A systematic review of research on professional doctorates

Denise Hawkes* UCL Institute of Education, UK Sridevi Yerrabati Sohar University, Oman

Abstract

Alongside the growing numbers of professional doctorate programmes being offered within universities in the past 20 years, there has been a growth in the academic literature associated with various aspects of these research degrees. This systematic literature review draws on the evidence of 193 academic papers to map out the existing academic knowledge about professional doctorates and highlight the gaps that this special issue aims to address. We use a simple vote-counting approach to categorizing the identified papers, considering: the type of professional doctorate studied, the country in focus, the main themes explored, the research methods used and the year of publication. This review highlights the need for academic work in this area to move beyond individual case studies of practice on programmes towards developing principles of practice for professional doctorates as a whole. This special issue hopes to start that academic conversation.

Keywords: professional doctorates; systematic literature review

Introduction

This special feature of the London Review of Education marks the twentieth anniversary year of the doctor in education (EdD) programme at UCL Institute of Education. As professional doctorate programmes, such as our own, are offered more widely by other higher education institutions, and now have an established history in British higher education, it is timely to reflect on the past 20 years in terms of what we have learnt as an academic community about professional doctorates. This systematic literature review seeks to scope out the academic literature on professional doctorates and map areas that could be further researched. Many, but not all, of these areas have been explored in this special issue.

Building on prior studies such as by Bourner et al. (2001), Mellors-Bourne et al. (2016) report that in the past five years there has been continued growth in the number of universities in England offering professional doctoral programmes, especially within post-1992 institutions. The main professional doctorates found were EdD, DBA (doctorate in business administration) and DClinPsy (doctorate in clinical psychology). Although there were growing numbers of professional doctorates, all were based in areas where a contribution to professional practice can be expected. Despite this increase in the scope of professional doctorates, it was found that many had very small cohorts and significant numbers of programmes were not recruiting. Mellors-Bourne et al. (2016) also report a lack of evidence of the contribution that professional

^{*} Corresponding author – email: denise.hawkes@ucl.ac.uk

©Copyright 2018 Hawkes and Yerrabati. This is an Open Access article distributed under the terms of the Creative Commons Attribution Licence, which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

doctorates make, as well as flagging concern about the perceived difference in quality between these and the PhD. Alongside the growing number of professional doctorate programmes being offered within universities worldwide in the past 20 years, there has been a growth in the academic literature associated with various aspects of these research degrees. Mellors-Bourne et al. (2016) focus on the programmes offered and counting the numbers of students thereon, as was the brief provided by the funder, the Higher Education Funding Council for England (HEFCE).

This systematic review will seek to take a broader approach to the literature review than this report, and seek to explore the academic literature to identify gaps in the knowledge on professional doctorates and propose potential areas for future research. This is undertaken by mapping the development in the academic literature since the seminal book by Scott et al. (2004) attempted to start the academic discussion about professional doctorates and their emerging pedagogy. This systematic literature review draws on the evidence of 193 academic papers to map the existing academic knowledge about professional doctorates and to highlight the gaps that this special issue aims to address. A list of the 193 papers is provided in the Appendix.

Methodology

Our search for this study involved a systematic review of studies of professional doctorates. Similar to earlier studies on meta-analysis by Yerrabati and Hawkes (2014, 2015, 2016), the review stages used in this study were informed by the guidelines set by three sources: Campbell and Cochrane Collaboration guidelines on systematic reviews in health care and social policy (Higgins and Green, 2011); Centre for Reviews and Dissemination (CRD, 2009); and Evidence for Policy and Practice Information and Coordinating Centre (EPPI-Centre, 2010) at UCL Institute of Education.

We started our search by using a list of pre-established search criteria to identify all studies in the English language on professional doctorates. We did this in two stages: the first stage involved identifying relevant databases to uncover both published and unpublished studies; the second stage involved listing keywords for the search. Keywords such as professional doctorate, doctorate, EdD and education doctorate were used in our search in addition to the list of individual professional doctorates. The list of professional doctoral programmes was drawn from the Mellors-Bourne et al. (2016) report for HEFCE on professional doctorates (Mellors-Bourne et al. 2016: 10, Table 2). Full names and acronyms were used in the search, for example 'EdD' and 'doctor in education'.

In hindsight, this selection of search terms based on Mellors-Bourne et al. (2016) may have led to the exclusion of literature that does not use UK programme names. For example, in the USA, education professional doctorates are commonly referred to as education doctorates. This could have led to the exclusion of important works, and therefore a robustness check was undertaken to extend the search terms to include 'education doctorates'. This robustness check suggested one more theme could have been identified if this had been included, that is the debate about the relative status of the professional doctorates and the PhD. Therefore, within the results below we may have under-reported the literature from the USA and focused on this debate. Given the nature of the systematic literature review approach, we have not extended the analysis to include this omitted field, to avoid narrative review bias. However, we note that this area of the literature may be under-reported in the results below.

For published studies, we used the following databases: EBSCO host, Science Direct, Web of Knowledge, Emerald, Age, Taylor and Francis, and Wiley Online. In addition to these, for unpublished studies or grey literature, Google Scholar was used. We searched all of these

databases, using the predefined list of keywords for professional doctorates, in the title, abstract, text and keywords. While the date of publication for the search was left open, only studies published in the English language were included. In total, 61,776 studies were obtained from various databases, as follows: Google Scholar (94), EBSC Host (1,489), Science Direct (8,346), Web of Knowledge (1,077), Emerald (93), Sage (738), Taylor and Francis (49,554) and Wiley Online (385). After reading the title and abstract of the studies, as well as eliminating duplicates, 193 studies were identified as being focused on professional doctorates.

These 193 studies were then categorized using a simple vote-counting approach, mentioned briefly in Gough et al. (2017). While there is some criticism of this approach for looking at quantitative data, where vote counting is used to look at the number of positive and negative numbers found, this approach is considered appropriate for this systematic review as the data generated was from qualitative data. In this study, we provide the frequency counts (simple votecounting approach) to categorizing the identified papers, considering: the type of professional doctorate studied, the country in focus, the main themes explored, the research methods used and the year of publication. These groups were drawn on based on the type of studies identified and the content of those studies. Most of the studies identified were programme or institutional case studies providing a broad range of information.

Results

Type of professional doctorates studied

Mellors-Bourne et al. (2016) identified the main 'brands' for professional doctorates in terms of the number of students on programmes. These programmes were the doctorate of education (EdD), doctorate in business administration (DBA) and doctorate in clinical psychology (DClinPsy). The first grouping considered for the 193 papers identified was which professional doctorate the papers studied. Table I presents the distribution of the literature by the type of professional doctorate explored.

Table I: Distribution of	the literature by	y type of professional doctorate
---------------------------------	-------------------	----------------------------------

Types of professional doctorate studied	Frequency	Percentage (%)	
Prof doc (professional doctorate)	62	32	
EdD (doctor in education)	76	39	
DBA (doctor in business administration)	10	5	
DNP (doctor in nursing)	13	7	
DSW (doctor in social work)	9	4	
Practice-based doctorates	7	4	
Other professional doctorates	16	9	
Total	193	100	

Of the main brands identified by Mellors-Bourne et al. (2016), the EdD is the most studied. The EdD is the main focus in 39 per cent of the papers, and also the true main focus of most of the papers that are labelled as 'Prof doc' (professional doctorates). In total, more than 60 per cent of the papers found focused their study on the EdD. For the other brands, the literature is less developed. The DBA is little studied, with only 5 per cent of the field, and nothing was found

regarding the DClinPsy. The focus in the literature on the EdD is unsurprising, given that higher education research is most strongly associated within education departments and faculties, and it is in these departments and faculties that EdD programmes have their home.

