

Don't ever stop! The imperative for career-long learning for the library and information profession

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Abstract

The Information Online conference highlights the ongoing digital developments that continue to shape the working environment for library and information professionals. As business and governments focus ever more keenly on knowledge and innovation as key drivers for social and economic development, library managers must consider their ability to recruit, retain and develop the talented and committed workforce needed contribute to these dynamic information contexts. Anecdotally, employers report that the pool of candidates applying for jobs fails to have the skill set they are seeking, while many of their current staff show little motivation to engage in meaningful professional training activities to develop new skills.

This paper reports on the findings of a research project undertaken in 2006 by Queensland University of Technology (QUT), in conjunction with ALIA, to identify the issues and challenges facing library managers as they endeavour to determine the best strategies for workforce planning and career development in an increasingly competitive labour market. Building on the research undertaken at QUT into the knowledge and skills required by the beginning library and information professional in the 21st century, the project has focused on the career long learning needs of information professionals, both within Australia and overseas. The study encompasses an evaluative review of various models of successful professional development programs, specifically those offered by university library schools, both independently or in collaboration with training providers and/or professional associations. Two of the key goals of the project are to foster a keener awareness of the importance of workforce planning and to develop a collaborative framework for career long learning for the library profession, bringing together employers, educators, trainers and individual practitioners.

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Introduction

The consistent professional interest and participation in the biennial Information Online conferences are driven by the need to understand and keep abreast with the ongoing digital developments that shape the working environment for library and information services (LIS) professionals. In developed countries such as Australia the speed of change, driven by innovation in information and communications technologies (ICTs), is increasing, with businesses and governments focusing ever more keenly on knowledge and innovation as the key drivers for social and economic development. At the same time, demographic change is predicted to have an impact on the social, economic and industrial factors in the years ahead. Already there are anecdotal reports from employers in all industry sectors about the pool of candidates applying for jobs failing to have the skill set they are seeking, while many of their current staff show little motivation to engage in meaningful professional training activities to develop new skills. This situation is stimulating research into the economic, political and industrial issues associated with the workforce, for example with the Centre of Labour Research at the Australian Institute for Social Research in Adelaide and the Workplace Research Centre in Sydney. In terms of planning for the future, the LIS sector cannot afford to ignore the key issues: library managers must consider their ability to recruit, retain and develop the talented and committed workforce needed to contribute to these dynamic information contexts.

The scene for the current paper was set at the ALIA Biennial Conference, Click06, held in Perth in September 2006 with the presentation 'Future perfect? Will we have made it? Workforce planning issues in the library and information sector' (Hallam, 2006). The Click06 presentation highlighted the impact that changing demographics are likely to have on the workforce in Australia in the next 20 years and beyond, particularly in terms of the anticipated competition for skilled workers, as predicted by Professions Australia (2005): "Demographic change will develop into the challenge of replacing skilled older workers from a much smaller pool of younger workers". In addition, the paper provided an outline of the research into the workforce planning issues in the LIS sector that have been and are currently being undertaken in the United Kingdom (UK), Canada and the United States of America (USA) (Usherwood et al, 2001; Re:source, 2003; MLA, 2004; Ingles et al, 2005; IMLS, 2006).

The primary concerns in these international studies focus on the concept of an ageing workforce and the associated retirement of senior LIS professionals; low unemployment levels which give rise to a dwindling pool of applicants from which to recruit; flattening or potentially even declining numbers of LIS graduates; the increased competition from other career sectors; less than competitive salaries; and the lingering negative image of the profession. The Click06 paper further argued that, while there were some scattered initiatives taking place in Australia which sought to develop a better understanding of the issues in the local context (Bridgland, 1999;

McCarthy, 2005; Whitmell, 2005; van Wanrooy, 2006), there was scope for a major Australian study to capture demographic, educational and employment data about LIS professionals at the individual level, as well as about the specific recruitment, retention and training and development practices at the institutional level.

The Click06 paper consequently represented the launch of a study which aimed to collect some of the critical information that is needed to fully understand the nexus, ie the links, connections, or the series of connections, between education, curriculum, recruitment, retention, training and development that can potentially sustain and develop the LIS workforce in Australia. Importantly, the project sought to foster a more acute awareness amongst LIS professionals not only of the importance of workforce planning in this country, but also of the imperative for the LIS sector to recognise the need for continuing education and professional development to ensure the workforce sustains a high level of relevant skills in a rapidly changing professional environment. Ultimately, employers, educators, trainers, the professional and individual practitioners should strive to develop a collaborative framework for career long learning for the library profession. The current paper presents an overview of the research project to date, together with the preliminary findings distilled from the first stage of the research which enable a clearer picture to be developed of the LIS profession today. Drawing on the demographic data, the paper begins to explore the issues of the age of those currently working in the LIS sector, their plans for retirement and the associated impact on staff development.

