the first cohorts of DProf candidates, Doncaster & Lester (2002) carried out a study of professional capability and development that highlighted two key benefits that practitioners were gaining or hoping to gain from their doctoral experience. One can be described as consolidating and giving a structure to the candidate's often significant experience and achievements,

and assisting the articulation of previously unorganised theory and ideas. In at least some cases this seems to be associated with rounding off a career or a major stage in one, either in preparation to move on to the next stage, or possibly to engage in some form of dissemination before retirement. This recurred in discussions with candidates and with staff involved in the programme, and it is also a major theme in the account by Thorne & Francis (2001), which compares and contrasts the experiences and benefits perceived by a PhD student starting her academic career and a DProf candidate already established in his field.

The other major area of benefit identified by Doncaster & Lester is the framework that the doctoral project provides for taking forward an area of application, maintaining a high level of thinking and action within and around it, and encouraging reflective and critical thinking that goes beyond the immediate practice situation. This appears to provide benefits both in terms of improving the quality and often nature of the practical outcome, as well as having a longer-term impact on the candidate's professional practice.

While these two areas could be seen as involving contrasting retrospective and prospective benefits, and perhaps crudely related to stage of career, when put in the context of work at doctoral level there is another dimension that links them together and brings out the added value of the practitioner doctorate. The consolidation referred to by DProf participants is consolidation of personal ideas and theories into high-level frameworks that result in, or have the potential for creating, significant change often at a systems level. Similarly, forward-looking projects are also concerned with this level of change and in the development of the candidate as a leading practitioner in his or her field. Both involve the development and confirmation of the candidate as the author or architect of his or her practice, an authority or source of professional ideas and practical developments, or what has been termed a creative-interpretive or 'Model B' professional (Lester 1995). In the more retrospective application this is likely be through bringing together previous experience into an appropriate conceptual framework, critically *one that is developed by the practitioner*, while in the prospective version it involves doing the equivalent around an ongoing activity.

The place of research in this conception tends to be emphasised much more by university staff than it does by practitioner-candidates, whether while working on their doctorates or afterwards. While a minority of participants in the Doncaster & Lester study were interested at a secondary level in enhancing their research capability, this generally appeared as subsidiary to creating development and change. For the candidate, it is the ability to be effective as a practitioner - which at this level means developing practice, producing ideas and leading change - that looms large; research is present, but as a contributing element rather than the primary focus. A more accurate way of conceptualising the practitioner doctorate from the practitioner standpoint would therefore be as a vehicle for self-managed development as a leading professional taking forward an area of practice. While the holder of this kind of doctorate will be able to design, undertake (or commission) and interpret research associated with his or her work, the credential states more importantly that s/he is a developer involved in leading change at the forefront of his or her area of practice.

From PhD to doctoral level

An issue for this more practically-focused conception of doctoral work is that the doctorate has, via the PhD, become associated with research to the point where research and knowledge-production (rather

than for instance advanced and original scholarship, or the production of original works and ideas) have become its defining characteristics. This is illustrated by recent moves to define or describe higher education (and other) qualifications by reference to explicit level criteria or indicators. Such descriptions of doctoral (not just PhD) work include the following:

> "The undertaking of an original research project resulting in a significant contribution to knowledge and understanding, and/or the application of knowledge within a discipline or field of study"
>
> (Australian Qualifications Framework Advisory Board 1998, p53)

> "Doctorates are awarded for the creation and interpretation of knowledge, which extends the forefront of a discipline, usually through original research. Holders of doctorates will be able to conceptualise, design and implement projects for the generation of significant new knowledge and/or understanding"
>
> ([UK] Quality Assurance Agency for Higher Education 2001, p3)

> "Involves skills and knowledge that enable a learner to provide an original contribution to knowledge through research or scholarship, as judged by independent experts applying international standards"
>
> (New Zealand Qualifications Authority 2001).

These 'official' views of the nature of doctoral work are also reflected, if in less stark terms, in much of the academic community as evidenced through current literature on doctorates. For example, in discussing 'second-generation' professional doctorates, Seddon (2001) expresses reservations about "licensing... researchers through the award of 'Doctor'..." on the basis of producing practical rather than "abstract and more universal" knowledge (p319). This presupposes that *all* doctorates have the effect of licensing their graduates as researchers, as well as suggesting an epistemological position (reflecting that conventionally underpinning the PhD) that academically valid knowledge is necessarily abstract and, at least up to a point, universal.

As an aside, it is worth noting that this is a different though related argument to that which criticises the erosion of the thesis within the so-called taught doctorate. Framework definitions set standards for the award of the doctoral title rather than delimit the structure of the programme, although the widespread requirement for significant and substantial independent work will normally act as a *de facto* design principle. As Lunt comments in the context of EdDs, even in doctorates that include a modular component there is also "the requirement that students… carry out a substantial piece of independent enquiry… which is assessed according to criteria very similar to those used to assess the PhD" (Lunt 2002, p3).

