The Professional Doctorate: Defining the portfolio as a legitimate alternative to the dissertation

TW Maxwell

Glenda Kupczyk-Romanczuk

School of Education
University of New England

Abstract

This paper outlines the advantages and potential problems derived from the introduction of the portfolio as a new assessment tool in doctoral work. It compares the traditional mode of a single, lengthy but clearly focussed doctoral dissertation with the portfolio as a collection of shorter research reports, held together by a linking paper. We argue that the portfolio is appropriate for the Professional Doctorate that focuses upon improvement in the professional workplace.

Reference to the *New Shorter Oxford Dictionary* (Brown 1999) can help us understand some of the resistance to the introduction of a portfolio in research doctoral degrees. According to this authoritative reference work, a portfolio is:

1. a case for holding loose sheets of paper, drawings, maps, music, etc.

2. a case for official documents for a minister of state

3. the range of investments held by a company or an individual.

The portfolio, as defined above, seems little more than a loose collection of papers, with none of the academic rigour one would expect as a product from a doctoral candidate. Clearly we need to make a case for the portfolio in higher degrees if this innovation is to be accepted alongside theses and dissertations. Let us begin this challenge by considering the definitions of these well-established doctoral texts.

Although the Oxford makes little or no distinction between 'thesis' and 'dissertation', indeed it uses one to define the other, both definitions include reference to a university degree. A thesis is:

> 1. a proposal laid down or stated, especially one maintained or put forward as a premise in an argument
>
> 2. a dissertation to maintain and prove a thesis, especially one submitted by a candidate as the sole or principle requirement for a university degree

A dissertation is

> 1. a discussion, debate
>
> 2. a spoken or written discourse on a subject, in which it is treated at length
>
> 3. an extended scholarly essay submitted for a degree or other academic qualification

In the specialised use of these two terms in doctoral education, some confusion seems to have developed. Following Professor Bill Green, from Charles Sturt University in Australia, our use in this paper will distinguish between the two, by focussing on the original meaning of 'thesis' as a premise in an argument, and contrasting it with the third meaning of 'dissertation', an extended scholarly essay. Thus, in doctoral education, a dissertation will expound a thesis.[1]

The reasons why the PhD dissertation has become the 'gold standard' of academic achievement are clear when one considers the rigorous requirements of the award, for example, as set out in the *FEHPS Research Guide* (Eckermann 2001, 14) at the University of New England:

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[1] As well as these terms, 'exegesis' has recently appeared in the context of doctoral education. For example, it has been used in doctoral creative arts and engineering programs in Australia. 'Exegesis' is defined in the *New Shorter Oxford Dictionary* as

> 1. an exposition, especially of scripture; an explanatory note.

Thus the central idea in the exegesis is interpretation. With the focus upon research in doctoral education here, the use of 'exegesis' as an explanatory device appears to be a weaker concept and so one that is beyond the focus of this paper.

A (dissertation) is a sustained and systematic piece of research that incorporates a logical line of argument, is supported by evidence which may be based upon analysis of data and contains argument relevant to the examination of a particular topic or hypothesis (or set of hypotheses). It should reflect a high level of theoretical conceptualisation. A (dissertation) is usually divided into coherent sections or chapters that link together in a logical manner. Each chapter should contribute to the advancement of the argument and when taken together all chapters form an integrated whole. A writer endeavours to maintain and present the argument in a clear precise and consistent manner…

The (dissertation) should embody something original. Originality may lie in the discovery or collection of material never before used; or it may lie in a new approach to material that has been used previously. Whatever the approach, the (dissertation) is expected to add something new to our understanding of the particular problem studied.

Background

The dissertation is most often situated within the PhD, and the PhD also has a strong history (Davies 1996). Academics, and researchers more generally, have seen the PhD as a form of rite of passage and in many cases a requirement for employment.

The strength of the PhD dissertation is its focus and in-depth analysis and thus its coherence, but this can also be its weakness for this approach implies narrowness. Consider these criticisms of PhD programs which, at the time that they were enunciated, had significant impact in Australia:

- Lack of consistency or quality assurance across programs;
- Programs driven by the philosophy of science 'in isolation' from other key criteria (*such as reality checks*);
- An ageing and inwardly-focussing academy;
- A 'tamer' graduate product whose quality is poorer than a decade ago;
- Failure to inculcate teamwork skills, good workplace practices, creativity and lateral thinking in graduates; over specialisation a the expense of risk-taking and frontier breaking activity; and

- The gap that is maintained between knowledge and skill

(Clark 1996, 4-6) [italics, our addition].

