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# A Framework for the Education of the Information Professions in Australia

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In recent years there has been considerable discussion afforded to the challenges facing the future of library and information science (LIS) education in Australia. This paper outlines a twelve-month project funded by the Australian Learning and Teaching Council that was undertaken by eleven institutions representing university and vocational LIS education in Australia. The project established a *Framework for the Education of the Information Professions in Australia* that provides a set of strategic recommendations that will inform future directions of Australian LIS education. This national project represented a bold move within Australian LIS education, and provided a unique opportunity for LIS educators across Australia to collectively unite in order to 'future-proof' education for future generations of LIS professionals.

## Introduction

Over recent years there has been considerable discussion and many publications regarding changes necessary in library and information science (LIS) education. In both national and international contexts, LIS educators have acknowledged the need for and importance of designing approaches to education that are responsive to the rapid and ongoing technological change of the evolving information age, and developing dynamic curricula that accommodate the demands of an increasingly broad and diverse employment landscape. Here in Australia the need for change in the approach to LIS education has similarly been acknowledged. Such change has been recognised as critical for meeting current and future needs for employment in the profession, and for providing a diverse supply of graduates with the attributes required for information work in the rapidly changing twenty-first century.

In addition Australian LIS education also faces a range of challenges that are unique in the tertiary education landscape. Collectively the need for changes in LIS education and the challenges it is facing in Australia has highlighted the necessity for a strategic realignment of its disciplinary and educational traditions. However while many issues presently confront LIS education in Australia, one of the most poignant observations to be made is the fact that it 'appears to attract plenty of criticism, but very few constructive ideas to respond positively to the challenges presented (Hallam 2007, 311). Recognising the array of issues facing LIS education in Australia, the possibility for a response to explore its future arose through the inception of a national research project: *Re-conceptualising and re-positioning Australian library and information science education for the twenty-first century*.

The project team consisted of 12 university and vocational library and information science (LIS)

educators from 11 institutions around Australia between November 2009 and December 2010. The purpose of the project was to establish a consolidated and holistic picture of the Australian LIS profession, and identify how its future education and training could be mediated in a cohesive and sustainable manner. The primary objective of the project was to develop a *Framework for the Education of the Information Professions in Australia*. The purpose of the Framework was to provide evidence based strategic recommendations in response to the following question:

*How can Australian library and information science (LIS) education produce, in a sustainable manner, the diverse supply of graduates with the appropriate attributes to develop and maintain high quality professional practice in the rapidly changing 21st century?*

The paper begins with a brief overview of LIS education in Australia, noting the unique issues and challenges, before providing a detailed discussion of the national project including research approach and project scope. The paper concludes by outlining the key findings from the project before discussing the 11 recommendations emanating from the 12 month endeavor.

## Library and Information Science (LIS) education in Australia

It has been evident for some time that a range of long-standing problems and concerns are confronting LIS education in Australia. For example in 2001, Harvey asserted that 'something's amiss with university-based education for librarianship' (p. 15) while in 2003 Myburgh argued that a 'fresh approach needs to be taken' by the Australian LIS industry in regard to its education and continuing professional development (p. 214). Concerns regarding education for LIS are not unique to the Australian context, as discourse regarding LIS education in other national and international contexts has likewise espoused similar statements and highlighted a range of challenges in recent years.

For instance in 2004, Michael Gorman, President of the American Library Association in 2005-2006 declared that there was a 'crisis in LIS education' (p. 376). These views were echoed and supported by others including Berry (2004); Dillon and Norris (2005); Mulvaney and O'Conner (2006); Seavey (2005); and Stoffle and Leeder (2005) who all provide comment on development and changes necessary in LIS education. In 2006, Gorman implied there was a series of 'critical issues' requiring attention. These issues included the absence of a core curriculum for the discipline of LIS, a perceived gap between education and practice, and the need for ongoing professional development and learning. More recently in 2009, in an article concerning skills developed through LIS education Gerolimos commented that this area was experiencing a time of change and outlined a number of issues that were impacting on the present context of educational delivery for LIS. These issues included the internationalisation of LIS education, uniformity of qualifications, the orientation of LIS education, the training and expert background of educators and competition with other disciplines involved in the management of information.

Notwithstanding the issues and concerns facing LIS education in other national and international contexts, LIS education in Australia presently faces a number challenges which render it unique within the landscape of Australian tertiary education (Hallam, 2007). These challenges concern issues regarding course recognition, development of appropriate curriculum, the multitude of avenues through which professional and paraprofessional qualifications can be obtained, the number of institutions involved in education delivery for the profession and issues pertaining to LIS educators. Each of these challenges is now briefly discussed.