The practitioner doctorate challenges the PhD-based orthodoxy in that it is explicitly concerned with practical knowing and doing, and does not set out to license researchers. It therefore suggests a need for conceptualisations that are not defined by academic research and knowledge-generation. In a practitioner doctorate research is undertaken with a particular aim in mind, and new knowledge is generated for a purpose, even if it is subsequently disseminated through publication or other means. Graduates of a practitioner doctorate will necessarily be able to operate as practitioner-researchers,

but they are foremost capable and thinking practitioners. Returning to the kinds of descriptions quoted above, this suggests enabling doctorates to be conceptualised also in terms of the kind of high-level thinking and action needed to create significant and considered change and development in complex practical situations.

At Middlesex, standard required for the DProf is defined through engagement in advanced learning leading to major organisational change and / or excellence in professional practice, the production of work of publishable standard, and engagement in self-managed or collaborative research and project development. A more detailed set of indicators specify criteria in twelve areas: knowledge, analysis, synthesis, evaluation, self-appraisal and reflection on practice, planning and management of learning, solving problems, communication and presentation, research capability, engagement with context, responsibility, and ethical understanding (National Centre for Work Based Learning Partnerships 1998, p10). Parallel conceptions are beginning to appear in other doctoral programmes, for instance the DBA at the Royal Melbourne Institute of Technology uses the idea of the 'executive scholar,' characterised by familiarity with advanced knowledge, analytical skill, an easy facility in the use of research and academic literature, rigour and care in judging and deciding, and a reflective, informed self (Morley & Priest 2001).

More recent descriptions of doctoral work in qualifications and levels frameworks are now beginning to emphasise aspects other than research and knowledge-generation. The revised descriptors in the Australian framework allow for practice-oriented doctorates, so that for instance "advanced, searching and expansive critical reflection on professional theory and practice" is included as an alternative to an academic literature review, and a "project addressing a matter of substance concerning practice in a profession" can be submitted rather than a research thesis (Australian Qualifications Framework Advisory Board 2002, p9). The recently-developed Irish qualifications framework also suggests that a practical approach is permissible, and among the outcomes of doctoral-level work includes "abilities to critique and develop organisational structures and initiate change" (National Qualifications Authority of Ireland 2002). In the UK, Ufi Ltd (the 'University for Industry') has produced a set of level indicators for Learning through Work, the negotiated work-based learning programme it manages in collaboration with a growing number of universities; the outline description of the doctoral level is as follows:

> "At this level, you will be developing thought-through courses of action which take into account alternative implications and issues beyond your professional discipline or area of practice. You will be making informed judgements... and working effectively with unpredictable issues. You will need to be able to draw on critical and creative mastery of a broad range of concepts, theories and practices, as well as being aware of the assumptions underlying them from perspectives which go beyond individual disciplines and contexts.
>
> "You will be producing your own ideas and theories and developing innovative responses in complex and unpredictable situations; you should be able to manage dilemmas and value-conflicts and find ways forward in problematic situations, including those which go beyond your organisation or discipline. One of the features of this level is that you will be taking forward an area of practice in a way which is of value beyond your organisation or community of practice, and developing as a leading practitioner in your field.

> "You will need to be able to design and make use of practical, methodologically sound research which contributes to your area of practice, and which results in new understandings or approaches which extend or redefine existing knowledge or practice."
>
> (Ufi Ltd 2001, p20).

This conception suggests that the pivotal feature of a practitioner doctorate is methodological (or process-led), but it is about the methodologies of development and systemic change rather than principally those of research. In supporting practitioner doctorates, this suggests a shift in emphasis away to some extent from research methodology and advanced discipline-based knowledge, and towards supporting high-level thinking and action appropriate to the exercise of mature capability (Lester & Chapman 2002) and practical wisdom (Sternberg 1998).

Beyond compromise: a robust view of the practitioner doctorate

The practitioner view of the work-based doctorate requires that it acts as a vehicle for real-world developments and for high-level professional capability. It might refer to approaches such as action learning, action research, soft systems methodology or reflective practice, but as described for the Middlesex DProf, it needs to be adequate for the 'swamps,' 'messes' and 'wicked problems' encountered by senior professionals in their practice situations. It may draw on technical and disciplinary knowledge, but it also needs to engage fully with the knowledge-in-use that thinking practitioners develop and use in the course of their work. On the other hand, the doctorate is the highest level of award normally made by a university (and moreover carries a form of address): there is an academic requirement to be met that normally rests on notions of advanced scholarship and extending the boundaries of knowledge. Doctoral candidature is always more than a consultancy or mentoring relationship to support practical action (part of the 'vehicle'), as it also involves the practitioner-candidate undertaking to meet the standard required for the award of 'doctor'.

