Australian professional doctorates: mapping, distinctiveness, stress and prospects

T.W. Maxwell[1]

University of New England, Australia

Some doubt has been cast upon the impact of Prof Docs and the main purpose of this article is to identify the continuing and potential contribution of Prof Docs to Australian doctoral education. An analysis of Australian Prof Docs websites in 2011 found (1) the number of awards had approximately doubled in a decade and (2) the major growth had occurred in 'niche' awards. Maxwell and Shanahan (2001) found that about half of Australian professional doctorates (Prof Docs) offered were distinctly professional. In this article 'distinctly professional' is aligned with the Gibbons et al. (1994) Mode 2 knowledge production model coupled with researcher experience in the profession/workplace. The question of whether professional doctorates in Australia are 'distinctly professional' was addressed via an analysis of 34 interviews of Australian Prof Docs co-ordinators. Only a minority were clear about this issue. About 60% of Co-ordinators thought their professional doctorate had a bright future but about 20% were more circumspect. These and other data indicated that perhaps as many as 20% of extant professional doctorates in Australia appear to be under stress (in addition to those already taken off the books in recent times). Overall, the growth and greater focus upon the workplace in professional Doctoral research indicates that at the present professional doctorates are in a reasonably healthy state though some awards will disappear. For example, the 45 Doctor of Psychology awards will have to be re-worked following the recent publication of the Australian Qualifications Framework that requires two thirds of a doctorate to be devoted to research. Three professional doctorate types for Australian universities can be identified: profession specific, robust and niche professional doctorates.

Keywords: professional doctorates, Australia, experience, award stress

Introduction

Australia has been a leader in doctoral education over the last two decades. A series of biennial conferences (1996-2004) shared knowledge about professional doctorates and helped to create a body of literature (see Maxwell & Shanahan 1996; Maxwell & Shanahan 1998; Green et al., 2001; McWilliam 2003; Maxwell et al., 2005). A continuing theme of

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[1]Email: tmaxwell@une.edu.au

these conferences was what distinguished the professional doctorate from the 'gold standard' PhD. Lee et al. (2009: 4) comment that 'the obsession to differentiate and find the distinctiveness of the professional doctorate in relation to the PhD has tended, we suggest, to obscure explorations of the limits and possibilities of a wider range of higher-level research awards'. Their point is taken but the exploration is needed because of the importance of Mode 2 knowledge production and the professional doctorates as the logical site for that work.

An early justification of the professional doctorate was its structural difference from the PhD. The Australian PhD, following the British model of the time, was usually 100% dissertation. Thus the structural difference was relevant in the 1990s though Maxwell (2003) argued that the structural difference was not critical and indeed a study by Neumann (2004) was able to show that structurally there was no great difference and the main point of difference was entry requirements. PhD practices had changed significantly such that about 50% of PhDs contained coursework whereas almost 100% of professional doctorates did so (Neumann, 2004).

In the period since the introduction of professional doctorates doctoral education has altered and Australian higher education has also altered. For example, the language of the Australian Government changed from 'funding' to 'subsidising' universities. Higher education became an industry and Australia developed into the third largest provider to international students after the US and the UK. To encourage international student enrolments and at the same time to ensure that those doctoral students have sufficient English language skills (usually determined by an IELTS overall score of 6.5, or equivalent) the 4 year full time PhD has been developed to incorporate the necessary coursework. Australian universities' Deans and Directors of Graduate Studies (DDoGS) prepared best practice papers (DDoGS, 2008) and guidelines (DDoGS, 2005a; 2005b).The Australian Government was also putting pressure on universities to 'increase throughput' of doctoral candidates via its funding mechanism, the Research Training Scheme (RTS). The Australian Qualifications Framework was created to advise levels and pathways amongst all Australian education awards.

Brief background to Australian doctoral education

Doctoral education (PhD) is essentially a post WWII development. Originally an award to be taken on campus mostly by males, now there is a considerable variation in the distribution of doctoral students in Australia. The stereotype of the PhD student coming from an undergraduate honours degree no longer obtains. Moreover, many, perhaps as many as 50% of higher degree research students in Australia, study part time and/or off campus (Evans 2002). Ryland (2004) in his doctoral study was able to demonstrate that science-based doctoral students were younger whereas those in the professions, notably education and management but also health, peaked in numbers around 30 to 40 years of age.