Traditionally, the Australian Library and Information Association (ALIA) 'recognised' courses to allow graduates to achieve professional status required for employment within the LIS field. However more recently, the LIS field has begun to embrace the multi-disciplinary nature of the profession, with the need for LIS education to consider the course recognition requirements of other associations such as the Australian

Computer Society and the Records Management Association of Australia. This move, implicitly recognising a convergence of cultural institutions, has important ramifications for curriculum models which for the most part, 'still support traditional definitions of the roles, functions, and audiences of archives, libraries, and museums' (Trant 2009, 369). As a result national standards for curriculum and learning outcomes in LIS degrees are no longer clear cut or consistent.

Furthermore, the broadening employment landscape for the LIS sector creates tensions in the development of appropriate curriculum. LIS education aims to prepare graduates for employment within the LIS sector; however the employment landscape is extensive incorporating academic libraries, school libraries, public, state and national libraries, through to special libraries and information centres, such as law libraries, health and medical information agencies. Abell et al. (2006), in their information roles project note that the e-landscape of information management is not only changing the roles in the 'traditional' LIS employment sectors, but is leading to the creation of new employment opportunities. These opportunities exist within areas such as knowledge management, records management, content and data management and web development to name just a few. In fact information management has become a 'core business process' and information specialists are not necessarily professionally qualified (Abell et al., 2006, 250). Consequently LIS educators must attempt to accommodate in the curriculum the demands of very broad and diverse professional contexts.

Various pathways presently exist through which qualifications for professional roles within the LIS field can be obtained. University qualifications are provided at several levels: bachelor, graduate diploma and master degrees. Concerns have long been noted about the appropriateness of offering LIS programs at the undergraduate level. IFLA (2000, para. 7) supports the view that 'students should acquire a broad general education (topics from other disciplines) as a significant preparatory component of the total education program for the library/information professional'. However Harvey and Higgins (2003) note that Australian

postgraduate qualifications within the LIS field are not usually linked to higher levels of pay, providing little incentive for prospective students to pay the extra costs incurred in studying at this level.

Furthermore the boundaries between paraprofessional and professional roles within the industry have respectively blurred over time. Given that entry into the LIS profession is attainable via vocational and university courses there is resulting confusion amongst students and employers over the responsibilities, skills and knowledge required at these different levels of employment. In discussing vocational education for the LIS profession Carroll (2002) notes that competency standards and the structure of the national qualifications framework has created a situation whereby educational outcomes in this sphere are dovetailing with that of university learning outcomes. Consequently new graduate librarians can find themselves 'functioning in that grey area inhabited by both the professional and paraprofessional' (Carroll 2002, 123).

The number of institutions involved in LIS education provision is a further matter of concern. Hallam (2007) reports that there is an evident imbalance when international comparisons are made between the total population and the number of institutions providing LIS education. With more LIS courses offered per capita than other countries (e.g. UK, USA, Canada) Australian universities are competing for the small number of students nationally who wish to pursue an LIS career. Continuing this idea the relatively small numbers of LIS students at individual universities increases the vulnerability of the courses themselves, especially when compared to degree programs with large enrolments. Consequently the ability of LIS curricula to provide 'specialised' sub-fields of study (e.g. archival studies) is also diminished as a result of this situation.

A final point of concern are issues relating to the LIS educators themselves. Within Australia, the number of LIS academics is decreasing and 'greying' which raises significant concerns in terms of the currency and relevance of the curriculum in the dynamic arena of LIS. Similarly financial remuneration for LIS educators appears to be

substantially less than what is potentially possible as an industry practitioner within the workforce (Genoni 2005). The present lack of incentives for practitioners to take up a career in academia inevitably means that LIS departments will become increasingly vulnerable if effective succession planning is not undertaken.

## Re-conceptualising and re-positioning Australian library and information science education for the twenty-first century

*Re-conceptualising and re-positioning Australian library and information science education for the twenty-first century* was funded by the Australian Learning and Teaching Council (ALTC), a national organisation focused on the enhancement of learning and teaching in Australian higher education. The twelve-month project was undertaken by eleven institutions representing the broad spectrum and diversity of university and vocational LIS education in Australia. Participating institutions in the project included Queensland University of Technology (Project Leader), Charles Sturt University, Curtin University of Technology, Edith Cowan University, Monash University, RMIT University, University of Canberra, University of South Australia, University of Tasmania, University of Technology Sydney and Victoria University.