In achieving these two things there is always a danger, using Scott *et al*'s term, that one becomes colonised by the other. While the kind of movement into the territory of the workplace that Middlesex and some other universities have undertaken is welcome and perhaps overdue, as Graham & Smith (2002) recognise it must not lead to sacrificing a robust conception of doctoralness, or the standards associated with the award of 'doctor', to the demands of pragmatism and market forces. On the other hand, poorly considered notions of what that conception should be can create strong pressures to absorb the practitioner doctorate back into the territory of the institution and force it to conform to an inappropriate paradigm in the name of academic rigour. Robustness, in this context, requires a conception that is at the same time highly practical and eminently valid academically.

One of the most productive places to begin in seeking a coming together between the practical and the intellectual is in the requirement that the doctorate has adequacy for Ackoff's 'mess' and Rittel & Webber's 'wicked problems.' Working effectively at this level is central to creating significant, workable organisational or professional change, but it also involves processes that are valued academically. In particular, the practitioner will need to consider both fitness for purpose, concerned with the production of real-world developments or solutions to meet practical needs in the here and now, and fitness *of* purpose, concerned with wider and longer-term consequences such as social and environmental implications and the moral and ethical dimensions of the area of action. The latter draws on critical levels of thought (cf Cox 1980, Barnett 1997) that move beyond taken-for-granted

assumptions and question both means and ends. It also points to a need for a systemic perspective that locates local phenomena, objectives and achievements in wider contexts and systems, as well as for a degree of systemic wisdom (Bateson 1971, Pór 1995) in which operating environments and bigger contexts are understood intuitively as interconnected wholes. Even at a pragmatic level, the nature of 'wicked problems' requires the ability to hold dilemmas and contradictions in tension and move beyond them to create 'solutions beyond compromise' (Schmookler, undated), that overcome limiting assumptions and integrate opposites.

If the essentially stable and abstract view of knowledge associated with the more traditional kinds of PhD is no longer adequate in the world of Ackoff's 'mess', neither is a purely interpretive perspective, however powerful it may be for cutting through assumptions and bringing individual realities into view. To work effectively in the kind of situations regarded as appropriate material for a practitioner doctorate requires abstract thinking to be integrated with practical wisdom and know-how, providing ways forward that are both considered and have local and global adequacy. This kind of thinking, which reflects both post-formal operational thought (Kramer 1983) and post-formal development (Czikszentmihalyi & Rathunde 1990), is essentially concerned with making 'maps that work' rather than producing nomothetically right answers, and is as equally applicable in technical and scientific fields as it is in managerial, educational and other socially-based ones. Epistemologically, it represents the final stage of the process described by Kitchener & King (1981), which involves evolution through stages of accepting knowledge as given, through viewing it as absolute, to regarding it as entirely contextual and subjective, and finally to a position of making best approximations based on the interpretations which are most complete and compelling. In this conception, the practitioner doctorate may be seen as moving beyond both abstract-universal and contextual-relative views of knowledge into a more mature realisation that balances the uncertainty of knowing with the need to create knowledge-structures in order to take action and move forward.

The practitioner doctorate therefore becomes founded on processes of thoughtful action, leading to advances in practice, rather than processes of research leading to advances in knowledge. This however leaves open whether a doctoral output based on a single, local impact on practice (however interpreted) is sufficient, or whether there should be wider dissemination or impact. If the primary mode of dissemination associated with the PhD is publication in academic journals, that for the practitioner doctorate might be better conceived as having an impact on a community of practice wider than that in which the doctoral work was set: this might be by indirect influence, conventional publication, or other forms of dissemination such as conferences, consultancy or audio-visual or web-based formats. The disseminable elements from a practitioner doctorate could well be similar to those from a conventional PhD, i.e. findings or ideas with application at a general level, but it more often they will be either contextual experiences that can be drawn on or reformulated to inform other practice situations, or drawings-together of experiences and ideas into formats that give them value to wider readerships.

A doctorate for the unstable state

A recent tendency in discussing professional doctorates has been to position them in relation to a particular socioeconomic model. The argument adopted by Usher (2002), Graham & Smith (2002) and others is basically that as advanced societies move more towards economies based on knowledge, the idea of universities being the main site of knowledge production gives way to multiple

sources of societally valuable knowledge; professional associations, industry, commerce and the public services also have an important role as knowledge-producers within a wider knowledge network or ecology. In these conceptions, professional doctorates are seen as harnessing the potential of non-academic knowledge sources and providing the kind of real-world, usable knowledge that contributes to competitive advantage or socioeconomic advance in the knowledge society.