In this paper a distinction is made between in-service and pre-service doctorates. This has become necessary because in recent times the University of Melbourne has introduced what it terms the 'Melbourne model' for certain prestigious masters (second cycle) awards and given them the title of 'Doctor' eg Doctor of Medicine (MD). Rather cutely in their guidelines they say 'This will not in itself confer the right on a graduate to use the honorific title of "Doctor", since the use of the honorific is in most cases controlled by the outside accrediting body governing the profession' (University of Melbourne, 2011a: 1). Some other Australian universities have followed suit. Australian universities had previously introduced the Juris Doctor now to be found in 13 universities.

Professional doctoral education

The issue of the amount of *research* (usually measured by time spent) to be completed in a doctorate has been evident in the discussions of professional doctorates but not in PhDs. The Australian Qualifications Framework (2011: 52-55) clearly advises that a doctoral award in Australia should contain 67% research. This is also consistent with the definition of a research award by the Commonwealth Government. These are the awards that can take part in the Research Training Scheme of Australian universities. Not all doctorates conform to this criterion.

About ten years after the introduction of professional doctorates, a government sponsored evaluation took place (McWilliamet al., 2002). The key findings were: (1) 61% of professional doctorate awards were research doctorates (defined as an award of greater than 67%

research); (2) there was a proliferation of similar programs rather than growth in programs; (3) the throughput of student numbers was not impressive. This was accounted for by such issues as the older cohort and the work full time/study part time nature of the award. Importantly they also found that (4) professional doctorates were not 'deeply' connected to industry/professions and that (5) the dominant model remained university focused and driven. Finally (6) they found tensions around standards of professional doctorates.

Evans et al.(2005) produced a challenging paper for proponents of professional doctorates. They used bibliometric data of doctoral theses and data from government sources to show that the PhD has produced more qualified researchers in the professions in Australia than have the professional doctorates over the last decade or so and that the numbers of graduates of professional doctorates remains relatively low and so their impact has been similarly low. These authors also raised the issue of the viability of some professional doctorate programs (Prof Docs under stress) within a general argument of the economics of doctoral education. However, the Evans et al. paper was instanced part of a 'discourse of demise' by Lee et al. (2009), a paper within an economic-managerial discourse, one which did not address the outcomes that professional doctorates are intended to produce.

The term 'professional doctorate' implies that the doctoral work is professionally-based. However, Tennant (2004) argued that Australian universities struggle with the notion that knowledge is created outside the tertiary sector. This is despite the fact that the Commonwealth government has encouraged universities to become linked to industry ever since the Dawkins White Paper of 1988. 'Linking to industry' inevitably means taking into account the realities of industrial and professional workplaces. In this way research is linked to the knowledge economy. However, Usher (2002: 150) concluded that the PhD dissertation is too restricted to make this linkage satisfactorily and argued for knowledge production along the lines of 'knowledge (that) is produced in the context of application (which) is inevitably performative. It is perhaps for this reason that Mode 2 is seen as a more appropriate conception of knowledge for the knowledge economy' (147). Following Gibbons et al. (1994), Lee et al. (2000: 124) point out that Mode 2 knowledge is

> produced in (the) context of application; transdisciplinary; heterogeneous; heterarchical and
> transient; socially accountable and reflexive, including a wider and more temporary and

heterogeneous set of practitioners, collaborating on problems defined in specific and localised context (Lee et al., 2000: 124).

Maxwell (2003) argued that professional doctorates needed to address Mode 2 rather than Mode 1 knowledge production. At about this time Scott et al.(2004) in their excellent study of professional doctorates in three professions found four kinds of Prof Docs:

Disciplinary: Indifferent to the practice setting, students initiated into academic practices;

Technical Rationality: Prioritises outsider knowledge over practice-based knowledge and practitioner acts in a technicist manner;

Dispositionality: engages in forms of meta reflection about practice and identity, embrace change; and

Criticality: Student-practitioner develops capacity to reflect critically on practices in own institution to change them.