Not all of these criticisms can be attributed to the dissertation itself, but the nature of the PhD dissertation, in which the examination process is by academic peers, almost exclusively demands the kind of isolated pursuit of disciplinary knowledge about which Clark is critical, as were Gibbons, Limoges, Nowotny, Schwartzman, Scott & Trow (1994) from an epistemological point of view.

Proponents of Professional Doctorates are seeking to carve out a place alongside the PhD (equivalent to but different from it), in which the Professional Doctorate focuses upon improvement in the professional workplace. The Australian Council of Deans and Directors of Graduate Studies (CDDGS, 1998, 1) document responded to the need nationally for a definition of "Professional Doctorate" and provided the following:

> a program of research, scholarship and advanced study which enables
> candidates to make a *significant contribution to knowledge and practice in
> their professional context*. In doing so, a candidate may also contribute
> more generally to scholarship within the discipline or field study.
> Professional doctorate students should be required to apply their research
> and study to problems, issues or other matters of substance which produce
> *significant benefits in professional practice* [italics, our emphasis].

This definition retains the notion of research being key in the Professional Doctoral form of the doctorate. More recent work has begun to differentiate the research Professional Doctorate and other forms, notably such doctorates as the Doctorate of Creative Arts and the Doctor of Psychology (see McWilliam, Taylor, Thomson, Green, Maxwell, Wildy & Simmons 2002; Green & Kiernander 2001) and the present discussion assists in widening the potential of these forms by the consideration of the portfolio as a legitimate form of research presentation.

Most early Professional Doctorates were established as structurally different from the PhD by virtue of their course work. They continued to require a dissertation. This was shorter because of the additional course work requirements, but the work was still discipline oriented (Maxwell & Shanahan 2001). Second class status was almost

inevitable for these Professional Doctorates, however the provision of the CDDGS definition was an important impetus because it enabled the direct focus of Professional Doctoral work on the matters italicised in the quote above. The early structurally different Professional Doctorates became known as first generation in contrast to second generation Professional Doctorates (Green, Maxwell & Shanahan 2001). Second generation Professional Doctorates were more professionally focussed and centred more on the realities of the workplace (eg, Maxwell 2003). They were also likely to be more trans-disciplinary in nature, not privileging academic knowledge, and resulting in action which was intended to achieve improvement. They were broadly more consistent with Mode 2 rather than Mode 1 knowledge production (Gibbons and colleagues 1994), as Maxwell (2003) argued.

Among the progenitors of the second generation awards was the EdD at Deakin. It was conceptualised as 'contributing to the development of professional practice rather than research conducted primarily as a contribution to academic knowledge' (Walker 1998, 94). Here research was seen as professional practice. In Professional Doctoral research, action was implied. Professional Doctorates had improvement (making a positive impact on / providing significant benefits to practice) as a key criterion. Taken together, these characteristics suggested forms of action research as consistent with much Professional Doctoral research (Maxwell & Vine 1998). We shall return to this point later.

The development of Professional Doctorates has been rapid in Australia (Maxwell & Shanahan 2001) and perhaps even more so in England (Bourner, Bowden & Laing, 2001). The reasons for the success of Professional Doctorates in England parallel those in Australia. Key amongst these reasons are:

- The accelerating pace of change in the professions;
- Concern about the limited impact of research on professional practice;
- The move towards evidence-based practice;
- The move to continuing professional development
- Growth and legitimisation of practitioner research;
- The development of work-based learning within higher education; and
- Acceptance of new forms of knowledge (Bourner, Bowden & Laing 2001)

These, of course, suggest much about the nature of the present professional workplace as a site for research that can make a difference.

Complexity and intensity characterise the modern professional workplace. Demands are diverse and this variety indicates the range of potential research questions that might be explored. Traditionally, the professional has worked to achieve improvements in practice or in the situation of practice. In recent times, professional discourse has expanded to encompass diverse discourse communities (Lee 1998). Professionals have to make meaning to others beyond their colleagues. In recognition of these developments and the focus of Professional Doctorates on research which benefits the profession, a number of Professional Doctorate programs have turned to the portfolio.

