THE PhD BY PUBLICATION

Susi Peacock   Queen Margaret University,   speacock@qmu.ac.uk
     Edinburgh, Scotland

ABSTRACT

Aim/Purpose	The purpose of this work is to develop more nuanced understandings of the PhD by publication, particularly raising awareness of the retrospective PhD by publication. The article aims to contribute to contemporary debates about the differing pathways to the attainment of doctoral study completion and the artifacts submitted for that purpose. It also seeks to support prospective graduate students and supervisors who are embarking upon alternative routes to doctoral accreditation.
Background	The PhD is considered the pinnacle of academic study – highly cherished, and replete with deeply held beliefs. In response to changes in job markets, developments in the disciplines, and more varied student cohorts, diverse pathways to completion of this award have emerged, such as the PhD by publication (PhDP). A PhDP may either be prospective or retrospective. For the former, publications are planned and created with their contributions to the PhDP in mind. The retrospective PhD is assembled after some, or most, of the publications have been completed. The artifact submitted for examination in this case consists of a series of peer-reviewed academic papers, books, chapters, or equivalents that have been published or accepted for publication, accompanied by an over-arching narrative. The retrospective route is particularly attractive for professionals who are research-active but lack formal academic accreditation at the highest level.
Methodology	This article calls upon a literature review pertaining to the award of PhDP combined with the work of authors who offer their personal experiences of the award. The author also refers to her candidature as a Scottish doctoral student whilst studying for the award of PhD by publication.
Contribution	This work raises awareness of the PhDP as a credible and comparable pathway for graduate students. The article focuses upon the retrospective PhDP which, as with all routes to doctoral accreditation, has both benefits and issues for the candidate, discipline, and institution.
Findings	The literature review identifies a lack of critical research into the PhDP, which mirrors the embryonic stage of the award's development. Two specific anxieties are noted throughout the literature pertaining to the retrospective PhDP: first,

	issues for the candidate when creating and presenting an artifact submitted for examination; and, second, the diverse, and sometimes conflicting, advantages and challenges for the candidate, the subject specialism, and the institution of this pathway to doctoral accreditation.
Recommendations for Practitioners	The advantages and challenges of the retrospective PhDP, for candidates, disciplines, and institutions are summarized especially pertaining to the artifact for submission, to guide conversations between supervisors and potential doctoral candidates.
Impact on Society	It is hoped that this work will inform on-going conversations about pathways to PhD accreditation.
Future Research	The article closes by proposing an emergent typology of the PhDP and by posing questions for those working in the area of doctoral study. Both seek to progress conversations about routes to doctoral accreditation.
Keywords	PhD by publication, doctoral studies, PhD by published works, PhD by published papers.

INTRODUCTION

Pathways to the attainment of doctoral study, and the artifacts submitted for that purpose, have diversified in response to changes in job markets, disciplines, and a more varied graduate student population (Francis, Mill, Chapman, & Birks, 2009; Sharmini, Spronken-Smith, Golding, & Harland, 2015). Nevertheless, such changes to the widely acclaimed gold standard of doctoral studies have led to on-going anxiety about "what are seen as traditional and immutable forms and modes of engagement in scholarly work at this level" (Lee, 2010, p. 14). This article considers one recent pathway to submission – the PhD by publication – and specifically explores the retrospective PhD by publication (PhDP) which is particularly attractive for professionals who are research-active but lack formal academic accreditation at the highest level. In the case of the retrospective PhDP, an educational institution accepts the candidate's prior research experience as fulfilling requirements for a doctoral degree. The artifact submitted for examination consists of a series of peer-reviewed academic papers, books, chapters, or equivalents that have been published or accepted for publication, accompanied by an over-arching narrative (Quality Assurance Agency for Higher Education, 2011).

The article commences with a discussion about the award of a PhDP, exploring the features which differentiate a retrospective and prospective PhDP. The author then reviews her methodology, which entails an extensive literature review combined with the personal experiences of those who have undertaken this route to accreditation. She also calls upon her five-year doctoral journey leading to the award of a retrospective PhDP. The findings acknowledge the lack of critical research into the award and then consider two recurrent themes identified in the limited research pertaining to the retrospective PhDP. The first of these is the reported issues for the candidate when creating and presenting an artifact submitted for the retrospective PhDP. The second is the diverse advantages and challenges for the candidate, the subject specialism, and the institution of this pathway to doctoral accreditation. Informed by the findings, the author then proffers an emergent typology for the prospective and retrospective PhDP; its aim is to provide a finer detailed classification reflecting the diversity of artifacts submitted for the PhDP. The article closes by posing questions to prompt further conversations about routes to doctoral accreditation. In her conclusion, the author contends that the PhDP is a credible and comparable option for the doctoral candidate although there are considerable demands that need to be addressed especially in the planning and writing of the submitted artifact.