The last two appear to be essentially Mode 2 in their orientation and the former two, Mode 1.

Professional doctorates that are primarily disciplinary misinterpret the term 'professional'. This is also broadly the stance of Lee et al. (2009). They go further and situate the professional doctoral education as imbued, potentially at least, within 'the generation of a different knowledge distinguished by an overall practice rationality' (Leeet al., 2009: 9). They argued that Mode 2 knowledge production was worthwhile and needed. Professional doctorates were the appropriate vehicles for research outside the academy though appropriate for research in the academy by academics.

Moreover, Mode 2 knowledge production demands greater facility than can be brought to bear by the neophyte. The complexities and nuances of practice and of the practice setting demand experience. The experienced person has deep knowledge of professional practices and of the context in its particularities and its generalities. The experienced person has the ability to make judgments in complex situations that are 'good enough' (Flood 2011) in the

sense that they are the best that can be made in the act of doing and that the consequences can be monitored and perhaps modified as required. For the experienced person reflection can be both in and on action (Schön, 1983; Wieringa, 2011).

The experienced person knows the field of practice including the impact of real places, real time, real people and real resources. This is a line of thinking derived from Aristotle and extends into the development of wise practitioners (*phronimoi*) as developed by Flood (2011). Flood argued persuasively that experience hones what Aristotle called *phronesis* (practical wisdom as rational and ethical, concerned with right action in real situations) further developed by Aquinus (13C) as *prudentia* (broadened to all decision making (not just ethical)). John Henry Newman (19C) extended both conceptions as the illiative sense which allows insight and intuition along with rationality from many sources of data. Flood argued that decisions made using the illiative sense in these complex situations are made with certitude not certainty. All three thinkers identified the importance of experience. *Phronimoi* are important because they assist with the development of practical knowledge/judgment and they are critical for neophyte mentoring. The key point here is that substantive experience is essential to the professional doctorate. This has clear implications for professional doctoral entry requirements as well as program development, implementation and evaluation.

The focus of the present paper is to map again the development of professional doctoral awards in Australia and what made these distinctive against a number of criteria. A further aim is to identify the extent to which professional doctoral awards were under stress in the present environment. As such the purpose is to identify the contribution of the Prof Docs to doctoral education in Australia.

Methodology

The websites of all 39 Australian universities were systematically searched for information about their professional doctoral awards. Where necessary, clarifications on some awards were sought by email, for example, where the status of the award appeared uncertain. For the website searches, a spreadsheet was developed which included such categories as

admission requirements including professional experience and percentage of research in the award.

A stratified (by sector) random sample of one in six program co-ordinators was interviewed by telephone. Seven questions were asked (see Appendix 1). By way of illustration, the first question asked was 'If I was a doctoral candidate and I asked you "what is the difference between your professional doctorate and a PhD?" what would you say?' Other questions included: 'What relationship, if any, does your Prof Doc have with the profession?' and 'What future do you see for your Prof Doc?' Interviews lasted from 20 to 45 minutes. Thirty four interviews took place. Institutional Ethics Committee approval was granted and its procedures followed including requesting permission for voice recording. Main points were noted in a spreadsheet during the interview. These notes formed the basis of a thematic analysis while the recorded interviews were used to check the data.

Mapping Australian Professional doctorates by sector

The analysis showed that the total number of professional doctorate awards has increased by about 100% in a decade (see Table 1 overleaf). The first five categories in Table 1 are those identified originally by Dawkins as sectors for expansion into professional awards. Of these, education and business administration numbers have remained relatively constant in the last decade. In 1996 education (mainly EdDs) dominated (44%) the Australian professional doctoral awards but these had decreased to 14% in 2011. In 2000 data compared to 2011 data (Table 1) there has been a 50% increase in health (includes nursing) and law while engineering awards increased from one to six in the decade. There remain no awards in accounting. Psychology awards have more than doubled in the same period though strictly these are pre-service awards following the coursework/internship/research project (<67%) structure as required for award accreditation by the Australian Psychology Accreditation Council (APAC). Many universities had a range of DPsych awards though it was evident that many course units were shared via electives. Importantly, the number of 'niche' professional doctoral awards has increased dramatically (by about 600%) in 2011 compared to 2000 (Table 1). Examples include biotech, sustainable agriculture, clinical pharmacy, astronomy, medical education and IT as well as more than ten creative arts awards. The

variety of these awards was great. Such an award may be a flagship for a department or centre.