The use of the portfolio is evident worldwide in doctoral education. A Google search using the terms 'portfolio' and 'tertiary education' found the use of portfolio in (for example):

- psychiatric nursing in a Professional Doctoral program in the UK (http://www.nursing-standard.co.uk/archives/vol17-36/pdfs/c17n36p104.pdf., sourced 8/8/03);

- the PhD at ANU in the creative Arts (ANU web page sourced 8/8/03);

- DEng. at Brunel University (BU web page sourced 8/8/03);

- PhD by publication or portfolio at University of Glamorgan (UG web page sourced 28/8/03);

- University of Western Sydney Professional Doctorates (UWS web page sourced 8/8/03);

- University of Surrey's Professional Doctorates as an alternative form to the dissertation for examination (US web page sourced 8/8/03).

- Uni. of Texas in Mexican Studies where the portfolio was separate from the dissertation (UT web page sourced 8/8/03);

- Uni. of Hertfordshire in a DBA for 2004 where the portfolio is a record of learning experiences at the workplace site and separate from the research piece (UH web page sourced 8/8/03); and

- At Southwest Missouri State University, the Doctorate of Audiology may contain undergraduate as well as postgraduate work (SMSU web page sourced 8/8/03).

Furthermore, higher doctoral awards (eg at UNE) as well as some PhDs (eg Griffith University) are awarded on the basis of a portfolio. Indeed it is understood that in some disciplines, what is still termed a 'dissertation' can be rather like a series of loosely connected refereed publications, more suggestive of the definition of a portfolio above than a dissertation.

The Portfolio Concept

Work from Deakin University (Walker 1998) is a good starting point to begin an exploration of why and how the portfolio can be a useful concept in the professional doctorate. Let us begin with the Deakin definition of a portfolio in its EdD:

> A (port)folio consists of (a) selection of products of research which best establish(es) the candidate's claim to have carried out research of a doctoral standard (Walker 1998, 94).

As Walker goes on to establish, this definition is akin to the use of the term in the creative arts, where the artist builds a portfolio, a selection from amongst possible items for a certain purpose and a certain audience 'with exhibits selected to show what you can do in the face of commissions like those you might expect. And intended to impress' (Walker 1998, 96).

When we extend the use of a portfolio to the Professional Doctorate, other parallels with the work of an artist are useful. A (thoughtful) artist, like a researcher, is intent on exploring an idea. Each may need to acquire new skills or hone old ones in order to do this. An artist may feel the need to move to a different medium – from pencil to water colour or vice versa - to explore a particular effect or a particular problem of perspective; similarly, the researcher may have to move from one to another research method in order to address different research questions. However, unlike the artist whose explorations are communicated in the final product, the Professional Doctoral researcher may need to move from prose to an audio-visual presentation or to power point in order to communicate the results of the research to different discourse communities and in different settings (Maxwell 2002). The use of a variety of media by the artist is not

simply a desire to impress, though it may do this too, but a response to an imperative to explore an idea as fully as possible. In the case of the researcher the desire is to communicate to the relevant discourse communities what has been found.

Thus a Professional Doctoral candidate has great potential to show a breadth of capacity in communication in a portfolio. This is not usual in a (PhD) dissertation. As noted in the previous paragraph, such variety in communication facilitates the presentation of research to different audiences, that is, to different discourse communities. For example, the same project might be reported to an academic audience as a refereed paper, a professional audience at a conference as a power point presentation and/or a community audience at a meeting in the form of a discussion. Furthermore, within the same medium of prose, a professional researcher might portray the research using different genres. A Professional Doctoral researcher will normally write differently for academic, professional or community audiences. Furthermore, just as artists may use different mediums at different times, their work may also be in different styles (eg figurative or abstract art). Similarly, the professional researcher might work within different paradigms or in different disciplines and so the research is likely to be drawn from a broad range of possible areas. To continue the comparison one stage further, artists choose different subjects even within the same style; and in much the same way, the researcher may select different research questions within a single professional workplace. For example, a researcher principal might choose some questions related to staff development and others related to school-community relations, and another on the concerns about student learning in mathematics. Walker's use of the concepts of *purpose* and *audience* are the key to understanding why a particular communication style or medium is chosen for one part of the portfolio.

