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BUILDING THE PROFESSION TOGETHER: TOWARDS HOLISTIC LIBRARY AND INFORMATION SCIENCE EDUCATION

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ABSTRACT

How can a holistic approach to library and information science education encompassing vocational and university sectors that meets the future information workforce requirements be achieved? This paper will outline a twelve month national project that considered this very question. Funded by the Australian Learning and Teaching Council (ALTC), the project's primary aim is to establish a consolidated and holistic picture of the Australian library and information science professions in all their varieties and complexities, such as libraries, records management and collection management, and identify how their future education and training can be mediated and designed in a cohesive and sustainable manner. The project is being undertaken by eleven institutions representing the broad spectrum and diversity of university and vocational library and information science education in Australia. The project by necessity is framed by three areas of consideration representing the key stakeholder groups in the broad library and information science educational environment: students, the workforce and educators. This national project represents the first funded research of its kind in Australia and signifies a bold and radical move within Australian library and information science education. The project also illustrates how educators from vocational and university environments are collaborating to develop a synergistic approach to education that will encompass an entire profession. Preliminary results arising from research undertaken by each of the project's areas of consideration will be discussed within the presentation.

1. INTRODUCTION

It is clear that many challenges are presently confronting library and information science (LIS) education in Australia, however one of the most poignant observations regarding this subject is the fact that LIS education "appears to attract plenty of criticism, but very few constructive ideas to respond positively to the challenges presented" (Hallam, 2007, p.311). The project outlined in this paper will help to meet this challenge by providing national data to guide future decision making. Funded by the Australian Learning and Teaching Council the project aimed to establish a consolidated and holistic picture of the Australian LIS profession, and identify how its future education and training can be

mediated in a cohesive and sustainable manner. The project was undertaken by eleven institutions that represent 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 comprises 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 that provides vocational LIS education, as education for paraprofessional roles within the Australian LIS field are determined by a standardised national training package. Through the inclusion of educators from both vocational and university environments the project will examine and develop a holistic and synergistic approach to education that encompasses the broad spectrum of the information professions. This paper will provide the preliminary project findings as it directly relates to LIS education at the vocational level.

2. LIBRARY AND INFORMATION SCIENCE EDUCATION IN AUSTRALIA

LIS education in Australia faces a number challenges which render it unique within the landscape of Australian tertiary education (Hallam, 2007). These challenges comprise 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.

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. p. 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, Chapman, Phillips, Stewartand Ward (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, p. 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 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, p.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 and vocational education providers 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 curriculum 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 that 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.

3. THE RESEACH PROJECT

3.1. Research aims

The project aimed to establish a consolidated and holistic picture of the Australian LIS profession, and identify how its future education and training can be mediated in a cohesive and sustainable manner. It

was framed around three areas of consideration that represent key stakeholder groups in LIS education. The areas of consideration were LIS students; the LIS workforce; and LIS educators. Each of these areas 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 (see Table 1).

Sub-Study: Student Considerations ***Focus:*** 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.	
Theme	**Aim**
Learning opportunities	To document and review the various learning pathways and study modes currently available to LIS students in Australia
Learning 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
Learning outcomes	To review and critically consider the destinations of graduates from LIS courses.
Sub-study: Workforce Planning Considerations ***Focus:*** 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.	
Theme	**Aim**
Convergence	To critically 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 critically analyse the generic, disciplinary and professional skills required in workforce planning for the information sector
Qualifications	To critically review the levels of qualifications required in the information sector.
Sub-Study: Tertiary Education Considerations ***Focus:*** To provide an overview and analysis of the current state of LIS education in Australia, as compared to alternative models overseas.	
Theme	**Aim**
LIS educators	To critically review the nature and context of LIS education 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 focus, themes and aims

3.2 Research Approach

The research adopted a Community Based Participatory Research approach (CBPR) (WK Kellogg Fuondation, n.d.). 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" (WK Kellogg Foundation, n.d.). 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 et al., 2004).

