



ORIGINAL PRACTICE DEVELOPMENT AND RESEARCH

Third-generation professional doctorates in nursing: the move to clarity in learning product differentiation

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Abstract

Context: Professional doctorates have been a part of the academic landscape for many years. Over this time, their focus, structure and mode of delivery have changed significantly as the terrain of professional practice has developed. In this paper we articulate this development over time through discussion of the evolution of first- and second-generation professional doctorates, and argue that there is a need for a third-generation doctorate with greater clarity regarding focus, structure and mode of delivery, in the context of advanced professional practice.

Aims: A scoping review was undertaken of the development of professional doctorates in the discipline of nursing to inform thinking with regard to future design work for a post-masters (nurse practitioner endorsement) professional doctorate.

Conclusion: In the context of the absence of any identified published outcome-based evidence of the value of first- or second-generation professional doctorates in general, and specifically in nursing, a third-generation evolution is proposed. This is based on the conclusion that the lack of identified outcomes is based not only on the axiomatic absence of research, but also that this may be symptomatic of a prevailing lack of clarity in programme design. A third-generation professional doctorate for nursing offers an opportunity to focus on congruence and internal consistency between the aims of the programme, learning outcomes, learning content and design, and the assessment.

Implications for practice development:

- The third-generation professional doctorate would no longer need to be distinguished from other degrees via an expression of what it is not, but rather would set out what it is
- The educational product, with clear processes and content that are congruent with the course aims, could be clearly described as a self-contained entity more capable of producing measurable outcomes
- Practice development is an integral part of the learning product through being a prescribed method in the research component of the course

Keywords: Professional doctorate, nursing, practice development, nurse practitioner, evidence-based emancipatory practice development, doctor of nursing

Introduction

As we approach the end of the second decade of the new millennium, nursing as a workforce – and hence nursing education – faces many challenges and the need to adapt and explore new approaches. There is an open dialogue within the profession related to what constitutes nursing work or the work to be done, the creation of nursing roles to do the work – such as in the domain of advanced practice – and the education needed to build the required capability. Not only is science, in the form of the nursing academy, speaking to the discipline in a manner that conveys information, but the discipline itself, alongside other stakeholders, is speaking back as it influences the message. This ‘speaking back’ is characteristic of postmodern social progression and the movement to a Mode 2 society (Nowotny et al., 2001). Mode 2 society is characterised by heterogeneity and the embrace of diversity in a context where the boundaries between market, state and culture have blurred and exist as fuzzy, as opposed to the rigid demarcations of a postmodern Mode 1 society. Under this frame of understanding, learning is seen to be valuable and to take place in a variety of contexts, as manifested by the rise of accreditation mechanisms and credentialing for workbased learning. This was borne out in the recent draft policy by the Department of Health in Ireland relating to advanced practitioners, which gave central importance to accreditation of workbased learning (Department of Health, 2017). With free trade agreements and the move to international markets in online education, there is now access to varied learning products. The wider community no longer accepts without question what is provided in the form of nursing care; instead, a patient- or person-centred care movement has arisen, with the consumer paying attention to cost, quality and safety of services, and wanting a voice in service design and evaluation.

A number of inquiries into deficiencies in care provision have consistently highlighted the importance of pertinent, relevant regulation and of listening to the voice of healthcare practitioners and consumers (see for example, Harding, 2006; Francis, 2013; Health Information and Quality Authority, 2013). At the same time, bureaucratisation and managerialism have pervaded the system and, in the name of innovation, rapid cycles of change are regularly rolled out across organisations, often based on minimal evidence in terms of volume or quality of research. Institutional realism looms large in a situation where institutions form a reality separate to those who work within them, as bureaucracies condition the possible in terms of thoughts and actions to solve perceived problems and issues (Graftstein, 1992). It is widely argued that contemporary education for nurses should be transformational, a situation where learners not only acquire new information but are transformed as they develop new ways to think (Benner et al., 2009). This position is understandable, but often exists only as an unrealised mantra or slogan. While the focus of education is reduced to building a base of skills, these mantras and slogans continue to be used to describe outcomes of the available nursing educational products and the commitment of the workforce. One clear example is evidence-based practice – all the evidence suggests the nursing workforce is on the whole poorly equipped to manage evidence and incorporate it into practice (Fairbrother et al., 2015).

