

# From First to Second Generation Professional Doctorate<sup>1</sup>

T. W. MAXWELL

*University of New England, Armidale, Australia*

**ABSTRACT** *The development of Professional Doctorates in Australia and elsewhere in the 1990s has led to a reconsideration of the nature of the doctoral award. There is evidence in Australia for the emergence of what has been called a second generation of Professional Doctorates. In this paper the features of the latter are analysed using three case studies. Research into an EdD and its subsequent development from a first to second generation program are also presented. The key conceptualisation used for the analysis and development is Lee, Green and Brennan (2000).*

## **Introduction**

Recent research in Australia and overseas has shown that while Professional Doctorates are not new, the number of Professional Doctorates has burgeoned in Australia in recent years (Maxwell & Shanahan 1996a, 1997, 2000; Trigwell, Shannon & Maurizi 1997), in New Zealand (Maxwell & Shanahan 2000) and in England (Bourner, Bowden and Laing 2001). More broadly, doctoral education has been changing. For example, Mathieu & Adams (1997) reported a "new doctoral program at the University of Antwerpen, comparable with several other initiatives in Western Europe, in which scientists not only acquire specialised knowledge through their research but apply that knowledge in political, economic, social and cultural contexts". This broadening of the PhD is evident in some disciplines such as social work (Orme 2000) and at some universities such as the University of Adelaide (Brine 2000). There is also a kindling of interest in Professional Doctorates in Canada (Smyth 2000). The professional inservice doctorate (as compared to the professional pre-service doctoral award) has been common in the United States for many years and has become established there (CSPEC 1987, p.8). However as far as the award of a PhD or an EdD is concerned, at some universities the distinction is one of choice. Edwardson (2000) reports that in the nursing profession in the US there has been

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an ongoing struggle over nature of the professional doctoral award. Recent developments in the nature of Professional Doctorates in Australia have been interesting, so much so that Seddon (2000) showed that it was possible to recognise the emergence of a new phase of professional doctoral awards there.

But first what characterised first generation Professional Doctorates (in Australia at least). Earlier work was able to show that Professional Doctorates broadly had a sameness about them. Mostly Professional Doctorates follow the course work plus thesis model (Maxwell & Shanahan 1997, p.138-40) and appear to be dominated by academe. Broadly, Trigwell *et al* (1997, p.6) agreed. In short, structural differences from the PhD characterised the “different but equal” Professional Doctorates.

What then of the second generation? The features Seddon (2000) identified features in the UWS (University of Western Sydney) EdD which made this program different from Professional Doctorates include (1) training in research and applied studies, (2) the portfolio, (3) a program comprising seminars, meetings and conferences, and (4) assessment which required a global judgement be made about the scope and quality of the award. Seddon summarises what will inform the development of the Monash EdD:

[The] trajectory, from a substantially taught professional doctorate depending heavily on coursework and individualised supervision, towards a learning environment that provides diverse support to facilitate learning by doctoral students (and staff), is what I understand to be the move from first to second generation Professional Doctorates (Seddon 2000, p. 3).

The UWS EdD approach is encapsulated by the following:

The EdD is based on a partnership between the University and the educational employers to provide candidates with an integrated set of experiences enabling them to demonstrate, through research scholarship, a set of outcomes reflecting the qualities prized in modern professional educators (Baumgart & Linfoot 1998, p.117).

The UWS EdD is one of the three cases presented below which together show features of second generation Professional Doctorates. The case studies were presented at the first two conferences which addressed the nature of the Professional Doctorate (Maxwell & Shanahan 1996; 1998). Following the analysis of the cases is an exploration of the Lee *et al* model which created considerable interest at the 2000 Professional Doctorates conference. It is this model which brings together second generational features identified in the three

cases and which is subsequently used to inform the most recent developments in the EdD at UNE. The final focus of the paper, then, is on the projected changes to the UNE EdD.

### **Case Study #1: The DTech at Deakin University**

Responses from poled potential students indicated there was a strong need for an award like the Doctor of Technology (DTech). Brian Lloyd and colleagues at Deakin (Lloyd & Baker 1996; Hodgson, Lloyd & Brownrigg 1998) have made strong use of links with industry to create a technology-based professional award in the fields of science, architecture and engineering that is embedded in the situation and the profession. The curtailed description that follows is based upon their two papers.