Table 1: Australian professional doctoral Awards by Sector;1996, 2000 & 2011

Sector	1996, N (%)	2000, N (%)	2011, N (%)	Retired recently*, N
Education	21 (44)	31 (30)	28 (14)	5
Engineering	1 (2)	1 (1)	6 (3)	3
Accounting	0	0	0	-
Health	4 (8)	14 (13)	21 (10.5)	6
Law	8 (17)	10 (10)	16 (8)	1
Other				
Psychology	3 (6)	22 (21)	43 (21.5)	6
Bus. Admin.	6 (12)	18 (17)	16 (8)	6
Other (Niche awards)	5 (10)	9 (9)	72 (36)	20
TOTAL	48 (99)	105 (101)	202 (100)	48

   *   2011 data compared to a similar 2008 database.

In the analysis it was also possible to identify awards that were being phased out or existed in name only. In the final column of Table 1 these are identified as 'retired recently' since they apparently no longer exist when compared to a database similar to the one in this study that had been prepared in 2008. Clearly the niche awards are the most vulnerable. It would be interesting to know why 48 awards were 'retired recently' though it was reasonably clear that university policy may have played a part; four universities had recently retired several awards. Moreover, recently retired awards may be under represented by as much as 10% as verification of their status was difficult but these particular awards were retained in the earlier column.

The analysis provided several other interesting findings:

- Two generic professional doctorates (Boud& Tennant 2006: 296) were identified;

- About 70% of professional doctorates are RTS compliant (up from about 60% in 2002); and

- The website search revealed that some universities inadvertently hid their professional doctorate award(s). Many potential students would likely not find the relevant web page easily since it was often difficult for this experienced searcher.

Distinctiveness

Few websites differentiated their professional doctorates from the PhD. The University of Melbourne Faculty of Education was an exception. They stated greater demands of their EdD:

> Doctoral degrees at the University of Melbourne seek to develop graduates who demonstrate academic leadership, increasing independence, creativity and innovation in their research work.
>
> In addition, professional doctoral studies, such as Doctor of Education, provide advanced training designed to enhance professional knowledge in a specialist area, and encourage the acquisition of a wide range of advanced and transferable skill (University of Melbourne 2011b).

It seems that potential students would need to discuss differences with the relevant co-ordinators.

However, from the 34 interviews, it was something of a concern that nearly one fifth of professional doctorate co-ordinators were unsure about what distinguished their professional doctorate from a PhD. However, for the majority, distinctiveness came from

- the location of the research for just more than a half;

- the coursework (about one third); and

- One tenth gave other reasons.

As argued above the coursework reason is not really relevant.

More broadly, it was evident that many co-ordinators interviewed did not know the literature in the field. This was in stark contrast to fourco-ordinators with considerable experience who gave more robust answers. Yet the role of the program co-ordinator is critical. It can be noted that 50% of attendees at the five conferences held between 1996 and 2004 were usually new faces and so were not generally conversant with the relevant literature.'What are typical arenas for research?' complemented the 'distinctiveness' item and evoked the following co-ordinators' responses:

- About 60% said the candidate's own workplace/practice was the focus;
- About 10% said others' workplace or practice was the focus;
- About 20% indicated both of the above; and
- 5% did not know.

These data stand in stark contrast to Neumann (2002) who found no Prof Doc workplace-oriented research in her study. The present data were moderated by many international students' requirements. Co-ordinators indicated that usually international students' research was carried out in Australia though often in others' workplaces.

Responses to the question: 'What relationship if any does your (Prof Doc) have with the profession?', indicate at least potential for industry linkages. Eighty-one percent of co-ordinators said that supervision and/or mentoring from industry colleagues was possible. Indeed one niche Prof Doc co-ordinator commented that 'The industry person brings depth of expertise locally (and) can be crucial for a cutting edge research topic'. Given the high stakes of examination it is interesting that 42% of co-ordinators said that award rules allowed at least one industry examiner. The high workplace/practice location of research (above) together with these kinds of relationships provides some support for distinctiveness of the Prof Doc. Industry linkages are presumably less evident in PhDs though Commonwealth Research Centres (CRCs) were created to increase research linkages in certain industries.