The purpose of this article is to develop more informed and nuanced interpretations of the PhDP. This work also seeks to support prospective graduate students and supervisors who are embarking upon similar endeavours. Three research questions have framed this work:

1. What are the specific challenges faced by doctoral candidates when submitting an artifact for examination for the retrospective PhDP?
2. What are the benefits and issues for candidates, the discipline and the institution of a retrospective PhDP?
3. How, and in what ways, can we develop more informed and nuanced understandings of the PhD by publication?

This article considers only artifacts submitted for the award of PhDP that consist of a commentary plus journal publications; a thorough review of doctoral accreditation based on creative works such as novels, plays and poems plus narrative is provided by Butt (2013).

THE PhD BY PUBLICATION

The following section introduces the award of PhD by publication (PhDP) and explores the differences between the progressive and retrospective route to doctoral accreditation.

BACKGROUND TO THE PhD BY PUBLICATION

The PhDP was introduced into the UK in 1966 at Cambridge University. It is also known as the PhD by published works or the PhD by published papers (Brien, 2008). This pathway to doctoral accreditation has been slowly accepted by other UK and Australian institutions (Powell with Crouch, 2008; Sharmini et al., 2015), although the actual number of completed PhDPs is uncertain. For instance, there is no data of the number of PhDPs in the UK amongst the 22,780 doctoral completions for 2014/2015 (Higher Education Statistics Agency, 2016). Powell (2004), for the UK Council for Graduate Education, reports growth in the number of awarding institutions for this pathway from 31 in 1996 to 49 in 2004. More recently in 2015 Christianson, Elliott, & Massey summarized the results of a UKCGE study investigating the inclusion of publications as part of a doctoral thesis; they report that 83% of the 50 participating educational institutions allowed PhDP or equivalents.

The PhDP was originally conceived to allow practitioners (such as creative writers, health and business professionals) who have already published and may still be research active to gain academic recognition at the highest level (Butt, 2013). The formal accreditation may enable experienced practitioners (such as pharmaceutical staff in Wilson's case study in the UK) to become more involved in research activities in their professional lives which are outwith academia, and potentially to supervise research degree students (Wilson, 2002). The PhDP is also attractive for practitioners entering academia mid-career who can bring with them a corpus of published papers and allows them to convert their professionally recognized practice into valid currency in the university setting (Davies & Rolfe, 2009).

The PhDP usually consists of a number of published peer-reviewed academic papers or equivalents. These are accompanied by an over-arching text; however, the extent and focus of this piece depends upon the awarding institution. As a minimum, the narrative summarizes the contribution of the publications to knowledge in the field and indicates a candidate's ability to continue to do so "in an independent, original way" (Powell, 2004, p. 17). There is much variation in the titling of the narrative as Green and Powell (2005) note in their informed work on the PhDP. It has been variously referred to as commentary, summary, synthesis, critique, critical essay, and appraisal. The term "exegesis" is widely used and has been adopted in this article. An exegesis is thus the over-arching text that accompanies the publications and in which the candidate offers "a convincing critical narrative about their overall intellectual position, unifying the submitted articles or papers" (Badley, 2009, p. 333).

THE PROGRESSIVE AND RETROSPECTIVE PhDs BY PUBLICATION

Draper (2012) usefully reminds us that a PhDP may either be prospective or retrospective. For the first of these options, the publications are planned and created with their contributions to the PhDP in mind. Lee's insightful work in 2010 explores the prospective PhDP, which is more common in

continental Europe. She offers, as fairly typical, a detailed account of a Swedish candidate who, on commencement of her doctoral studies, was assigned both an administrative/teaching post and research responsibilities for a specific section of a more extensive research project. The output of her work was four peer-reviewed papers, accepted for publication in international journals and which, accompanied by an exegesis, formed part of a doctoral submission. Robins, in Australia, offers a similar example in which she published nine articles and a book chapter during her PhDP studies (Robins & Kanowski, 2008).

The retrospective PhD, in comparison, is assembled after some, or most, of the publications have been completed. There is considerable diversity in the artifacts submitted for this award. As Draper (2012) notes, some submissions for the retrospective PhDP may be viewed as an "elaborate application form," whilst others are similar to a document to be housed in a library created explicitly to be read by other scholars working in the chosen field. Most, if not all, of the selected publications will not have been planned nor written to be part of a doctoral submission, and their number and type will vary considerably. The exegesis may consist of a succinct introduction and conclusion although, in comparison, some awarding institutions will expect a more substantial piece, linking the published works and outlining their coherence and significance (QAA, 2011).