In this special issue, we had hoped to move beyond the case studies of individual EdD programmes to draw broader links between professional doctorates. Despite our best efforts in approaching potential authors with knowledge of other professional doctorates, this special edition yet again is largely drawn from those with a focus on the EdD. This suggests that at this time, to generalize about professional doctorates could be difficult because of the dominance in the literature on the EdD. However, given the number of papers using case studies on the EdD, it may be possible to start to build more general principles for doctorates in education. More case studies on other types of professional doctorates could be fruitful, especially for the other two key brands, the DBA and DClinPsy. This is our first identified gap in the literature.

Country of professional doctorates studied

While PhD programmes are found worldwide, professional doctorates are found in a narrower group of countries. In terms of the literature, this pattern of a smaller group of countries is also found. The country in which the study of the professional doctorates was undertaken is presented in Table 2. This is the second grouping considered for the 193 papers identified on professional doctorates.

				-		_	
Table 2:	Distribution	of the	literature	hv	country	∕ of	study

Country	Frequency	Percentage (%)
UK	60	31
USA	85	44
Australia	33	17
Other	15	8
Total	193	100

The literature is largely dominated by papers based in three countries: the USA (44 per cent), the UK (31 per cent) and Australia (17 per cent). Very little has been written outside these three countries, and these are the same three countries in which professional doctorates are most dominant. The growth in professional doctoral programmes in English higher education institutions found by Mellors-Bourne et al. (2016) has not been repeated worldwide. While recent years have seen the development of professional doctorates in East Asia, the dominance of the PhD globally has been largely unbeatable. Mellors-Bourne et al. (2016) refer to this in terms of the perceived quality difference between professional doctorates and PhDs.

This special issue has encouraged papers from outside the usual areas of study: the UK, the USA and Australia. Papers are included herein considering international students' views, with contributions from international students from Israel, India and Ireland. In addition, one contribution from an author in Singapore has been included. This is clearly an important dimension of study to explore, even for EdD programmes. This would enable the development of more general principles of professional doctorates with more worldwide appeal. Clearly there is still scope to explore the development of professional doctorate programmes outside the UK, the USA and Australia.

Themes studied

Our third grouping concerns the aspects of professional doctorates that have been considered in the individual papers. This grouping helps us to identify which aspects of professional doctorates are less well investigated, as well as those where the literature has a broad consensus. Much of the literature identified follows a case study research design. Such papers often report what we do on our programme and why it is considered valuable. This leads to a wide diversity in the material covered within individual papers. As this research design encourages the exploration of many themes, those identified within each paper have been arranged in four main groups, as set out in Table 3.

Table 3: Distribution of the literature by theme explored

Country	Frequency	Percentage of literature (%)		
Value of professional doctorate to institution	21	6		
Faculty reflection	5			
Faculty view	10			
Policy	6			
Programme content	208	55		
Overview of professional doctorates	49			
Overview of local programme	54			
Assessing the programme	8			
Pedagogy	9			
Curriculum	43			
Requirements of programme	3			
Quality assurance	2			
Practical relevance	40			
Research degree aspects	35	9		
Methodology	6			
Theses	12			
Supervision	8			
Dissemination	2			
Ethical issues	1			
Attrition, retention and completion	6			
Student experience	113	30		
Supporting students/mentoring	15			
Student experience	46			
Student perception	12			
Student motivation	6			
Student attitude	2			
Student training	4			
Student challenges	2			
Student learning	11			
Student engagement	5			
Student assessment	10			
Total	377	100		

The first panel presents the proportion of the literature and subgroups within the group that considers the value of professional doctorate programmes to the institution. This topic covers 6 per cent of the literature. As found by Mellors-Bourne et al. (2016), we did not identify any academic literature on the wider effect of professional doctorates, beyond the impact on either the individual and/or the institution. Much is claimed in terms of anecdotal evidence of the wider impact on professional practice of professional doctorates, but nothing more than that is found in the academic literature. The search did attempt to include theses, professional papers and other grey literature, but it is possible that any work on the wider impact in professional publications that is published there is under-reported, given the nature of the search terms and databases used. This is clearly an important gap in the academic literature, and one we hope to address in future research.

The second panel presents the proportion of the literature and subgroups that consider professional doctorate programme content. This topic covers 55 per cent of the literature and is the largest aspect of the published work. Within this theme, overviews of professional doctorates (both in general as a group or in terms of local programmes offered) are the main content in the field. This is largely the focus of the older literature, which dedicates a lot of case study time to highlighting the innovative design of these programmes, often in relation to the PhD. The more contemporary literature focuses on the curriculum development of professional doctorates and their practical relevance. This aspect of the literature is very well developed, and largely focuses on the EdD. Over time, a focus on research methods and professionalism as the core content for a doctorate in education become largely agreed upon in the literature. The practical relevance is often used to motivate this focus on professionalism and research methods, as well as being used to signal the unique contribution of professional doctorates. However, this practical relevance is less well developed in the literature, often reported through anecdote and the views of programme leaders. This links to Mellors-Bourne et al.'s (2016) call for more research on the practical relevance of professional doctorates.

The third panel records that 9 per cent of the literature considers the research degree aspects of professional doctorates. Issues around supervision, thesis development and completion rates are much more widely studied for PhD programmes than for professional doctorates. While the focus on the curriculum of the taught aspects of the programme have led to a general consensus on what to offer in the early stages of an EdD programme, the lack of research on the research stage gives scope for further research on aspects of the professional doctorates focused on supervisor and thesis issues. Research by Hawkes (2017) attempts to start this conversation, building on Hawkes and Taylor (2016), by considering the resources developed online to support EdD students at the thesis stage.

The fourth and final panel explores the second-largest theme in the literature, which related to the student experience. This is unsurprising, given the focus on the EdD and the origin of many papers from education researchers. The student experience is often reported as positive, and the findings largely suggest that students welcome the structure of the professional doctorate programme, the cohort of students they are based within and the focus on a problem of practice in their research. This broad consensus in the literature on EdDs could be extended to consider other professional doctorates, and is an identified gap in the field. Storey (2013, 2016) attempts to explore in more detail the value of the EdD cohort, applying a critical friends approach. This work shows the scope for considering the benefits of the cohort using education theory.

In summary, the literature has focused on the programme (taught) aspects and student experience. There is largely agreement in the literature for EdDs that curriculum is based on professionalism and research methods, and that the student experience values the programme structure, the cohort and the focus of the research on professional practice. Much less is written

on the research degree aspects associated with supervisors and thesis development, or on the value of professional doctorates beyond the institution. These are clear gaps in the research that are worth exploring and some that we hope to address in this special issue on professional doctorates.

Research methods used

While most papers in this area are case study based, within each paper a range of different research methods are used to collect data. A paper can use more than one technique to collect data. Table 4 presents the range of research methods employed in the studies. A large proportion of the field is based on narrative papers, with those working with professional doctoral students sharing their insights. For those collecting data, the most common approach is to interview or survey the student body, and more recently to exploit secondary data. Given this range of research methods, it is interesting that consensus on the curriculum of EdDs and the key components to ensure student experience have been found. In this special issue, we have attempted to encourage authors to move beyond the case study to draw together a bigpicture view of where we are, as professional doctorate programmes reach maturity. We have been able to broaden the range of techniques used to explore this area to include philosophy and systematic literature review.