In CBPR the community participates fully in all aspects of the research process. It 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). In this way community members become "part of the research team and researchers become engaged in the activities of the community" (Hartwig, et al, n.d). For this project 'community' comprises all those individuals who have a role in, or a vested interest in, LIS education and includes LIS educators, professionals, employers, students and professional associations. Individuals from these groups within the broader community will be invited to participate in 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 formed a *Reference Group* that provided critical commentary on the project process and outcomes based upon members' industry or professional experience. The reference group comprised of 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 (courses that are not recognised by the Australian Library and Information Association). 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.

3.3 Data Collection

A range of instruments were used to undertake data collection for the project. Instruments used included questionnaires, surveys, focus groups and one-on-one, face-to-face interviews. Environmental scans were also undertaken to establish what was already known and identify research gaps for investigation. To investigate the objectives that underpin the themes for each sub-study, compound data collection strategies were employed in order to obtain both qualitative and quantitative information. Table 2 outlines the proposed participants that were used in the data collection phase.

Sub-study	Data Collection and Participants
Tertiary Education Considerations	• Interviews with 11 LIS degree coordinators • Online questionnaire of 69 LIS educators • Interviews with 12 individuals involved in offering 'alternative' models of LIS education nationally and internationally
Student Considerations	• Online questionnaire with 291 LIS students • Online questionnaire with 98 recent graduates (within one year of graduating) • Focus groups with 13 LIS students and recent graduates
Workforce Planning Considerations	• Analysis of 467 job advertisements • Interviews with 9 employers and recruiting agencies • Online questionnaire of 333 of LIS professionals

Table 2 Sub-study data collection techniques

4. PRELIMINARY FINDINGS

This section will provide a brief discussion on the key preliminary findings from the project relevant to Australia's LIS vocational education.

4.1 Students

Key findings suggest that there are various pathways that students take to achieve a LIS qualification. Institutions across Australia offer LIS courses via a number of delivery modes including face-to-face, blended, distance and wholly online. Students found out about courses via the Web and by word of mouth. This may be an indication that the professional associations have considerable work to achieve in the area of advocacy and career marketing if the profession is to be sustainable.

The profile of LIS students as older than the average student and predominately female is confirmed by this research. Additionally it was found

- The VET sector delivered 61 per cent of education/training for the LIS field in 2008
- There are significant state based difference in the ratio of higher education and VET enrolment by sector
- Surprisingly there was more VET full-time student (19 per cent) than higher education full-time students (13 per cent)
- There are some significant (though not unexpected) differences between the sectors in delivering education and training to various equity groups
- In many instance LIS tertiary education (VET and higher education) under-delivered to key equity groups including those from non-English speaking backgrounds, Aboriginal and Torres Strait Islanders and those from low SES groups compared the tertiary sector as whole.
- The VET LIS training had 11 per cent of students with an identified disability compared to 6 per cent of the total VE student cohort. This has implications for teaching and learning

In terms of teaching and learning, students still have a preference for face-to-face learning. However, many students agreed they like the flexibility afforded by online delivery. Both current and graduate students expressed strong levels of satisfaction with course content, teaching methods, and expectations. Most graduate students felt their courses had equipped them well for the working environment. Almost all of the graduates and 50 per cent of current student were working in the LIS

area. Most students from both groups were happy with the specialisations offered, although these did not appear to stretch across faculty areas. There are issues with entry pathways for students who do not have undergraduate qualifications. These issues are concerned with membership to the professional association upon graduation. Overall, the data obtained in this part of the Student Sub Study surveys indicate that students are very satisfied with LIS courses being offered at various levels (VET and higher education) around Australia.

Students are generally optimistic about the future of the LIS profession, and consider that technology will continue to play a key role in future career options. Students have the desire to develop practical skills as well as a strong theoretical underpinning, as they consider skills assist them to gain employment. Some students consider that undertaking a practicum early in their course would provide improved context for the theory.

4.2 Workforce

The workforce sub-study used three methods of data collection: an analysis of 467 job advertisements collected in two timeframes, two weeks in February-March and one week in mid-June; an online survey of 370 employees in the workforce for more than one year; and interview of 9 employers and/or recruiting agencies.