METHODOLOGY

This article calls upon a literature review, undertaken over a period of years during the author's doctoral candidature which enabled a "slow, careful contemplation in which the mind engages with ideas or information and synthesized them into new possibilities and new questions" (Rose, 2016, p. 3). Searches were undertaken periodically in ERIC-EBSCO and supplemented with regular reviews of pertinent international journals such as the International Journal of Doctoral Studies, Assessment and Evaluation in Higher Education, and Studies in Higher Education. Published research by national agencies was also interrogated on a regular basis. Most notable are the three surveys pertaining to the PhDP by the UK Council for Graduate Education (Powell, 2004; Powell with Crouch, 2008; Christianson et al.. 2015) which usefully provide a snapshot of institutional approaches to the award such as fees, eligibility criteria, time to completion, and, perhaps most significantly, the regulations pertaining to the number and type of publications.

In addition, this paper references authors, such as Willis (2011), Cowton (2011) and Jackson (2013), who have written powerful accounts of their personal experiences of completion of the retrospective PhD by publication. For instance, Niven and Grant (2012) offer a frank exposition of their candidatures in South Africa. They describe the painful process of developing a complex, coherent, metanarrative, which presented theoretical, conceptual, and epistemological challenges. The writers note the self-doubt they experienced whilst following this pathway especially when encountering skeptical colleagues who regarded this as a quick-fix solution.

The author also calls upon her personal experiences as a Scottish doctoral student whilst studying for the award of PhD by publication from 2010 to 2015. Taking an autobiographical approach, she calls upon her reflections of creating an artifact for doctoral examination and the benefits and challenges encountered on her journey to accreditation. Like many candidates, prior to undertaking a PhDP, she was research-active and had a significant research portfolio but lacked doctoral accreditation. In 2015, she submitted an exegesis, stating her intellectual position regarding the Community of Inquiry Framework (CoIF), a well-known framework for online learning (Garrison, 2011). Unusually, in her narrative, she used her six selected publications from her research portfolio (some of which had been written during her candidacy) to assist her interrogation of the CoIF and to scrutinize her approach to the inquiry process.

FINDINGS

The literature review identifies a lack of critical research into the PhDP which mirrors the embryonic stage of the award's development (Brien, 2008). Nevertheless two specific areas are consistently

raised in the limited work which discusses the retrospective PhDP. The first of these focuses upon the issues for the candidate when creating and presenting an artifact submitted for examination, and the potential options available to address such demands. The second is the diverse, and sometimes conflicting, advantages and challenges of this pathway to doctoral accreditation for the candidate, the subject specialism, and the institution. The purpose of this section is to guide conversations between supervisors and potential graduate candidates, whilst addressing research questions one and two.

DEMANDS IN CREATING AND PRESENTING SUBMITTED ARTIFACTS FOR A RETROSPECTIVE PHD BY PUBLICATION

A persistent area of concern within the limited research into this award is the precise nature of the artifact submitted for examination. Authors working in this field, such as Park (2005, 2007), Green and Powell (2005), Powell (2004, 2008), Badley (2009), Robins and Kanowski (2008), and Jackson (2013), repeatedly raise concerns about the nature of the artifact submitted for examination and particularly the exegesis, with Butt asserting that "the whole sector is in . . . a muddle when it comes to the critical exegesis" (2013, p. 10). Four issues are outlined here together with the options that could be followed by the doctoral candidate to resolve these demands.

The selection and documentation of the publications

The first demand that candidates will encounter is the identification and selection of published articles which are appropriate and make a substantial contribution to the exegesis (Cowton, 2011; Jackson, 2013). Awarding universities will typically have specific criteria about the minimum and maximum number of publications, the timeframe for inclusion, and on whether a publication has been included in a previous award. There may also be guidance about the quality of the selected articles and place of publication (Badley, 2009). The candidates will need to reflect upon their research portfolio, identifying articles of relevant substance and perhaps acknowledging omissions in their coverage, rigour and depth. The examiners will need to be assured that these published works make "serious contributions to scholarly conversations in their own discourse community" (Badley, 2009, p. 338). Careful selection is also required to avoid criticisms that publications included in a PhDP lack internal consistency and are not indicative of a coherent research portfolio (Badley, 2009; Sharmini et al., 2015). For instance, Niven and Grant (2012) found a lack of theoretical, conceptual, and methodological coherence when reviewing their own publications taken from their research portfolio.

