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TRENDS IN LIS EDUCATION IN AUSTRALIA

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Abstract. Recent reforms to the higher education sector are presenting challenges for academic staff and university administrators across Australia. Within this context, LIS education faces its own specific issues and challenges. This paper reviews the current trends in the LIS education, looking at student numbers, academic staffing and curriculum issues. Education providers also need to consider the career-long learning needs of the profession. It is argued that LIS educators cannot work in isolation: the LIS profession as whole must work together collaboratively to ensure it has a bright and relevant future.

Introduction

I am very grateful for the invitation to attend the Asia-Pacific Conference on Library and Information Education and Practice (A-LIEP) to discuss the current trends in LIS education in Australia. I am an LIS educator, employed as Senior Lecturer with the Faculty of Information Technology at the Queensland University of Technology (QUT), Brisbane, where I am Course Coordinator for the Master of Information Management (MIM) course. Beyond this, in my professional capacity, I currently chair the Education Reference Group of the Australian Library and Information Association (ALIA). This Group is a committee reporting to the Board of Directors to oversee ALIA's role in professional education for the LIS sector.

This paper aims to explore some of the current trends in LIS education in Australia, focusing specifically on the issues and challenges that are impacting on professional education within our discipline. In an international forum such as A-LIEP, it is important to contextualize the overall professional and academic environments of LIS education in Australia. The Australian market for LIS education will be outlined, along with a brief overview of the role of ALIA as the professional standards body. The paper will focus on current trends in the field, looking at student numbers and academic staffing, as well as the impact of higher education reforms on LIS education. The paper will conclude by considering some of the current curriculum issues.

The LIS Sector in Australia

The library sector is comprised of public, academic and special libraries: the National Library of Australia, eight State and Territory Libraries and around 1800 public libraries. There are 38 university libraries and about 70 libraries in the colleges of Technical and Further Education (TAFE). The latest figures for corporate and government libraries indicated there were 1128 in 1999 (Smith, 2001).

The total employment market in Australia is about 10 million. Statistical information on employment in the LIS sector in Australia indicates that there are about 28,000 library and information workers, with about 13,000 qualified librarians, 5,000 library technicians and 7,000 library assistants. The balance of 3,000 is employed in archives and allied professional areas. It has been estimated that about another 40,000 people are engaged in library work on a voluntary basis. Employment levels for librarians do fluctuate, with figures for 2000 sitting at about 12,500, and then dropping in 2001-2002 to around 9,500. There has, however, been a steady increase in employment figures again, to the current 13,000 level. The age demographics of the profession show that 60% of librarians are aged 45 years and over, a further 26% aged 35-44 and 14% are under 35 years. Like many other countries, the issue of the 'graying' of the profession is leading to an increased awareness of the need for effective workforce development and succession planning initiatives.

The Market for LIS Education in Australia

The initial steps to formalising the education and training of librarians took place in 1944 when the Australian Institute of Librarians (to become the Library Association of Australia (LAA) in 1949) introduced a 'qualifying examination'. This was renamed the 'registration exam' and formed the main career pathway for librarians until 1980. The first academic qualification was introduced by the Uni-

versity of New South Wales in 1960 as a postgraduate Diploma of Librarianship, deemed equivalent to the registration exam. In 1963 the General Council of the LAA adopted the formal position that librarians should hold a postgraduate qualification. However, in 1965, the government introduced colleges of advanced education and institutes of technology as a new area of tertiary education. Library education fitted into this domain, with a number of courses emerging at the undergraduate level. Since 1968, the professional association has accepted both undergraduate and graduate qualifications as first award courses.

LIS education is offered at the university level, with graduates becoming librarians, and at the vocational education level through the institutes of technical and further education (TAFEs). Diplomates from TAFE become library technicians. There are currently ten universities offering LIS courses at undergraduate and graduate levels. Five of these offer courses at both levels, while one university limits its offering to an undergraduate program. Four universities offer only graduate programs (Graduate Diploma or Masters). QUT offers only a Masters course, either in Information Management (MIM) or teacher librarianship (Master of Learning Innovation). Harvey has noted that "librarianship has perhaps always had an identity crisis in that it can be argued that it encompasses every field of endeavour" (2001a). The multidisciplinary nature of librarianship today requires knowledge and skills that cut across information technology, management, psychology and education. This situation is demonstrated by the diverse intellectual emphasis in different institutions in terms of faculty or discipline affiliation for the LIS school: courses can be found in schools or faculties of information technology, business, management, humanities and social sciences, media and information, or law, business and the arts.