We contend that the potential of the Professional Doctoral portfolio, in its breadth as opposed to the narrow focus of the traditional PhD, must not reduce it to the mere collection of 'loose sheets of paper' in the Oxford definition, however. In the academic world, Walker (1998) makes the point that the portfolio will have an over-riding line of argument – a thesis in the first part of the Oxford definition cited earlier. For Walker (1998, 94) the thesis is the 'argument made, the intellectual and conceptual glue that holds the (port)folio together'. In the tertiary sector a thesis provides

coherence, a marker for quality scholarship. It is this requirement for the formulation of a thesis that distinguishes the research doctorate portfolio. The thesis provides the equivalence and the portfolio items a structural difference from the dissertation. However, in the art world, artists rarely explain their intentions in print, they leave it to the works to 'speak for themselves'. If and when the artist becomes famous, an exhibition curator or a supportive critic will point out the coherence in an artist's work in an introductory speech or in the text accompanying reproductions of the artist's work. In contrast, it is the EdD portfolio writer's task to provide coherence.

A Portfolio Structure

In response to the desire for coherence, several possibilities come to mind. For example, a 'linking paper' is required in the 'new EdD at UNE' (Maxwell 2003). In it, researchers must demonstrate the theoretical and/or professional argument of their portfolio. An image, taken from architecture, has assisted us in our discussions about why this is a vital part of the portfolio. In the Greek temple (Figure 1) the linking paper is represented by the over-arching pediment, (the roof). The pediment is supported by the peristyle (a row of columns) in which individual columns represent the different pieces of research in the portfolio. The pediment might extend beyond the peristyle supporting it, and probably will, either as a developed introduction or as a developed final section, or both. In a Greek temple, the columns are of regular proportions, but in the portfolio the research pieces may be of different proportions – some wider than others. The academic model would not be so classically elegant, but the key factor would be that each column would support the pediment. To carry out the role of supporting the coherent linking paper (the over-arching pediment), each piece of work (each column), must be firmly situated on a solid base. The foundation of the 'new EdD at UNE' portfolio is the professional experience that the professional researcher brings to the topic, such experiences commonly distinguishing the Professional Doctorate researcher from the PhD researcher. The EdD is a degree for experienced education professionals, a feature common to most Professional Doctorates, and this foundation is the basis of its strength – just as the solid foundation is an essential feature of a Greek temple.

The representation of the person in Figure 1 is also important. The positioning of the professional researcher within the research product in this way symbolises the researcher's own voice as valid, especially in terms of the authority of the researcher as an experienced professional and hence the credibility that is brought to bear upon the analyses. It is appropriate that the figure stands on the foundation of the structure.

Figure 1: **Model for 'new EdD at UNE' portfolio**
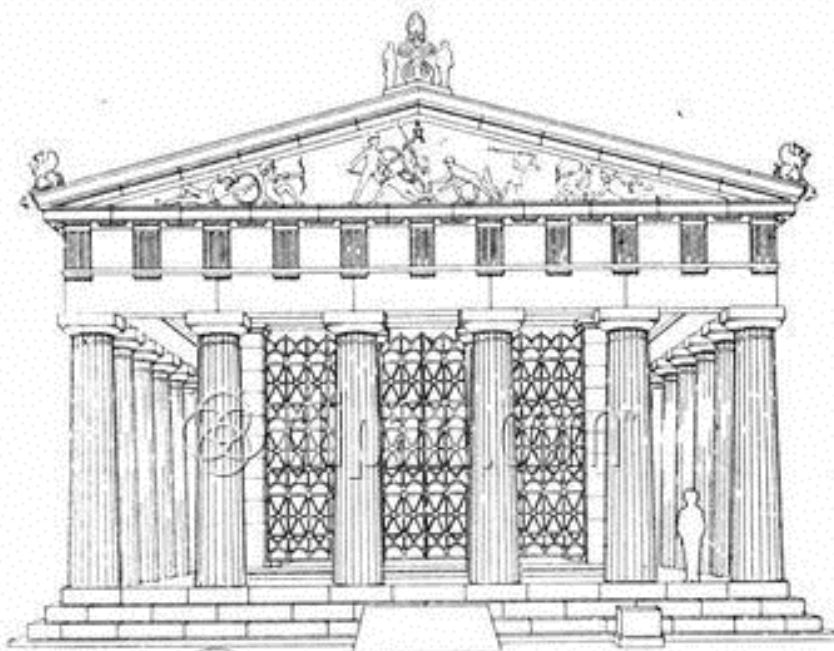
The linking paper is one way to create coherence in the portfolio, the structure needs a roof. Other possibilities to create coherence include short linking pieces between main items, some diagrammatic representation, development of themes through the different items, or some combination of these.