Table 4: Distribution of the literature by methods used

Methods	Frequency
Literature review	5
Case study	14
Secondary data	34
Questionnaire/Survey	30
Interview	46
Focus groups	9
Observations	8
Narrative paper	81
Content analysis	6
Self-reflection	28
Grounded theory	5
Total	266

Year of publication

Finally, we consider the year of publication as a grouping for the literature. Table 5 provides a distribution of the literature by year of publication. In total 89.2 per cent of these papers (excluding those without a year of publication) are published after the seminal work by Scott et al. (2004). This shows the growth of publications has mirrored the growth and establishment of professional doctorate programmes in the UK, the USA and Australia. Again, it is worth remembering that many of these are based on the doctorate in education programme.

Year	Frequency	Percentage (%)
No date	7	4
1991-2000	9	5
2001–2010	82	42
2011–2016	95	49
Total	193	100

Table 5: Distribution of the literature by year of publication

Conclusion

This review highlights the need for academic work in this area to move beyond individual case studies of practice on programmes towards developing principles of practice for professional doctorates as a whole. This special issue hopes to start that academic conversation. The current state of the literature has focused on EdD programmes from the UK, the USA and Australia. This literature has led to consensus being developed on the curriculum of EdD programmes and the factors associated with positive student experiences. For the curriculum, a focus on research methods and professionalism completed in a brief taught phrase at the start of the programme has been established in practice and in the literature for the EdD programme. Similarly, for a positive student experience on an EdD programme, the value of the structure of the programme, the student cohort and the focus of the research on a problem of practice are well documented and largely considered as building blocks for a successful EdD programme in practice. Our own EdD programme at UCL Institute of Education follows the consensus in the literature with a focus on the curriculum and student experience, and these values and principles have been celebrated in our twentieth anniversary year.

This systematic review also highlights some significant areas for future research. First, while the literature on EdDs has led to general consensus on two important aspects – curriculum and student experience – the literature on other types of professional doctorates is limited, and there is therefore scope for research in these areas for other professional doctorates. This provides an opportunity for future research, especially for the other key brands, DBA and DClinPsy, to see if these two important aspects from the EdD literature are transferable to other professional doctorates. This special issue once again is largely focused on contributions from those associated with EdD programmes, although contributions were actively sought from those working on other professional doctorates.

Second, the focus of the literature on the UK, the USA and Australia provides scope for exploring professional doctorates outside these countries. In this special issue we have been able to start this conversation with papers from Singapore, Israel, Ireland and India.

Finally, we identify two significant gaps in knowledge, even on the EdD programme. The first, also identified by Mellors-Bourne et al. (2016), is literature on the wider impact of professional doctorates. While it is clear for those who work with professional doctoral students that there is a wider value, this is not well documented in the literature. The second is a significant gap in the literature on the research phase of the EdD. The majority of the literature focuses on the taught aspects of the EdD programme and little is known about the thesis stage and the role of the supervisor. In this special issue some papers consider these two important aspects.

Notes on the contributors

Denise Hawkes is an applied economist with research interests in broadly applied social economics related to education and work. She is a multidisciplinary researcher, applying econometric techniques to topics from labour economics, social policy and economic demography. She is the EdD Programme Leader at UCL Institute of Education and researches various aspects of professional doctoral programmes. Her interests in professional doctorates are focused on their economic and social effects in the labour market.

Sridevi Yerrabati is an experienced economic systematic literature reviewer who uses metaregression techniques to understand key economic relationships. She is a higher education teacher with more than ten years of teaching experience and Fellow at the Higher Education Academy, UK.

References

- Bourner, T., Bowden, R. and Laing, S. (2001) 'Professional doctorates in England'. Studies in Higher Education, 26 (1), 65–83.
- CRD (Centre for Reviews and Dissemination) (2009) Systematic Reviews: CRD's guidance for undertaking reviews in health care. York: Centre for Reviews and Dissemination.
- EPPI-Centre (Evidence for Policy and Practice Information and Co-ordinating Centre) (2010) EPPI-Centre Methods for Conducting Systematic Reviews. London: Evidence for Policy and Practice Information and Co-ordinating Centre.
- Gough, D., Oliver, S. and Thomas, J. (2017) An Introduction to Systematic Reviews. 2nd ed. London: SAGE Publications.
- Hawkes, D. (2017) 'Developing effective online resources to support student research dissertations and theses: Evidence from the Doctor in Education programme at UCL Institute of Education'. *Disciplinary Approaches to Connecting the Higher Education Curriculum*, London: UCL Press, 118–30.
- Hawkes, D. and Taylor, S. (2016) 'Redesigning the EdD at UCL Institute of Education: Thoughts of the incoming EdD program leaders'. In Storey, V.A. (ed.) International Perspectives on Designing Professional Practice Doctorates: Applying the critical friends approach to the EdD and beyond. Basingstoke: Palgrave Macmillan, 115–25.
- Higgins, J.P.T. and Green, S. (eds) (2011) Cochrane Handbook for Systematic Reviews of Interventions (Version 5.1.0). Oxford: Cochrane Collaboration. Online. http://handbook-5-1.cochrane.org/ (accessed 20 November 2017).
- Mellors-Bourne, R., Robinson, C. and Metcalfe, J. (2016) *Provision of Professional Doctorates in English HE Institutions*. Cambridge: Careers Research and Advisory Centre.
- Scott, D., Brown, A., Lunt, I. and Thorne, L. (2004) *Professional Doctorates: Integrating professional and academic knowledge.* Maidenhead: Open University Press.
- Storey, V.A. (ed.) (2013) Redesigning Professional Education Doctorates: Applications of critical friendship theory to the EdD. New York: Palgrave Macmillan.
- Storey, V.A. (ed.) (2016) International Perspectives on Designing Professional Practice Doctorates: Applying the critical friends approach to the EdD and beyond. Basingstoke: Palgrave Macmillan.
- Yerrabati, S. and Hawkes, D. (2014) 'FDI and economic growth in South and East Asia and Pacific region: Evidence from meta-analysis'. Oxford Journal: International Journal of Business and Economics, 9 (2), 97–131.
- Yerrabati, S. and Hawkes, D. (2015) 'Economic governance and economic growth in South and East Asia and Pacific region: Evidence from systematic literature reviews and meta-analysis'. Advances in Economics and Business, 3 (1), 1–21.
- Yerrabati, S. and Hawkes, D. (2016) 'Institutions and investment in the South and East Asia and Pacific region: Evidence from meta-analysis'. *Economics: Open-Access, Open-Assessment e-Journal*, 10, Article 11, 1–48.

