



Challenging Librarians: the Relevance of the Doctorate in Professional Practice

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Abstract

We, as librarians, are adept at challenging academics, students and administrators about the crucial role of information literacy in higher education and lifelong learning. Consequently, the push for strategic partnerships with academics is frequently in the foreground of our thinking. Concomitantly, the push for academic status for librarians is raised occasionally, particularly as a pay and equity issue. Yet, our purposes may appear somewhat misguided or rhetorical when contrasted to the nominal prerequisites required for professional practice, especially when compared with those of academics. The issues of information literacy and knowledge production within a knowledge economy compound such debate. This paper argues that 'credential creep' is catching up with librarians in the university sector. In order to be regarded as integral to academic endeavour, those of us who 'teach' information literacy may need to match the qualifications normally required by academics. Consonant with this proposal is the *Australian and New Zealand Information Literacy Framework: Principles, Standards and Practice* (Bundy, 2004) of the Australian and New Zealand Institute for Information Literacy (ANZIL) and the Council of Australian University Librarians (CAUL). The *Framework* mirrors many of the desired outcomes of a doctoral degree, a degree possessed by approximately one per cent of Australian librarians but, in comparison, by more than fifty-four per cent of Australian academics. This paper challenges—not academics—but librarians, to embrace the notion of undertaking doctoral study to enhance our professional (or amateur) practice and our information literacy. The recommendation is derived in essence from my study on doctoral research and information literacy (Macauley, 2001). It also incorporates the current discourse on these issues and uses personal narrative to articulate the findings. It seeks also to explore those tensions and contradictions commensurate with practising what we preach.

Introduction

In her classic chapter 'Librarians and scholars' Jean Whyte (1984, p. 261) challenged the profession by stating:

Librarianship is an academic discipline but at present it occupies a basement in the house of intellect. It will climb upstairs when it can present a more firmly based tradition of scholarship, more certain and significant research findings, a less didactic approach to its subject matter so that students in library schools participate in academic questioning and argument rather than concentrating on learning a body of facts that will, inevitably, be out of date; and a more pervading sense of urgency and purpose.

In her chapter she provided a critique of the profession and judging by her passage above, 'challenged' is probably an understatement. My purpose in this paper is to pose similar challenges. While a number of librarians (Peacock, 2001; Lupton, 2002; and Nimon, 2002) have discussed the similarities between librarians and academics recently, the differences between the respective professions remain significant. One of the major differences relates to the qualifications required for admission into the respective profession. Both require degrees but, increasingly, a doctorate is required for entry to or advancement within academe. Another difference relates to information and

knowledge: librarians tend to focus on the former, particularly, the dissemination of information; academics focus on the latter—the creation of knowledge through original research. While librarians and academics are professionals, the entry into the respective professions is normally and understandably different. It is not only the rites of passage that differ; information literacy is a case in point. Academics may see information literacy as a means to an end; librarians often perceive information literacy as an end in itself. My research suggests that when asked, most academics perceive information literacy as (only) library-related information seeking skills and generally do not relate information literacy to the higher order knowledge production skills they expect of their doctoral candidates and graduates. It appears to be a tacit concept. I suggest that many librarians (still) perceive information literacy as (only) library-related information seeking skills. We may espouse the *ANZIL Framework*, but in reality we tend to focus upon only some aspects. These differences of perception pose challenges for professional practice.

The doctorate has been in existence for approximately 850 years and was introduced initially for the professions of theology, medicine and law (Noble, 1994). However, it was not until the nineteenth century in Europe that the Doctor of Philosophy (PhD) degree gained prominence as a degree highlighting distinction in research (Noble, 1994). The University of Melbourne awarded

the first Australian PhD in 1948 (Evans et al, 2003a). From that time the numbers of doctoral candidates have increased steadily and almost exponentially since the 1990s when the binary system of higher education was merged into a unitary system through the Dawkins reforms (Dawkins, 1988). Some people, including those connected with government departments and agencies, have perceived doctorates—particularly the PhD—to be based on pure as opposed to applied research, undertaken prior to the commencement of one's career rather than mid-career, studied full-time on-campus rather than part-time and/or off-campus, and with the focus on a career in academia and not in the professions. Times and opinions have changed: applied research is now an accepted and welcome method for doctoral degrees and is the norm for the more than 130 professional doctorates currently on offer in Australia (McWilliam et al, 2002); Government reports (West, 1998; and Kemp, 1999) stress the relevance and importance of applied research to the knowledge-based economy and national benefit; seventy-two per cent of candidates are over thirty years of age (Evans et al, 2003b); the proportion of part-time students has increased dramatically and is approaching fifty per cent (Evans & Pearson, 1999; Pearson & Ford, 1997; DETYA 2001); approximately forty per cent of doctoral candidates are part-time and study off-campus for at least some of their candidature (Pearson & Ford, 1997); and the number of doctoral graduates entering academia has dropped to forty per cent (ARC/GCCA, 1999). In fact, fifty-five per cent of doctoral students are now in professional fields of study as Evans (2002, pp. 158-159) states:

... over half of research doctorate candidates are enrolled in DETYA Broad Fields of Study related to the professions. PhD students comprise the bulk of research doctorates, therefore, one assumes that their research in the professional fields, whether conducted within or without the academy's walls, is adjudged (by examiners) to make significant contributions to knowledge related to their professional fields.

In other words, there is considerable flexibility and diversity in doctoral study in Australia with many professionals, including some librarians, now undertaking doctorates. The number of librarians with doctorates remains small, yet increasing. As an indicator, the Australian Library and Information Association (ALIA) had sixty-four members with the title 'Dr' for the financial year 2002/2003 (Personal Communication, 11 August 2003). This amounts to 1.3 per cent of the total personal membership of 5058 (an additional eleven members (0.2 per cent) had the title 'Professor' which *may* indicate they hold a doctoral qualification). Credential creep will see that figure increase. Broadly speaking, in a decadic sense, the 1980s appeared to be the growth period of the graduate diploma; masters degrees were the trend in the 1990s and the new millennium brought the doctorate to the reach of those already in the workforce. Due to open and flexible teaching and learning being mainstreamed in the 1990s, including at doctoral level, professionals could remain in the workforce whilst studying. Librarians, who often preach the importance of lifelong learning and continuing professional development (CPD) are not immune to credential creep.

This paper focuses upon doctorates relating to the professional practice of librarians. As Evans (2002, p. 163) has stated, 'the term "profession" and its derivatives are used in ... an inclusive sense to capture occupations which require a degree for entry and which may or may not be regulated (by government) or

self-regulated (through a professional body)'—such as ALIA. Today the growing trend for doctorates in the professions is demonstrated by the vast array of professional doctorates, such as the Doctor of Education (EdD), Doctor of Psychology (DPsych), Doctor of Business Administration (DBA), Doctor of Creative Arts (DCA), Doctor of Technology (DTech), Doctor of Communication (DCom), Doctor of Health (DHealth) etc. Professional doctorates may be achieved by coursework, research, or as is often the case, a combination of both. Contrary to what the name suggests, the relevant profession may have little input into the curriculum and only a handful are accredited by the respective professions. No such accreditation is assigned to the PhD as it is not a 'professional' award; rather it is an internationally recognised degree without a discipline designation.

Significant to this discussion is the absence of a professional doctorate in librarianship/library science/information studies etc. offered by an Australian university. The Doctor of Librarianship (DLib) as it is commonly known in the USA, has not, at this stage, made it to our shores. Of course, this does not preclude librarians undertaking a professional doctorate in related fields such as education (EdD) or communication (DCom). For this reason, my discussion draws primarily on the PhD. Consequently, the issue of the relevance of the PhD in professional practice is the real focus of this paper.

The (Ir)relevance of the Doctorate in Professional Practice

A trend in research training that has received significant attention institutionally and at government level is the increased diversity of employment outcomes for doctoral graduates of whom fewer than forty per cent are expected to work in the higher education sector (ARC/GCCA, 1999). This has strengthened the calls from employers and government for research training to provide more appropriate preparation for careers in industry settings (Mullins & Kiley, 1998). The White Paper 'Knowledge and innovation: a policy statement on research and research training' (Kemp, 1999) identifies a number of issues regarding the quality and breadth of research training. These include 'research programmes that are too narrow, too specialised and too theoretical leading to graduates whose communication, interpersonal, and leadership skills require further development' (Kemp, 1999, p. 17). What appears clear in this report and in much of the literature is that pundits are basing their arguments on the stereotypical vision of candidates undertaking their doctorate prior to career commencement and being young, first class honours graduates, and probably undertaking a science-based doctorate situated in a university laboratory. Most likely they are also viewed as male. One could be forgiven for thinking government-produced reports on doctoral research are not in touch with reality.