This author's awarding institution required that at least half of the articles had to be published during her candidature. She chose six publications from her research portfolio, the maximum number permitted by the awarding institution; these typified her research focus. In the first chapter of her exegesis, she introduced the selected publications, clarifying their provenance with a short summary of the contribution of each to the narrative and noting links between all six and to her overall research portfolio. The chosen articles had to fulfil two roles. Firstly, they must relate directly to the interrogation of the CoIF. Secondly, but equally important, they had to illustrate her on-going development as a qualitative educational researcher.

Most awarding institutions agree that "co-authored papers can be included in the submission, yet candidates are expected to have made a significant contribution and should ideally be the principal author" (Jackson, 2013, p. 360). However, over two-thirds of the 62 examiners in Sharmini et al.'s study in New Zealand in 2015 were concerned about the intellectual contribution of candidates to multi-authored publications. It is essential for the candidate to clarify their individual contribution to the selected pieces, while recognizing the practice that the first author of many joint publications is often the supervisor. As Robins and Kanowski advise "Good practice requires that student and supervisors discuss the issue of co-authorship prior to embarking on collaborative writing, in the context of the university's policies, and establish a mutually-agreed approach consistent with those policies and professional ethics" (2008, n.p).

Five of this author's publications were co-authored, representing the work of teams of academics and researchers that had been brought together. All those involved had made a small but significant contribution to the paper, and hence they were included in the list of authors. Drawing upon the work of the University of Hertfordshire (Wilson, 2002, p. 75), an Information Sheet detailed the lead author, and the content and nature of the co-authors' contributions for each selected publication. A percentage indicative of the contribution to the whole for each of the authors was verified, signed and dated by each co-author. See Appendix A.

A coherent structure and narrative to the artifact

Francis and colleagues (2009) identify the extensive consideration required by the candidate in the organisation of the artifact for submission – a poorly written and badly organised piece may leave "examiners confused, baffled and puzzled" (Golding, Sharmini, & Lazarovitch, 2014, p. 569). The planning and writing skills of the candidate will be challenged when creating a coherent narrative that links closely to the publications and is easily navigable for the readers, whoever they are and whatever their purposes. As Francis and colleagues sagely note, "The onus is not on the examiner to piece together the thought processes of the candidate. Rather, the candidate is obliged to ensure that his or her argument flows logically and the reader is lead (sic) seamlessly through the doctoral dissertation" (p. 102). Durling (2013), for example, usefully describes and discusses his journey when creating such an artifact and how he eventually distilled his submission into four sections, consisting of context statement (background), contribution to knowledge, methodology, and, finally, the published works. In comparison Badley (2017, personal communication) used a simple model based upon Glassick, Huber, and Maeroff (1997), which focused upon six qualitative standards: clear goals, adequate preparation, appropriate methods, significant results, effective presentation, and reflective critique.

For some candidates, depending on the nature of their submission, the siting of the publications may be problematic. The present author, informed by the work of Steeples' PhDP submission (2003), opted to situate her articles in appendices, with line numbers added to enable exact referencing throughout the narrative. Locating the publications in the main review could have been a distraction from reports of new work in the narrative, especially since publications will have been written according to the various conventions and house styles of the respective journals.

Another consideration for candidates and supervisors is how closely the submitted piece will follow a structure similar to a traditional monograph PhD, which is more familiar to many examiners. Many such as Durling's work, as outlined above, are very different. However, in comparison, the artifact submitted by the present author bore close resemblance to the monograph PhD structure with an introduction including the research questions, followed by an extensive critical literature review of online learning and the CoIF, and then a reflective account of her approach to the inquiry process. The discussions situated the new knowledge, concluding with recommendations for change. For ease of access, the structure was presented diagrammatically.

The critique of the candidate's approach to the inquiry process in the exegesis

Candidates will need to offer a reflective critique of their approach to the inquiry process, as exemplified in their publications. This critique will bring to light for the candidates the key philosophical, theoretical decisions about, and influences upon, their research. Such an appraisal will include a review of their research strategies and paradigm and their alignment as well as a scrutiny of the methods that they used in the inquiry process (design, collection, analysis, and sharing). For the candidate, this critical self-reflection will provide a solid, informed understanding of research to date and a platform to progress future research ventures. However, as found by Niven and Grant (2012), the review of publications written at different times, for different contexts, can be challenging especially if there is little methodological coherence.

In the author's case reflecting upon her journey as a researcher required objective and dispassionate consideration of progress to date, and self-evaluation of contributions to completed and published

research. She hoped that her submission would illustrate her continuing journey as a researcher, demonstrating the strengths and weaknesses of her work from a range of evidence, whilst showing her intention to improve. As Badley (2009) had predicted this critique of her research journey was a vital part of her candidature experience.