APPENDIX

Studies used in the systematic reviews

- Adorno, G., Cronley, C. and Smith, K.S. (2015) 'A different kind of animal: Liminal experiences of social work doctoral students'. *Innovations in Education and Teaching International*, 52 (6), 632–41.
- Amrein-Beardsley, A., Zambo, D., Moore, D.W., Buss, R.R., Perry, N.J., Painter, S.R., Carlson, D.L., Foulger, T.S., Olson, K. and Puckett, K.S. (2012) 'Graduates respond to an innovative educational doctorate program'. Journal of Research on Leadership Education, 7 (1), 98–122.
- Andrews, J.F. (2003) 'Benefits of an EdD program in deaf education: A survey'. *American Annals of the Deaf*, 148 (3), 259–66.
- Armsby, P. (2012) 'Accreditation of experiential learning at doctoral level'. *Journal of Workplace Learning*, 24 (2), 133–50.
- Armsby, P. (2013) 'Developing professional learning and identity through the recognition of experiential learning at doctoral level'. *International Journal of Lifelong Education*, 32 (4), 412–29.
- Banerjee, S. and Morley, C. (2013) 'Professional doctorates in management: Toward a practice-based approach to doctoral education'. Academy of Management Learning and Education, 12 (2), 173–93.
- Bennett, Z. (2009) 'Theology and the researching professional: The professional doctorate in practical theology'. *Theology*, 112 (869), 333–43.
- Bennett, Z. and Graham, E. (2008) 'The professional doctorate in practical theology: Developing the researching professional in practical theology in higher education'. *Journal of Adult Theological Education*, 5 (1), 33–51.
- Berry, S., Blankenship, P., Bolt, W. and Phillips, C., (2009) Innovative Leadership Preparation: What works and why. Available online: https://education.uky.edu/epe/wp-content/uploads/sites/8/2014/11/Whatworks-and-why.pdf (accessed 25 January 2018).
- Beutel, D., Gray, L., Beames, S., Klenowski, V., Ehrich, L. and Kapitzke, C. (2010) 'An exploratory study of online social networking within a doctorate of education program'. *International Journal of Learning*, 17 (3), 67–79.
- Bishop, C.C., Boyle, D.M., Clune, R.R. and Hermanson, D.R. (2012) 'A different model for doctoral education in accounting and auditing: Student and faculty reflections'. *Current Issues in Auditing*, 6 (1), A1–A16.
- Blass, E., Jasman, A. and Levy, R. (2012) 'Supervisor reflections on developing doctoralness in practice-based doctoral students'. Quality Assurance in Education, 20 (1), 31–41.
- Bourner, T., Bowden, R. and Laing, S. (2001) 'Professional doctorates in England'. Studies in Higher Education, 26 (1), 65–83.
- Boyce, B.A. (2012) 'Redefining the EdD: Seeking a separate identity'. Quest, 64 (1), 24-33.
- Brennan, M. (1995) 'Education doctorates: Reconstructing professional partnerships around research?'. Australian Universities Review, 38 (2), 20–2.
- Brennan, M. (1998) 'Struggles over the definition and practice of the educational doctorate in Australia'. Australian Educational Researcher, 25 (1), 71–89.
- Brennan, M., Kenway, J., Thomson, P. and Zipin, L. (2002) 'Uneasy alliances: University, workplace, industry and profession in the education doctorate'. *Australian Educational Researcher*, 29 (3), 63–83.
- Bresciani, M.J. and Uline, C.L. (2012) 'Assessing EdD programs for program evaluation and improvement and impact on PK-20 learning environments'. Assessment Update, 24 (2), 7–9.
- Brown, M.A., Draye, M.A., Zimmer, P.A., Magyary, D., Woods, S.L., Whitney, J., Acker, M., Schroeder, C., Motzer, S. and Katz, J.R. (2006) 'Developing a practice doctorate in nursing: University of Washington perspectives and experience'. *Nursing Outlook*, 54 (3), 130–8.e.4.
- Brown-Benedict, D.J. (2008) 'The Doctor of Nursing Practice degree: Lessons from the history of the professional doctorate in other health disciplines'. *Journal of Nursing Education*, 47 (10), 448–57.
- Browne-Ferrigno, T. and McEldowney Jensen, J. (2012) 'Preparing EdD students to conduct group dissertations'. *Innovative Higher Education*, 37 (5), 407–21.
- Burgess, H., Weller, G. and Wellington, J. (2011) 'Tensions in the purpose and impact of professional doctorates'. Work Based Learning e-Journal, 2 (1), 1–20.

- Burgess, H., Weller, G. and Wellington, J. (2013) 'The connection between professional doctorates and the workplace: Symbiotic relationship or loose association?'. Work Based Learning e-Journal International, 3 (1), 76–108.
- Burgess, H. and Wellington, J. (2010) 'Exploring the impact of the professional doctorate on students' professional practice and personal development: Early indications'. Work Based Learning e-Journal, I (1), 160–76.
- Buss, R.R., Zambo, D., Painter, S.R. and Moore, D.W. (2013) 'Examining faculty member changes in an innovative educational doctorate program'. *Innovative Higher Education*, 38 (1), 59–74.
- Buss, R.R., Zambo, R., Zambo, D., Perry, J.A. and Williams, T.R. (2017) 'Faculty members' responses to implementing re-envisioned EdD programs'. Studies in Higher Education, 42 (9), 1624–40.
- Caboni, T.C. and Proper, E. (2009) 'Re-envisioning the professional doctorate for educational leadership and higher education leadership: Vanderbilt University's Peabody College EdD program'. *Peabody Journal of Education*, 84 (1), 61–8.
- Carr, S.M., Lhussier, M. and Chandler, C. (2010) 'The supervision of professional doctorates: Experiences of the processes and ways forward'. *Nurse Education Today*, 30 (4), 279–84.
- Clinton, P. and Sperhac, A.M. (2006) 'National agenda for advanced practice nursing: The practice doctorate'. *Journal of Professional Nursing*, 22 (1), 7–14.
- Collinson, J.A. (2005) 'Artistry and analysis: Student experiences of UK practice-based doctorates in art and design'. *International Journal of Qualitative Studies in Education*, 18 (6), 713–28.
- Cosner, S., Tozer, S. and Smylie, M. (2012) 'The EdD program at the University of Illinois at Chicago: Using continuous improvement to promote school leadership preparation'. *Planning and Changing*, 43 (1–2), 127–48.
- Costley, C. (2013) 'Evaluation of the current status and knowledge contributions of professional doctorates'. Quality in Higher Education, 19 (1), 7–27.
- Costley, C. (2014) 'Professional doctorates in the UK'. ADAPT Bulletin, 17 June, 1–3.
- Costley, C. and Armsby, P. (2007) 'Research influences on a professional doctorate'. Research in Post-Compulsory Education, 12 (3), 343–55.
- Costley, C. and Stephenson, J. (2007) 'The impact of a professional doctorate centred on the candidates' work'. Work Based Learning e-Journal, 1–15.
- Crisan, O. (2007) 'Teaching human rights at the doctoral school in Romania'. *Pharmacy Education*, 7 (4), 375–7.
- Crossouard, B. (2008) 'Developing alternative models of doctoral supervision with online formative assessment'. Studies in Continuing Education, 30 (1), 51–67.
- Crossouard, B. and Pryor, J. (2008) 'Becoming researchers: A sociocultural perspective on assessment, learning and the construction of identity in a professional doctorate'. *Pedagogy, Culture and Society*, 16 (3), 221–37.
- Crossouard, B. and Pryor, J. (2009) 'Using email for formative assessment with professional doctorate students'. Assessment and Evaluation in Higher Education, 34 (4), 377–88.
- Dawson, K. and Kumar, S. (2014) 'An analysis of professional practice EdD dissertations in educational technology'. *TechTrends*, 58 (4), 62–72.
- DeMarco, R.F., Pulcini, J., Haggerty, L.A. and Tang, T. (2009) 'Doctorate in nursing practice: A survey of Massachusetts nurses'. *Journal of Professional Nursing*, 25 (2), 75–80.
- Devenish, R., Dyer, S., Jefferson, T., Lord, L., van Leeuwen, S. and Fazakerley, V. (2009) 'Peer to peer support: The disappearing work in the doctoral student experience'. *Higher Education Research and Development*, 28 (1), 59–70.
- Doncaster, K. and Lester, S. (2002) 'Capability and its development: Experiences from a work-based doctorate'. Studies in Higher Education, 27 (1), 91–101.
- Doncaster, K. and Thorne, L. (2000) 'Reflection and planning: Essential elements of professional doctorates'. Reflective Practice: International and Multidisciplinary Perspectives, 1 (3), 391–9.
- Dowling, R., Gorman-Murray, A., Power, E. and Luzia, K. (2012) 'Critical reflections on doctoral research and supervision in human geography: The "PhD by publication". *Journal of Geography in Higher Education*, 36 (2), 293–305.
- Dracup, K., Cronenwett, L., Meleis, A.I. and Benner, P.E. (2005) 'Reflections on the doctorate of nursing practice'. *Nursing Outlook*, 53 (4), 177–82.