As Barnacle and Usher (2003, p. 346) state:

However, little or no concrete evidence has ever been given to support these claims. Furthermore, no substantive distinction is made between different categories of research degree candidates, for example, between those who are undertaking their research full-time and those who are already full-time professional workers and are undertaking their research degree in a part-time mode.

Additional criticisms of the so called 'traditional' PhD addressed by Usher (2002, pp. 149-150) include: they do not encourage

multi-disciplinary or trans-disciplinary work; PhD training does not provide a broad enough skills set; that it is not an appropriate vehicle for collaborative work; and interestingly—for this discussion on the doctorate in professional practice—that the form and culture of the conventional PhD precludes the involvement of industry practitioners.

A seminal issue relating to criticisms of the 'traditional' PhD—if in reality there is such a thing as a traditional PhD—is the relationship to the knowledge economy and the concomitant aspects of innovation and knowledge being tradeable commodities. The emergence of this 'new economy' in which information and knowledge are the drivers, is seen as crucial for international competitiveness with innovation and creativity as principal determinants of this, giving rise to a focus on intellectual capital (Neumann, 2002). Research in general—and doctorates in particular—are about the production of an original (or significant) contribution to knowledge, consequently doctoral research is congruent with the Australian Federal Government's push towards enhancing Australia as a knowledge economy. What these criticisms ignore—contest even—is the importance to the knowledge economy of professionals undertaking doctorates (particularly part-time). As Barnacle and Usher (2002, p. 352) state:

Research degrees are undertaken in order to engage with ideas, to enhance knowledge, and to obtain the added confidence that comes from the experience of doing, and knowing how to do, research. The university is understood as a site where critical distance from, and reflection on, workplace practices and issues can occur, as well as providing a valuable source of ideas for application within professional practice.

Discussing their research on part-time research students from the professions, they go on to say 'Respondents believed that doing research makes them better professionals. It informs their work through disciplinary expertise and research knowledge and gives them confidence in, and a critical perspective on, what they do in the workplace' (Barnacle & Usher, 2003, p. 353).

Continuing professional development is almost always seen as crucial for lifelong learning and in professional practice, with ALIA's CPD scheme being an example. This is articulated in their CPD Policy (ALIA, 1998). Elaborating on the importance of CPD in professional practice, when introducing the scheme, the ALIA President stated 'In introducing this new category, the Association is following the lead set by other professional bodies, such as the Australian Medical Association and Society of Certified Practising Accountants, as well as many others' (Anderson, 1999, p. 4). In considering the relevance of the doctorate to professional practice in librarianship it could be perceived as the ultimate in professional development: doctoral candidates (or graduates) could be regarded as a benchmark for achieving the requisite 'points' for ALIA's CPD Scheme. The scheme requires a minimum of 30 points each year and a minimum total of 120 points over a triennium with three years being a prerequisite for CPD accreditation. Tertiary courses attract up to 60 points per annum, presentations and papers up to 20 points, publications up to 30 points per year, professional reading 10 points, and informal learning activities up to 30 points per year (ALIA, 2004). These activities comprise part of doctoral processes and demonstrate the relevance of doctoral study to professional practice. A doctorate—the highest education—certainly takes CPD to a new level. The skills, knowledge and scholarly networks gained

from undertaking a doctorate almost certainly produce lifelong learners. Furthermore, while difficult to quantify, the professional development undoubtedly flows on to colleagues, clients and others. There are also community service aspects that should not be overlooked, including mentoring colleagues, editorial duties, refereeing papers etc.

Information Literacy, the Doctorate and the Production of Knowledge

Understandably, the focus of the *ANZIIL Information Literacy Framework* is on information, not the production or reproduction of knowledge. Interestingly, the word 'information' is mentioned eleven times in the 'statement of principles' and 'core standards' sections of the document, compared with a single use of the word 'knowledge'. This is where the professions of librarians and academics differ. Librarians support the information seeking of students (and academics) whereas academics reproduce knowledge and create new knowledge and impart that knowledge to their students—a role we clearly do not have. This issue was debated by Asher (2003, p. 54) who said:

Teaching students to analyse data, evaluate ideas, and develop a philosophical understanding framed within a subject discipline are elements of information literacy that lie outside the expertise of most librarians. Universities hire academics to do that. The librarian can change a life for the better every day by opening a door for a student to a new piece of knowledge. The academic can help the student interpret it. Both of these jobs are important.