The current research project

The *neXus* research project comprises three different, yet interrelated, studies, with the key stakeholders in the initiative being Queensland University of Technology (QUT), the Australian Library and Information Association (ALIA) and CAVAL Collaborative Solutions (CAVAL). Stage One, referred to as the *neXus* census, was an online survey of individual LIS professionals; Stage Two investigates workforce policies and practices in LIS institutions. At the time of preparing this paper, the survey of individuals has been completed, with a preliminary analysis of the collected data. The survey of institutions has concluded its pilot stage, following the collection of data via a questionnaire distributed to members of the CAVAL consortium of Victoria, which principally has members in the academic library sector. An international study tour has provided the opportunity for a review of various models of successful professional development programs, specifically those offered by university library schools, both independently or in collaboration with training providers and/or professional associations. The current paper can be viewed as a progress report, prepared two months into the project, to provide insights into some of the preliminary research findings.

The *neXus* survey instrument was developed in accordance with the principles of academic research ethics, gaining ethical clearance from the QUT Office of Research Ethics and ensuring that participants in the project were fully informed about the nature of the research and that their responses would be handled with total confidentiality and anonymity. The questionnaire was piloted using a subset of the target population, with the goals of testing the clarity of wording, interpretation and acceptance of the questions and having the online instrument completed using a range of platforms and versions of different browsers. The self-administered questionnaire was accessible online for one month, with a direct link from the home page of the ALIA website, and was promoted widely via ALIA, LIS special interest groups and organisational e-lists.

The advantages of online data collection are widely acknowledged, enabling researchers to achieve: “reduced response time, lower cost, ease of data entry, flexibility of and control over format, advances in technology, recipient acceptance of the format, and the ability to obtain additional response-set information” (Granello & Wheaton, 2005). Nevertheless, it is also acknowledged that, while “online research is the fastest growing development in social research since the introduction of scientific opinion polls in 1936” (Gunter et al, 2002, p.232), the process of distributed, online surveys is in essence an evolving tool for social research, with the sampling techniques inevitably resulting in the self-selection of respondents. This in itself can impact on the level of potential bias in responses, the overall validity of the survey and the generalisability of the findings. One of the major concerns with online surveys is the difficulty in determining the response rate per se: “when participants for electronic surveys are recruited via newsgroups, search engines, or electronic mailing lists, researchers are not able to pinpoint the number of individuals who received the information, and therefore they cannot determine response rates nor speak to the representativeness of the sample” (Granello & Wheaton, 2005, pp.389-290). However, it has been found that online surveys can indeed increase response rates with specific target populations, frequently with an increase in data accuracy and reliability, as respondents tend to make fewer errors in completing the questionnaire, answer more items and also provide richer answers to open-ended questions and disclose more about themselves (Brown et al, 2001; Gunter et al, 2002).

As the potential population for the *neXus* survey was essentially a discrete group (people working in the LIS sector), with Internet access readily available to this population, and with e-lists regarded as a key method for professional communication, a web-based survey was considered a convenient and effective research tool. The focus of the *neXus* survey meant that the sampling of a specific group was more important than achieving a representative sample: the “generalization of the findings to the greater population [was not] as important as gaining an understanding of how certain types of people respond to particular questions and the ways they articulate their answers” (Gunter et al, 2002, p.232). The online survey attracted 2353 respondents – a significant figure which in itself indicates the high level of interest in the current issues amongst members of the profession. Technical problems were associated with 0.3% of responses, and where the affected respondents contacted the researchers, they were offered the opportunity to complete the print survey. Eight print surveys were completed, to have a total of 2354 valid responses. In an effort to sustain interest in the project amongst the target group, emails were sent out to relevant e-lists several times during the period when the survey was open, with specific reminders sent to advise when the survey would no longer be accessible.

In comparison to this Australian study where respondents were sourced via professional e-lists, the Canadian study (Ingles et al, 2005) developed a sampling frame of librarian and paraprofessional staff was developed over several months with the assistance of several library associations and libraries that provided the research team with their membership or staff lists, further supplemented by internet searches. Nevertheless, as this population framework did not represent the entire population of LIS professionals and paraprofessionals, list-server respondents were also included. The Canadian survey attracted 4,693 respondents, achieving a response rate of 42% (p.32).

In order to keep the questionnaire as straightforward and streamlined as possible, it was designed with ease-of-use in mind. The sequencing of the questions, the use of radio buttons and

navigation using the tab key were all considered critical factors. Automatic routing of respondents and pre-determination of question and response option presentation provided the opportunity to design the instrument so that the questions that appeared to respondents would depend on the way specific questions were answered. This not only precluded many potential sources of response error (Gunter et al, 2002), but further ensured that respondents who were currently employed did not have to see questions that were, for example, relevant only to those who were unemployed; similarly those who had recently retired would only be asked to respond to questions relevant to their situation, thereby sustaining the respondents' motivation to complete the questionnaire.