- Draye, M.A., Acker, M. and Zimmer, P.A. (2006) 'The practice doctorate in nursing: Approaches to transform nurse practitioner education and practice'. *Nursing Outlook*, 54 (3), 123–9.
- Eastman, C. and Maguire, K. (2016) 'Critical autobiography in the professional doctorate: Improving students' writing through the device of literature'. Studies in Continuing Education, 38 (3), 355–72.
- Ellis, L.B. (2006) 'The professional doctorate for nurses in Australia: Findings of a scoping exercise'. *Nurse Education Today*, 26 (6), 484–93.
- Ellis, L. (2007) 'Academics' perceptions of the professional or clinical doctorate: Findings of a national survey'. *Journal of Clinical Nursing*, 16 (12), 2272–9.
- Enger, K. and Lajimodiere, D. (2011) 'A multi-cultural transformative approach to learning: Assessing attitude change in doctoral students following an online diversity course'. *Multicultural Education and Technology Journal*, 5 (3), 176–93.
- Erichsen, E.A., DeLorme, L., Connelley, R., Okurut-Ibore, C., McNamara, L. and Aljohani, O. (2013) 'Sociotechnical systems approach: An internal assessment of a blended doctoral program'. *Journal of Continuing Higher Education*, 61 (1), 23–34.
- Evans, T. (1997) 'Flexible doctoral research: Emerging issues in professional doctorate programs'. Studies in Continuing Education, 19 (2), 174–82.
- Everson, S.T. (2009) 'A professional doctorate in educational leadership: Saint Louis University's EdD program'. Peabody Journal of Education, 84 (1), 86–99.
- Exter, M., Korkmaz, N. and Boling, E. (2014) 'Student support and advising in a new online EdD of instructional systems technology program: A design case'. *TechTrends*, 58 (4), 36–44.
- Fenge, L.-A. (2009) 'Professional doctorates: A better route for researching professionals?'. Social Work Education, 28 (2), 165–76.
- Fenge, L.-A. (2010) 'Sense and sensibility: Making sense of a professional doctorate'. Reflective Practice: International and Multidisciplinary Perspectives, 11 (5), 645–56.
- Fillery-Travis, A.J. (2014) 'The framework of a generic DProf programme: A reflection on its design, the relational dimension for candidates and advisers and the potential for knowledge co-creation'. Studies in Higher Education, 39 (4), 608–20.
- Fitzpatrick, J.J. and Donahue, M. (2011) 'Transitioning hospital-based nurse leaders to professional doctorates'. *Nurse Leader*, 9 (5), 46–55.
- Flessa, J. (2007) 'The trouble with the EdD'. Leadership and Policy in Schools, 6 (2), 197-208.
- Forbes, J. (2008) 'Reflexivity in professional doctoral research'. Reflective Practice: International and Multidisciplinary Perspectives, 9 (4), 449–60.
- Fox, A. and Slade, B. (2014) 'What impact can organisations expect from professional doctorates?'. Professional Development in Education, 40 (4), 546–60.
- Fuller, J.S., Risner, M.E., Lowder, L., Hart, M. and Bachenheimer, B. (2014) 'Graduates' reflections on an online doctorate in educational technology'. *TechTrends*, 58 (4), 73–80.
- Fulton, J., Kuit, J., Sanders, G. and Smith, P. (2012) 'The role of the professional doctorate in developing professional practice'. *Journal of Nursing Management*, 20 (1), 130–9.
- Galvin, K. and Carr, E. (2003) 'The emergence of professional doctorates in nursing in the UK: Where are we now?'. *Nursing Times Research*, 8 (4), 293–307.
- Gill, G. (2014) 'Executive doctorate in business at USF?'. Informing Faculty, 2 (3), 1–30.
- Ginsberg, M.B., Knapp, M.S. and Farrington, C.A. (2014) 'Using transformative experiences to prepare instructional leaders through doctoral education'. *Journal of Research on Leadership Education*, 9 (2), 168–94
- Graham, E. (2007) 'The professional doctorate in practical theology: An idea whose time has come?'. *International Journal of Practical Theology*, 10 (2), 298–311.
- Grant, C.L. and Tomal, D.R. (2015) 'Guiding social work doctoral graduates through scholarly publications and presentations'. *Journal of Teaching in Social Work*, 35 (1–2), 179–96.
- Griffin, K.L. (2011) 'Starting from ground zero: Establishing a collection for a new doctoral program'. Behavioral and Social Sciences Librarian, 30 (4), 223–45.
- Grossman, F., Tappert, C., Bergin, J. and Merritt, S.M. (2011) 'A research doctorate for computing professionals'. *Communications of the ACM*, 54 (4), 133–41.
- Guthrie, J.W. (2009) 'The case for a modern Doctor of Education degree (EdD): Multipurpose education doctorates no longer appropriate'. *Peabody Journal of Education*, 84 (1), 3–8.