The project team comprised all ten Australian universities that provide courses recognised by the Australian Library and Information Association (ALIA), which enable graduates to attain qualifications for professional roles within the LIS field. In addition the project scope included education for paraprofessional roles in the LIS field through the inclusion of one institution providing vocational LIS education as education for paraprofessional roles in the Australian LIS field are determined by a standardised national training package. By including educators from both vocational and university environments the project aimed to examine and develop a holistic and synergistic approach to education that encompassed the broad spectrum of the information professions.

Recognising the three major and equal stakeholders in the education process – students, educators and employers – the project was framed around three areas of consideration that represented key stakeholder groups in LIS education. These areas of consideration were LIS students; the LIS workforce; and LIS educators. The formation of these areas was informed by relevant literature regarding the future of LIS education in conjunction with the project team members' understandings of national and international issues and priorities regarding the LIS profession and its education. Each area of consideration corresponded to a research sub-study that had a specific focus and was shaped by a series of key themes with associated aims. Table 1 outlines these aspects for each respective sub-study in the project.

<b>Substudy: Student Considerations</b>	
<i>Focus:</i> To provide a profile of LIS students and an analysis of their choices, experiences and expectations in regards to LIS education and their graduate destinations.	
<b>Theme</b>	<b>Aim</b>
Learning opportunities	To document and review the various learning pathways and study modes currently available to LIS students in Australia
Learner attributes	To review the nature of the LIS student population in Australia
Learning experiences	To explore LIS students' experiences, perceptions and expectations of LIS courses in Australia
Learner outcomes	To review and critically consider the destinations of graduates from LIS courses
<b>Substudy: Workforce Planning Considerations</b>	
<i>Focus:</i> To provide an overview and analysis of the nature of the current LIS workforce, including a focus on employer expectations and employment opportunities and comment on the core and elective skills, knowledge and attitudes of current and future LIS professionals.	
<b>Theme</b>	<b>Aim</b>
Convergence	To review how the 'convergence' of the information professions has and will impact upon their practice and disciplinary knowledge
Employers	To ascertain the current employers and potential employers of LIS graduates
Professional skills	To analyse the generic, disciplinary and professional skills required in workforce planning for the information sector
Qualifications	To review the levels of qualifications required in the information sector
<b>Substudy: Tertiary Education Considerations</b>	
<i>Focus:</i> To provide a profile of LIS educators and an analysis of their characteristics and experiences including the key issues and challenges, it will also explore the current national and international trends and priorities impacting on LIS education.	
<b>Theme</b>	<b>Aim</b>
LIS educators	To critically review the nature and context of LIS educators in Australia
LIS education	To critically review the nature and context of LIS education programs or courses of study in Australia
National & international context	To critically review the key national and international agendas, policies and models that will impact on the future of LIS education in Australia

Table 1. Project sub-study, themes and aims

## Research approach

The project utilised a Community Based Participatory Research approach (CBPR). CBPR is a 'collaborative approach to research that equitably involves all partners in the research process and recognises the unique strengths that each brings. CBPR begins with a research topic of importance to the community and has the aim of combining knowledge with action' (The Center for Advancing Health, n.d., para. 2). As a research approach, CBPR combines research methods and community capacity-building strategies with the intention of bridging the gap between knowledge developed through research and the transformation of knowledge from research into interventions and policies (Viswanathan, Ammerman, Eng, Gartlehner, Lohr, Griffith & Rhodees 2004).

In CBPR the community participates fully in all aspects of the research process. As a research approach CBPR can be described as iterative, incorporating research, reflection and action in a cyclical process. CBPR seeks to 'transform research from a relationship where researchers act upon a community to answer a research question to one where researchers work side by side with community members to define the questions and methods, implement the research, disseminate the findings and apply them' (Hartwig, Calleson, & Williams, n.d., para. 3). In this way employing a CBPR approach will see researchers working with rather than in communities, as the community members become 'part of the research team and researchers become engaged in the activities of the community' (Hartwig et al., n.d., para. 3). Furthermore a key distinction with CBPR from other community-based research approaches 'is the recognition of community as a social entity with a sense of identity and shared fate' (Viswanathan et al. 2004, para. 5).

The notion of 'community' with a CBPR approach is typically self-defined however common categories include a community of individuals with a shared issue or concern, or a common goal or interest, and communities defined by geographic location. For this project, 'community' comprised all individuals who have a role in, or a vested interest in, LIS education and included LIS educators, professionals, employers, students

and professional associations. It also included the Australian Learning and Teaching Council (ALTC) and the administration of the institutions involved in providing library and information science education in Australia (e.g. Head of School, Deans). Individuals from these sub-groups within the broader community were invited to participate in a range of aspects of the project from design through to implementation and evaluation. Through the involvement of a comprehensive spectrum of stakeholders it was intended that national education practices and approaches within LIS would be critically reviewed.