As part of the need in nursing education to explore new ways of doing things, it is timely to consider the evolution of the professional doctorate in nursing as a learning product, as well as whether it is fit for purpose in the endeavour to help move the profession towards congruence between espoused practice standards and what the patient experiences. It is time to consider taking the journey beyond aspirational mantras of transformative experiences and capability development in areas such as leadership and research in the clinical domain, towards realisation embedded in nursing scholarship.

Background

It has been identified that there is a marked paucity of published evidence of the impact of professional doctorates on patient care, or even of the impact of learning outcome achievement on practitioners and students in nursing and across healthcare disciplines (Cleary et al., 2011; Watson et al., 2011; Wilkes et al., 2015). This shortfall applies not only in healthcare but in other professions (Kumar, 2014). It is unclear if this is solely the result of the obvious lack of research, or if it reflects a lack of clarity in the design of professional doctorates that flows into difficulty in identification of researchable questions.

The call has been made for nursing to engage in a debate about the future direction of doctoral education (Walker et al., 2016). This paper scopes the current published peer-reviewed literature and in the context of the findings, considers the evolution of professional doctorates on which nurses are enrolled. It further proposes the next step in the evolution through consideration of salient programme elements and the provision of an example.

Method

A scoping review was undertaken (Arksey and O'Malley, 2005). The terms 'professional doctorate' and 'nurse' were searched in the databases CINAHL, Medline and PsycInfo from January 2000 until January 2017. A pearl-growing strategy (Harter, 1986) was used, whereby reference lists of identified sources were searched and new sources identified. For search returns see Table 1.

Table 1: Scoping review search returns	
Search terms	Results at title level
'professional doctorate' and 'nurse'*	8
*Due to small number no further limits were applied and all papers were included in the review	

The aim was to determine what is known about professional doctorates, their evolution and evidence of impact or outcomes. Papers were included if they discussed the evolution of professional doctorates in general, and specifically in relation to nursing. Discipline-specific position papers on the values of professional doctorates, other than in nursing, were excluded.

First- and second-generation professional doctorates

In the US, professional doctorates in nursing were introduced in the 1960s, often as a transitional step to schools being able to offer the PhD (Nicholes and Dyer, 2012; Reid Ponte and Nicholas, 2015). The professional doctorate (hybrid) is no longer supported in the US, following the 2004 decision of the American Association of Colleges of Nursing to support only the taught doctor of nursing practice and the PhD (American Association of Colleges of Nursing, 2004; 2015). What was characteristic of first-generation professional doctorates in the US was wide variation in the programmes and public confusion over the degree (American Association of Colleges of Nursing, 2004). Both the professional doctorate and PhD required the production of a thesis, and the assessable dissertation was in many cases indistinguishable between degrees (Nicholes and Dyer, 2012). This confusion impacted on graduate career opportunities and the ability to secure external grant funding (Reid Ponte and Nicholas, 2015).