In the *ANZIIL Framework* knowledge is clearly mentioned in the first statement of principles: 'engage in independent learning through constructing new meaning, understanding and knowledge'; yet it is not articulated in any others, nor, in the core standards. The generation of knowledge however, may be implied, particularly with Standard Five: 'Applies prior and new information to construct new concepts or create new understandings'. It is possible the words information and knowledge are sometimes used interchangeably throughout the *Framework* although this may exhibit a lack of understanding of two different, yet inter-related, concepts.

The examples contained in the new *Information Literacy Framework* not surprisingly are similar to an information seeking checklist for a doctorate. If a candidate achieved all the learning outcomes and the examples provided in the *Framework* this would undoubtedly assist in achieving a successful completion. Using personal reflection, as a BA graduate and as a MAppSc graduate I may well have failed many of the learning outcomes/examples provided. It has taken the successful completion of a PhD in information literacy, scholarly communication and doctoral pedagogy for me to believe I genuinely exceed the standards. From my own experiences it may follow that many, if not most, undergraduate students may not achieve the standards. Some of the more challenging standards include 'uses alert/current awareness services', 'selects appropriate controlled vocabulary or a classification specific to the discipline or information access tools' and 'creates a system for organising and managing the information obtained e.g. EndNote, card files'. While these examples reflect the expectations of doctoral candidates, I personally believe they are unrealistic for those at undergraduate level and even for those undertaking postgraduate coursework studies.

The *ANZIL Framework* seeks to place the assigned standards in a broader context of generic skills, of which information literacy is the core component. It is worth acknowledging that the University of South Australia (UniSA) has been a driving force behind the *Framework*. Additionally, it comes as no surprise that UniSA has also introduced the '*Research Degree Graduate Qualities*' (University of South Australia, 2004). I have not however, identified a link between the two documents. Interestingly, the first of seven qualities states '[a postgraduate research degree graduate of the UniSA] has an understanding of current research based knowledge in the field, its methodologies for creating new knowledge, and can create, critique, and appraise new and significant knowledge' (University of South Australia, 2004). Significant here is the word 'knowledge' which is mentioned three times, once again reinforcing the differing foci of librarians and academics.

What some practitioners may not realise is how certain components of information literacy change during, and particularly after, the gaining of a doctorate. Rather than the traditional channels of self-initiated information seeking, candidates and graduates particularly, embrace a new paradigm where information comes directly to them. The information takes the form of reviewing drafts of colleagues work, refereeing conference papers and journal articles, supervising and examining theses, book reviews, reading thesis and grant proposals, advising on draft policy documents etc. The irony is that it circumvents some of the information literacy processes librarians are so passionate about but, importantly, as the information is normally yet to be published it is not accessible through normal channels of information seeking. It is privileged information. What it also demonstrates is the importance of human contact in scholarly communication and information literacy (which is very much an academic trait) as opposed to the librarian's traditional route of information seeking through bibliographic database searching.

Information literacy could be seen as a concept constructed by librarians to articulate and justify our role in information seeking and more recently lifelong learning. I believe the focus should be more on the creation of new knowledge, or at least new knowledge to the student. Information is reproduced or replicated very easily (David & Foray, 2002) by copying—i.e. photocopying or electronically, orally, by reading etc. However, knowledge is far more difficult to reproduce let alone create. A doctorate both reproduces knowledge, and most importantly, creates it. My perception is that information literacy is the rudimentary part of the equation: turning information into knowledge is the real issue—an issue that challenges most librarians. In other words, much of what we focus upon are realistically lower order skills—and important skills they are—yet it is the more cognitive aspect—producing knowledge—that really counts, particularly as we live in a so called knowledge economy: producing knowledge rather than reproducing information. As an example, I suggest, based on my own doctoral research that, 'research' papers produced by librarians have a tendency towards very long reference lists compared with those of our colleagues in academia. Moreover, I suggest that this is because we are trained to identify comprehensively and locate relevant literature; but as we rarely engage in 'original' research we also need to reproduce the research (often not genuine research but opinion pieces or position papers) written by others. Academics, on the other hand, predominately report on their own research, with less need to reference the work of others except for

the almost mandatory framing of the relevant literature. As Jeans (1994, p. 5) states: 'systematic first-hand examination of the nature of research and direct experience of research processes can move the [doctoral] graduate from a consumer of knowledge to a generator of knowledge'.