An original contribution

The candidate will need to engage with current thinking regarding the nature and definition of originality in regard to PhD submissions and according to the subject specialism (Badley, 2009; Niven & Grant, 2012). This enhanced understanding of originality will inform the candidate's future research enterprises, ensuring that they are aligned with the subject specialism's definition. It will also enable the candidate to support others in a supervisory capacity when undertaking doctoral and master's studies.

For the concluding chapter of the author's submitted artifact, she used the UK Research Excellence Framework (REF, 2012) guidance for her subject specialism about originality ". . . in terms of the innovative character of the research output…" (p. 66). She created two tables, detailing the original contribution to the discipline in the submitted artifact. In the first table, following the advice by Badley (2009), she outlined with specific examples where the publications had made some contribution to new knowledge or were original in their approach, their presentation or their topic, linking back to the definition provided by the REF. In the second table, she identified and detailed how the exegesis had sought to address an identified gap.

As Davis and Rolfe (2009) assert, the PhDP is certainly not for the fainthearted graduate student or supervisor. However, throughout the literature discussing the artifact to be submitted for accreditation for a retrospective PhDP, the diverse advantages and issues of the award for the candidate, the discipline and the institution have emerged. These are now discussed.

THE BENEFITS AND ISSUES OF A RETROSPECTIVE PHD BY PUBLICATION FOR THE CANDIDATE, DISCIPLINE, AND INSTITUTION

For the candidate

Although the journey towards a retrospective PhDP is, at times, destabilizing and uncomfortable, the literature identifies positive outcomes for the candidate. As noted in the previous section, the creation of the artifact may require clarification of the candidate's research portfolio (including overall research aims and focus), a crystallization of the methodology underpinning the research, and a refinement of understandings and use of research methods through the self-evaluation of the candidate as a researcher (Niven & Grant, 2012).

However, on-going research also records the significant issues encountered by PhDP candidates. Most notable will be the frequent comparisons made between the PhDP submission and the traditional monograph thesis, with an on-going perception that the PhDP is a "backdoor route for those who are incapable of earning a higher degree in the conventional way" (Willis, 2011, n.p). Candidates will not only have to defend their work and its contribution to the discipline but also cope with criticisms from colleagues who are often opposed to this route on pedagogical grounds (Robins & Kanowski, 2008). For instance, it is frequently asserted that PhDP candidates lack experience in conceptualizing, organising and then writing a large substantial piece of work as is the case for those compiling a more traditional monograph PhD (Cowton, 2011). The submitted artifact will need to show the examiners that the candidate can plan, organise, execute, and make accessible to readers, a complex, inter-linked text and moreover that its development has enhanced the candidate's "technical skills and craft knowledge" (Brien, 2008, p. 3).

For the discipline

This route to accreditation has the benefit of creating new knowledge and understandings in the discipline (Francis et al., 2009). The candidate will already have made, and will now be continuing to make, a contribution to their subject, through their peer-reviewed, publicly accessible, publications (Brien, 2008). Authors also suggest that the experience of following this route may better equip candidates to continue publishing after the completion of their studies. All too often, doctoral candidates who have followed the traditional PhD route, fail to publish after completing their studies (Francis et al., 2009; Robins & Kanowski, 2008).

Nevertheless those working in the disciplines have expressed anxieties about supervision in relation to the PhDP. Francis et al. (2009) emphasise that the PhDP cannot be undertaken on an *ad hoc* basis, but needs considerable planning from the early stages of the candidature, with supervisors providing practical guidance. However, understandably few supervisors at the present time have experience of PhDP and especially the retrospective PhDP (Cowton, 2011; Jackson, 2013; Wilson, 2002). Those who have some experience may find themselves spread 'too thinly' and unable to provide adequate support. There are additional concerns that candidates who have completed the PhDP may then be ill-prepared to supervise more traditional monograph PhDs, by not having undertaken an extended piece of research.

For the institution

For institutions, there may be considerable benefits such as boosting research productivity with mid-career academics converting their recognized practice into the currency of a university (doctoral accreditation) whilst still undertaking research and publishing (Davies & Rolfe, 2009). Also, those who have completed a PhDP can increase knowledge of alternative pathways to accreditation within an institution as well as widening the pool of examiners (Francis et al., 2009).