The institutional survey that was the principal research instrument in Stage Two was developed in collaboration with the Staff Development Coordinators (SDC) Committee of CAVAL. This angle of the research commenced with an initiative to update earlier studies into training and development practices amongst the member institutions of CAVAL (Smith, 2002, 2006). As the proposal to update this research coincided with the initial *neXus* census work, there was an opportunity to extend the study to cover recruitment and retention policies and practices in the member institutions. It was believed a deeper understanding of these issues was integral to the analysis of training and development activities in the individual organisations. The survey instrument was distributed in hardcopy to the university librarians of the thirteen members of CAVAL.

This extensive institutional survey covers four main areas of workforce activity that are considered important pieces of the LIS workforce jigsaw puzzle: general staffing information, recruitment and retention, staff development and succession planning. The researchers have hoped that the survey questions would stimulate discussion amongst key staff members in each organisation and encourage them to use the survey itself as a tool to review and reflect on current practice in their institution, so it could potentially be an effective staff development process in its own right. The surveys were returned to CAVAL at the end of November 2006, with the findings being collated and analysed in the ensuing weeks. It is hoped that, with the support and encouragement of the board of CAVAL, this study can serve as a pilot, so that the research instrument can be reviewed and refined to be submitted to the QUT Research Ethics Committee to obtain ethical clearance to permit a far wider study of policies and practices in the areas of staff recruitment, retention, training and development across a range of institutions in the LIS sector, to be undertaken in February-March 2007.

The international study tour was structured to make the most of the opportunity to understand some of the international perspectives that are relevant to the project. From the author's perspective as an academic, it was felt that there was scope for Australian universities to consider their role in providing career-long learning opportunities, ie beyond the qualifications for the beginning professional and meeting more in-depth learning needs than the one-day course. At the same time, professional associations play their own significant role in monitoring the need for and the quality of professional education, at both the professional and paraprofessional levels. Different countries offer diverse opportunities to encourage career-long learning within the profession, with a range of government, corporate and academic models feeding into the process. The study tour provided the opportunity to consider the 'big picture' dimensions of LIS education and workforce planning through discussions with different players in different countries: with staff of universities that offer well-established models for successful continuing education programs; with professional associations involved in the development of and support for

continuing professional development; with government agencies that have responsibility for education and training at the professional and paraprofessional levels in the LIS sector; and with organisations interested in the issues of leadership development. Together, the three strands of the research project, the individual census, the institutional survey and the international study tour seek to establish a holistic and balanced understanding of the 'nexus' between education/curriculum/recruitment/retention/training/development in the LIS sector.

Developing a picture of the LIS profession in Australia

An important first step in the process of understanding our professional future is the development of a clear picture of who is currently in the profession and where they believe they are heading. Indeed, in common with many jurisdictions, it is difficult to ascertain the exact make-up of the LIS sector. Drawing on a range of sources published by the Australian Bureau of Statistics (ABS) and the Department of Employment and Workplace Relations (DEWR), Australian Job Search (2002) contends that the LIS sector in Australia comprises a total workforce of 28,000, with 13,000 (46%) being librarians; 5,000 (18%) being library technicians; 7,000 (25%) working as library assistants; and 3,000 (11%) archivists or allied professionals. As noted, the *neXus* census attracted 2346 online responses and eight paper-based responses. The logistics of the international study tour has meant that the preliminary analysis of the data reported here focuses on the online responses only. The data will be subsequently updated to incorporate the eight written responses. The demographic, educational and career data collected will help develop a clearer picture of the LIS profession in this country and can potentially be updated on a regular basis, for example every five years, to allow the profession to follow changes and trends that might emerge.

86.4% of all respondents stated that they had completed their studies in LIS, while 7.7% were still enrolled in a course. Of those who had qualified or were studying, 79.2% had or were working towards university-level qualifications in LIS, which for the purposes of reporting will be referred to as 'professionals' or 'librarians', while 16.8% had qualified with or were studying towards a vocational certificate, associate diploma, diploma or advanced diploma in LIS. This group will be referred to as 'paraprofessionals'. On occasion, the cohort of respondents who hold, or are studying towards, qualifications at the various levels of LIS diploma, will be referred to as 'library technicians', especially when comparisons are made with other research studies. 4.0% of respondents indicated that they had no formal LIS qualifications (Figure 1). 17.8% of respondents identified themselves as new graduates, ie that they had gained their qualifications as an LIS professional or paraprofessional in the last five years, although it should be noted that a significant number of respondents (14.4%) did not give an answer to the question.