If the Greek temple with many pillars on a solid base supporting the overarching roof represents the complex outward appearance of the new portfolio, the traditional dissertation could, by a twist of architectural history, be represented by a skyscraper. In this architectural metaphor, we contemplate a construction whose connections and strength can be explored from within, but which presents as a single entity - tall and narrow, with foundations that necessarily dig deep in one place in order to support the

monolith.   Both structures are triumphs of human ingenuity, but they are not the same and cannot usefully be substituted. However, each, when well constructed, causes the observer to stop and admire.

Potential of the Portfolio

The potential of the portfolio in Professional Doctoral work is largely dependent on its structure. It is particularly attractive to the busy, senior professional whose work is complex and diverse. As shown above, portfolio items can vary in subject. Putting this in another way, the portfolio is flexible enough to allow different forms of scholarship in the Boyer (1990) senses. Busy professionals need answers to research questions within a reasonable period of time. A portfolio presented for a Professional Doctorate encourages a number of scholarly studies that take account of real people, real time and available resources. As we have seen, the portfolio allows a number of studies, which recognises the breadth of expertise that an extended professional requires. These can be finished at different times, a circumstance not allowable in the long haul dissertation structure.

Furthermore, busy professionals simply do not have time to read a dissertation. Our contention is that they are more likely to read shorter, quality research pieces that take into account real world circumstances from which the readers make the generalisations to their own situations (Stake 1976). Thus the portfolio is more accessible to peers in the profession, especially when the same piece of research is written in different genres or presented in different ways to accommodate different discourse communities. Such examples of the same research presented to different audiences could reasonably be added as appendices. In practical terms, the series of shorter, quality studies encouraged by the portfolio structure accommodates the professional who changes employment while in the middle of a doctoral program, a situation less likely in the single, focused dissertation.

Limitations

As discussed earlier, the structure of the portfolio could be seen as a source of limitations because its separate parts could contribute to a lack of coherence. Is such a lack critical? Busy professionals have a range of areas in which they may research. For

example academics at UNE have teaching, research and service as the fundamental descriptors of their role.

A portfolio with a broad scope could be criticised as lacking depth. For those who demand depth in their doctoral studies, then the PhD-style dissertation would be more suitable (and this is why the dissertation is retained as a possibility in the 'new EdD at UNE'). The depth/breadth alternative addresses the purposes of the research program.

Another limitation is more pragmatic. Portfolio demands will put pressure on a professional doctorate researcher in full-time employment. These demands may become excessive just because a series of studies is required, for example because each study requires the reading of different relevant literature. Alternatively, the conceptual demands of several projects may overload researchers, especially if the size and scope of each is not carefully controlled. It is for these and related reasons that the professional doctorate researcher would be well advised to limit research to professional workplace practice as illustrated by the new EdD at UNE.

There are limitations to the portfolio but this is true of all kinds of work presented for examination at doctoral level. The temptation is to think of the PhD as unproblematic. The PhD dissertation is the 'gold standard' as far as many, including perhaps most academics, are concerned. However, almost any PhD dissertation will vary in quality from chapter to chapter, as can be testified by any university doctoral committee member whose job it is to read examiners' reports. Dissertation researchers have to respond to examiners' comments and in portfolio examination this well developed process is likely to be retained. The key idea is peer review to ensure quality. It would be highly unlikely that any university would dispense with peer review to ensure quality in their doctoral portfolios but the range of background of examiners is one of the issues that needs to be considered.