Nevertheless, the retrospective PhD presents the institution with considerable quality assurance issues. Jackson's (2013) work helpfully summarizes the variable policy and guidelines of 34 Australian universities for the PhDP. She notes variability of fees and length of enrolment for candidature, as well as the lack of consistency about the length, focus, and purpose of the exegesis, echoing the findings of the UKGCE surveys in 2004 and 2008 (Powell and Powell with Crouch). Particular concerns have been raised about access to a PhDP since many institutions restrict the PhDP to those who are working within the university or have a specific connection, such as being an alumnus (Badley, 2009; Powell, 2004). Such an approach has led to anxieties about the quality of the award, with some considering it is a closed route and therefore a lesser qualification (Brien, 2008; Powell, 2004; Wilson, 2002). There is also too often a lack of institutional clarity about the definitions of 'published'. Some awarding institutions allow papers that have been submitted, or accepted, but not yet published. Other universities will accept papers that are not published but are of 'publishable' quality (Thomson, 2013). For legitimate reasons, such as confidentiality, funded research may limit when and where doctoral studies can be made available in the public domain (Brien, 2008; Robins & Kanowski, 2008). Also, some publishers are not keen for articles to be included in PhDP submissions, which are then typically held in open-access institutional repositories.

DISCUSSIONS: CONTEMPORARY CONVERSATIONS ABOUT ROUTES TO PHD ACCREDITATION

This section addresses the third research question, seeking to develop more nuanced interpretations of the PhD by publication, and is informed by the findings of the literature review.

Authors such as Park (2005, 2007), Green (2005), Powell (2004, 2008), Draper (2012), Badley (2009), Brien (2008), Robins and Kanowski (2008), and Jackson (2013), have all noted particular anxieties about the lack of consistency and commonality between awarding institutions about the PhDP. Using Sharmini et al.'s (2015) typology of "publication-based theses," Draper's thinking (2012), current lit-

erature and the author's personal experiences as a doctoral candidate, an emergent typology of three different types of PhDP is proposed: progressive, retrospective, and intermediate (see Appendix B). The typology particularly considers the role of the supervisor, the features of the artifact to be submitted for examination, and the awarding institution's quality assurance role.

Like Sharmini and colleagues (2015), the present author hopes that this finer detailed classification will reflect the diversity of artifacts submitted for PhDP, helping those embarking upon this award and those providing support and examining. The typology may also inform contemporary debates, potentially leading to a more coherent and consistent perspective about the PhDP.

To frame future discussions, provoke new questions, and challenge assumptions, the author closes by posing questions, shaped by the work of authors referenced throughout this article, about the criteria for judgment of theses and the PhD by publication. The purpose of the questions is to encourage others working in the field of doctoral studies to scrutinize such different pathways to accreditation alongside the more traditional monograph PhD:

- *What differentiates the educational experience of preparing and submitting a PhD by publication from studying for and submitting a typical monograph PhD? Is this difference significant?*
- *Is the PhDP more akin to a professional doctorate than a typical monograph PhD? If so, should the artifact be judged according to different criteria?*
- *In what ways can the PhDP help inform examining of theses which include publications?*
- *What constitutes 'publishability'?*
- *What benchmarks could be used to compare the deliverables from different routes to accreditation?*

Finally, future research into the PhDP could include a literary analysis of PhDP documents. More theses are now available through open publishing and these will provide a rich source of data for future investigations.

CONCLUSION: CONTEMPORARY CONVERSATIONS ABOUT ROUTES TO PHD ACCREDITATION

Badley (2009) points out that "mainstream discussions of the PhD very rarely pay much attention to the PhD by published work" (p.332). The present article explores this lacuna. Whilst accepting that there is limited research into the award, this current piece details two areas which are consistently raised about the retrospective PhDP. Drawing upon these findings and the work of authors researching into the PhDP, the author proposes an emergent typology and hopes that this finer detailed classification will reflect the diversity of artifacts submitted for PhDP, helping those embarking upon this award, and those providing support and examining. The article closes with questions to stimulate a richer debate about alternative pathways to the gold standard of doctoral accreditation.

The author asserts that the PhDP is a credible pathway, having, as with all doctoral routes, both benefits and issues for the candidate, discipline, and institution. She also opines that informed discussions surrounding all routes to doctoral accreditation can lead to more nuanced conceptualisations of the PhD as the pinnacle of academic study.

REFERENCES

Badley, G. (2009). Publish and be doctor-rated: The PhD by published work. *Quality Assurance in Education: An International Perspective, 17*(4), 331-342. doi.org/10.1108/09684880910992313

Brien, D. (2008). Publish or perish? Investigating the doctorate by publication in writing. *The Refereed Proceedings of the 13th Conference of the Australian Association of Writing Programs, University of Technology, Sydney.*

Butt, M. (2013). One i made earlier: On the PhD by publication. *Text, 22*, 1-14.

Christianson, B., Elliott, M., & Massey, B. (2015). *The role of publications and other artifacts in submissions for the UK PhD*. Lichfield: UK Council for Graduate Education.