37% (172) of the job advertisements were library jobs, overwhelmingly in the public sector (54 or 31%), with 4 in the VET sector. However teasing out the level of the job was difficult; generally this was ascertained by examining the qualification requirements and in many cases qualifications were not specified, although some roles implied a requirement for qualifications by specifying either library technician or associate membership of ALIA. In the case of the 4 library jobs in the VET sector only one required any LIS qualification. Within the 54 public or local library positions advertised, 25 required an ALIA accredited LIS qualifications, only 4 of which were at technician level. While our job advertisements did not give a clear indication of the market for library technicians, the IBSA environmental scan of the cultural and creative industries projected a “growing demand for library technicians” (IBSA, 2010 p. 6).

The online survey returned more data on library technicians; 22 participants (5.9% of the responses) gave their job titles as either library technician or library assistant and when asked to give the type of work they did in their jobs, 30.4% stated librarianship. Of those whose LIS education was at the certificate, diploma and/or advanced diploma levels, generally they utilised the skills developed in their course (greatly utilised 31%, somewhat utilised 58%). However 17 out of the 165 (10.3%) of employees with TAFE qualifications planned to undertake further LIS studies.

Over all the respondents comments showed that the lower level courses were more focussed on practical skills than the higher level courses. This was borne out in the interviews with employees and/or recruitment agencies particularly within the traditional librarianship sectors.

In general the current research has highlighted the potential diversity of information careers for those who are adaptable and responsive to rapidly changing contexts; in this there seems to be no differentiation among lower and higher levels of education. Nevertheless the broad patterns of employment of library technicians as revealed through the online survey have not changed dramatically. Jobs are heavily oriented to the public sector, to traditional contexts of libraries, and there is relatively low job turnover.

4.3 Educators

Twenty-four (35%) LIS educators from the TAFE/VET sector participated in an online questionnaire. The majority of the respondents were female (87.5%) and their ages ranged from 24 to 64 with an average age of 52. A recent study indicates that 48% of the TAFE (the largest subset of the VET sector) workforce were, in 2008, aged over 50 years (Guthrie, 2010). Almost 83% of the LIS VET educators who participated in the current study are aged 50+ and only one VET educator was younger than 40 years of age. Not surprisingly, the study also revealed that two thirds of the participants were looking to retire within the next ten years. The current study suggests that the LIS profession must start finding ways now to entice new VET educators into the field.

Three quarters of the VET educators in the current study had postgraduate qualification, with only one educator possessing a PhD. This is striking when considered against the 2008 figures that showed only one quarter of teachers within the TAFE workforce had a post graduate qualification (Guthrie, 2010). Australia's information educators in the VET sector are more qualified than their teaching peers. As the VET educators in the current study are considerably older than the overall VET workforce it may be that they have had more time to acquire their higher than normal number of post graduate qualifications. One third of the VET educators indicated that they were currently studying, at a variety of levels including diploma, coursework masters, research masters and PhD. This study reveals that Australia's LIS VET educators have embraced the importance of being "learning professionals" (Darling-Hammond & Sykes, 1999).

It has been suggested that LIS professionals and educators inhabit two different worlds, with insufficient interplay and interaction between them (Hallam, 2007; Moran, 2001). The findings of the current study clearly reveal that Australia's LIS VET educators actively seek to connect with the industry they support. All of the studies respondents had at some point in time worked within the LIS profession and over 41% were still indicated that, in addition to their work as an educator, they were also currently employed within the LIS profession. Although it must be noted that just over 20% had not been employed in the LIS profession for more than ten years.

Findings suggest that Australia's LIS VET educators appear to be rather satisfied with their educator's life; with over 86% indicated they were satisfied or very satisfied with their job. Further support for this high degree of job satisfaction is evidenced by the fact that most respondents (67%) were not looking for another job, though about 8% were looking for a similar position at another institution, and another 12% were looking for a job outside of information studies education.

5. CONCLUSION

This national project provides the unique opportunity for LIS educators across Australia to collectively unite in order to 'future-proof' education for future generations of LIS professionals. Creating a sustainable and cohesive future for LIS education – at both the VET and higher education levels - can only be realised through cooperation and collaboration across all stakeholders on a holistic and national level.

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