- Guthrie, J.W. and Marsh, D.D. (2009) 'Strategies for elevating the public and professional regard of the EdD'. Peabody Journal of Education, 84 (1), 100-6.
- Hallinger, P. (2011) 'A review of three decades of doctoral studies using the principal instructional management rating scale: A lens on methodological progress in educational leadership'. Educational Administration Quarterly, 47 (2), 271–306.
- Hartocollis, L., Cnaan, R.A. and Ledwith, K. (2014) 'The social work practice doctorate'. Research on Social Work Practice, 24 (5), 636–42.
- Hartocollis, L., Solomon, P., Doyle, A. and Ditty, M. (2015) 'An evaluation of the University of Pennsylvania's practice doctorate (DSW) program'. *Journal of Teaching in Social Work*, 35 (1–2), 116–30.
- Hawkes, D. and Taylor, S. (2014) 'So who wants to do an EdD anyway? Evidence from the Institute of Education EdD completions 1996–2013'. Work Based Learning e-Journal International, 4 (1).
- Hawkes, D. (2016) 'Why do a Professional Doctorate? Evidence from prospective EdD students'. *International Journal of Continuing Education and Lifelong Learning*, 8 (2), 34–46.
- Helmes, E. and Pachana, N.A. (2005) 'Professional doctoral training in psychology: International comparison and commentary'. Australian Psychologist, 40 (1), 45–53.
- Huisman, J. and Naidoo, R. (2006) 'The professional doctorate: From Anglo-Saxon to European challenges'. Higher Education Management and Policy, 18 (2), 1–13.
- lannone, R. (1992) 'A critical perspective reform paradigm for EdD programs'. *Education*, 112 (4), 612–17. Ingleton, C., Ramcharan, P., Ellis, L. and Schofield, P. (2001) 'Introducing a professional doctorate in nursing and midwifery'. *British Journal of Nursing*, 10 (22), 1469–76.
- Jablonski, A.M. (2001) 'Doctoral studies as professional development of educators in the United States'. European Journal of Teacher Education, 24 (2), 215–21.
- Jackson, D. (2013) 'Completing a PhD by publication: A review of Australian policy and implications for practice'. Higher Education Research and Development, 32 (3), 355–68.
- Jagiello, J. (2014) 'The professional doctorate by public works: Reflections on a case study in curating in public spaces'. Higher Education, Skills and Work-Based Learning, 4 (2), 196–206.
- Jang, Y.J., Woo, H. and Henfield, M.S. (2014) 'A qualitative study of challenges faced by international doctoral students in counselor education supervision courses'. Asia Pacific Education Review, 15 (4), 561–72.
- Johnson, D. (2005) 'Assessment matters: Some issues concerning the supervision and assessment of work-based doctorates'. *Innovations in Education and Teaching International*, 42 (1), 87–92.
- Jolley, J. (2007) 'Choose your doctorate'. Journal of Clinical Nursing, 16 (2), 225–33.
- Joyce, D. and Young, A. (2004) 'Developing and implementing a professional doctorate in computing'. In Lister, R. and Young, A.L. (eds) Computer Education 2004: Proceedings of the Sixth Australasian Computing Education Conference (ACE2004), Dunedin, New Zealand (Conferences in Research and Practice in Information Technology 30). Sydney: Australian Computer Society, 145–9.
- Kettle, M. (2014) 'Reflecting upon child protection: The professional doctorate journey'. *Higher Education, Skills and Work-Based Learning*, 4 (2), 184–95.
- Kivirauma, J. (1999) 'Finnish doctoral theses in education in the 1900s'. Scandinavian Journal of Educational Research, 43 (3), 295–312.
- Klenowski, V., Ehrich, L., Kapitzke, C. and Trigger, K. (2011) 'Building support for learning within a Doctor of Education programme'. Teaching in Higher Education, 16 (6), 681–93.
- Klenowski, V. and Lunt, I. (2008) 'Enhancing learning at doctoral level through the use of reflection?'. Assessment and Evaluation in Higher Education, 33 (2), 203–17.
- Knight, C. and Lagana, M. (1999) 'The use of a teaching practicum for doctoral students in social work'. Journal of Teaching in Social Work, 18 (1–2), 13–22.
- Kohun, F., Ali, A. and DeLorenzo, G. (2004) 'The collaborative characteristics of professional doctorate degrees: A case example of a doctorate program in information systems and communications'. Issues in Information Systems, 5 (1), 166–72.
- Kot, F.C. and Hendel, D.D. (2012) 'Emergence and growth of professional doctorates in the United States, United Kingdom, Canada and Australia: A comparative analysis'. Studies in Higher Education, 37 (3), 345–64.
- Kumar, S. (2014) 'A systematic approach to the assessment of impact in a professional doctorate'. Higher Education, Skills and Work-Based Learning, 4 (2), 171–83.

- Kumar, S. and Antonenko, P. (2014) 'Connecting practice, theory and method: Supporting professional doctoral students in developing conceptual frameworks'. *TechTrends*, 58 (4), 54–61.
- Kumar, S. and Dawson, K. (2013) 'Exploring the impact of a professional practice education doctorate in educational environments'. Studies in Continuing Education, 35 (2), 165–78.
- Kumar, S. and Dawson, K. (2014) 'The impact factor: Measuring student professional growth in an online doctoral program'. *TechTrends*, 58 (4), 89–97.
- Kumar, S., Dawson, K., Black, E.W., Cavanaugh, C. and Sessums, C.D. (2011) 'Applying the community of inquiry framework to an online professional practice doctoral program'. *International Review of Research in Open and Distance Learning*, 12 (6), 126–42.
- La Belle, T.J. (2004) Credential Inflation and the Professional Doctorate in California Higher Education (Research and Occasional Paper Series CSHE.1.04). Berkeley: Center for Studies in Higher Education.
- Lake, J. (2015) 'Autoethnography and reflective practice: Reconstructing the doctoral thesis experience'. Reflective Practice: International and Multidisciplinary Perspectives, 16 (5), 677–87.
- Lee, A., Brennan, M. and Green, B. (2009) 'Re-imagining doctoral education: Professional doctorates and beyond'. *Higher Education Research and Development*, 28 (3), 275–87.
- Leijen, Ä., Lepp, L. and Remmik, M. (2016) 'Why did I drop out? Former students' recollections about their study process and factors related to leaving the doctoral studies'. Studies in Continuing Education, 38 (2), 129–44.
- Lester, S. (2004) 'Conceptualizing the practitioner doctorate'. Studies in Higher Education, 29 (6), 757-70.
- Lester, S. (2012) 'Creating original knowledge in and for the workplace: Evidence from a practitioner doctorate'. Studies in Continuing Education, 34 (3), 267–80.
- Li, J., Friedel, J. and Rusche, P. (2011) 'Examining practical relevance of the coursework of doctoral leadership programs'. Community College Journal of Research and Practice, 35 (1–2), 3–17.
- Lipu, S. and Hill, A. (2005) 'High level learning by design: The nuts and bolts of assessment and evaluation in a doctorate of business administration program'. Australian Library Journal, 54 (3), 200–25.
- Loss, C.G. (2009) 'Building, sustaining, and expanding the education doctorate at Peabody College: An administrative view'. *Peabody Journal of Education*, 84 (1), 44–7.
- Loxley, A. and Seery, A. (2012) 'The role of the professional doctorate in Ireland from the student perspective'. Studies in Higher Education, 37 (1), 3–17.
- Malloch, M. (2010) 'Professional doctorates: An Australian perspective'. Work Based Learning e-Journal, I (1), 35–58.
- Malone, B.G., Nelson, J.S. and Nelson, C.V. (2004) 'Academic and affective factors contributing to degree completion of doctoral students in educational administration'. *Teacher Educator*, 40 (1), 33–55.
- Manathunga, C., Smith, C. and Bath, D. (2004) 'Developing and evaluating authentic integration between research and coursework in professional doctorate programs'. *Teaching in Higher* Education, 9 (2), 235–46.
- Marsh, D.D. and Dembo, M.H. (2009) 'Rethinking school leadership programs: The USC EdD program in perspective'. *Peabody Journal of Education*, 84 (1), 69–85.
- Maxwell, T. (2003) 'From first to second generation professional doctorate'. Studies in Higher Education, 28 (3), 279–91.
- Maxwell, T.W. and Kupczyk-Romanczuk, G. (2009) 'Producing the professional doctorate: The portfolio as a legitimate alternative to the dissertation'. *Innovations in Education and Teaching International*, 46 (2), 135–45.
- Maxwell, T.W., McConaghy, C. and Ninnes, P. (2004) 'Offering a doctoral program internationally: Tensions and congruities'. *Journal of Research in International Education*, 3 (1), 71–86.
- Maxwell, T.W. and Shanahan, P.J. (1996) 'The Doctor of Education in Australia: Some comparative data'. Journal of Institutional Research, 5 (1), 7–18.
- Maxwell, T.W. and Shanahan, P.J. (1997) 'Towards a reconceptualisation of the doctorate: Issues arising from comparative data relating to the EdD degree in Australia'. *Studies in Higher Education*, 22 (2), 133–50.
- McNair, D.E. (2010) 'Preparing community college leaders: The AACC core competencies for effective leadership and doctoral education'. *Community College Journal of Research and Practice*, 34 (1–2), 199–217.