It has been noted that there is a comparative imbalance internationally between the total population and the number of institutions offering LIS courses. Current figures are presented in Table 1.

Table 1. Comparative data for LIS schools (2005)

Country	LIS schools	Population	Ratio LIS schools: population
Australia	10	20 million	1:200,000
Canada	7	33 million	1:470,000
United Kingdom	14	60 million	1:428,000
United States	50	295 million	1:590,000

This imbalance means that not only are the LIS schools competing for graduate enrolments within their own institutions, to encourage students to study towards the Graduate Diploma in Library and Information Studies rather than, say, a Graduate Diploma in Justice Studies, but also there are too many institutions competing for the small number of students nationally who do in fact wish to pursue an LIS career. In contrast to the United States (usnews.com, 2006), no formal data is published in Australia to assist students assess the quality of LIS schools and their staff.

The Role of the Australian Library and Information Association as Standards Body

In common with many other areas of professional study, LIS courses in different countries tend to be subject to formal recognition by a professional association. In 2000, the International Federation of Library Associations and Institutions (IFLA) developed its *Guidelines for professional library/information educational programs - 2000* (IFLA, 2000). These guidelines were developed to primarily address the quality of graduate and professional level LIS programs and are therefore very general in their scope given their potential application across such a broad jurisdiction. The guidelines encompass the broader framework (context, mission, goals and objectives etc), curriculum, faculty and staff, students, administration and financial support, and instructional resources and facilities.

At the local Australian level, ALIA acts as the standards body for the library and information profession in Australia. ALIA holds responsibility for the recognition of the university and TAFE courses which provide a library and information studies qualification. The course recognition process is directly linked to the categories of membership of the Association, specifically in terms of the Associate membership, which requires members to hold an ALIA-recognised LIS qualification at undergraduate or graduate levels, and the Library Technician membership, with members holding an ALIA-

recognised library technician qualification. Other categories of membership include general Member, Student and Institutional Member, as well as Associate Fellow and Fellow.

In recognising courses at professional level and library technician level, ALIA draws on its core education policies: *ALIA's role in education of library and information professionals* (ALIA, 2005a), *Courses in library and information management* (ALIA, 2005b) and *Library and information sector: core knowledge, skills and attributes* (ALIA, 2005c). Seven key criteria are taken into consideration: course design, curriculum content, student assessment, staffing, resourcing, quality assurance mechanisms and infrastructure. As courses may be offered, of course, in diverse ways – eg face to face, online, or hybrid – ALIA seeks to ensure that learning outcomes will be consistent across the various delivery modes (ALIA, 2006). Institutions planning to offer an LIS course are required to submit documentation to respond to the seven criteria and to be open to scrutiny through a site visit by a panel of LIS educators and industry practitioners. The courses are monitored through the submission of an Annual Course Return (ACR).

It is acknowledged that course recognition is a valid alternative to the onerous task of assessing individual qualifications in determining eligibility for membership of the Association. The process of course recognition further serves to reassure potential employers about the range and level of skills and knowledge of graduates entering the workforce (Nicholson and Tattersall, 2001). Concerns have been expressed about the "mediocrity of the course recognition process", with ALIA "preferring to recognise almost every course for the maximum period rather than use its teeth to effect real change and improvement" (Harvey, 2001a), although at a later juncture Harvey does acknowledge that ALIA does indeed regularly scrutinize the courses for currency and relevance (2004). This is achieved through the ACR submitted by each university. In 2005, the ALIA Education Reference Group reviewed and revised the ACR form with the goal of gathering data that would be comparable across the different education institutions and help develop a cohesive picture of LIS education in Australia.

Current Trends in LIS Education in Australia

It could be argued that the two principal stakeholders in the education process are students and academic staff. The Annual Course Return is a mechanism to capture information about the individual courses from the dual perspectives of students and staffing. As it is beyond the scope of this paper to review the education of paraprofessionals (library technicians), the discussion focuses on university-level LIS education.