Professional doctorates grew in number in the UK and Australia following criticism of the PhD's narrowness of focus and lack of within-degree development of transferable skills for practitioners not intending to pursue a career in academia (Ingleton et al., 2002; Watson et al., 2011; Kot and Hendel, 2012). The first professional doctorates for nurses appeared in Australian universities in the late 1980s to early 1990s (Yam, 2005; Ellis, 2006). In the UK they were introduced in 1995 by the University of Ulster in Northern Ireland (Ellis, 2006). Not unlike the experience in the US, these early professional doctorates were in many ways indistinguishable from the PhD in terms of the course deliverables, excepting the prescribed coursework in countries where coursework was not a typical component of PhDs. Unlike in the US, though, these courses were primarily in-service (study while working as a nurse), as opposed to pre-service (before endorsement and licensing) and largely undertaken on a part-time basis (Yam, 2005). A list of proposed subjects for a UK professional doctorate in 2001 clearly showed the vision of teaching research as the coursework (Ingleton et al., 2002) and this trend was replicated in the findings of a scoping review of Australian professional doctorates (Ellis, 2006). There was an identified disconnect between the espoused goal of teaching clinical leadership and practice development, and the course content and processes (Ellis, 2006).

The call for nursing to move to second-generation professional doctorates was distinguished by a focus on the mode of learning. This emerged between 2005 and 2010 (Yam, 2005; Rolfe and Davies, 2009). This shift came in response to the realisation that earlier professional doctorates in nursing lacked internal coherence between aims, learning content and process. The proposed shift was not based on findings of the impact of doctorates on practice, or on nursing specifically. The philosophical argument hinged on the type of knowledge production that characterised both the professional doctorate and the selected contrast of the more established PhD. Professional doctorates (second generation) were distinguished as being based on Mode 2 knowledge production, whereas the PhD was reported to be based on Mode 1 knowledge production (Rolfe and Davies, 2009). Some debate existed over whether these modes of knowledge production were separate entities or existed on a continuum (Yam, 2005). This debate seems to be resolved by the point that Mode 2 knowledge production is characteristic of Mode 2 society. Therefore, if society has shifted to a Mode 2 reality, then both PhDs and professional doctorates, taught as knowledge products of that society, have generally made the same shift (Nowotny et al., 2001).

Mode 2 knowledge production has five characteristic elements, acknowledging that:

- Knowledge is not produced separately to the context in which it is used
- The range of sites where knowledge is produced is diverse
- Knowledge is transdisciplinary and resides within individual practitioners and teams
- Knowledge is reflexive and embedded, coming from somewhere as opposed to existing by itself ready to be discovered
- Novel forms of quality control are indicated (Nowotny et al., 2006)

It would be difficult in a postmodern context to argue against any of these elements. In contrast to Mode 2, Mode 1 knowledge production is characterised as a positivistic endeavour – or pure science – where knowledge is produced by and for the scientific discipline in a closed scientific community. While a detailed discussion of this may require more nuance than the scope of this article allows, it is clear that while the call to reform the approach to professional doctorates to facilitate realisation of the stated vision of the first generation made sense, the argument based on mode of knowledge production was made without consideration of temporal changes that have occurred in doctoral education for nurses, in the context of the wider shift to a Mode 2 society. This omission continues to be the case (Walker et al., 2016).