It is significant that *no* course co-ordinators mentioned experience as an important distinguishing feature of the professional doctorate. In that they are missing something important. In the website search 133 programs identified experience as an admission requirement (0-4 years: N=45, 5years + N=45 and unspecified N=43). Common experience in many professional doctorates is that the student age distribution is bi-modal; a group in their 30s and a group in their late 40s early 50s. The latter group is likely to contain *pronimoi*who would be useful for those with lesser experience in a cohort approach to the award.

Professional doctorates under stress

From the interviews and the website analysis seven related points can be made:

1. The number of Prof Docs has doubled in a decade and entered new 'niche' areas;

2. Up to 25% awards (projected) have recently retired (since 2008);

3. Some awards (as many as 20%?) have low student numbers though 25% said they had too many students (one DPsych took 12 from 500 applicants);

4. 20% interviewed indicated the future was not bright or problematic but 60% said 'good', 'bright' or something similar;

5. Competition via the proliferation of similar awards has created a tension which will inevitably mean that more awards will go by the wayside;

6. As noted above, 20% of program co-ordinators could not say how their program was distinctive;

7. A continuing issue is the low status of professional doctorates among academics. Thirty-five per cent of co-ordinators saw the status of Prof Docs as a problem. But this is not often the case for prospective students who are often looking for a doctoral award that is not a PhD, especially one that does not have the long dissertation as the end product. Clearly program co-ordinators have a PR job to do and they can use the quality of the research undertaken as the key ammunition; and

8. The power and robustness of the PhD means that in many universities a PhD will be the award of choice since it can potentially contain Mode 2 research (cf Evans et al. 2005).

In summary, a minority of Prof Docs was clearly under stress yet new professional doctorates are being developed.

Discussion

In the early days of professional doctorates there *was* a structural difference between them and PhDs. This has since disappeared. In Australia in the 1990s course work in PhDs was not nearly as common as it is now.In terms of distinctiveness, course structure is not critical, but these points are:

1. Research in the workplace/practice – location (Mode 2 knowledge production);
2. Professional doctorates can make a contribution to knowledge of practice and also to change for the better; and
3. Experience remains essential as a criterion for the professional doctoral student.

Moreover, professional doctorates can be tuned into the demands of the practical turn (see Lee et al. 2009) and hence phronesis. Deep links with the profession are advised since supervisors/mentors (phronimoi) with a strong knowledge of the industry/profession can greatly assist in the quality of the research by grounding it in significant issues of the day. For similar reasons highly regarded industry and professional people are needed to examine workplace-based research. Many Prof Doc regulations already allow the latter but more information is needed on the former.

Can PhDs achieve similar outcomes as the Prof Docs? The answer is possibly 'yes' in some universities. PhD robustness has been a feature since they began (Boud& Tennant 2006). However, as Lee et al. (2009) have pointed out, Professional doctorates are now part of the history of doctoral education. Also we are currently at a point in history where people apparently want named objects: even socks have a Nike tick. Consequently it is not surprising that doctorates may well be sought after for their post-numerals. Some of those in academia with an eye for marketing have not missed this point.

Prof Docs alive and kicking

In the last decade there has been a growth rather than proliferation in programs (cfMcWilliamet al. 2002). Table 1 provided clear evidence in support of the claim by Lee et al. (2009: 8) that 'Reports about the "death" of the professional doctorate are much exaggerated. Rather, the award continues to grow and exceed its own previous boundaries'.This growth is best seen by the development of niche awards. There were just nine in 2000 and 60 were found in 2011 extending into the sciences as well as arts. In fact as more than one co-ordinator pointed out; Prof Docs have engaged new fields of study and engaged new groups of students. These are considerable gains even though, as Evans et al.(2005) argued, the numbers are (presently) relatively small. However it is reasonable to assume that awards with 200 students (as in one university's DBA) as well as those that may well be smaller but of high quality must be having an impact on industrial and professional workplaces. Research on impact is still needed. These awards deserve recognition across academia and in government. With respect to the latter, the Commonwealth Government's (2008) 127 page *Building Australia's Research Capacity* does not mention 'professional doctorates' once but has approximately 120 references to 'PhD'.