Trends in Student Numbers

It has been noted that LIS students may enrol in either undergraduate or graduate studies. While the postgraduate courses, such as a Graduate Diploma in Library Studies or a Master of Information Management, will have a clearly defined, discrete cohort of students, the undergraduate programs may have a common qualification such as a Bachelor of Arts or Bachelor of Information Technology, with students distributed across a number of different streams, only one of which may be the LIS stream. In some faculties, the enrolment in one specific subject, such as LIS Professional Practice, may be the only way to discretely identify the LIS student cohort. Unfortunately, this situation makes it very difficult to rely on any definitive statistics for student enrolments.

The data collected in the 2005 ALIA Annual Course Returns indicate that there are currently about 1550 students enrolled in the graduate programs and about 950 students enrolled in undergraduate courses. Figure 1 presents the enrolment trends over the ten-year period 1996-2005. Numbers of students enrolled in graduate courses peaked in 1997 (1917 students), then dropped noticeably over the period 1997-1999, with a low of 1373, which reflects the timeframe when full-fee paying courses were introduced for graduate courses in Australia. The 1997 spike highlights the students 'getting in fast' before the graduate fees were introduced. As many students study part-time, the corresponding drop in graduating full-time students occurs in 2000 and in part-time students in 2002. However, the past few years indicate greater stability in numbers of students and graduates.

The figures for undergraduate students (see Figure 2) show a drop of almost 54% from the 1997 high of 1745 students to the 2005 figure of 811. A number of undergraduate courses have closed over the past few years, which can be directly attributed to the impact of the higher education reforms, which are discussed later in this paper. In contrast, the number of graduates completing the undergraduate courses has remained stable, highlighting the trend for students to drop out of courses before graduation, an issue which was raised in the government's Higher Education Review.

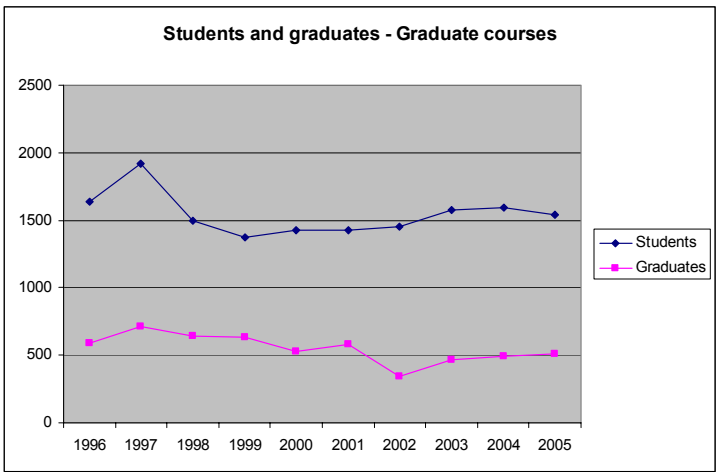

Figure 1. Numbers of students and graduates – LIS graduate courses, 1996-2005

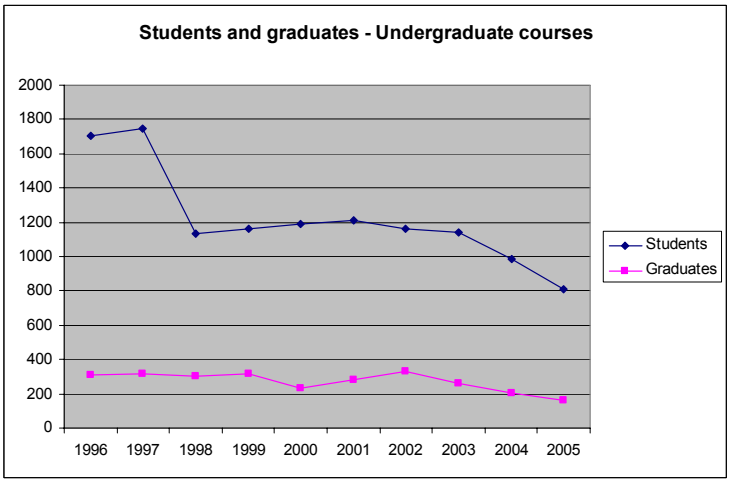

Figure 2. Numbers of students and graduates – LIS undergraduate courses, 1996-2005