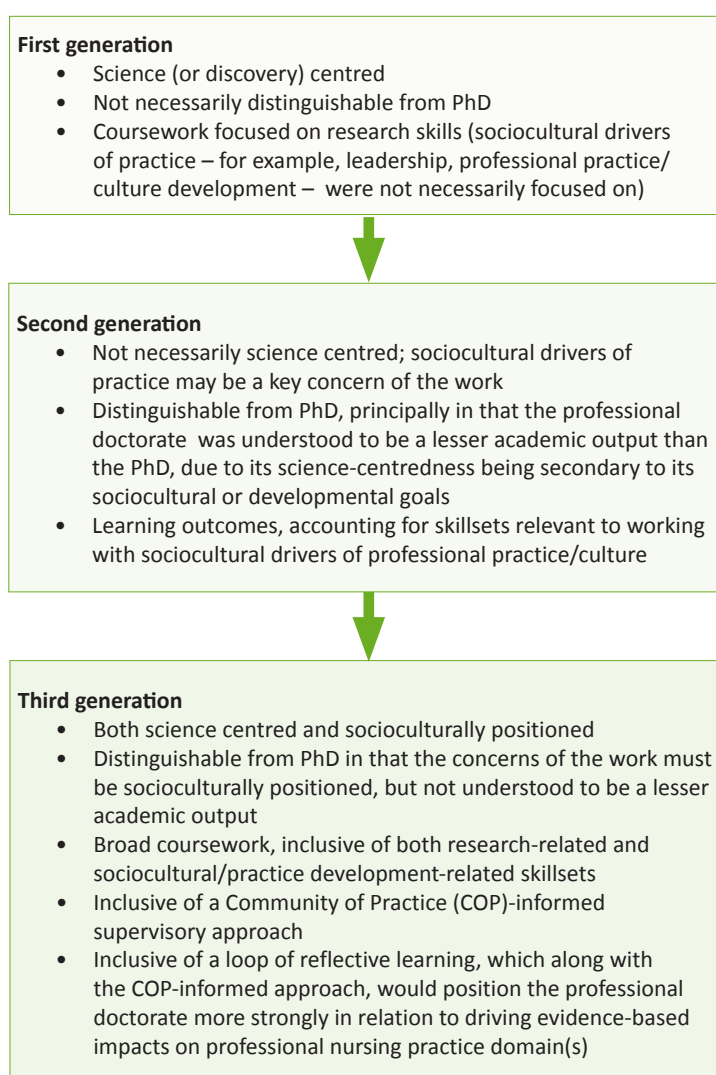
With regard to the temporal progression, in the same period as the professional doctorate was introduced in nursing and the first generation evolved, there was a lengthy debate around what constitutes evidence in nursing and health, and how to include a place for qualitative and mixed-methods approaches. Along with a range of qualitative methodologies, evidence-based emancipatory practice development (EBEPD; Manley et al., 2013) and action research projects in their various guises, are regularly undertaken as PhD work by nurses. Doctoral education evolved from Humboldtian to post-Humboldtian, from a master apprentice approach to one inclusive of the spectrum of both Mode 1 and Mode 2 knowledge production (Taylor, 2012), in the sense that it integrates learning, cultural knowledge and context. Von Humboldt led the foundation of the University of Berlin in 1810, from which the modern version of the PhD arose, although it had existed in an earlier form since mediaeval times (Taylor, 2012). The changes in doctoral education in general were driven by government policy affecting university funding and changes within universities to bring higher-degree research supervision in line with other university teaching, in terms of staff development and quality control. In Australia, current policy is driving the agenda for greater integration between universities and industry, and the establishment of clearer links between doctoral studies and the impact on the economy and wellbeing of the country (Commonwealth of Australia Department of Prime Minister and Cabinet, 2015; McGagh et al., 2016). It is acknowledged in the policy that knowledge production does not just reside in the university, so the revolutionary claims behind the call for second-generation professional doctorates and differentiation based on mode of knowledge production make less sense when viewed

in the broader context. Under the Australian Qualifications Framework, both PhDs and professional doctorates are level 10 and viewed as equal and complementary (Australian Qualifications Framework Council, 2013). Students enrolled in either a PhD or a professional doctorate are eligible for funding in the Research Training Programme (Commonwealth of Australia, 2016).

A shift to the third-generation professional doctorate

In terms of marking points in the iterative development in thinking related to professional doctorates, it is timely to mark the transition point to a third generation, for which the thinking is documented here in the spirit of a call to keep the discussion alive within the discipline of nursing (Walker et al., 2016). The thinking builds on the work that occurred within nursing in the establishment of the first-generation professional doctorates and the work outlining the philosophy of the second generation (see Figure 1).