In line with the adoption of a CBPR approach the project also formed a Reference Group that was asked to provide critical commentary on the project process and outcomes based upon members' industry or professional experience. The reference group comprised approximately 50 members and included national and international members representing the full spectrum of key stakeholders in LIS including professionals, employers, current students, recent graduates, representatives from national and international professional associations, consultants, higher education experts, and representatives from institutions providing other 'information' degrees which were not part of the project team. Reference group members were consulted and involved in various research elements such as the design of data collection instruments, data analysis and interpretation, and providing critical comment on project outputs and deliverables.

## Project scope

*Re-conceptualising and re-positioning Australian library and information science education for the twenty-first century* signified the first investment of funding for research into LIS education in Australia. For this reason the inception of the project offered a unique opportunity and powerful mechanism through which to bring together key stakeholders and inspire discourse concerning future education for the profession. As the first national project of its kind, its intent was to provide foundation research that would inform and guide future directions for LIS education and training in Australia. Hence the project was

designed to represent the first step in ensuring a future, instead of a definitive response to resolve the plethora of issues that presently confront Australian LIS education. The scope of the project was also influenced by the timeframe established for the study. As a twelve-month research project, questions posed for investigation had to be achievable within the time and financial resourcing available. In this way, the project was not envisaged as a vehicle through which all research questions pertinent to Australian LIS education could be explored. Furthermore, it must also be noted that the intent of the project was to examine LIS education from a holistic rather than domain specific perspective. Therefore the project was focused on the entire depth and breadth of education for the discipline instead of examining education for specific niche areas such as health librarianship, teacher librarianship or records management.

## Key findings

A range of techniques was used to undertake data collection for the project. A mixed method of questionnaires, surveys, focus groups, one-on-one, face-to-face interviews and environmental scanning activities enabled the research team to consider many different perspectives in LIS education, including employers and recruiters, professional associations, students and graduates, and teaching staff. The project involved over 300 LIS students, more than 200 recent graduates, over 150 employers and recruiters, and 69 LIS educators. The findings presented in the project's Final Report (Partridge et al. 2011) were identified as the most important observations for guiding and grounding the development of the *Framework for the Education of the Information Professions in Australia*. This section outlines the main findings or observations for each of the three sub-studies. Each observation concludes with a comment on the 'challenge for LIS education' that needs to be addressed. In addition it should be noted that the phrase 'LIS education' is being used broadly; it involves many stakeholders including educators, employers, professionals and professional associations.

The **Students substudy** provided a profile of LIS students and an analysis of their choices, experiences and expectations in regard to LIS education and their graduate destinations. The key observations from this substudy were:

- Australian LIS current students and recent graduates feel well prepared by their LIS programs for the workforce. *The challenge for LIS education* is to ensure that graduates have the opportunities when entering the workforce to apply the innovative theories and practices they have developed through their program, and for the LIS sector to provide stimulating professional learning opportunities that ensure the retention of the brightest and best professionals in the LIS field.
- LIS lacks a strong profile or direct pathway for vocational development at the secondary education stage. *The challenge for LIS education* is to develop strategies to increase the profile of the LIS profession at all levels in Australia. In particular there is a need to educate career advisors about the LIS profession and develop clear pathways through high school to LIS.
- Evidence-based practice and academic research are essential to the advancement of any profession. *The challenge for LIS education* is to actively pursue increased research opportunities such as Higher Degree Research scholarships, post-doctoral fellowships, practitioner-academic exchanges and advocacy.
- More straightforward pathways between the vocational and higher education sectors are needed to ensure career progression. *The challenge for LIS education* is to promote and participate in collaborative partnerships between the sectors, to create a seamless, transparent and consistent approach to articulation, for the benefit of both LIS education and the profession.
- Graduates need a mix of core LIS knowledge and capabilities as well as problem-solving and critical thinking to address well established and emergent needs. *The*



*challenge for LIS education* is to ensure that LIS graduates acquire the basic tools and theoretical underpinning from which they can evolve flexibly with rapidly changing information and workplace environments – at local, national and international levels.

- LIS education offers multiple pathways to a professional qualification. Concerns have been raised about the apparent inequalities in recognition of qualifications by professional associations and associated barriers to their employment as LIS professionals. *The challenge for LIS education* is ensure that program outcomes and professional recognition of graduates align equitably whilst meeting needs of an expanding LIS professional environment. In addition, these programs must be developed and accredited in light of existing national policies and frameworks (e.g. AQF, TEQSA).