Issues

McWilliam et al (2002) make the point that present academics almost exclusively have the PhD as their doctoral qualification. They bring this experience to the examination and supervision process. By implication, their experience of the portfolio is limited. However, academics are familiar with the shorter Masters form of dissertation as

a quality piece of academic work. Hence it is likely that the problems of supervision will emanate not so much from size but from the variety of forms of presentation and genres that are possible within the portfolio format. Supervisors who themselves have written and previously become accustomed to the academic genre of the dissertation are likely to find the issue of genre a difficult one to come to terms with. Yet it is also evident that the academic genre of the dissertation is also being questioned (Richardson 2000).

A related issue is the choice of examiner. Examination will be fraught with difficulties simply because the nature and form of the portfolio will be unfamiliar to many in these early years of development. This is exacerbated by the focus upon the realities of the workplace and Mode 2 knowledge production as compared to supervisors' greater familiarity with Mode 1 (see Maxwell 2003). Highly regarded, experienced professionals are likely to be examiners of Professional Doctoral portfolios along with academics when these are key issues for a Professional Doctorate. Published criteria will assist this process although these might take time to develop and mature. (See Appendix 1 for the criteria for the 'new EdD at UNE'.) Students would be well-advised to be wary. 'Gung-ho' course co-ordinators may be doing their students a dis-service by not pointing out the potential pitfalls.

In parallel with these examination issues, supervision of the portfolio is also in the process of development. Supervisory relationships are likely to be different as the researcher will almost certainly have greater knowledge of the research situation than the supervisor (cf Brennan 1995; Maxwell & Shanahan 1997).

Lastly, such shorter pieces of research for a portfolio will be arranged in time. Are they done in series or in parallel? How do universities that demand a proposal prior to the commencement of the research cope with realities determined in time, not usually experienced by the dissertation researcher, of a change in research pieces brought on by evolving circumstances? Supervisors and universities will need to be flexible.

Conclusions

We have made the claim that the portfolio has considerable potential for the Professional Doctorate for a number of reasons. If this approach is to be accepted, however, the creative arts use of the term must be extended to include the notion of

coherence. Portfolio coherence is central and will be achieved through the development of a thesis (line of argument), for example, through a linking paper. The separate research items can be conceived as supports for the thesis. Items in the portfolio will vary in their content, depending upon the research questions. This is a useful feature, since the areas in which the professional is required to be competent are themselves varied, as we illustrated by the role of the academic. The range of research questions to be addressed by the professional researcher can be accommodated better by the portfolio structure than the dissertation.

Furthermore, Professional Doctoral research is normally intended to produce '*significant benefits in professional practice*'. The professional has a variety of discourse communities with whom communication is required. The different discourse communities are likely to be interested in the 'benefits in professional practice'. Portfolios have the capacity to include items for different audiences. The portfolio items may vary in their means of communication, for example, by including different written genres as well as video or audio presentations.

Structurally, the dissertation is inclined to depth of treatment whereas the portfolio favours breadth. In both cases, however, quality is the key issue. In these early days of using portfolios in higher education, potential problems could arise from the lack of experience in the supervision or examination of the portfolio form of presentation. In this scenario, the portfolio constructor, supervisor and examiner need to be wary and deserve clear guidelines. A minimum condition would appear to be the publication of the criteria for examination.

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Appendix 1

THE UNIVERSITY OF NEW ENGLAND

DEGREE OF DOCTOR OF EDUCATION

INFORMATION FOR EXAMINERS (Extract)

2.   STANDARD OF EXAMINATION

Overseas examiners who are unfamiliar with the standards applicable in Australian universities, are advised it is the University's intention that the standard of its EdD degree be equivalent to the standard of the corresponding degree in the leading universities of Great Britain and North America.

A portfolio/dissertation may be regarded as acceptable for the award of the degree if it: reflects international standards of academic rigour; is oriented to applied research in education; and, makes a contribution to the profession and/or professional practice. *The criteria, against which the portfolio/dissertation is to be examined, include*:

- significance of the research to the practice of education and the clarity with which it is stated;
- competence in identifying and reviewing relevant literature(s);
- adequacy of developing research question(s);
- Quality of basic research design(s): plausibility, parsimony and elegance;
- appropriateness of identification, collection and analysis of relevant evidence;
- expertise with which findings are interpreted in terms of theory, implications for policy and practice, and needs for further research; and
- quality and clarity of writing and presentation for relevant audiences.

5298 words