The data collected in the ACRs indicate that, on average, about 30% of graduate students complete their course in any year, compared with about 20% of undergraduate students. While both types of program attract a high percentage of part-time students, there is a higher drop out rate for undergraduate courses, resulting in a lower number of graduates overall. On average, around 700 new graduates theoretically enter the workforce each year, although a significant proportion may already be employed in the LIS sector.

Ironically, the market for LIS qualifications may be moving towards postgraduate entry model, as was first proposed by the Library Association of Australia in the early 1960s. The overall trends in student numbers in Australia indicate that proportionally fewer students are interested in the undergraduate qualification, dropping from 47% in 1997 to 34% in 2005. In addition, some universities, like QUT, are offering a coursework Masters as the standard professional qualification, moving away from the Graduate Diploma as the entry-level qualification, referred to as 'credential creep' (Macauley, 2004). "It may be that this is the start of a trend towards both students and employers expecting a Masters degree as the standard entry level. There are sound pedagogic reasons for this being the case. There have long been questions as to how well a 12 month course prepares graduates for the workplace. This issue is becoming more critical as the expansion of required skills and knowledge demands constant additions to the curriculum. The downside is that it will require greater financial commitment from students, which may be a disincentive for some" (Genoni, 2005a).

Student fees are a critical issue in the context of Australian university education. The Minister of Education, Science and Training responsible for the current set of higher education reforms, Dr Brendan Nelson, has stated that 75% of undergraduate study costs are funded by government, with the student responsible for 25% of the costs, either payable upfront, or deferred as a student loan (Nelson, 2005). Graduate programs, however, are full-fee paying, so with no government subsidy, with fees ranging for Graduate Diploma programs from about $7 500 to $12 000, depending on the institution. Masters programs range from $12 000 to $24 000. Student loan schemes are available for graduate students.

While the universities are required to ask students to complete a Graduate Destination Survey, the number of returns is disappointing, resulting in unreliable data. Anecdotally, it appears that graduates often obtain part-time work in the first instance – either while still studying, or after completing the course – and secure full-time work within 6-12 months. In recent months, however, students in South East Queensland have reported that most jobs on offer are in fact for full-time work, and they would actually prefer part-time employment. Graduates who are working in an LIS environment while studying are generally offered promotion upon completion of their course, or they are successful in applying for a higher level position with another employer.

It will be important to watch future student enrolment patterns. The Australian employment market is predicted to decline significantly in the next decade, with large numbers of Baby Boomer workers exiting from the workforce, and fewer young people entering paid employment. There will be immense competition for capable and talented workers: will the LIS sector be in a position to attract the brightest and best candidates to join its professional ranks?

Trends in Academic Staffing

There has been a progressive decline in numbers of academic staff members in the LIS discipline (see Figure 3). Over the period 1996-2005, the number of staff decreased literally by 50%, from 130 to 64.