Figure 1: From first- to third-generation professional doctorate



One question not identified in the nursing literature is whether different course content is required by those in, or aiming to move to, different roles in nursing? In the US, the doctor of nursing practice programmes are differentiated not only based on role, but also build on masters degrees differentiated based on the population foci and specialty within the role (American Association of Colleges of Nursing, 2015). In Australia, advanced practice nursing and advanced nursing practice roles have been conceptualised through application of the Strong model (Gardner et al., 2013; 2016). Research has

found the pillars of the Strong model, while identifiable in various roles, are expressed differently and with different emphasis (Cashin, Buckley, et al., 2015; Cashin, Stasa, et al., 2015). Cashin (2013) offers a visual image of a liquorice stick, with the different strands representing the model being twisted up to form the unique attributes of each role. This vision has been incorporated into the current Australian Nurse Practitioner Standards for Practice (Nursing and Midwifery Board of Australia, 2014). In the US, a similar metaphor was arrived at, using rope to show the strands of capabilities twisted together as opposed to existing as static pillars, in the TAPP model (Elliott and Walden, 2015). It would follow from this thinking that professional doctorates, or pathways within them, need to be consciously designed to accommodate different development needs, or combinations of valence of the learning required by the enrolled students for their current or desired future position and roles.

At this point it should be noted that doctoral and university education is about more than vocational preparation. The transformative element of education must progress from mantra to a carefully designed and closely monitored core component of any doctoral education process. The tension between the Mode 2 characteristics of society and the influence on knowing, and the preferred independence of university from church and state acknowledged from at least the beginning of the Humboldtian period, must be recognised and explicitly managed (Newman, 2009). Bureaucracies exist in society as entities that structure not only what are seen as permissible questions but also as conditioners of the potential choices faced by students in coming to know solutions (Graftstein, 1992). Such independence was difficult to achieve in Mode 1 society and this is still the case as universities remain to some extent dependent on the state (and in some cases religious organisations) in fulfilling their mission (Newman, 2009).

A move to third-generation professional doctorates requires us to articulate how the programme hangs together to produce specific matrices of capability transferable to practice at doctoral level, while extending and transforming students' reasoning capacity. In Australia and Ireland there has been previous discussion of the need to consider post-masters education for nurse practitioners or indeed pre-endorsement doctoral qualifications (Tuaoi et al., 2011; Scanlon, 2015; Cashin, 2016; Department of Health, 2017). While clinically capable and effective practitioners are prepared through the current mechanism, the extra volume of formal education would allow development of clinical leadership and practice development capabilities, which are much needed in context of the sociocultural complexity at play in healthcare delivery today. While PhD study has been tentatively shown to be of value to clinicians (Wilkes and Mohan, 2008), the third-generation professional doctorate would provide an alternative product with targeted scaffolded learning and an integrated project experience.

It is proposed that this third generation be composed of three integrated loops of learning. The first is in the coursework, the second in the application of the coursework to the project and the third in the reflection on participation in the community of practice employed in the doctoral supervision process.

Partnerships

While not discussed widely with regard to professional doctorates as currently structured, one challenge faced by US universities in offering the doctor of nursing practice programmes has been having the breadth of expertise required to teach the degree in any single university (Dunbar-Jacob et al., 2013). If nursing moves to identifying clearly the matrix of capabilities required for different nursing roles as a guiding element in individual learning contracts in third-generation doctorates, the expertise to teach the required elements and to lead focused learning will need to be ensured. This need for a diverse profile of expertise has led to the development of innovative partnerships, not only between university and service sectors but also between different universities offering collaborative or joint programmes (Dunbar-Jacob et al., 2013; Weber et al., 2016). In Australia and Ireland, service partnerships do exist and have been developed in relation to nurse practitioner education in the current masters degrees. Partnerships between universities and unit sharing between international partners are less common.