Exposing the Myths of Irrelevance: a Personal Reflection

There is a (mis)conception that undertaking a doctorate involves 'learning more and more about less and less'. Such rhetorical statements are often bandied around in tearoom discussions about the irrelevance and overly specialised nature of the PhD in the 'real' world. To justify the rhetoric, claims are made about the numbers of taxi drivers who have PhDs and cannot get a 'real' job! Not surprisingly comments such as these tend to be made by people who have not completed a doctorate (nor driven a taxi); consequently there is little substance to their claims. As mentioned above the doctoral process could be seen as an exemplar for the *ANZIL Information Literacy Framework* and the pursuit of lifelong learning. The transferable skills learnt are many fold. Doctoral education exemplifies many aspects of information literacy and is often grounded in professional practice yet, due to the individualistic nature of the process, the various components cannot be neatly pigeonholed into identifiable sections that satisfy the critics. What follows is a rudimentary attempt to break down the various components of my own PhD journey—as opposed to what is contained in the actual printed thesis (Macauley, 2001)—into a kind of curriculum map, using a simplistic metaphor of virtual subjects. It is best described as a heuristic tool: an explanatory device to frame my argument that a doctorate is clearly relevant to professional practice—in this case, librarianship. While this exercise draws comparisons with placing square pegs in round holes, it offers a quantitative representation to what is very much a qualitative process. It should be noted that my PhD was undertaken in a faculty of education and not through a library school. Also, as an Australian PhD, the assessment was based entirely on the examination of the thesis; no 'real' coursework was undertaken.

The title of my thesis was 'Doctoral research and scholarly communication: candidates, supervisors and information literacy' and the study investigated information literacy and scholarly communication within the processes of doctoral research and supervision at a distance. Further to this, the influence of pedagogic continuity—particularly in relation to the information seeking behaviour of candidates—was investigated, as was the concomitant aspect of how doctoral researchers practise scholarly communication. Superimposed upon these issues was the theoretical framework of adult learning theory, in particular the tenets of andragogy (possibly a learning theory now outmoded). The research methodology used qualitative and quantitative techniques encompassing both data and methodological triangulation. The study used two sets of questionnaires—with 409 responses—and a series of in-depth interviews with seventy-two on-campus and off-campus doctoral candidates and supervisors from four Australian universities. The findings were critically analysed and synthesised using the metaphor of a scholarly 'Club', membership of which is obtained through the gaining of a doctorate as a rite of passage. There were strong linkages with professional practice, as many of the respondents were working professionals undertaking their study on a part-time basis. In other words, they were very much typical doctoral

candidates from Australian universities—not the stereotypical candidates espoused in recent government documents.

Table 1 presents the deconstruction (or reconstruction) of the doctoral process into discrete parts or virtual subjects. This schema is presented to help visualise the many components and complexities of a PhD and demonstrates the relevance of doctorates to professional practice. It is acknowledged that the ‘virtual subject’ analogy may suit some disciplines (and indeed some professions) more than others, but the argument remains the same.

Table 1 Virtual Subjects Completed in PhD

Information Literacy	Statistics	Online Research
Research Ethics	Academic Writing	Research Design
Survey Design	Scholarly Communication	Adult Learning Theory
Project Management	Advanced Project Management	Interpreting Qualitative Data
Scholarly Networking	Academic Publishing	Library Research Methods
Educational Methodologies	Faculty/Library Collaboration	Conference Presentation Skills
The Literature Review	Distance Education	Proposal Writing
Conducting Research Interviews	Research Culture	Academic Publishing in Australia
Thesis Supervision	Doctoral Pedagogy	The Information Explosion
Higher Education	Andragogy	Pedagogy
Students from a NESB	Pedagogic Continuity	Disintermediation
Information Seeking Behaviour	Information Seeking in Practice	Writing Grant Applications

What is apparent from this schema is the overlap of theory and professional practice. There is no dichotomy between theoretical and practical subjects. In constructing this model I categorised subjects initially as theoretical or practical, plus those relating to information literacy. It became obvious this was a futile exercise; in all cases more than one element was present and in most cases all three elements were identified. Not surprising was the relevance to professional practice. In addition to gaining a body of knowledge I was able to integrate theory and professional practice and therefore hopefully make a greater contribution to the knowledge economy. Taking the *ANZIIL Information Literacy Framework* into consideration, each and every virtual subject listed in Table 1 contributes to information literacy, whether theoretical or practical and all relate to professional practice. In other words, information literacy extends far beyond the work of libraries and librarians.