AQF Impact

Some awards, and so the numbers enrolling in them, will be affected by the recent publication of the Australian Qualifications Framework (AQF 2011).The AQF choice of wording is significant in describing the two dominant forms of Australian doctorate.

> The research Doctoral Degree (typically referred to as a PhD) makes a significant and original contribution to knowledge; the professional Doctoral Degree (typically titled Doctor of (field of study)) makes a significant and original contribution to knowledge in the context of professional practice (AQF, 2011: 52).

The distinction being made in the 'professional Doctoral Degree' is consistent with research in the workplace and that means, by and large, Mode 2 knowledge production. Perhaps the use of the term 'research doctoral degree' in relation to the PhD marginalises the professional doctorate since presently 70% of Prof Docs are also research awards in the AQF's own definition.

Two other key points in relation to the AQF and professional doctorates are:

> Research is the defining characteristic of a doctorate; specifically they state 'The purpose of the Doctoral Degree is to qualify individuals who apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation, scholarship or professional practice' (AQF 2011: 52); and

> 'Research in the program of learning will be at least two years and this will be typically two thirds or more of the qualification' (AQF 2011: 54).

Although the AQF is advisory, Australian universities' responsibility to ensure these requirements means that all the DPsych awards will need to be re-worked probably into Masters awards since these awards are used by the accrediting professional body. Their high internship component means that the award cannot achieve two thirds research. An alternative is that the accrediting body might change its requirements. A further 10% of Prof Doc awards (those with less than a 67% research component) will also be affected. Either they will disappear as awards or will be re-worked to conform to the two thirds requirement. However, strong full fee awards and 'Melbourne model awards' that do not presently fulfil the two thirds requirement may decide to retain the doctoral nomenclature even though they do not comply. The name tag of 'doctor' is a strong incentive and marketing strategy.

Experience

The fact that no co-ordinator identified experience as important coupled with the fact that the majority of awards used experience as an entry criterion is perplexing. The recognition that professional doctoral 'students' have significant levels of experience creates an ideal opportunity for universities to re-imagine doctoral education (Lee et al., 2009: 284-285). Several questions emerge. How can the deep knowledge of some candidates be used effectively in the research experience and in the teaching learning situation? How do advisors/supervisors work with these kinds of deep knowledge especially when it is outside their specific expertise? What impact does deep experience have upon course work? How can phronimoi in workplaces bring their experience to bear upon the advisory processes?

From the university management perspective: how can the experience of phronimoi be harnessed?

Deep linkages

The acknowledgement of experience of the student brings a new dimension to the debate about the linkages between the university and professions/industry. Here the linkage is not structured at a high level (except in the various Doctors of Psychology) but rather embodied in the students and includes their relationships with the workplace and other workers. This approach contrasts with the McWilliamet al. (2002) approach which addressed high level structural linkages. The depth of the former kind of linkage will depend upon the depth of experience of the student. This line of argument is consistent with Lee et al. (2009: 284): 'Despite accounts of the limited extent of "deep" engagements with industrial and professional bodies, there are relationships between professional workplaces as knowledge producers/sites where many professional doctorate students and graduates are based and where universities are building partnerships.'

As noted, McWilliamet al. pointed to the lack of 'deep Linkages' of professional doctorates in their study. Some evidence is available here in that the research site was dominated by the workplace. Additionally, ex academia supervision and examination by industry members and professionals reported above are major changes in the decade. These point to stronger linkages if not deeper ones. Professional doctorates are/should be moving in this direction.

Program co-ordinators

That movement will be slow if professional doctorate co-ordinators are not conversant with the literature and the basic assumptions associated with Mode 2 knowledge production. Long term co-ordination brings with it experience that is essential and that needs to be passed on via succession planning and mentoring. For example, consideration of possible student futures is critical in early discussions about awards. A co-ordinator needs to find out the student's future career ideas in order to fully discuss which doctoral award is appropriate. What kinds of experiences does the student have? What does this mean to the student's doctoral program?