The program is designed to broaden and deepen the leadership, creativity and innovation in advanced professional practice resulting in new knowledge and understanding of professional practice. While maintaining the required standards of a doctorate, the emphasis is upon complexity and integration (as opposed to specialisation and abstraction) and includes consideration of human and commercial concerns. It has an industry focus and aims to foster excellence in professional practice. An industry partner co-supervises in an award structure that is one third course work which leads to a program report which is in turn used as the basis of the project (two thirds). A project may be in the area of personal professional development, consolidating and advancing established professional expertise, or issues. Enrolment is controlled. About ten students enroll annually. They do so because they perceive that the degree gives them more flexibility (than the PhD) and adds more direct value to their career. While there is a thesis (exegesis) as a main output of the individualised projects, this is complemented by the production of highly useful artifacts (eg. computer software, designs, and folios). In the two years since the introduction of the award in 1996, the majority of students used the course work as an informal lead up to the exegesis. Two current project topics include R & D into the economies of scale in a major manufacturing process, and a feasibility study for niche market manufacturing.

Two years' experience of the program has raised some concerns. Student workplace transfer and high workloads affect study continuity, intellectual property ownership, liability and confidentiality. There is a need to formalise agreements on these issues. Busy students have also to be kept on track and it has been found necessary for supervisors to set milestones to facilitate this. Candidates were found to work in bursts of activity which sometimes lead to a lack of acquaintance with relevant literature and this,

coupled with a report writing style, meant that strategies had to be implemented to provide support. Examination issues have also been addressed with criteria established to distinguish the Masters degree from the DTech, the latter examination process including an oral examination in which a panel of experts questions the candidate on a broad range of issues related to the exegesis. Providing sufficient numbers of experienced supervisors for the mature, motivated student has been an on going concern.

While these changes might be expected with a developing program, research in the DTech appears to be quite different from that of the PhD in this area. The work addressed is wide-ranging and clearly situated within industry. The problem addressed in the exegesis is one of industry, it is addressed in context and the researcher has to deal with the realities of the time, people and financial constraints of the workplace. Hodgson, Lloyd and Browning (1998, p.106) elaborate:

Real life problems are now extremely complex and the types of people entering the program are commonly involved in decisions that range from business plans through actual technological work, often leading to implementation and marketing. These people are also involved in consultancy. The issues here may involve the integration of technological strategy planning, with quality over an entire company or industry sector, with (needs) to plan training and development of staff and hopefully an analysis of strategies which have not worked in the past. In these cases the candidates tend to try and develop generic tools that can be used in quite a broad range of applications. The development of these tools is then supported by a wide range of case studies drawn from the candidate's own experience.

According to Lloyd and colleagues, with these kinds of workplace bound problems and industry related processes, the DTech appears to be addressing an enduring problem within the manufacturing industry: Professional Doctorate students know that employers shy away from PhD graduates. In the way that the award has been developed and implemented there appears to be a negotiated compromise between the demands of the workplace and the requirements for academic rigour especially in the need to relate the work to the literature.

The case study highlights the importance of the workplace to a professional award. There are also some questions, namely, (1) what kind of relationship is developed between the "student" and the "supervisor"?; (2) how is evidence for the non analytical knowledge presented in the exegesis and how is it justified in the oral examination?; (3) what place do

ethical and commercial concerns have in the final exegesis?; (4) how are the diverse research methodologies that appear to be possible handled within the program?; (5) what is the place of critical reflection within the DTech?, and (6) did the candidates develop in their professional competence as a result of the program? Despite these questions, it is evident that the DTech program is striving for the rigour of the University, applied to the realities of the workplace.

### **Case Study #2: RMIT's DBA**

The Royal Melbourne Institute of Technology (RMIT) Doctor of Business Administration (DBA) has been developed to cope with the turmoil of the current business environment and to provide leadership in an industry where a major government Industry Task Force (1995) reported serious problems with the knowledge base and styles of Australia's managers. The literature provides managers with a bewildering range of strategies, many of which are unproven. Morley & Priest (1998) set the scene for their paper in this way and the description that follows relies upon their work. Since 1996 about twelve students have enrolled annually in a program which has 55% course work and 45% research. In Morley & Priest's own words:

The research is ... necessarily applied research. The contribution to knowledge required is seen in the context of professional practice, and the professional doctorate is concerned to contribute to the *development of professional practice*, rather than to the advancement of purely theoretical knowledge [my emphasis]. The complexity of the realities of professional practice require some specialisation, but preclude a narrow specialisation on a single discipline or methodology and entail an openness to the usefulness of a number of relevant, related disciplinary fields in an inclusive rather than exclusive study. The course work component of the program is intensive, to build the knowledge base required, and structured to cover the necessary range of relevant areas (24).