- McVicar, A., Caan, W., Hillier, D., Munn-Giddings, C., Ramon, S. and Winter, R. (2006) 'A shared experience: An interdisciplinary professional doctorate in health and social care'. *Innovations in Education and Teaching International*, 43 (3), 211–22.
- Miguel, C.S. and Nelson, C.D. (2007) 'Key writing challenges of practice based doctorates'. *Journal of English for Academic Purposes*, 6 (1), 71–86.
- Milton, C.L. (2005) 'Scholarship in nursing: Ethics of a practice doctorate'. Nursing Science Quarterly, 18 (2), 113–16.
- Mishima, Y. (2004) 'A new doctoral course in the 21st century COE program, materials science, at Tokyo Institute of Technology'. Science and Technology of Advanced Materials, 5 (4), 533–5.
- Morley, M. and Petty, N.J. (2010) 'Professional doctorate: Combining professional practice with scholarly inquiry'. British Journal of Occupational Therapy, 73 (4), 186–8.
- Mountford, M. (2005) 'The journey toward transformational learning in a statewide doctoral program'. Innovative Higher Education, 30 (3), 213–27.
- Neumann, R. and Goldstein, M. (2002) 'Issues in the ongoing development of professional doctorates: The DBA example'. *Journal of Institutional Research*, 11 (1), 23–37.
- Niven, P. and Grant, C. (2012) 'PhDs by publications: An "easy way out"?'. Teaching in Higher Education, 17 (1), 105–11.
- Nogeste, K. (2008) 'Dual cycle action research: A professional doctorate case study'. *International Journal of Managing Projects in Business*, I (4), 566–85.
- NQAI (National Qualifications Authority of Ireland) (2006) Review of Professional Doctorates. York: ESCalate (Education Subject Centre of the Higher Education Academy).
- Oktay, J.S., Jacobson, J.M. and Fisher, E. (2013) 'Learning through experience: The transition from doctoral student to social work educator'. *Journal of Social Work Education*, 49 (2), 207–21.
- Olson, K. and Clark, C.M. (2009) 'A signature pedagogy in doctoral education: The leader-scholar community'. *Educational Researcher*, 38 (3), 216–21.
- Orlans, V. (2014) 'Developing the researching professional: The case of a professional doctorate for psychological therapists'. Higher Education, Skills and Work-Based Learning, 4 (2), 161–70.
- Osterman, K., Furman, G. and Sernak, K. (2014) 'Action research in EdD programs in educational leadership'. *Journal of Research on Leadership Education*, 9 (1), 85–105.
- Parker, R. (2009) 'A learning community approach to doctoral education in the social sciences'. Teaching in Higher Education, 14 (1), 43–54.
- Perry, J.A. (2012) 'To EdD or not to EdD?'. Kappan, 94 (1), 41-4.
- Perry, J.A. (2015) 'The Carnegie Project on the Education Doctorate'. Change: Magazine of Higher Learning, 47 (3), 56–61.
- Pratt, N., Tedder, M., Boyask, R. and Kelly, P. (2015) 'Pedagogic relations and professional change: A sociocultural analysis of students' learning in a professional doctorate'. Studies in Higher Education, 40 (1), 43–59.
- Price, D.C. and Money, A.H. (2002) 'Alternative models for doctoral mentor organisation and research supervision'. *Mentoring and Tutoring: Partnership in Learning*, 10 (2), 127–35.
- Rayner, S., Lord, J., Parr, E. and Sharkey, R. (2015) "Why has my world become more confusing than it used to be?": Professional doctoral students reflect on the development of their identity'. *Management in Education*, 29 (4), 158–63.
- Robinson, G., Morgan, J. and Reed, W. (2012) 'Disruptive innovation in higher education: The professional doctorate'. *International Journal of Information and Education* Technology, 6 (1), 85–9.
- Rothwell, D.W., Lach, L., Blumenthal, A. and Akesson, B. (2015) 'Patterns and trends of Canadian social work doctoral dissertations'. *Journal of Teaching in Social Work*, 35 (1–2), 46–64.
- Rudman, N.P.C. (2013) 'A critical reflection of self in context first steps towards the professional doctorate'. Reflective Practice: International and Multidisciplinary Perspectives, 14 (2), 183–95.
- San Miguel, C. and Nelson, C.D. (2007) 'Key writing challenges of practice-based doctorates'. *Journal of English for Academic Purposes*, 6 (1), 71–86.
- Sarros, J.C., Willis, R.J. and Fisher, R. (2002) 'The DBA in Australia'. *Journal of Institutional Research*, 11 (2), 1–13.
- Sarros, J.C., Willis, R.J. and Palmer, G. (2005) 'The nature and purpose of the DBA: A case for clarity and quality control'. *Education + Training*, 47 (1), 40–52.

- Sayed, M.G. and Al-Shehri, M.Y. (2012) 'A matter of degrees: The introduction of clinical doctorates to the Saudi higher education system and a comparative prospective from the American model'. *Medical Teacher*, 34 (Supplement 1), S75–S80.
- Sharmini, S., Spronken-Smith, R., Golding, C. and Harland, T. (2015) 'Assessing the doctoral thesis when it includes published work'. Assessment and Evaluation in Higher Education, 40 (1), 89–102.
- Silvester, A. (2011) 'Doing a doc! The thoughts, experiences and relationships of students undertaking a professional doctorate in counselling'. *Counselling and Psychotherapy Research*, 11 (3), 179–85.
- Simpson, C. and Sommer, D. (2016) 'The practice of professional doctorates: The case of a UK-based distance DBA'. *Journal of Management Education*, 40 (5), 576–94.
- Skipper, A. and Lewis, N.M. (2006) 'Clinical registered dietitians, employers, and educators are interested in advanced practice education and professional doctorate degrees in clinical nutrition'. *Journal of the American Dietetic Association*, 106 (12), 2062–6.
- Smith, D.G. and Delmore, B. (2007) 'Three key components to successfully completing a nursing doctoral program'. Journal of Continuing Education in Nursing, 38 (2), 76–82.
- Smith, N.-J. (2013) 'Professional doctorates and nursing practice contribution: A systematic literature search and descriptive synthesis'. *Journal of Nursing Management*, 21 (2), 314–26.
- Smith, P.R. (2000) 'A meeting of cultures: Part-time students in an EdD program'. *International Journal of Leadership in Education*, 3 (4), 359–80.
- Smith, P., Curtis, H., Sanders, G., Kuit, J. and Fulton, J. (2011) 'Student perceptions of the professional doctorate'. Work Based Learning e-Journal, 2 (1), 135–54.
- Southern, S., Cade, R. and Locke, D.W. (2012) 'Doctor of Professional Counseling: The next step'. Family Journal: Counseling and Therapy for Couples and Families, 20 (1), 5–12.
- Sperhac, A.M. and Clinton, P. (2004) 'Facts and fallacies: The practice doctorate'. *Journal of Pediatric Health Care*, 18 (6), 292–6.
- Sperhac, A.M. and Clinton, P. (2008) 'Doctorate of nursing practice: Blueprint for excellence'. *Journal of Pediatric Health Care*, 22 (3), 146–51.
- Stanley, J.M. (2005) 'Evaluating the doctorate of nursing practice: Moving toward a new vision of nurse practitioner education'. *Journal for Nurse Practitioners*, 1 (4), 209–12.
- Starcher, R.L. (2004) 'African students in theological doctoral programs in Christian institutions of higher learning'. *Christian Higher Education*, 3 (3), 207–22.
- Starcher, R.L. (2004) 'A non-Western doctoral program in theology for Africans in Africa'. *Christian Higher Education*, 3 (4), 295–311.
- Stein, K.F. (2010) 'The doctorate of nursing practice and the clinical project: Use of the SQUIRE guidelines for project dissemination and evaluation'. *Journal of the American Psychiatric Nurses Association*, 16 (5), 278–9.
- Stein, K.F. (2011) 'The doctorate of nursing practice: Elaboration of contributions and roles'. *Journal of the American Psychiatric Nurses Association*, 17 (4), 271–2.
- Stephenson, J., Malloch, M. and Cairns, L. (2006) 'Managing their own programme: A case study of the first graduates of a new kind of doctorate in professional practice'. Studies in Continuing Education, 28 (1), 17–32.
- Stephenson, J., Malloch, M., Cairns, L. and Costley, C. (2004) 'Towards a third generation of professional doctorates managed by the learners themselves?'. Deakin Conference on Professional Doctorates.
- Swider, S.M., Levin, P., Cowell, J., Breakwell, S., Holland, P. and Wallinder, J. (2009) 'Community/public health nursing practice leaders' views of the doctorate of nursing practice'. *Public Health Nursing*, 26 (5), 405–11.
- Taylor, J. (2008) 'Quality and standards: The challenge of the professional doctorate'. *Higher Education in Europe*, 33 (1), 65–87.
- Taylor, N. and Maxwell, T.W. (2004) 'Enhancing the relevance of a professional doctorate: The case of the Doctor of Education degree at the University of New England'. Asia-Pacific Journal of Cooperative Education, 5 (1), 60–9.
- Taylor, R.T. and Storey, V.A. (2013) 'Leaders, critical friends, and the education community: Enhancing effectiveness of the professional practice doctorate'. *Journal of Applied Research in Higher Education*, 5 (1), 84–94.