Doctoral award types

From a review of the contents of Table 1, professional doctoral awards can be categorised into three:

1. Profession specific awards: These include education, engineering, accounting, health, law and business administration and are already represent in social work, medicine, dentistry, physiotherapy and even occupational therapy. These are likely to remain the most common and clearly correlate with the well known professions;

2. Generic professional awards (egUNe's Prof D and Middlesex's DProf): Although small in number these may well sit nicely alongside the PhD in a small university's suite of offerings; and

3. Niche awards: These awards may well develop from indicate cutting edge industry/profession links using Mode 2 research. The will include specialist awards such as professional overlap areas such as medical education and biotech.

It will be interesting to see whether robust PhDs will engulf the professional doctoral awards and how the sector handles the Melbourne model.

Conclusions

The continuing and potential contributions of Prof Docs to Australian doctoral education have been set out in this paper. Mapping professional doctoral awards in Australia indicated that around 200 professional doctoral awards were found in a thorough study of 39 university websites. Consolidation in some sectors was evident. Some professional doctoral awards were under stress (around 20 %). A further 48 awards had been 'taken off the books', some apparently as a matter of university policy. A majority of co-ordinators was confident of the future of their award. Additionally, growth, rather than proliferation (McWilliamet al., 2002), could be seen. The most pronounced growth was in the niche area where 72 awards covered almost the entire range of university offerings.

The case for the distinctiveness of the professional doctorates as congruent with Mode 2 knowledge production was supported by an argument that experience was critical and indeed this was found to be an entry requirement in two thirds of awards. The fact that no

program co-ordinator pointed out that this is one of the distinctive features would indicate that this is an area that professional doctoral award development, implementation and evaluation may well benefit from its consideration. On the other hand, tacit understanding of its importance may be developing in that experienced people outside academia are increasingly, or potentially so, being involved in supervising/advising and examining. This avenue of linking with workplace experience people may well provide the kind of deep linkages that are needed to produce high quality Prof Doc research. Unlike some earlier research the present study found that, according to program co-ordinators, workplaces were sites for professional doctoral research in the majority of cases. A study of products of doctoral research would explicate this point further. Recent Australian Qualifications Framework requirements are likely to mean that around 50 to 60 of extant awards (predominantly DPsychs) will need to be re-considered.

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Notes on contributors

Tom Maxwell

Tom co-ordinated the UNE EdD for a decade until the early 2000s. During that time he became interested in the potential of Professional doctorates to make a difference in the work place. He led the development of UNE's Prof D (Industry and Professions). He co-convened five international conferenceson Professional doctorates (1996-2004). He has a range of publications related to Professional doctorates and in doctoral education.His experience extends to higher education work in Bhutan, Fiji, Laos, Vietnam, Uganda and Zambia. Tom is now an adjunct professor having retired in

July 2010. An earlier version was a keynote presentation: "The Professional doctorate – Generational change?" Keynote presentation, 2nd International Conference on Professional Doctorates, Edinburgh, Scotland, 20th April.

Appendix 1: Interview Schedule: What makes Professional doctorates Professional?

Settle in

Convey "Information to Participant"

Thanks and ask for voice to be recorded

Turn on digital recorder

1 If I was a doctoral candidate and I asked you "what is the difference between your Professional doctorate and a PhD?" what would you say?
   a. What makes your Prof Doc distinctive? (profession/workplace/uni mix)

2 Have there been any recent changes to your Prof Doc features:

   a. % age is research?

   b. admission requirements?
        i. Professional?
        ii. Academic?

   c. Full/part time?

3 What are typical arenas for research?
   a. Workplace of researcher?
   b. Workplace of others?
   c. Other?

4 What relationship if any does your Prof Doc have with the profession?
   a. Supervision?
   b. Examination?
   c. Consultative Committee?
   d. Formal accreditation?

5 What issues does your Professional doctorate currently face?

6 What future do you see for your Prof Doc?

7 Any other comments