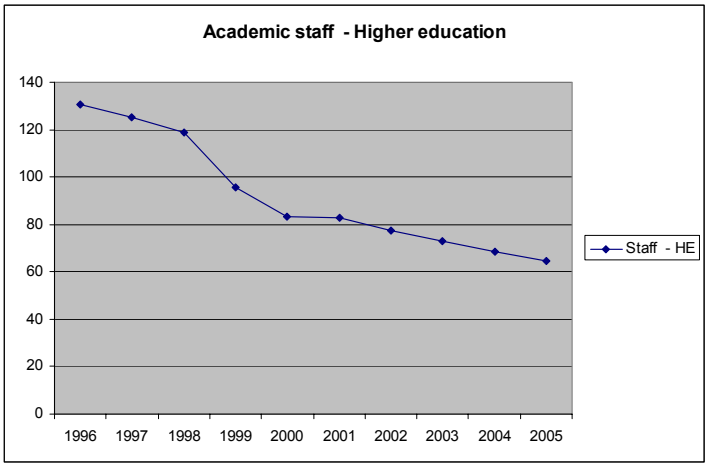

Figure 3. Academic staff – LIS higher education, 1996-2005

Not only are the numbers dropping, but the educators themselves are 'graying'. "Library education in Australia expanded rapidly in the late 1970s and 1980s, and a number of those who joined the teaching departments in their early period of growth still remain" (Genoni, 2005b). This situation raises serious issues in terms of the currency and relevance of the curriculum in a dynamic field such as LIS. It is essential that the curriculum itself is dynamic, providing graduates with the knowledge and skills they will need as soon as they join the workforce. Libraries and information centres are very different places in 2006, compared with twenty, or even ten years ago. Staff development for existing academic staff is therefore crucial.

At the same time, there is anecdotal evidence that the LIS departments in Australia are finding it very difficult to attract new staff. In the light of higher education reforms, which are discussed in more detail later in the paper, there are growing expectations that a PhD is one of the essential selection

criteria for a career as an academic. In the LIS sector, PhD remains a scarce commodity. Macauley provides some interesting insights into the role of the doctorate amongst LIS professionals, reporting that in 2002-2003, only 1.3% of the personal membership of ALIA held the title 'Dr' (Macauley, 2004). He argues, however, that 'credential creep' should result in a growing number of doctoral graduates.

At this point in time, it would appear that there are few incentives to become an educator. It is rare for library and information professionals to be willing to invest several years of their life to obtain a higher degree, when the remuneration they will be finally be offered as a lecturer, with little or no teaching experience, is going to be substantially less than the remuneration they would receive by remaining in the workforce and "winning promotion to the senior ranks" as an industry practitioner (Genoni, 2005b). The funding for casual academic staff, to help individuals gain experience in the classroom, is also becoming harder to acquire. Inevitably, without effective succession planning, LIS departments become vulnerable.

Reforms in the Higher Education Sector in Australia

Over the past few years, the higher education sector in Australia has been subjected to radical reforms. In 2002, the Federal government undertook a major review of higher education, with 49 consultation forums and more than 730 written submissions received. The findings from the review indicated that the existing policy and funding framework had become complex and difficult to manage effectively. It was found that, overall, about 30% of students did not complete their course; that there was considerable duplication in university activities and course offerings; that the cost of running courses was increasing significantly; and that alternative funding models needed to be considered.

The higher education reforms were underpinned by four key principles:

Sustainability: to deal with local and global factors impacting on the sector and to provide the opportunity for more flexible responses to changing environments in teaching and learning, to capitalize on research opportunities and to operate in a more collaborative way with other educational and research institutions and/or industry.

Quality: to encourage improved practices in teaching and learning to provide high quality learning outcomes for graduates.

Equity: to introduce new student financing arrangements to reduce the extent to which some students were disadvantaged.

Diversity: to reduce the level of commonality across the sector by encouraging both diversity and collaboration between educational and industry organizations.

The focus of the reforms was consequently to establish new funding arrangements for universities, with additional performance and incentive funding to encourage universities to demonstrate their achievements in the areas of learning and teaching, equity, workplace productivity, collaboration and quality outcomes, plus new student financial contribution and loan schemes (Backing Australia's Future, 2003). In turn, the universities have to introduce new budgeting and planning processes, more rigorous data collection and reporting to the Department of Education, Science and Training, and be subject to more transparent student management systems. There will be an increased interest in quality assurance mechanisms, for example through student evaluation of subjects and courses, as well as through the assessment of graduate skills such as critical thinking and problem solving, oral and written communication and interpersonal skills.

There have been very vocal concerns expressed about the relationship between teaching and research and the proposed workplace productivity programme for academic staff. In these areas, funding will be contingent on universities demonstrating quantitatively and qualitatively the level of excellence in teaching. Research funding will also be performance-based, with a clear focus on collaboration and commercialisation. In terms of workplace reform, funding to the universities will be linked to a move away from collective bargaining to individual contracts, with the emphasis placed on personal productivity and performance.