Cowton, C. (2011, August 4). Looks good on paper. *Times Higher Education*. Retrieved from https://www.timeshighereducation.com/features/looks-good-on-paper/416988.article

Davies, R., & Rolfe, G. (2009). PhD by publication: A Prospective as well as a retrospective award? Some subversive thoughts. *Nurse Education Today, 29*(6), 590-594. doi.org/10.1016/j.nedt.2009.01.006

Draper, S. (2012). *PhDs by publication*. Retrieved from http://www.psy.gla.ac.uk/~steve/resources/phd.html

Durling, E. (2013, May). *Understanding the PhD by publication*. Paper presented at the 2nd International Conference for Design Education Researchers, Oslo, Norway.

Francis, K., Mills, J., Chapman, Y., & Birks, M. (2009). Doctoral dissertations by publication: Building scholarly capacity whilst advancing new knowledge in the discipline of nursing. *Internal Journal of Doctoral Studies, 4*, 97-106. Retrieved from https://www.informingscience.org/Publications/695

Garrison, D. R. (2011.). *E-learning in the 21st century: A framework for research and practice*. London: Routledge-Falmer.

Glassick, C., Huber, M., & Maeroff, G. (1997). *Scholarship assessed – evaluation of the professoriate*. San Francisco, CA: Jossey-Bass.

Golding, C., Sharmini, S., & Lazarovitch, A. (2014). What examiners do: What thesis students should know. *Assessment & Evaluation in Higher Education, 39*(5), 563-576. doi:10.1080/02602938.2013.859230

Green, H., & Powell, S. (2005). The PhD by published work. In H. Green & S. Powell (Eds.), *Doctoral study in contemporary higher education* (pp. 69-85). Maidenhead: Open University Press.

Higher Education Statistics Agency. (2016). *Doctoral students in the UK 2014/2015*. Retrieved from https://www.hesa.ac.uk/

Jackson, D. (2013). Completing a PhD by publication: A review of Australian policy and implications for practice. *Higher Education Research & Development, 32*(3), 355-368. doi:10.1080/07294360.2012.692666

Lee, A. (2010). When the article is the dissertation. In C. Aitchison, B. Kamler & A. Lee (Eds.), *Publishing pedagogies for the doctorate and beyond* (pp. 12-29). Abingdon: Routledge.

Niven, P., & Grant, C. (2012). PhDs by publications: An 'easy way out'? *Teaching in Higher Education, 17*(1), 105-111. doi:10.1080/13562517.2012.640086

Park, C. (2005). New variant PhD: The changing nature of the doctorate in the UK. *Journal of Higher Education Policy and Management, 27*(2), 189-207. doi:10.1080/13600800500120068

Park, C. (2007). *Redefining the doctorate*. Discussion paper. Higher Education Academy, York, UK. Retrieved from http://eprints.lancs.ac.uk/435/

Powell, S. (2004). *The award of PhD by published work in the UK*. Lichfield: UK Council for Graduate Education.

Powell, S. with Crouch, N. (2008). *Higher doctorate awards in the UK*. Lichfield: UK Council for Graduate Education.

Research Excellence Framework (*REF*). (2012). *Part 2C: Main panel C criteria*.

Robins, L., & Kanowski, P. (2008). PhD by publication: A student's perspective. *Journal of Research Practice, 4* (2). Retrieved from http://jrp.icaap.org/index.php/jrp/article/view/136/154

Rose, E. (2016). Reflection in asynchronous online postsecondary courses: A reflective review of the literature. *Reflective Practice*, *17*(6), 2-13. doi:10.1080/14623943.2016.1220936

Sharmini, S., Spronken-Smith, R., Golding, C., & Harland, T. (2015). Assessing the doctoral thesis when it includes published work. *Assessment & Evaluation in Higher Education, 40*(1), 89-102. doi:10.1080/02602938.2014.888535

Steeples, C. (2003). *Networked learning environments: Continuing professional development and the creation and use of multimedia artifacts*. Doctoral dissertation at Lancaster University, UK.

Thomson, P. (2013). *PhD by publication or PhD and publication – part two*. Retrieved from https://patthomson.net/2013/04/22/phd-by-publication-or-phd-and-publication-part-two/

The Quality Assurance Agency for Higher Education. (2011). *Doctoral degree characteristics*. Gloucester: The Quality Assurance Agency for Higher Education.