The **Workforce substudy** provided an overview and analysis of the nature of the current LIS workforce, including a focus on employer expectations and employment opportunities, and comment on the core and elective skills, knowledge and attitudes of current and future LIS professionals. The key observations from this substudy were:

- Generic and personal qualities are seen as increasingly desirable within Australia's LIS sector, particularly those associated with learning potential, flexibility, workplace communication and teamwork, and potential for personal growth, including leadership. *The challenge for LIS education* is to assess the extent to which it is possible to train in these areas of generic skills, or the degree to which they need to be recruited with incoming students.
- The impact of information technology is an unavoidably transforming feature of the current workplace. It is apparent that graduates from all LIS programs are expected to have a good working knowledge of modern information and communication technologies and their use in the collection, management, storage and transmission of data and information. *The challenge for LIS*

*education* is to produce graduates who are capable of adapting emerging technologies and applications to an information service, and in negotiating needs and services with IT staff.

- There is demand for graduates with a knowledge base that spans the major collecting areas of libraries, archives and records. *The challenge for LIS education* is to devise programs that prepare students across two (or even more) of these diverse areas, by balancing generic information skills with the need for knowledge and skills that remain specific to these still distinct professional areas.
- Academic and special libraries and some non-traditional employers have an increasing demand for staff who have a good understanding of the research process and evidence-based practice. *The challenge for LIS education* is to stimulate interest in higher degree research and provide viable pathways for practitioners interested in obtaining research qualifications.
- There is evidence from special libraries of demand for subject specialist skills. These roles may require an enhanced knowledge of the core discipline or business of the parent organisation that cannot be acquired within the context of a first LIS qualification. *The challenge for LIS education* is to attract entrants to graduate programs from a wide variety of disciplinary and professional backgrounds, and in the case of undergraduate programs to formulate appropriate and varied double-degree structures.

The **Tertiary Education substudy** provided a profile of LIS educators and an analysis of their characteristics and experiences including the key issues and challenges, it also explored current national and international trends and priorities impacting on LIS education.

- Recruitment of new LIS educators has emerged as a pressing issue. At the university level another key issue to consider is the need for new educators to have a doctoral qualification, yet a PhD remains a relatively

scarce commodity in Australian professional LIS culture. In addition, there is evidence more broadly that becoming an educator, regardless of discipline, is a less than an enticing career choice with long hours and high workloads. *The challenge for the LIS education* is to find ways now to entice new educators into the field.

- Nationally and internationally LIS education is moving from a focus on specific agencies (e.g. libraries, archives) to the broader information landscape. Care must be made to ensure LIS education does not become too broad or too general and unable to meet the needs of the industry it supports. *The challenge for LIS education* is to establish programs that are able to not only position the LIS discipline more firmly within the broader educational context, but are also able to provide quality learning outcomes that will adequately prepare students for the realities of work as an LIS professional.
- With more institutions offering more LIS programs per capita than other countries (e.g. UK, USA and Canada) Australia's LIS education providers are competing for a small number of students nationally who wish to pursue an LIS career. In addition the small number of LIS educators based within each institution has implications for program quality, research performance, workload and burnout. Although the master's qualification has emerged as the dominant program internationally, there is little agreement as to the appropriate degree level for entry into the LIS profession within the Australian context. *The challenge for LIS education* is to establish LIS education programs that are sustainable, attractive and relevant to the future for the discipline, and competitive within the international market.
- There is a growing focus on research performance and standards within Australia's tertiary education sector. Research has been identified as crucial to Australia's future. If the LIS discipline is to continue to have a sustainable role within the nation's tertiary education sector then it must become more research active and build a stronger research

profile. *The challenge for LIS education* is to continue to develop a strong and active research culture, both within and across practice and the academy.

- Australia's LIS education must continue to provide innovative and quality learning environments that meet students' needs for greater flexibility and variety in their study options. Australia's LIS educators will need to continue to develop their skill and knowledge in online pedagogy. *The challenge for LIS education* is to continue to develop a strong culture of teaching and learning both within and across institutions.

## A Framework for the Education of the Information Professions in Australia

The primary outcome of the national project was the establishment of a *Framework for the Education of the Information Professions in Australia*. This Framework provides a set of strategic recommendations that will inform the directions of LIS education in the twenty-first century. To build this framework the project team researched the issues and challenges of LIS education by capturing the views and experiences of the different stakeholders engaged with LIS education in Australia. It is acknowledged that the picture presented represents a snapshot in time, and that the LIS sector and its subsequent education is not static, it is evolving and growing in response to various national and international stimuli.