Like Deakin's DTech, entry to the RMIT DBA requires extensive professional experience. In the program, reflection on professional practice is a key integrative component. The course work, which includes a unit on social science research, is supported by the early professional development seminars focussing on personal dynamics. In later doctoral seminars, issues of strategic management are discussed. There are seminars to support the development of the thesis that is concurrent with the course work. The DBA at RMIT is not designed for academics but aims to produce a "scholar executive". Critical reflection

upon one's role as a manager is seen to be central to the development of the scholar executive. The importance of critical reflection has been tested out in the program, especially from reactions to and in the professional development seminars. One outcome is an interesting Reflective Practice Model which has great potential for application in other professions. It has similarities to single and double loop learning (see Figure 1). Morley & Priest (1998, p.30-1) describe the Model in this way:

In Figure (1) the two discs at the centre of the diagram can be considered as the two faces of a coin. The upper face represents the reflective-practitioner considering experience from a typically traditional modern orientation and the lower face represents the reflective-practitioner considering experience and contemplation from a more recent (but not necessarily radical) postmodern orientation (Cahoone 1996). The upper two boxes summarise two aspects of traditional analysis and action, which are often associated with domination and control. The summary is achieved by searching out and applying systems of rules in order to produce specified outcomes. The two lower boxes represent the typical post-modern orientation of focusing on outliers, exceptions and momentary processes in order to uncover and challenge dominant assumptions and liberate non-mainstream thinking and expression. The two boxes on the left-hand side represent the commonly recognisable dimensions of practice, whilst the two boxes on the right hand side represent the usually private processes of reflection. The arrows suggest a sequence in which the four processes become successively dominant in the practice of reflection.

Traditional modernist orientations such as modeling, analysis, and the development and use of procedures are so commonplace they are often regarded as taken-for-granted skills. Not so the skills of deconstruction and reframing that are characteristic of postmodern orientations. The juxtaposing and melding of these two 'competing' orientations provides a discipline and opportunity to gain insights and test their consequences so that reflective-practice development can occur.

#### FIGURE 1 ABOUT HERE

Included as possibilities for the postmodern orientation deconstruction are knowledges other than analytical knowledge and this is a real strength of the model. Perhaps its weakness is the over reliance upon analysis at the expense of action. More space needs to be made for other learning processes such as interaction, experience and common sense and other forms of tacit knowledge. Morley & Priest report encouraging

observations from the use of the model in the DBA. They summarise their conceptualisation of it in this way:

A key insight has been to find that the two orientations are complementary and mutually encouraging. These two orientations operate as if one is alternatively using a telescope (modern) and a microscope (postmodern) to alternately spot interesting outlines or differences in the landscape and then investigate the micro-worlds whose distinctive processes give rise to new awareness and need for reflection. The process of reflective practice involves a double hermeneutic that is critical to ... thoughtful, active and continual reconstruction and one's operating resources (34).

The Morley & Priest paper highlights the importance of reflection upon workplace experience, especially as this relates to the person. There appears to be an important assumption about improvement. However, the RMIT DBA retains the thesis though it has less weight than the DTech and indeed most other Professional Doctorates (Maxwell & Shanahan 2000, p.8). Again, a number of interesting questions are raised in the consideration of this case. Some of these are: (1) is analytical knowledge privileged at the expense of non-analytical knowledges?; (2) what place does ethics have in the program?; (3) how is critical reflection via the reflective practice model incorporated within the thesis, and (4) what justification is required for data to be accepted?; and (5) did the candidates develop in their professional competence as a result of the program?

### **Case Study #3: The EdD at UWS**

As has already been indicated, the Professional Doctorate runs the risk of being seen simply as an alternative to the PhD although the previous two case studies make a strong case for a coherent and viable alternative. Both, however, largely take the course work plus thesis structural route. In contrast, Professor Neil Baumgart at the University of Western Sydney, Nepean has lead a team of colleagues in the creation of an EdD that is structurally different and that has a strong professional flavour. The presentation of Baumgart and colleagues at the 1998 Professional Doctorates conference (Baumgart & Linfoot 1998) highlighted that the "EdD at Nepean is structured around an educational environment to encourage research and its dissemination through publication and other forms of presentation of research findings" (116). The latter are collected into a portfolio. Once more research on "workplace problems [are seen as] an excellent preparation for educational leadership" (116). One of the anticipated features of the UWS EdD is the partnership developed between the university and the employer so that doctoral degree

experiences are integrated with the needs of the employer. Interestingly, few students have availed themselves of this possibility, unlike at the University of South Australia (Thompson 2000). Further, co-supervisors may be appointed from the workplace. As mentioned already, the portfolio is the formal student output from the program and it contains at least six pieces, of which four need to be published, conference presentations, or those placed on the Internet. The portfolio also has an overarching integrative statement to assist the three external examiners in their judgment of the "scope and quality in terms of the award of the doctorate" (117). EdD students at Nepean also have access to external advisers who may participate in annual conferences and/or workshops and provide an international perspective on students' work. Innovative too is the UWS Nepean approach to teaching: there is no course work but the students are required to conduct seminars with fellow students in their specialty, the assumption being that "one needs a greater understanding to teach a topic than one does to participate as a student" (118). Such an approach also does not privilege the position of academics nor of academic knowledge. While the program is highly flexible, comments from a small number of students indicate that publication is a high priority. They are happy with the program perhaps mainly because they could work on a range of professionally related topics. They did not favour course work.