- Taysum, A. (2006) 'The distinctiveness of the EdD within the university tradition'. *Journal of Educational Administration and History*, 38 (3), 323–34.
- Taysum, A. (2007) 'The distinctiveness of the EdD in producing and transforming knowledge'. *Journal of Educational Administration and History*, 39 (3), 285–96.
- Terry, T. and Ghosh, R. (2015) 'Mentoring from different social spheres: How can multiple mentors help in doctoral student success in EdD programs?'. *Mentoring and Tutoring: Partnership in Learning*, 23 (3), 187–212.
- Terzioglu, F. (2011) 'Leadership competence educational model for a twenty-first century nursing doctoral education in contemporary Turkey'. *International Journal of Leadership in Education*, 14 (4), 443–55.
- Thyer, B.A. (2003) 'A student portfolio approach to conducting doctoral social work comprehensive examinations'. *Journal of Teaching in Social Work*, 23 (3–4), 117–26.
- Tucker, D.L. (2006) 'The rise of the professional Doctor of Ministry degree in the Association of Theological Schools'. Evangelical Review of Theology, 30 (1), 13–30.
- Tuñón, J. and Ramirez, L. (2010) 'ABD or EdD? A model of library training for distance doctoral students'. Journal of Library Administration, 50 (7–8), 989–96.
- Valentina, K. and Ingrid, L., (2008) 'Enhancing learning at doctoral level through the use of reflection?'. Assessment & Evaluation in Higher Education, 33 (2), 203–17.
- Walker, D.H.T. (2008) 'Reflections on developing a project management doctorate'. *International Journal of Project Management*, 26 (3), 316–25.
- Ward, Y.L., Johnson, W.B. and Campbell, C.D. (2004) 'Practitioner research vertical teams: A model for mentoring in practitioner-focused doctoral programs'. *Clinical Supervisor*, 23 (1), 179–90.
- Webb, J. and Brien, D.L. (2015) 'Examining the creative arts doctorate in Australia: Implications for supervisors'. *Educational Philosophy and Theory*, 47 (12), 1319–29.
- Webb, M.S. and Allen, L.C. (2005) 'A global survey of AACSB accredited doctoral programs: 2004'. *Journal of Teaching in International Business*, 16 (3), 29–46.
- Wellington, J. and Sikes, P. (2006) "A doctorate in a tight compartment": Why do students choose a professional doctorate and what impact does it have on their personal and professional lives?". Studies in Higher Education, 31 (6), 723–34.
- Wetzel, K. and Ewbank, A. (2013) 'Conceptualizing the innovation: Factors influencing doctoral candidates' interventions in the action research dissertation'. *Educational Action Research*, 21 (3), 392–411.
- Wikeley, F. and Muschamp, Y. (2004) 'Pedagogical implications of working with doctoral students at a distance'. Distance Education, 25 (1), 125–42.
- Wildy, H., Peden, S. and Chan, K. (2015) 'The rise of professional doctorates: Case studies of the doctorate in education in China, Iceland and Australia'. Studies in Higher Education, 40 (5), 761–74.
- Zambo, D. (2011) 'Action research as signature pedagogy in an education doctorate program: The reality and hope'. *Innovative Higher Education*, 36 (4), 261–71.
- Zambo, D. (2014) 'Theory in the service of practice: Theories in action research dissertations written by students in education doctorate programs'. *Educational Action Research*, 22 (4), 505–17.
- Zambo, D., Buss, R.R. and Zambo, R. (2015) 'Uncovering the identities of students and graduates in a CPED-influenced EdD program'. Studies in Higher Education, 40 (2), 233–52.
- Zambo, D. and Isai, S. (2013) 'Action research and the educational doctorate: New promises and visions'. Journal of Research on Leadership Education, 8 (1), 97–112.
- Zambo, R., Zambo, D., Buss, R.R., Perry, J.A. and Williams, T.R. (2014) 'Seven years after the call: Students' and graduates' perceptions of the re-envisioned EdD'. *Innovative Higher Education*, 39 (2), 123–37.
- Zastrow, C. and Bremner, J. (2004) 'Social work education responds to the shortage of persons with both a doctorate and a professional social work degree'. *Journal of Social Work Education*, 40 (2), 351–8.
- Zusman, A. (2013) Degrees of Change: How new kinds of professional doctorates are changing higher education institutions (Research and Occasional Paper Series CSHE.8.13). Berkeley: Center for Studies in Higher Education.





This paper is part of a London Review of Education special feature: 'The EdD at 20: Lessons learned from professional doctorates', edited by Denise Hawkes, Sridevi Yerrabati and Susan Taylor.

The other articles in the 'EdD at 20' feature are:

- Bamberger, A. (2018) 'Academic degree recognition in a global era: The case of the doctorate of education (EdD) in Israel'. London Review of Education, 16 (1), 28–39.
- Burnard, P., Dragovic, T., Ottewell, K. and Lim, W.M. (2018) 'Voicing the professional doctorate and the researching professional's identity: Theorizing the EdD's uniqueness'. *London Review of Education*, 16 (1), 40–55.
- Chua, S.M.J. (2018) 'Being written: Thinking the normative in the EdD'. London Review of Education, 16 (1), 56–62.
- Cunningham, B. (2018) 'Pensive professionalism: The role of "required reflection" on a professional doctorate'. London Review of Education, 16 (1), 63–74.
- Hawkes, D., Yerrabati, S. and Taylor, S. (2018) Editorial: 'The EdD at 20: Lessons learned from professional doctorates'. London Review of Education, 16 (1), 1–3.
- Lunt, I. (2018) Introduction to 'The EdD at 20: Lessons learned from professional doctorates'. London Review of Education, 16 (1), 4–9.
- Moran, E. and Misra, D. (2018) 'Professional doctorates: A pathway to legitimacy for non-academic HE professionals?' London Review of Education, 16 (1), 75–89.
- Robinson, C. (2018) 'The landscape of professional doctorate provision in English higher education institutions: Inconsistencies, tensions and unsustainability'. *London Review of Education*, 16 (1), 90–103.
- Taylor, S. (2018) 'The UCL EdD: An apprenticeship for the future educational professional?' London Review of Education, 16 (1), 104–21.