In a US study among nursing faculty about the experience of introducing the doctor of nursing practice programmes, it was found that, along with faculty support for the concept, being a freestanding or autonomous nursing school was the factor most strongly associated with the ability to innovate (Auerbach et al., 2014). This element of autonomy was related to the ability to be nimble in response to the changing context. The trend for schools of nursing and midwifery to become part of larger health faculties may be a constraining factor, as there are increasingly fewer freestanding autonomous nursing schools, a fact that may underline the urgency of this study's thinking. The drives to innovate and to stimulate debate over postgraduate nurse education have been described as two definite benefits attributable to the creation of the doctor of nursing practice, resulting in the 'shot in the arm' nursing needed (Danzey et al., 2011, p 313). This injection of urgency and direction, if attention is paid to it internationally, may save the pain of the needle in other countries.

Mode of teaching in post graduate education with online content and intensives for some of the units is conducive to partnerships

The doctor of nursing practice and professional doctorates internationally commonly employ a mixture of online learning and intensives (where students attend the university in set blocks during each learning period or year). This improves course viability, as students can be drawn from a wide geographic area, and for in-service programmes it makes the process more work friendly. Such course design opens the possibility that, like students, those providing the teaching do not need to be based at a single university or geographic location. The online learning environment and internationalisation of learning referred to earlier as part of the contemporary context open diverse possibilities for the development of capabilities as part of the student's individually identified matrix. The possibilities afforded through online learning further underline the potential benefit of partnerships between institutions to allow students to select from a range of accredited learning opportunities internationally, facilitated by experts in the domain of enquiry. A key benefit of partnership is that the pre-accreditation of the attainment of learning from the university and the development of service agreements would allow seamless integration into learning contracts, without the need for further assessments to award credit.

Loops of learning

Clear integration of the project element with the coursework facilitates double-loop learning (Argyris, 2000; 2002). Reflection on participation in the community of practice in the model of supervision facilitates a third loop of learning. The use of spiral curriculum design in nursing coursework is common, as revisiting and building on learning is widely acknowledged as more effective than a hit-and-run, single exposure, Ikea flat-pack style curriculum (Harden, 1999). The same principle could be applied in third-generation professional doctorates. Each spiral is represented by a staging point in the professional doctorate where assessment of learning and individual transformation occur. This begins at the end of the initial reflection and identification of learning needs and concludes with reflection on experience in the community of practice. Inherent in this learning loop process is the change that takes place in the individual as a result of new learning and awareness.

An example of a third-generation professional doctorate design

While not intended to constrain creativity in the design of third-generation professional doctorates in nursing, an example is provided to render the abstract ideas in a more concrete form to aid the grasp of the authors' intent (Figure 2). The example is a nurse practitioner course with the aim of developing clinical leadership and practice development capabilities situated to build on a pre-endorsement nurse practitioner masters degree.

Figure 2: A proposed example of a third-generation professional doctorate as a means of advancing nurse practitioner capability

An example from chronic disease management

Background

A nurse practitioner in a chronic disease care domain (for example, heart, liver, kidney or respiratory disease) is tiring of witnessing routinised suboptimal treatment outcomes among her patient group. She decides she wants to contribute to the (probably emergent) body of evidence around the efficacy of nurse-led, evidence-based outreach or community-based service provision, as opposed to existing GP-led or outpatients-led care, which may be ad hoc, provider specific and not necessarily evidence based. To do this she embarks on a third-generation professional doctorate, which allows her to structure and scaffold her learning. The doctorate is driven by the nurse practitioner's personal learning aims (see below) designed as a doctoral action plan agreed with her supervisors and, if appropriate, her workplace adviser. By undertaking doctoral modules that are based in leadership, participatory action research, evidence-based emancipatory practice development (EBEPD) and reflective practice, the practitioner can work and extend the leading edge of her profession through transformation of knowledge and experience, while gaining insight into her self and professional identities, and developing leadership and practice development capabilities. The transformations are profound and demanding and require learning processes that offer reflection on insights and assumptions and, also as part of the process, take into account how the person acts in situations based on new learning and experience.