This EdD is clearly situated in the workplace, as the students themselves contend, but two other issues are important. First, the award appears to have broken away from the straitjacket of the formal thesis through acceptance by the UWS Academic Board that the portfolio and its examination fulfils the demands required of a doctorate. Secondly, accessibility of output is important and UWS Nepean's EdD appears to have taken a first step toward making the research more available to the profession in that publication in professional journals is a possibility. Baumgart & Linfoot mention publication in international journals but there is no specific mention of publication in professional journals, including those that were unrefereed. Peer review provided by international journals does give confidence regarding quality but the audience for Professional Doctorate output is more logically other professionals rather than academics.

As with the other two case studies, there are a number of questions that come to mind. (1) Given that academics apparently take a major supervisory role and publication is paramount, is analytical knowledge privileged at the expense of non-analytical knowledges? (2) What kind of relationship was developed between the "student" and the "supervisor"? (3) How is critical reflection incorporated? (4) Did the candidates develop in their professional competence as a result of the program?



### **Reconsidering the cases**

Each case adds to our understanding of what a second generation Professional Doctorate might look like. However and additionally, there have recently been important and related theoretical developments. Centrally, the work of Gibbons, Limoges, Nowotny, Schwartzman, Scott and Trow (1994) show the effects of the new “knowledge society” on universities and employers, and the displacement of knowledge production from the disciplinary university to the places where people work, that is, knowledge produced in the “context of application”. To some extent higher education is under threat in this view. One reading would be that Professional Doctorates are one form of resolution of this contestation, especially in that it retains universities’ certification function and market. Scott (1995) acknowledges the importance of the marketplace for universities and also builds upon Gibbons et al.

It is on these two works that Alison Lee, Bill Green and Marie Brennan in *Research and Knowledge at Work: Perspectives, case studies and innovative strategies* (Garrick and Rhodes 2000) present their “hybrid curriculum” for the Professional Doctorate (See Figure 2), a conceptualisation first presented at the 1998 Professional Doctorates conference. The work of Lee et al epitomises the shift to second generation Professional Doctorates. The site for Professional Doctoral activity is the intersection of the Profession, Workplace and University spheres (the P/W/U site). The key notion is the distinctions made between Mode 1 knowledge production (of the disciplinary university) and Mode 2 (the challenging knowledge production of the “context of application”). In the Lee et al summary, 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, p. 124).

They contrast such socially distributed sites with the more culturally concentrated, Mode 1 knowledge in which

problems (are) set and solved in context governed by academic interests of specific communities (characterised as) disciplinary; homogeneous; hierarchical and form preserving; accountable to discipline-based notions of methodologically 'sound' research practice (Lee et al, 2000, p. 124).

Mode 1 knowledge is more consistent with first generation Professional Doctorates. Lee et al's "hybrid curriculum" for the Professional Doctorate is "a three-way model, where the university, the candidate's profession and the particular work-site of the research meet in specific and local ways, in the context of a specific organisation" (Lee et al, 2000, p.127). The conceptualisation has great potential for program development and for the production of useful knowledge (Seddon 1999) in which action is part of the research. We would also argue that the professional site/sphere includes the notions of improvement, collegiality and ethical behaviour. More especially, the hybrid curriculum does not privilege academic over knowledge produced and held by the profession. The model is useful too in that it points to the centrality of the workplace, ie, the realities of the people and human relationships there, the time available, the actual funding and resource base.

#### FIGURE 2 ABOUT HERE

Maxwell and Shanahan (2000) used the Lee et al conceptualisation as the basis for analyses of 72 (of 109) Professional Doctoral programs in Australia and New Zealand. In relation to the movement from first to second generation Professional Doctorates, they concluded

There is evidence that second generation Professional Doctorates are gaining a footing in higher education [in Australia]. Approximately half of the Professional Doctoral programs (N=37) indicated, in one way or another ... that their interests were at the heart of the Lee [et al] (2000) model. We note especially that twenty or so of these gave a P/W/U site response on the distinctiveness of their program. At the same time there is also evidence that there are programs, perhaps around twenty or so, remaining within the first generation of development (for example, 24 programs at the U site on distinctiveness) (Maxwell & Shanahan 2000, p. 17).