The issue of whether a doctorate (and a PhD in particular) is an appropriate preparation for teaching warrants a separate paper, however a few points are worth noting. The PhD is a research degree, rather than a teaching degree, unlike the original form of the doctorate (from the Latin word ‘docere’, meaning ‘to teach’). Teaching, learning and research are linked intrinsically; research informs teaching and learning. Without informed subject knowledge, one cannot teach—as opposed to train, which most librarians do rather than teach. A doctorate provides in-depth knowledge, and a number of transferable skills. A doctorate

develops high level information literacy skills including critical thinking in addition to the mandatory creation of new knowledge. While teaching skills are important, teaching is the conduit for the transference of the content knowledge, without which there is nothing to teach! Clearly, the trends towards academics (and librarians) acquiring qualifications in teaching to supplement their discipline-based degree(s) is positive and sure to enhance their professional practice.

The Push for Academic Status

The view that librarians should hold academic status (including the subsequent pay and equity issues that emerge from the debate) has been raised by some librarians including Peacock, 1999; Peacock, 2001; and Lupton, 2002. Their arguments include: that we are ‘teaching librarians’ and should view ourselves as educators (Lupton) and ‘Librarians must be strongly positioned as key educators in the teaching and learning environment, and empowered with an educational competence and professional confidence equal to that of their academic peers’ (Peacock, 2001, p. 27). The debate that librarians should be employed on the same awards, conditions, and salary as our academic counterparts has been long running and not restricted to the Australian context. Claims include librarians have qualifications, particularly in teaching and learning, that often match or exceed those of academics, and that, like academics, librarians ‘teach’. I would suggest in most cases we train rather than teach as mentioned above.

Using pay scales as a comparison, the claims do not appear justified. Based on the per annum pay scales of my own university (Deakin University, 2004) the base grade academic Level A position ranges from \$39086 to \$53042, commencing at \$51228 if the incumbent has a doctorate. This compares with the base grade librarian scale of \$39154 to \$44088. However, most librarians are at least HEW6 level or above. HEW6 ranges from \$45416 to \$49161. Of course, many are employed at HEW7 level (\$50117 to \$55331) and some at HEW8 (\$56381 to \$64762). Fewer still are employed at HEW9+. Many, if not most academics are on Level B which spans \$55837 to \$66305. Academic promotions to Level C or above are rare, if not unlikely, these days without a doctoral qualification. Additionally, there is also a trend for academics to undertake qualifications in teaching and learning to enhance their skills and increase promotional opportunities. Considering just over one per cent of Australian librarians have a doctorate (Personal Communication with ALIA, 11 August 2003) compared with more than fifty-four per cent of Australian academics (DEST, 2004), the pay and equity issue appears unfounded. Put another way, and possibly simplistically, most Australian academics have the equivalent of at least seven years of full-time university study (i.e. an undergraduate degree + Honours + PhD) compared with only three or four years of full-time study for librarians (i.e. an undergraduate degree or an undergraduate degree + graduate diploma). While many librarians may have three or more university qualifications, the same can be said for academics. Furthermore, the argument by some librarians that many academics lack teaching qualifications is countered these days, as many universities have implemented graduate certificates in teaching and learning/higher education etc. to enhance the quality of teaching. The current round of AUQA audits covers this issue in relation to the quality of teaching. Moreover, in Australia you can become a librarian with a one year graduate diploma following any undergraduate degree. According to Myburgh (2003) a master’s degree has now become

the first professional qualification for library and information science internationally with the exception of Australia and South Africa. The latter is phasing out the graduate diploma qualification. To become an academic at Level B or above, the standard prerequisites include a doctorate, or progress towards one, a track record of (refereed) publications, evidence of teaching skills (and increasingly teaching qualifications as previously mentioned), and the ability to attract nationally competitive research grants. Few librarians have such prerequisites, nor are they prerequisites for entry into the profession of librarianship.