These current reforms build on an ongoing process of change in the higher education, with specific implications for LIS education. As universities strive to achieve greater efficiencies, the principles of economic rationalism inevitably apply. The bulk of the funding goes towards the bigger and stronger disciplines where high numbers of students are guaranteed, such as medicine, law and business. Smaller niche disciplines like library and information science have found their autonomy and their identity threatened. Independent 'library schools' have been subsumed into LIS departments, to ultimately become nothing more a discipline stream within a school within a faculty. At QUT, our

identity is 'IT70' or 'the MIM'. In many cases this means that the LIS schools "have been forced into alliances with other disciplines, and it is unlikely that any school now teaches courses over which they have full control" (Genoni, 2005a). This in turn has implications within the framework of course recognition by ALIA, as local conditions in individual universities may make it increasingly difficult to compare apples with apples in terms of the content of the curriculum.

The relatively small numbers of LIS students in individual universities increases the vulnerability of the courses themselves. It is immensely challenging for an academic unit with perhaps four academic staff and less than 100 students to be noticed and respected, when there are programs with thousands of students and hundreds of faculty staff, in the overall pool of tens of thousands of students enrolled at the university. In 2001, Schauder estimated that it took 31.43 full fee paying Australian students to cover the employment costs of one academic staff member. The course requirements are eight academic subjects for the Graduate Diploma, so with the worst case scenario of two academics running four units each, the minimum enrolment just to cover salaries is 62.86. Harvey (2001a) and Bundy (2001) have proposed that Australian LIS courses should have a minimum of 6 academic staff dedicated to the LIS discipline. They have calculated that this model would require an annual full-time graduate student enrolment of 188.57 students, which in the Australian context is unsustainable. What are the implications of students having, for example, only two teaching staff for the whole course? Surely it is critical to have a balance of staff with diverse professional experience to provide the opportunity for a range of views to be presented?

Ultimately this is leading to "a deteriorating situation in provision of education for beginning level practitioners in many universities where demand levels and markets play a major role in what courses are offered" (Mairéad Browne, cited in Bundy, 2001). Bundy indeed questioned "whether it is in the long-term interests of the profession for ALIA to continue to recognise programs in universities which can not, or will not, resource them properly" (2001). However, as Genoni (2005) stresses, while the recognition of courses by ALIA aims to provide a valuable degree of quality assurance through the scrutiny of the profession and employers, it offers minimal protection against closure of courses. In the past twelve months, two tertiary LIS courses have closed in Australia, with little or no discussion with the staff involved, let alone with the LIS sector as a whole.

In recent months, there has been considerable debate about the interplay between teaching and research, with the Minister for Education, Science and Training arguing that Australia may require three categories of university: primarily a research establishment, primarily teaching only, or a combination of both research and teaching (Nelson, 2005). Funding will be closely linked to the research quality framework or the demonstration of best practice in teaching and learning. The overt push for collaborative (industry-sourced) funding for research presents its own problems in the LIS sector, where industry itself is continually at the bottom end of the funding ladder, with little opportunity for largess towards university research projects. There are likely to be many question marks over the sustainability of LIS courses in this environment.

At the individual end of the spectrum, there are certainly issues for those who are employed as educators. It is becoming increasingly difficult to attract new staff into the world of academia. The pressures facing existing academics are continually increasing, so that the time required to develop high quality educational programs and to nurture student learning is constantly under threat. Harvey (2001b) notes that with the introduction of quality assurance processes in universities, greater academic accountability is a positive outcome for all stakeholders in higher education.

On a personal level, however, quality assurance processes result in the need for increased documentation and clearly defined auditable measures, usually without any additional administrative support, so this may have a further detrimental impact on the academic's potential contribution to quality student learning opportunities. The Australian Centre for Research in Employment and Work (ACREW) has announced a new research study to investigate the extent of overworking in the normal routine of academic staff in Australian universities: "Over the past three decades, the teaching workload for academics at Australian universities has increased. In addition to teaching, an academic is also expected to conduct research, supervise research students, participate in committees and meetings, liaise with industry and contribute to professional associations" (ACREW, 2005). Universities are seeing the retrenchment of administration staff, with academic staff required to be responsible for all the administrative tasks that are associated with their teaching and research. There are likely to be further question marks over the sustainability of LIS educators in this environment.