Structuring her learning through formal coursework combined with workbased modules, the student first explores the theory and context of the project being undertaken – this is driven by the transformative theories of learning. She then develops, implements and evaluates her learning in the work setting, allowing an impact on practice from an early stage of her doctoral work. The project is tightly linked to the earlier learning as a second loop of learning where the capabilities are put into practice.

Project aims

- i Using EBEPD methodologies, to investigate how (by what mechanisms/processes) patients are connected with community-based care options at the point of their discharge from hospital
- ii Using EBEPD methodologies, to establish a coherent, risk-based pathway to specialist nurse-led, community-based care programming
- iii To trial, experimentally or quasi-experimentally, nurse-led versus GP-led community-based care options
- iv To explore qualitatively the sociocultural dynamics associated with representation/readmission to inpatient services
- v Using EBEPD, to redesign pathways established in step ii above, which account for the findings of studies conducted in steps iii and iv

Proposed methods

- i To establish a multidisciplinary and intersectoral community of practice (CoP) in the clinical domain of interest
- ii To use the CoP (clinically and organisationally) to help the candidate to establish a localised pathway to nurse-led care that is based on dispassionate reasoning and prevailing clinical judgement within the field
- iii Once a pathway is established, to design an experimental or quasi-experimental study of its efficacy against standard options, where possible enrolling other national or international sites in the trial
- iv To conduct contemporaneous qualitative research that is focused on exploring the drivers of maintaining treatment adherence
- v To use the CoP reflectively in clinical redesign efforts that target a more informed and patient-centred approach to discharge and community-based follow-up
- vi To conduct a structured reflection on participation in the CoP supervision module and capability development

Coursework ramifications

Clinical leadership and systems change; clinical innovation; treatments of emancipatory practice development-informed approaches to driving organisational change; health policy analysis and influence; positivistic study design and data analysis; qualitative study design and data analysis; and mixing methods to establish complex and context-bound clinical realities.

Group supervision

Via the CoP, which is ongoing and focused on method and project, not individual candidates.

Outcome arising from the doctorate

Student capability development, in which the vision is raised towards the system and organisational level beyond individual episodes of care. A novel, tested, socioculturally situated, realisable model of nurse-led community care in the chronic disease-related domain of interest.

The example provides greater depth in the outline of a programme that begins with guided, and assessed, reflection of learning needs, resulting in a learning contract. This contract may be fulfilled within a single university through workbased learning and formal offerings, or it may take advantage of diverse learning opportunities facilitated through formal international partnerships. The fulfilment of the contract includes assessed capability and reflection on the learner's development as an individual and in the context of practice. The project element flows from the coursework (contract) component and is coherent with the learner's capability development, as it pulls this through into the project, which is grounded in the methodology of evidence-based emancipatory practice development. Supervision occurs through active participation in a facilitated community of practice with student peers. Other participants may be included in the community in keeping with Mode 2 knowledge production. The final element of the programme, assessed as part of the doctoral project by the internal and external examiners, is reflection on the experience of participation in the community of practice designed to surface this learning opportunity, and ensuring the community of practice remains a live part of the taught/lived curriculum.