This project revealed there are a number of pressing issues confronting LIS education in Australia. Left unaddressed these issues will have significant implications for the future of not just LIS education, but the LIS profession more broadly. The LIS sector has a vital role to play in ensuring Australia's future in the 'information economy' and in advancing 'Australia's ability' as a knowledge society. Australia's LIS services and agencies need committed and highly skilled professionals in order to effectively address the information needs of the nation's individuals, communities and organisations. These recommendations were

offered as a way to ensure that LIS education continues to provide, in a sustainable manner, the diverse supply of graduates with the appropriate attributes to develop and maintain high quality professional practice in the rapidly changing 21st century.

The project's recommendations sought to be both inspirational and aspirational. They offer a bold challenge to place LIS education in a position of greater strength within the nation's tertiary education sector. It is acknowledged that many of the project's recommendations will need careful planning as well as time and resources to enable implementation. For this reason, no time line for completion was outlined nor were specific details on the process and systems for implementation. As such the recommendations are intended to be strategic future orientated goals that will be completed over the next several years by drawing upon existing LIS educators' networks in Australia.

**Recommendation 1:** It is recommended that a broader and more inclusive vocabulary be adopted that both recognises and celebrates the expanding landscape of the field, for example 'information profession', 'information sector', 'information discipline' and 'information education'.

Language is power. It can influence how individuals and communities understand or conceive of an issue or concept, and it can also impact the actions undertaken and the decisions made. The field is changing, and as it grows and evolves the boundaries of the field will continue to shift and blur. Adopting a broader and more holistic language to describe the field will help to build a stronger sense of unity and common purpose; it will also help to accommodate any new dimensions and perspectives that arise in the future.

**Recommendation 2:** It is recommended that a self-directed body composed of information educators be established to promote, support and lead excellence in teaching and research within the information discipline.

This self-directed body will lead the implementation of the project's final

recommendations. Established by the nation's information educators for the nation's information educators, the body will provide a forum via which Australia's information educators can discuss and address matters of mutual concern and national importance. It will seek to be inclusive of the full spectrum of information education across the tertiary sector. The body will help to extend the community of practice for information educators that was established as a result of the project. Organisations supporting education within various parts of the information sector exist, for example, professional associations represent and accredit education programs in sub-fields such as records management, information management, and archival studies. Education however is just one agenda among many that these associations must consider in fulfilling their mandates. A need exists for the formation of an overarching body that will focus on supporting and leading information education in its broader form and in supporting and championing the interests and needs of information educators. Importantly, the body will collaborate and maintain strong links with industry, professional associations and other relevant bodies. It will provide a voice for the nation's information educators and thereby help ensure that the information discipline is more visible and better able to seize opportunities within the changing tertiary context.

**Recommendation 3:** It is recommended that Australia's information discipline continue to develop excellence in information research that will raise the discipline's profile and contribute to its prominence within the national and international arena.

It is important that the Australian information sector continues to build its research profile both nationally and internationally, by establishing strategies that will encourage both individual and collaborative research endeavours within and across industry and the academy. This will help to not only build a rich knowledge base that can be used to advance professional practice but will also ensure that Australia's information education is both research based and research led. The information researchers and educators located in the nation's universities have a vital role to play

in mentoring and guiding new researchers and professionals, as well as working with educators in the VET sector. There is a need to promote and support information professionals in undertaking higher degree research programs.

**Recommendation 4:** It is recommended that further research examining the nature and context of Australia's information education programs be undertaken to ensure a sustainable and relevant future for the discipline.

Australia's 23 institutions offering information education programs are competing for the small number of students who wish to pursue an information career. The project's final report includes some evidence that Australia is perhaps too well served by the number of educational programs on offer, and the number of institutions offering them. However, whilst the data provided interesting insight into the nation's information education programs, several key issues such as the appropriate number of such programs, the distributions of programs between cities/states, the desirable range and focus of programs, and the preferred level of first graduating qualifications, were left unresolved. It is therefore important that the Australian information sector continues to undertake research relevant to these matters in order to develop the evidence base necessary for future decision making. The data obtained from this research are essential in ensuring the Australian information sector can influence change at the institutional and national level in order to ensure a sustainable and relevant future for the discipline.

**Recommendation 5:** It is recommended that further research examining the pathways and qualifications available for entry into the Australian information sector be undertaken to ensure relevance, attractiveness, accessibility and transparency.