Looking back at the three cases it is easy to see elements of the model in each. The shift in source of knowledge, the focus of the products away from the academic genre and audience is evident. There is a great interest in the workplace and potential for the production of useful knowledge, heightened by the input of the workplace supervisor in some programs. They appear to be building upon the experience of the candidate to improve the work of the profession.

### UNE's EdD

The UNE EdD was not one of those that had interests “at the heart of the Lee et al (2000) model”. The UNE EdD had a traditional structure, developed in the period 1990 -1993, brought into being within a conservative academic environment. It had a number of distinctive features (Maxwell & Carrigg 1996) including compulsory residential schools and the professional extension unit. Overtime these two features in particular waned as enrolment numbers declined. The program presently contains 75% research represented by the single dissertation of about 70,000 words and 25% course work which consists of three units, one of which is the compulsory Advanced Research Methods. Clearly the perspective of latter unit can have an important impact upon the dissertation. Students in the EdD at UNE have consistently expressed satisfaction with this particular unit (Maxwell & Carrigg 1996, p.200). Supervisors are typically from UNE faculty. About 50 mature professionals have enrolled since the inception of the EdD in 1994 and there have been just six graduates (to 2000). This was a first generation Professional Doctorate suffering from fierce market place competition (cf Maxwell & Shanahan 2000).

Comment by the examiners of the first three UNE EdD dissertations catalysed the present authors to mount a small research project (Maxwell & Vine 1998). The comments of one of the nine examiners best illustrated my concern:

This particular study has all the hallmarks of quality academic work (leading to) high standard scholarship. It would be most unfortunate if the Education Doctorate degree were not accorded the same standing as a traditional doctorate, and *I must admit to not really being able to distinguish between them in this particular case* [my emphasis].

From my point of view we were dammed with faint praise. If the UNE EdD is not distinctively professional why have a different doctoral award from the PhD in education at UNE?

In consideration of this concern, discussions with stakeholders at UNE covered a range of ideas. Eventually two key notions appeared to be productive ways forward. The first was the importance of experience as a criterion of entry for the EdD. This is one distinguishing feature of the EdD (as compared to the PhD) at UNE. Secondly we were concerned that the nature of the framework within which the Advanced Research Methods unit presented research techniques may be covertly contributing to prescription of the nature of the research in the program.

Our analysis indicated a formidable agenda for change for the UNE EdD. For example, if taken up as a distinctive feature of UNE's EdD, critical reflection would pose interesting challenges in unit development. Of course experience is an essential precursor to critical reflection. An understandable response might be to seek to incorporate such material in the Advanced Research Methods unit. However, that unit is already very demanding in terms of breadth and depth of coverage and complexity of ideas, and if it were to be modified to give greater emphasis to action research it would be impractical to add critical reflection as yet another discrete but integrated theme. This suggests that a new unit devoted entirely to the understanding and practice of critical reflection might be needed, and this carries other implications for program design.

The discussants (10 of 15 EdD supervisors at UNE) clearly thought the workplace central to EdD work because it is the source of the research question and the site of professional experience. There was also a desire for research methodologies that allowed the workplace to be central. Action research was seen as one clearly distinctive and appropriate research methodology for Professional Doctorates and the UNE EdD in particular. The great strength of action research is that it allows for the actioning of knowledge in the workplace, producing knowledge that is useful (Seddon 1999).

Professor Bill Green, who conceived the hybrid curriculum model, joined the faculty of UNE in 1998. He introduced it to EdD stakeholders. Building upon earlier developmental work over a series of meetings and a retreat, those involved in the program in 2000 agreed to use the hybrid model as the key organising conceptualisation for a new EdD. A discussion paper was created in August 2000 (Maxwell, Green & McCrea 2000, p. 3) in which the salient points were:

1. The relationship between the University, the Workplace and the Profession (is) central to any redevelopment of the EdD.
2. Course work be specifically tailored .... to consist of three major units of study, addressed respectively to 'Professional Practice', 'Organisational Dynamics' and '[Advanced] Research [Methods/] Literacies'.