However, 21st-century society is not only characterised by the knowledge ecology. Societies and networks are becoming less centralised and both more global and more local. There is growth in both international organs of governance and sub-national self-determination. Work, careers and occupations are changing in nature and becoming more diverse. Societal norms are changing, sometimes violently, suggesting societies in transition. Few areas of endeavour offer the Lewinian luxury of unfreeze-change-refreeze: in many change is the norm, the stable state the exception. Perhaps most critically for the longer term, our ability through environmental degradation to undermine the basis of our own survival is forcing a slow realisation of the need to manage the consequences of all our actions, however distant in time or space. This kind of society requires a form of systemic thinking which permits ways forward to be found within complex, indeterminate and unpredictable relationships; the creativity to look beyond the currently envisaged; the capability for effective action and for evaluating the risks associated with that action; and the wisdom to see beyond immediate contexts and systems, and make judgements which are not limited by precedent or the present.

Conceptualising second-generation professional doctorates as adequate for the needs of the knowledge economy or knowledge society moves beyond the linear research - codification - application relationship that underpins the traditional PhD, but it does not move the doctorate on from being primarily a vehicle for the creation of knowledge. The practitioner doctorate, with its requirement for effective action in complex contexts, moves beyond this and seeks adequacy for the challenges of the change society. In the unstable state, much new knowledge is useful only briefly, and knowledge-generation is an increasingly short-term project. On the other hand a concern with major changes to practice requires not only gaining or using new knowledge, but gaining new understandings and ways of seeing or conceptualising that have more lasting value. A doctorate focused in this area must be concerned not only with knowledge, but with capability (the ability to create effective change) and wisdom (the ability to see beyond the immediate and integrate the needs of the present and the future, the local and the distant).

The practitioner doctorate and the university

Doctoral education normally represents the highest level of credentialled activity undertaken by a university. Given this, there might be expected to be some form of correspondence between a university's doctoral programmes and the institution's expertise and ethos. At a more practical level, the credibility of a doctoral programme is linked to the university's authority in the area concerned, whether the doctorate is a PhD (requiring research expertise) or a practitioner doctorate (requiring engagement with practice contexts). Graham & Smith (2002) argue that a new doctoral model may function as a 'platform' for a university, representing a new kind of offering "intended to create a substantial new base of business and a new basis for competitiveness" (p7) as opposed to an incremental change to existing programmes. This description is as apt for the Middlesex DProf as for that at Central Queensland, but its wider ramification is yet to be realised.

In subscribing to a platform such as that represented by the practitioner doctorate, an institution is making a statement about its culture, values and direction. The practitioner doctorate sits with a conception of the institution as concerned with practice and application, and with forging partnerships with organisations and practitioners to effect and lead change. It suggests that the university derives its authority as much from getting involved in practical situations and innovating as from more conventional forms of research. Staff might be regarded principally as consultants, developers and agents of extension rather than researchers, and draw their credibility as teachers and mentors from innovative engagement with practice rather than doing academic research. Rather than a producer of knowledge for its own sake or for external consumers, the institution becomes a catalyst and animateur in the development of knowledgeable practice; it moves from a knowledge production and transmission model to a conception closer to that of Schön, where knowledge and practice interact in a cyclic or spiral relationship.

Whether this kind of conception can permeate entire institutions is at present speculative. However, it does accord with the policy, currently being promoted in the UK, Australia and South Africa, of encouraging different institutional missions and concentrating resources for pure research on a limited number of institutions (e.g. Department for Education and Skills 2003). Although this is frequently viewed as a negative step towards teaching-only institutions, it can also be interpreted as an opportunity for those universities prepared to do so to grow their reputations in acting as a focus for development and change; there is as much a need for world-class organisations in this area as there is in that of pure and applied research, and there is also a need for innovative regional hubs. Rather than needing to be a return to the polytechnics or institutes of technology of a decade or more ago, this can represent a way forward that is led by concern with developing leading-edge practice. This kind of institution might focus on taught and practice-based programmes, rather than taught and research programmes, with the practitioner doctorate as its flagship qualification.

Conclusion

The practitioner doctorate provides a way forward for developing the highest levels of university awards in a way that is both academically robust, and directly relevant to professional practitioners who are concerned with leading practice and initiating change rather than being researchers. It takes professionally-oriented doctorates to a further level of development compared with both field-specific, semi-taught professional doctorates as well as the more recent and applied versions of the PhD. In doing this, it suggests a particular challenge for universities: to develop a credible source of authority based on engagement in practice, rather than (or in addition to) engagement in academic research.

The challenges facing societies in the current century point up the inappropriateness of the highest-level university programme being reserved for researchers, or even for advanced practitioners within specific professional disciplines. If universities are to engage effectively with the change society or the unstable state and assist practitioners to develop and employ requisite qualities, practitioner doctorates need to become an increasingly necessary and prominent part of higher education.

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