There are a number of trends and drivers impacting on Australia's tertiary education sector that will inform issues around qualifications regardless of discipline, for example the Australian Qualification Framework (AQF) and Tertiary Education Quality and Standards Agency (TEQSA). It is important that the information sector takes

active steps to ensure that it has the evidence base needed to make informed decisions and to influence change. The project's findings revealed no consensus as to the appropriate mix of qualification and/or career pathways needed for a sustainable future of the information profession in Australia. More data and more critical and open discourse involving all stakeholders are needed.

**Recommendation 6:** It is recommended that strategies are developed and implemented to ensure the sustainability of the workforce of information educators.

The project's findings indicated that over two-thirds of current information educators will be reaching retirement age in the next five to ten years, and over half are looking to retire in the next decade. Recruitment of new information educators will therefore become a pressing issue in the near future, and it is necessary for the current cohort of educators to actively manage their own succession. This may entail developing clearer pathways from practice to academe and making doctoral study a more attractive option for research and teaching oriented practitioners.

**Recommendation 7:** It is recommended that a national approach to promoting and marketing the information profession and thereby attracting more students to the field is developed.

There is confusion and limited awareness, especially among school leavers, about the varied nature and multiple career options within the information profession. For the discipline to have a sustainable future it is important that promotional strategies to increase the profile of the information profession are developed. Comprehensive information should also be provided to educate career advisors about the information profession and develop clear pathways through high school to the information sector. Project findings also point to the need to recruit more students into information education that reflect the diversity of the Australian population.

**Recommendation 8:** It is recommended that Australia's information discipline continues to support a culture of quality teaching

and learning, especially given the need to accommodate a focus on the broader information landscape and more flexible delivery options.

Ongoing consultation and collaboration between industry and educators will ensure that programs remain current and relevant to evolving marketplace needs. As students seek greater flexibility in their study options, Australia's information educators will need access to professional development that will support their knowledge and skill in designing and delivering quality teaching and learning within blended or online learning contexts. It is also recognised that information education must focus on developing theoretical understandings as well as practical skills. Encouraging a scholarly approach to teaching practices and providing avenues to support the scholarship of teaching and learning, whilst maintaining a close relationship to the information industry, will assist in maintaining quality in the nation's approach to information education.

**Recommendation 9:** It is recommended that strategies are developed that will support and encourage collaboration between information education within the higher education and VET sectors.

The findings of this project suggested that Australia's educators are actively seeking to ensure the development of programs that support quality learning outcomes for students. The project also noted however that there currently is little collaboration taking place between the higher education and VET sector. Both sectors seek to educate future information professionals. To ensure a sustainable and relevant future for information education in Australia it is essential that mechanisms and strategies are developed that will facilitate an open dialogue and support collaboration between these sectors.

**Recommendation 10:** It is recommended that strategies and forums are developed that will support the information sector working together to conceptualise and articulate their professional identity and educational needs.

In the course of this project it became apparent that there is still some way to go before Australia's information sector has a clear, united vision and sense of purpose. To establish relevant and quality education for the information sector it is essential that the information profession has a shared sense of identity that it can articulate to educators. This will require the profession to take a broad view of its shared interests, rather than focusing on the specific domains of (for example) libraries, archives and knowledge management. It will also require the sector to create broadly-based forums that can negotiate issues of professional roles and identity, and represent their interests to educators.

**Recommendation 11:** It is recommended that a research agenda be established that will identify and prioritise areas in which further development or work is needed to continue advancing information education in Australia.

*Re-conceptualising and re-positioning Australian library and information science education for the twenty-first century* signified the first investment of funding for research into information education in Australia. For this reason the inception of the project offered a unique opportunity and powerful mechanism through which to bring together key stakeholders and inspire discourse concerning future education for the profession. As the first national project of its kind, its intent was to provide foundation research that would inform and guide future directions for information education and training in Australia. Hence the project was designed to represent the first step in ensuring a future, instead of a definitive response to resolve the plethora of issues that presently confront Australian information education. Inevitably more research and work is still required to continue responding to the constantly changing context.

## Conclusion

*Re-conceptualising and re-positioning Australian library and information science education for the twenty-first century* symbolised a bold move within Australia LIS education and posed a unique opportunity for LIS educators across Australia to unite collectively in order to 'future-

proof' education for future generations of LIS professionals. The key findings from this project confirm that a number of pressing issues are confronting LIS education in Australia. Left unaddressed these issues will have significant implications for the future of LIS education as well as the broader LIS profession. Consequently creating a sustainable and cohesive future can only be realised through cooperation and collaboration among all stakeholders including those with the capacity to enact radical change in university and vocational institutions. Indeed the impending adoption and implementation of the project's recommendations will fundamentally determine whether Australian LIS education is assured both for the present day and into the future.