Integration of the doctoral project

Using a prescribed methodology for the doctoral project has many benefits. The first is that students are exposed in a guided manner to a coherent process of designing a project that links methodology to method. Part of the guided process is following a lineage of ontology and epistemology. If all students are immersed in the same lineage of thinking, full participation in discussion in the community of practice will be enabled and deeper learning created through a collective co-construction. This learning will foreseeably deepen participation in doctoral presentations where student projects are typically presented, as students able to understand the methodology will ask each other questions related to choices of method and interpretation of findings. For the doctoral project in nursing, EBEPD has a particularly close fit with previously discussed Mode 2 knowledge production and the goal of developing clinical leadership and practice development in the above example. Within an EBEPD frame, generation of evidence can include methods that may be considered to have existed at the Mode 1 knowledge production end of the spectrum (Fairbrother et al., 2015). The critical methodology will keep the transformative element of the professional doctorate surfaced. EBEPD operationalised by approaches to active learning (Dewing, 2008) and underpinned by epistemological principles derived from critical theory, enables double-loop learning to be realised as an integral part of the doctoral process. The learning that ensues about practice and how it develops is actioned through systematic collaborative approaches to inquiry and practice change (McCormack et al., 2013). EBEPD focuses on methods that enable collaborative, inclusive and participative ways of engaging with clinical teams and other key stakeholders; this approach to changing practice is consistent with contemporary system-wide quality improvement strategies and person-centred approaches to care delivery (McCormack et al., 2015), but with systematic participatory evaluation methods included. Thus the potential for the doctoral project to have immediate impact in practice as well as to generate new knowledge about effective practice development processes is significant and allows the values of Mode 2 knowledge production to be realised.

Group supervision model and participation in a community of practice

Group supervision, also discussed as a group mentorship model in the doctor of nursing practice programme and seen as generally different to that occurring in the PhD, could have merit (Brown and Crabtree, 2013). It is of note that group supervision is not uncommon in post-Humboldtian PhDs – driven by educational philosophy for some, and faculty shortage of qualified supervisors for others. It should also be noted that supervision models are not internationally homogeneous. The UK and Australia usually employ smaller supervision teams than in the US or mainland Europe (Watson et al., 2011). However, in third-generation professional doctorates, group supervision could be employed by design, constructed as a formal CoP and incorporated as part of the action of learning (Bourner and Simpson, 2014). This group would then become not only the context of supervision of the doctoral project, but also a learning opportunity, itself forming the third loop, extended by reflection of experience in the

community as an assessable part of the thesis. In this way it would not only contribute to the personal and professional development of the student through first-person inquiry, but would also contribute to the immediate group in second-person inquiry and finally contribute to third-person research by extending the learning to the context of practice (Starr and Torbert, 2005; Coghlan and Branick, 2014). Hence, the third-generation doctorate has the potential to impact on the individual, the group and the environmental context. In effect, an extra loop of learning arising post-project is created, as students reflect on their experience in the community as participants and on learning that could be transferred to the role of facilitation of a group.

The need for programmatic research

One concern about practice development and action research has been the potential for limited impact related to generalisability and single-case research. Such research is often viewed as not consistent with the sensitivity to the need for programmatic research that has become clear in universities. Mode 2 learning is characterised by being socially robust (Nowtony et al., 2006). Social robustness is constructed of reliable and replicable contextualised science. If socially robust, the single case, while not claiming generalisability, is another way of building transferable evidence through volume and variety of context and distributed knowing (Gustavsen, 2003), with each smaller project building to a coherent whole. This notion is not without critique (Reason, 2003). The critique is largely unrelated to distributive action research, but rather highlights the need to keep sight of the emancipatory element of the endeavour. The transformative element is not merely central to the philosophy of the third-generation professional doctorate – in the design it is scaffolded through each loop of learning, or stagepost in the cycles, of the curriculum. The emancipatory element is front and centre in the methodology of EBEPD (Fairbrother et al., 2015).

Conclusion

It is timely to discuss formally the progress from second- to third-generation professional doctorates in nursing. The move signifies a conscious commitment to move beyond the discussion of course philosophy and comparison with the PhD, to discussion of a learning product at doctoral level that has internal coherence, and where course philosophy, learning outcomes, teaching and learning activity and assessment are clearly articulated. The learning product would not be judged against the PhD but rather against university (and societal) standards of doctoral education. The degree would focus on building practice capability rather than producing nurse scientist capability. Clear articulation of the learning product may indeed facilitate identification of findings that could begin to build a body of research that identifies the impact of the doctorate on the learners and also on the systems in which they practice. Such research is much needed to gauge the transformative nature and social robustness of the professional doctorate and to establish its place in development of nursing practice scholarship.

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