We see the units presented here as topics to encapsulate a shift from Mode 1 to Mode 2 knowledge, especially in that they are not disciplinary, and recognise that we academics have to find new ways of getting students access to professional knowledge, including the use of online and face-to-face discussions since almost all of our students are not on campus. Following the discussion paper, decisions were made (not yet sanctioned by the Academic Board, though no great difficulty is anticipated because the University has become more open to market driven alternatives) that a portfolio would be the preferred product over a dissertation. The portfolio will include a linking paper and could include pieces that were written for different audiences, notably workplace and professional audiences as well as academic ones. Furthermore, the portfolio allows for the possibility of a number of short workplace-relevant pieces of research. Busy senior professionals, who it is our experience undertake the EdD, are involved in a wide range of projects as part of their professional work and so the new EdD can complement that range of work via the projects included in the portfolio. It is also our experience that many busy professionals do not want to be tied down to the single piece of sustained research to be written up in the academic genre over a number of years.

More recent discussions have changed and further specified the program. The unit on Organisational Dynamics was re-focussed to one that centred upon the nature of the workplace to add to the one on Professional Practice. Details of the nature of the units have still to be worked out by the respective teams and it is likely that the discussions around the Methods/Literacies unit will be lively. A fourth unit has been conceived which commences as candidature begins. This is the Research Proposal unit at the end of which will be a formal presentation. These mostly will be given at the Program School, held annually. Entry requirements will remain at research at honours level plus at least four years experience in the profession together with access to workplaces. Parallel with these developments has been the re-connection of the stakeholders in the program with teachers and administrators who will work with us in an ongoing fashion. We see this connection as crucial and want to enshrine this formally as well as informally. Naturally, there are still issues to be worked through. These include:

- Supervision of the new EdD: Who has the skills and of those that do, how can their workloads remain reasonable? How can we encourage professionals outside the university to co-supervise?;
- Relationships clarified between Course-work and Research: How can we develop course work which is organic to the research?;
- Funding of administration/governance of Professional Doctorates; and

- Examination: Should this be oral and/or written? Who can best examine and what is the right mix of academics and professionals in the field?
- Portfolios: How can we maintain rigour in the research projects?

### Conclusions

Professional Doctoral programs have burgeoned in Australia and elsewhere. In Australia at least the first generation forms were characterised as only structurally different from the PhD, in fact sometimes described as a “PhD plus course work”. More fundamentally though, these early forms privileged academic over professional knowledge and outputs (cf Maxwell & Shanahan 1997). There is evidence that there are some programs in Australia that have the features of what has been termed second generation Professional Doctorates. In these the realities of the workplace, the knowledge and the improvement of the profession and the rigour of the university are being brought together in new relationships.

The UNE EdD was one of the early Professional Doctorates. Despite the concerns that were raised initially in the middle 1990s change was glacial, though understandable. Recent planned developments are based upon the Lee et al hybrid curriculum model which places Mode 2 knowledge production at the centre of the learning. While there are still quite a few details to be worked out before the first students enroll in 2002, there is a general level of enthusiasm and satisfaction that the underlying conceptualisation is a strong one and so we have a sound basis upon which we can build our second generation EdD.

### REFERENCES

- BAUMGART, N, & LINFOOT, K. (1998) The Professional Doctorate in education: A new model', in MAXWELL, T.W. & SHANAHAN, P.J. 1998. *Professional Doctorates: Innovations in Teaching and Research*, Proceedings of the Conference entitled 'Professional Doctorates: Innovations in Teaching and Research', Coffs Harbour, 8-10 October, (Faculty of Education, Health and Professional Studies, University of New England, Armidale).
- BOURNER, T., BOWDEN, R. & LAING, S. (2001) Professional Doctorates in England, *Studies in Higher Education* 26, 1, ?.