Willis, R. (2011, August 4). Looks good on paper. *Times Higher Education*. Retrieved from https://www.timeshighereducation.com/features/looks-good-on-paper/416988.article

Wilson, K. (2002). Quality assurance issues for a PhD by published work: A case study. *Quality Assurance in Education: An International Perspective, 10*, 2, 71-78. doi.org/10.1108/09684880210423555

APPENDIX A: AN EXAMPLE INFORMATION SHEET

Full citation for the paper *(full details of the paper)*		
Aim of the paper *(two sentences)*		
Details about the number of times accessed online and/or downloaded	**Details of citations**	**Impact factor of journal**
Approval from publisher for inclusion in PhD *(name and contact details)*		
Background to the Research Project including: • Title of the research project • Aim of the Research Project • The Research Team		
Date research undertaken with a further year for dissemination	**Affiliation**	
Overview		
Shared outputs of the inquiry process *(dissemination)* • Final report available on Internet • Dissemination to learning technology communities		
Pictorial representation of research methods		
Authors' contributions to the article		
% by principal author	Detail contribution to publication	
% by others	Detail contribution to publication	
Signatures of co-authors		
Name	Signature plus date	

APPENDIX B: TOWARDS AN EMERGENT FRAMEWORK FOR PHD BY PUBLICATION

PROSPECTIVE PHD BY PUBLICATION

Option one: publications embedded in the exegesis
Supervisors appointed before first research for publication commences.
Research questions decided early into the candidature, and research and publications planned accordingly.
Awarding institution sets requirements for publications, and exegesis, as well as providing pointed guidance for supervisors and external examiners.
Papers included as separate sections within the exegesis which has a short introduction, critical commentary (including discussions about originality, significance, and rigour) and closing comment.

Option two: publications appended with detailed referencing throughout exegesis
Supervisors appointed before first research for publication commences.
Research questions decided early into the candidature, and research and publications planned accordingly.
Awarding institution sets requirements for publications, and exegesis, as well as providing pointed guidance for supervisors and external examiners.
Papers appended with detailed referencing throughout exegesis.
Exegesis provides critical review of content including discussions about originality, significance, and rigour. In-depth reflective account of learning and critique of approach to the inquiry process. Critical review identifies omissions, and offer suggestions for enhancement and further work.

RETROSPECTIVE PHD BY PUBLICATION

Option one: publications appended to exegesis
Supervisors appointed who guide experienced candidate with wording of research questions according to already completed and selected publications.
Awarding institution sets requirements for publications to be acceptable, and exegesis, including a record of recent CPD activities undertaken. Pointed guidance for supervisors and external examiners.
Papers appended with detailed referencing throughout exegesis.
Extensive exegesis with critical review of content including discussions about originality, significance, and rigour. In-depth reflective account of learning of learning and critique of approach to the inquiry process. Critical review identifies omissions, and offer suggestions for enhancement and further work.

Option two: exegesis framed by questions posed by the awarding institution

The awarding institution sets out questions which have to be satisfactorily addressed to entitle the

candidate to the award. As a minimum, one of these focuses on research questions, another on the inquiry process and a third on recent CPD activities undertaken. The institution also proffers pointed guidance for supervisors and external examiners.

Supervisors appointed who guides experienced candidate in how to address the questions, considering wording of research questions according to already completed and selected publications.

The exegesis addresses the questions in a structured form, with pointers to the applicant's annotated publications where these provide the answer or appropriate clarification; otherwise these are within the thesis.

INTERMEDIATE PHD BY PUBLICATION

Awarding institution sets requirements for publications, and exegesis. as well as providing pointed guidance for supervisors and external examiners.

Supervisors appointed who guide candidate with wording of research questions according to already completed and selected publications. Supervision on future research in further addressing research questions. Research and further publications planned accordingly.

Papers appended with detailed referencing throughout exegesis.

Extensive exegesis with critical review of content including discussions about originality, significance, and rigour. In-depth reflective account of learning, recent CPD activities and critique of approach to the inquiry process. Critical review identifies omissions, and offer suggestions for enhancement and further work.

BIOGRAPHY

Susi leads the team, responsible for the development of learning technologies at Queen Margaret University, Edinburgh, Scotland. Her research explores student and staff experiences of learning in technology-rich environments. The aim of her research is to inform and develop understandings about the complex situation of how, and in what ways, learning technologies can be implemented as facilitative tools to support learning and teaching. At all times, Susi's research is a collaborative venture with students, academics, learning technologists, professional services staff and other researchers.

Susi's thesis comprised a critical review, and suggestions for enhancements, to Garrison's well-known Community of Inquiry Framework (CoIF). The purpose of this Framework is the development of an appropriate, quality, generic educational experience in an online community in which learners engage in educational conversations and activities. Her doctoral work has led to a number of peer-reviewed publications, presentations and on-going research. Within her institution, Susi is guiding the University's strategy for online learning informed by her doctoral work. In addition, her research is shaping the development of online programmes, such as the ePGCert in professional and higher education, in which Susi teaches, and her supervisory work with doctoral and masters students.