Trends in Curriculum Development

The impetus for more rigorous quality assurance mechanisms is incorporated into the Backing Australia's Future reforms. Initiatives include the audit of tertiary institutions through the Australian Universities Quality Agency (AUQA); the collection, evaluation and publication of student survey data through the Graduate Destination Survey and the Course Experience Questionnaire; and the introduction of the Graduate Skills Assessment (GSA) as a recruitment tool to determine the levels generic skills of graduates.

In recent years in Australia, there has emerged a growing interest within the higher education sector to help students develop life skills that can allow them to "function across different cognitive domains or subject areas and across a variety of social, and in particular employment situations" (Bridges, 1993). Skills such as problem solving, critical thinking, effective communication, teamwork and ethical thinking are all examples of the life skills in question. Together these life skills form the core set of workplace skills and abilities desirable in graduating students and new employees. They complement the discipline specific skills and professional knowledge acquired by students through their university study. Within the literature many synonyms have been used to refer to this core set of skills. Such synonyms include 'transferable skills' (Atlay & Harris, 2000), 'key competences' (Mayer, 1992) 'generic skills' (Oliver & McLoughlin, 2001) and 'graduate attributes' (Down, Martin, Hager & Bricknell, 1999).

The concept of developing a student's generic skills has become increasingly popular in recent years in universities in Australia. This popularity reflects the increasing interaction between industry and education and the significant role played by higher education as a supplier of employees to the marketplace. Industry groups and professional bodies have begun to strongly advocate the need for universities to offer courses that more adequately meet current industry and marketplace needs. One such area that is being targeted for consideration is that of generic capabilities.

Indeed, findings from a poll of employers in 2000 commissioned by the Department of Education, Training, and Youth Affairs (DETYA) showed that employers believed that 75% of Australian university graduates were not in fact suited for the jobs they apply for (AC Nielson Research Services, 2000). Employers indicated that this apparent lack of preparedness was not in the technical areas but in the generic capabilities of oral and written communication, interpersonal dealings, critical thinking, problem solving and ethics training. The findings of this study suggested that it was imperative that universities develop students who possessed not only discipline knowledge but also a high level of personal and interpersonal skills. These findings were not unexpected with many studies over the years throughout the world confirming industry's desire for graduates with generic capabilities and the need for changes to higher education to accommodate these desires (Bennett, Dunne & Carre, 2000; Dearing, 1997; Dench, 1997; Oliver & McLoughlin, 2001).

Consequently, there has been a push within the LIS courses to embed the acquisition of generic skills in the teaching and learning programs. IFLA has highlighted the importance of transferable skills within professional courses: "Methods of teaching and assessment should be designed to develop or enhance students' interpersonal communication skills, ability to work in teams, and time and task management skills. At the professional level, emphasis should be placed on developing students' analytical and problem-solving skills" (IFLA, 2000). In 2005, ALIA revised its policy statement on the profession's core knowledge, skills and attributes, accentuating the importance of generic skills and attributes (ALIA, 2005c). As an example, QUT introduced the Master of Information Management in 2005. Considerable work went into the development of the new curriculum, with two university teaching and learning grants funding the research – one to consider the required discipline knowledge and the other to determine the generic skills - to ensure the new course would offer a contemporary and relevant program of study for LIS professionals.

There are feelings in some quarters that the shelf life of university qualifications is reducing, so the need for individuals to continually upgrade their skills is resulting in a change of focus: "Individuals at all levels of the workforce are having to take responsibility for their long-term employability" (Nicolson, 2001). Some education providers are considering how to best develop career-long education programs which will support the ongoing growth of information professionals, rather than limiting their course offerings to beginning professionals. Again using QUT as an example, a suite of Graduate Certificates with specialisations in library studies, web management, records management and knowledge management have been launched, to meet the needs of people at different stages of their careers.