- BRINE, J. (2000) Defining an appropriate range of learning opportunities for an outward looking PhD, Paper presented at the 3<sup>rd</sup> International Professional Doctorates Conference entitled, 'Doctoral Education and Professional Practice: The Next Generation?', Armidale, 10-12 September, 2.
- CSPEC (California State Postsecondary Education Commission) 1987. *The Doctorate in Education: Issues of Supply and Demand in California, Commission Report #78-11*, California State Postsecondary Education Commission, Sacramento, 58p. (ED287433).
- EDWARDSON, S.R. (2000) Professional. Research doctorates in nursing, Paper presented at the 3<sup>rd</sup> International Professional Doctorates Conference entitled, 'Doctoral Education and Professional Practice: The Next Generation?', Armidale, 10-12 September, 8p.
- GARRICK, J. & RHODES, C. (2000) *Research and Knowledge at Work: Perspectives, case studies and innovative strategies* (London, Routledge).
- GIBBONS, M., LIMOGES, C., NOWOTNY, H., SCHWARTZMAN, S., SCOTT, P. & TROW, M. (1994) *The New production of Knowledge: The Dynamics of Science and Research in Contemporary Societies* (London, Sage).
- HODGSON, P.D., LLOYD, B.E. & BROWNRIGG, A. (1998) Experiences with the Doctor of Technology program at Deakin University, in MAXWELL, T.W. & SHANAHAN, P.J. (eds) *Professional Doctorates: Innovations in Teaching and Research*, Proceedings of the Conference entitled 'Professional Doctorates: Innovations in Teaching and Research', Coffs Harbour, 8-10 October, Faculty of Education, Health and Professional Studies, University of New England, Armidale, pp.99-108.
- Industry Task Force on Leadership and Management Skills (1995) *Report*. [Karpin Report] (Canberra, Australian Government Publishing Service).
- LEE, A., GREEN, B. & BRENNAN, M. (2000) Organisational knowledge, professional practice and the at work, in J. GARRICK & C. RHODES(Eds) *Research and Knowledge at Work: Perspectives, case studies and innovative strategies*, (London, Routledge).
- LLOYD, B.E. & BAKER, L. (1996) New doctorate in technology at Deakin University', in T.W. MAXWELL & P.J. SHANAHAN (Eds) *Which way for Professional Doctorates? Context and Cases*, Proceedings of the Conference entitled 'Which way for Professional Doctorates?', Coffs Harbour, 16-18 October, (Armidale, Faculty of Education, Health and Professional Studies, University of New England).
- MAXWELL, T.W. & CARRIGG, J. (1996) The UNE Doctor of Education and Students' Reactions, in T.W. MAXWELL & P.J. SHANAHAN (Eds) *Which way for Professional Doctorates? Context and Cases*, Proceedings of the Conference entitled 'Which way for Professional Doctorates?', Coffs Harbour, 16-18 October, (Armidale, Faculty of Education, Health and Professional Studies, University of New England).
- MAXWELL, T.W., GREEN, B. & MCCREA, N. (2000) Doctorates within FEHPS: A Discussion Paper, mimeograph, unpublished, Faculty of Education, Health and Professional Studies, UNE, 3p.
- MAXWELL, T.W. & SHANAHAN, P.J. (1996.) *Which way for Professional Doctorates? Context and Cases*, Proceedings of the Conference entitled 'Which way for Professional

- Doctorates?', Coffs Harbour, 16-18 October, (Armidale, Faculty of Education, Health and Professional Studies, University of New England).
- MAXWELL, T.W. & SHANAHAN, P.J. (1997) Towards a reconceptualising the doctorate: Issues arising from comparative data on the EdD degree in Australia, *Studies in Higher Education* 22, 2, pp.133-150.
- MAXWELL, T.W. & SHANAHAN, P.J. (1998) *Professional Doctorates: Innovations in Teaching and Research*, Proceedings of the Conference entitled 'Professional Doctorates: Innovations in Teaching and Research', Coffs Harbour, 8-10 October, (Armidale, Faculty of Education, Health and Professional Studies, University of New England).
- MAXWELL, T.W. & SHANAHAN, P.J. (2000) Current issues in Professional Doctoral education in Australia and New Zealand', Paper presented at the 3<sup>rd</sup> International Professional Doctorates Conference entitled, "Doctoral Education and Professional Practice: The Next Generation?", Armidale, 10-12 September, 20p.
- MAXWELL, T.W. & VINE, K. (1998) The EdD at UNE: The view through conceptual bifocals, in MAXWELL, T.W. & SHANAHAN, P.J. (Eds) *Professional Doctorates: Innovations in Teaching and Research*, Proceedings of the Conference entitled ' Professional Doctorates: Innovations in Teaching and Research', Coffs Harbour, 8-10 October, (Armidale, Faculty of Education, Health and Professional Studies, University of New England).
- MORLEY, C. & PRIEST, J. (1998) RMIT reflects on its Doctor of Business Administration program, in MAXWELL, T.W. & SHANAHAN, P.J. (Eds) *Professional Doctorates: Innovations in Teaching and Research*, Proceedings of the Conference entitled ' Professional Doctorates: Innovations in Teaching and Research', Coffs Harbour, 8-10 October, Armidale, Faculty of Education, Health and Professional Studies, University of New England).
- ORME, J. (2000) Co-ordinating a doctoral training programme, ESRC funded seminar series, #3 entitled "Doctoral and Advanced Studies in Social Work", 12p.  
<<http://www.nisw.org.uk/tswr/orme.html>>
- SEDDON, T. (1999) Research, recommendations and realpolitik: Consolidating the EdD, *Australian University Researcher* 26, 3, 1-14.
- SEDDON, T. (2000) What is doctoral in doctoral education?, Paper presented at the 3<sup>rd</sup> International Professional Doctorates Conference entitled, "Doctoral Education and Professional Practice: The Next Generation?", Armidale, 10-12 September, 2.
- SMYTH, E. (2000) Changing educational environments and changing technologies: Professional Doctorates at the Ontario Institute for Studies in Education of the University of Toronto (OISE/UT), Paper presented at the 3<sup>rd</sup> International Professional Doctorates Conference entitled, 'Doctoral Education and Professional Practice: The Next Generation?', Armidale, 10-12 September, 14 slide powerpoint presentation.
- THOMPSON, P. (2000) On, in and out of line: The Professional Doctorate as ambiguous practice, Keynote paper presented at the 3<sup>rd</sup> International Professional Doctorates Conference entitled, 'Doctoral Education and Professional Practice: The Next Generation?', Armidale, 10-12 September.