A Final Challenge

There have been a number of threads in this paper. The main focus has been the relevance of the doctorate, and in particular, the PhD to the professional practice of librarianship. The overarching issue has been information literacy and comparisons between librarians and academics and the differences in those roles—librarians tend to focus on information, and academics tend to focus on knowledge. The examples of the ANZIL Framework and the UniSA's *Research Degree Graduate Qualities* articulate some of these differences. Also, credential creep is catching up—and librarians may wish to pursue doctoral study and take the next step, whether or not they enter academe. In doing so they may have some justification for seeking the academic status and pay and conditions our academic colleagues possess. The PhD is a flexible, multi-vocational form of training, and well suited to professionals undertaking applied (and theoretical) research in the workplace. It seems reasonable to assume that part-time doctoral students undertaking doctorates related to professional work are located where their new research skills and knowledge can be of direct benefit to their workplace or profession.

Returning to Whyte's comments, she spoke of 'intellect' and 'scholarship', both I believe, relate more to knowledge than information. She challenged the profession to 'participate in academic questioning and argument' rather than concentrating on learning a 'body of facts'. My interpretation of her challenge to librarians is—once again—to focus more on knowledge and scholarship and not just on information. Additionally, she spoke of presenting more 'significant research findings' which I understand to mean undertaking and publishing genuine research that will move the profession forward. Furthermore, the 'pervading sense of urgency and purpose' she mentioned suggests the profession may need to be more responsive to change. I suppose there is some irony that without the production of new knowledge, it is difficult for a profession to move on. For a profession that prides itself on the importance of information literacy, I propose, it is time to take the next step and not only focus upon the 'lower order' skills of information literacy but to look beyond that and lead by example to create new knowledge that challenges professional practice and those served by our profession. By undertaking doctorates, we will go some way to achieving this challenge. Critics may perceive the end result of a doctorate as a thesis bound in buckram—I would rather perceive it as boundless. I believe that undertaking a doctorate enables numerous outcomes, including an opening of your mind—and hopefully the minds of others; getting out of your comfort zone; the ability to critique the work of others, and for others to critique yours; and importantly, to make a contribution to Australia's knowledge base. Your undertaking a doctoral program of study will make a significant contribution to professional practice and in doing so, enhance Australia's reputation as a knowledge economy.

References

- Anderson, C. (1999), 'CPD – building the future', *inCite*, vol. 20, no. 7, p. 4.
- Asher, C. (2003), 'Separate but equal: librarians, academics and information literacy', *Australian Academic & Research Libraries*, vol. 34, no. 1, pp. 52-55.
- Australian Library and Information Association, (2004), 'CPD made easier', *inCite*, vol. 25, no. 3, pp. 14.
- Australian Library and Information Association, (1998), 'Continuing professional development' <<http://www.alia.org.au/policies/education/continuing.professional.development.html>> (22 May 2004)
- Australian Research Council and Graduate Careers Council of Australia, (1999), *Career paths for PhD graduates: a scoping study*, Australian Research Council.
- Barnacle, R. & Usher, R. (2003), 'Assessing the quality of research training: the case of part-time candidates in full-time professional work', *Higher Education Research & Development*, vol. 22, no. 3, pp. 345-358.
- Bundy, A. (Ed.) (2004), *Australian and New Zealand information literacy framework: principles, standards and practice*, Australian and New Zealand Institute for Information Literacy, Adelaide.
- David, P. A. & Foray, D. (2002), 'An introduction to the economy of the knowledge society', *International Social Science Journal*, vol. 177, pp. 9-23.
- Dawkins, J. & Australia. Department of Employment, Education and Training, (1988), *Higher education : a policy statement*, Australian Government Publishing Service, Canberra.
- Deakin University, (2004), 'Salary & benefits', <<http://www.deakin.edu.au/hrs/benefits/salary.php>> (11 May 2004)
- Department of Education, Science and Training, (2004), *Staff 2003: selected higher education statistics*, Department of Education, Science and Training.
- Department of Education, Training and Youth Affairs, (2001), *Higher education students: time series tables*, Department of Education, Training and Youth Affairs, Canberra.
- Evans, T. (2002), 'Part-time research students: are they producing knowledge where it counts?' *Higher Education Research & Development*, vol. 21, no. 2, pp. 155-165.
- Evans, T., Macauley, P., Pearson, M. & Tregenza, K. (2003a), *A brief review of PhDs in Creative and Performing Arts in Australia*, Defining the doctorate: Doctoral study in the Creative & Performing Arts, Australian Association for Research in Education, Newcastle. <http://www.aare.edu.au/indexpap.htm>.
- Evans, T., Macauley, P., Pearson, M. & Tregenza, K. (2003b), *A decadic review of PhDs in Australia*, Paper presented to the Joint Australian Association for Research in Education/New Zealand Association for Research in Education Conference, Auckland. <http://www.aare.edu.au/indexpap.htm>
- Evans, T. & Pearson, M. (1999), 'Off-campus doctoral research and study in Australia: emerging issues and practices', in Holbrook, A. & Johnston, S. (Eds.), *Supervision of postgraduate research in education*, Review of Australian Research in Education No. 5, Australian Association for Research in Education, Coldstream, Victoria, pp. 185-206.
- Jeans, B. (1994), *Credentiailling educational researchers: higher degrees in education*, Australian Association for Education Research Conference, Newcastle.
- Kemp, D. A. (1999), *Knowledge and innovation: a policy statement*