Gonczi postulates that the interaction of theory and practice is essential when educating new professionals, regardless of discipline: "the interactions combine cognitive, emotional and bodily processes in the social and cultural setting of the workplace" (2001). This encourages the development of real understanding through social activities rather than individual actions. The wide range of informa-

tion centres and the diversity of issues in the library environment means that there is seldom one single identifiable problem with one particular solution. Bringing guest speakers into the classroom enables students to explore what the issues are and see how different organisations consider the problem and the types of solutions they find and implement. Assessment tasks can offer the opportunity for authentic learning experiences through group projects which are based on real-life examples of information work. Attention is therefore being paid to new teaching and learning approaches, moving away from the conventional lecture/tutorial model to a workshop format, and migrating from the traditional 13 week course to intensive programs such as 5 full days, with assessment to follow in the subsequent weeks.

I believe there is scope for LIS educators to respond to some of the current challenges emanating from the higher education reforms by exploring the opportunities for inter-institutional initiatives, which could be regarded as particularly valuable in a market like Australia. Indeed Harvey (2001a) proposed a distributed library education program as a possible model for this country, with a number of possible options, for example local LIS schools offering core units, then individual institutions developing areas of specialisation, eg law librarianship, health informatics, preservation and conservation, or offering units targeted for specific information sectors, eg public or academic libraries. QUT ran a successful pilot in the summer semester 2005, offering two law librarianship subjects as five day intensive units. Notably they attracted a good number of cross-institutional enrolments.

Flexible delivery of programs is increasing the feasibility of offering such programs to a national market, with obvious benefits to people in rural and regional Australia. Distributed education could then support a pick-and-mix approach to learning which would enable students to select courses to suit their own personal circumstances in order to build up a portfolio of skills. The challenge is, of course, for academic administrators to work to support such initiatives, when the economic imperatives are often counterproductive to the ideal of sharing subjects and expertise across institutional boundaries. It is important that LIS educators investigate the new government policy directions that seek to introduce more collaborative teaching and learning opportunities that may span two or more institutions, to result in "a greater range of courses and specialisms available nationally, and the development of centres of excellence, leading in turn to improved standards… the whole of the information sector in Australia would benefit" (Harvey, 2001a).

Conclusion

One of the greatest challenges for educators is to ensure that the content of LIS courses is regularly evaluated, revised and updated to respond to the rapidly changing world in which we live and work. The effects of technological innovation and socio-cultural changes have an enormous impact on the information profession. As providers, gatekeepers and intermediaries of information, library and information professionals need to be well informed and highly skilled in information retrieval and evaluation, irrespective of format. It is essential to ensure that LIS courses blend theory and practice while also being progressive and geared to emerging needs. Beyond this, academic staff are faced with changes in the field of tertiary education: changes in assumptions about knowledge and cognitive skills; changes to university funding; changes to program delivery; changes to university organisation, with the possibility of collaborative programs; and changes in relationships between universities and professional associations.

In the past, the entry-level qualification was sufficient for a librarian's future career, but today graduates need to be fully aware of the pace of change which will demand an open mind and commitment to ongoing learning throughout their whole career. Our role today is to develop librarians and information professionals "who possess appropriate professional ways of thinking and appropriate technical skills, who are excited about their career, and who are prepared to put time, energy and money into improving their professional and technical skills on an ongoing basis throughout their career" (Harvey, 2001b).

Dearstyne has noted that "the best (LIS) schools use guest lecturers and expert adjunct professors to bring current insights and encourage students to do internships or field studies. Their professors are actively engaged in the field through research and publications; consulting; and giving papers, serving on committees and holding leadership positions in professional associations. They are change agents, advancing the field even as they are preparing future professionals" (Dearstyne, 2002). It is clear that change is the norm, so that self-development and continuing professional development become an inevitable requirement for professionals in all disciplines. LIS educators specifically will need to support practicing information professionals as they "constantly learn and update their IT skills, and de-

velop other new skills, in preparation for the future" (Garrod and Sidgreaves, 1998). It is an exciting time for the library and information profession to attract high quality students and to produce new graduates who are interested, engaged and enthusiastic. However, the development of new professionals is not the sole responsibility of the LIS educator, but should be viewed as a career-long learning process that involves the individual, universities, employers and professional associations. "Without education we don't have a profession. Without the profession, there is no need for educators" (Genoni, 2005b). Echoing ALIA's catch cry, it is imperative that, if the LIS profession is to have a future, all stakeholders must work collaboratively and proactively to *Inform>Innovate>Inspire.*

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