TRIGWELL, K., SHANNON, T. & MAURIZI, R. (1997) *Research-course work Doctoral Programs in Australian Universities* (Canberra, Evaluations and Investigations Program, Higher Education Division, Department of Employment, Education, Training and Youth Affairs).

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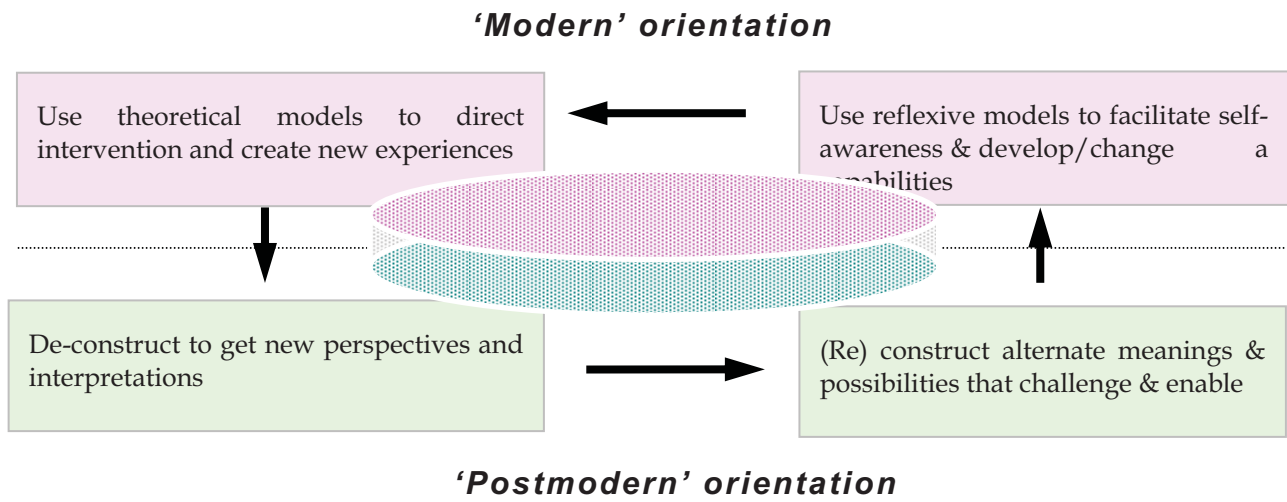


Figure 1: **Reflective Practice Model** (Morley & Priest 1998)

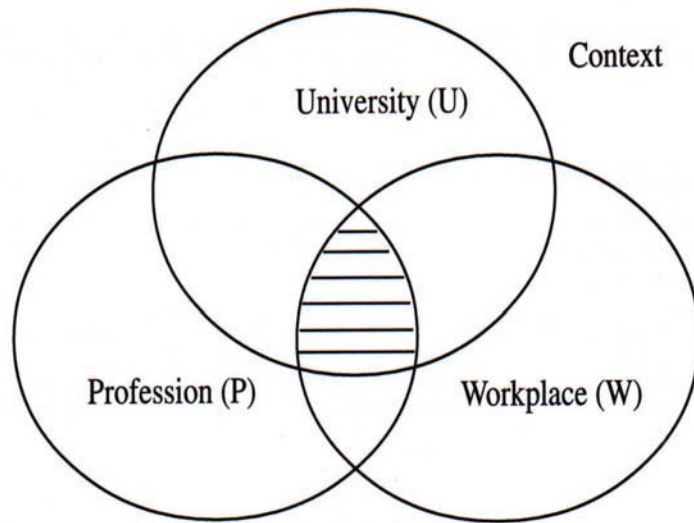


Figure 2 : The hybrid curriculum of the professional doctorate (after Lee et al, 2000, p.127)