- on research and research training, Department of Education, Training and Youth Affairs.
- Lupton, M. (2002), 'The getting of wisdom: reflections of a teaching librarian', *Australian Academic & Research Libraries*, vol. 33, no. 2, pp. 75-85.
- Macauley, P. D. (2001), *Doctoral research and scholarly communication: candidates, supervisors and information literacy*, PhD Thesis, Faculty of Education, Deakin University, Geelong.
- McWilliam, E., Taylor, P. G., Thomson, P., Green, B., Maxwell, T., Widy, T. & Simons, D. (2002), *Research training in doctoral programs: What can be learned from professional doctorates?*, EIP Report, Department of Education, Science and Training.
- Mullins, G. & Kiley, M. (1998), *Quality in postgraduate research: the changing agenda*, Quality in Postgraduate Research: Managing the New Agenda: Proceedings of the 1998 Quality in Postgraduate Research Conference, Kiley, M. & Mullins, G. (Eds.), The Advisory Centre for University Education, The University of Adelaide, Adelaide, pp. 1-13.
- Myburgh, S. (2003), 'Education directions for new information professionals', *Australian Library Journal*, vol. 52, no. 3, pp. 213-227.
- Neumann, R. (2002), 'Diversity, doctoral education and policy', *Higher Education research and Development*, vol. 21, no. 2, pp. 167-178.
- Nimon, M. (2002), 'Developing lifelong learners: controversy and the educative role of the academic librarian', *Australian Academic & Research Libraries*, vol. 33, no. 1, pp. 14-24.
- Noble, K. A. (1994), *Changing doctoral degrees: an international perspective*, The Society for Research into Higher Education & Open University Press, Buckingham.
- Peacock, J. (1999), *From trainers to educators: librarians and the challenge of change*, Concept, Challenge, Conundrum: from Library Skills to Information Literacy: National Information Literacy Conference 1999, City West Campus, UniSA, Adelaide.
- Peacock, J. (2001), 'Teaching skills for teaching librarians: postcards from the edge of the educational paradigm', *Australian Academic & Research Libraries*, vol. 32, no. 1, pp. 26-42.
- Pearson, M. & Ford, L. (1997), *Open and flexible PhD study and research*, Evaluations and Investigations Program, Higher Education Division, Department of Employment, Education, Training and Youth Affairs.
- University of South Australia, (2004), 'Implementing Research Degree Graduate Qualities At UniSA', <<http://www.unisa.edu.au/resdegrees/Impgradquals.rtf>> (11 May 2004)
- Usher, R. (2002), 'A diversity of doctorates: fitness for the knowledge economy?' *Higher Education Research & Development*, vol. 21, no. 2, pp. 143-153.
- West, R. & Higher Education Financing and Policy Review Committee, (1998), *Learning for life: final report: review of higher education financing and policy*, Australian Government Publishing Service, Canberra.
- Whyte, J. P. (1984), 'Librarians and scholars', in Bryan, H. & Horacek, J. (Eds.), *Australian academic libraries in the seventies: essays in honour of Dietrich Borchardt*, University of Queensland Press, St Lucia, pp. 243-262.

Acknowledgments

This paper draws, in part, on work in a series of collaborative projects being undertaken by Terry Evans (Deakin University), Margot Pearson (Australian National University) and myself. In particular, it relates to our Australian Research Council funded project 'Working students: reconceptualising the doctoral experience. I also wish to thank Georgina Bourke and William Dolley for reading earlier drafts of this paper.

Keywords

Doctoral Research, Knowledge Economy, Professional Practice, Information Literacy, Lifelong Learning