## References

- Abell, A., Chapman, D., Phillips, P., Stewart, H., & Ward, S. "Roles in the e-landscape". *Business Information Review*, 23(4), (2006): 241-251. Accessed February 28, 2012, doi: 10.1177/0266382106072249
- Berry, J. N. "Blatant Berry: Don't Dis the LIS 'Crisis'", *Library Journal*. (2004) Accessed February 28, 2012, <http://www.libraryjournal.com/article/CA456234.html>
- Carroll, M. "The well-worn path", *Australian Library Journal*, 51(2), (2002): 117-125.
- Dillon, A., & Norris, A. "Crying Wolf: An Examination and Reconsideration of the Perception of Crisis in LIS Education", *Journal of Education for Library and Information Science*, 46(4), (2005): 280-298.
- Genoni, P. "The changing face of LIS higher education in Australia, part 2", *inCite*, 26(8), (2005): 18.
- Gerolimos, M. "Skills developed through library and information science education", *Library Review*, 58(7), (2009): 527.
- Gorman, M. "Whither library education?", *New Library World*, 105(9/10), (2004): 376-380., accessed February 28, 2012, doi:10.1108/03074800410557330
- Gorman, M. "Confronting the Crisis in Library Education : Satellite Broadcast and Webcast. A National Teleconference". Accessed May 24, 2011, [http://www.dupagepress.com/no\\_cache/library-learning-network/previous-teleconferences/ala-crisis-in-library-ed/crisis-in-library-ed-links-coords/?sword\\_list%5B%5D=education](http://www.dupagepress.com/no_cache/library-learning-network/previous-teleconferences/ala-crisis-in-library-ed/crisis-in-library-ed-links-coords/?sword_list%5B%5D=education)
- Hallam, G. C. "Education for library and information service", in *Libraries in the twenty-first century: Charting new directions in information services*, edited by Stuart Ferguson, 311-336. Wagga Wagga, NSW: Centre for Information Studies, Charles Sturt University.
- Hartwig, K., Calleson, D., & Williams, M. "Unit 1 Section 1.1: Definitions, Rationale and Key Principles in CBPR", (n.d.). Accessed May 23, 2011, <http://www.cbprcurriculum.info/>
- Harvey, R. "Losing the quality battle in Australian education for librarianship", *Australian Library Journal*, 50(1), (2001): 15-22.
- Harvey, R., & Higgins, S. "Defining fundamentals and meeting expectations: Trends in LIS education in Australia", *Education for Information*, 21(2/3), (2003): 149-157.
- International Federation of Library Associations and Institutions (IFLA), "Guidelines for professional library/information education programs, 2000", (2000) Accessed February 28, 2012, <http://archive.ifla.org/VII/s23/bulletin/guidelines.htm>. Accessed 23 May 2010.
- Myburgh, S. "Education directions for new information professionals", *Australian Library Journal*, 52(3), (2003): 213-228.
- Mulvaney, J. P., & O'Connor, D. "The crux of our crisis", *American Libraries*, 37(6), (2006): 38-40.
- Partridge, H., Hanisch, J. Hughes, H., Henninger, M., Carroll, M., Combes, B., Genoni, P., Reynolds, S., Tanner, K., Burford, S., Ellis, L., Hider, & Yates, C. *Re-conceptualising and re-positioning Australian library and information science education for the 21st century: final report*. (2011). Accessed February 28, 2012, <http://eprints.qut.edu.au/46915>
- Seavey, C. A. "The Coming Crisis in Education for Librarianship", *American Libraries*, 36(9), (2005): 54-56.
- Stoffle, C. J., & Leeder, K. "Practitioners and library education: A crisis of understanding", *Journal of education for library and information science*, 46(4), (2005): 312-319.
- The Center for Advancing Health. "Kellogg Health Scholars - About Us: Community Track", (n.d). Accessed May 19, 2010. <http://www.kellogghealthscholars.org/about/community.cfm>
- Trant, J. "Emerging convergence? Thoughts on museums, archives, libraries, and professional training", *Museum Management & Curatorship*, 24(4), (2009): 369-387. Accessed February 28, 2012. doi:10.1080/09647770903314738
- Viswanathan, M., Ammerman, A., Eng, E., Gartlehner, G., Lohr, K. N., Griffith, D., Rhodes, S., et al. "Community-based participatory research: Assessing the evidence", (Summary, Evidence Report/Technology Assessment No. 99, AHRQ Publication 04-E022-1). (2004) Rockville, MD: Agency for Healthcare Research and Quality. Accessed February 28, 2012, <http://www.ncbi.nlm.nih.gov/books/NBK37283/>

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