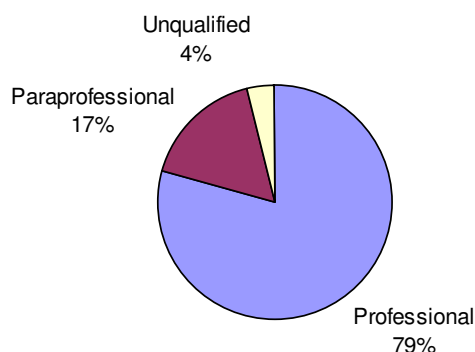


Figure 1: Qualifications of respondents

The Canadian study, which had adopted a multi-pronged sampling frame, resulted in a higher ratio of paraprofessional to professional respondents than the Australian study, with 54% professionals and 45% paraprofessionals completing the survey (Ingles et al, 2005, p.32).

The age profile of the respondents in the *neXus* study shows a fair distribution of age groups, with 3.4% of respondents being in the age group of 18-25, 17.8% were 26-35 years, 26.5% were 36-45 years, 34.1% were 46-55 years, 16.8% were over 56-65 years and 1.6% were 66 years or older. In the context of workforce planning, the number of older workers heading towards retirement is of particular interest and will be discussed in greater depth later in the paper. The *neXus* study reveals a total of 18.4% of respondents over the age of 56 (see Figure 2).

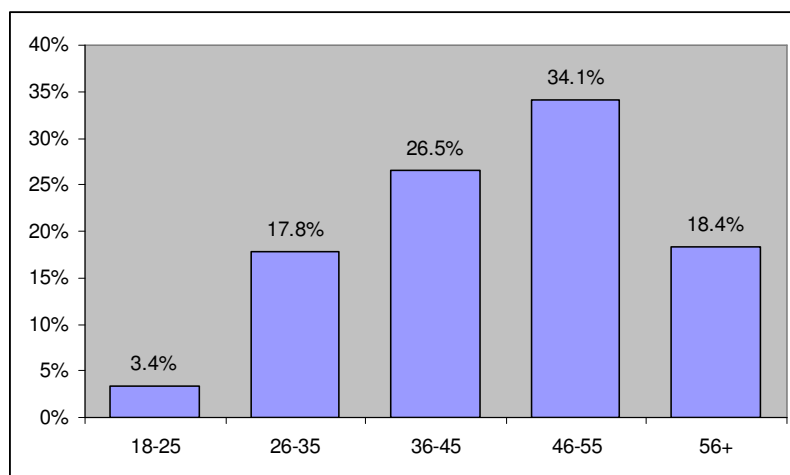


Figure 2: Age of respondents

The most recent figures published by the website Australian Job Search (2006) reports however that 65.1% of librarians and 45.6% of library technicians are 45 and over. However, the data collected by the *neXus* census gives a lower age demographic for librarians, but a higher figure

for library technicians. 49.9% of librarian respondents are 46 years and over, while 54.1% of library technician respondents fall into the category of over 46 years. The Australian Job Search data presents 24.7% of librarians and 11.1% of library technicians being over 55, while the *neXus* census recorded that 16.1% of respondents with librarian qualifications and 17.6% of respondents with library technician qualifications fell into the categories of 56 years and over. In the *neXus* census there were noticeably more respondents in the age group 26-35 (18.8% professional and 17.8% paraprofessional), compared with the Australian Job Search figures which report 8.7% librarians and 10.4% library technicians aged 25-34 (see Table 1). It should be noted that there is a marginal difference in the actual age groupings in the two studies, eg 26-35 (*neXus*) compared with 25-34 (Austalian Job Search).

neXus age groups	Librarians	Library Technicians	Australian Job Search age groups	Librarians	Library Technicians
18-25	2.8%	4.2%	15-24	2.7%	3.7%
26-35	18.8%	17.8%	25-34	8.7%	10.4%
36-45	28.5%	24.0%	35-44	23.5%	40.3%
46-55	33.8%	36.5%	45-54	40.4%	34.5%
56+	16.1%	17.6%	55+	24.7%	11.1%

Table 1: Comparison of age demographics for professional and paraprofessional staff: *neXus* census and Australian Job Search (2006)

12% of all respondents reported that they came from a linguistically or culturally diverse background and 0.7% indicated that they were of Aboriginal or Torres Stair Islander descent.

It was felt that there was a fair geographical distribution of respondents, with comparative figures for the estimated resident population by State and Territory (ABS, 2006) presented in Table 2. It was interesting to compare the geographical distribution with data reported by Australian Job Search (2006), specifically as it indicates that 51.3% of library technicians reside in Victoria, while there are apparently none in the Australian Capital Territory (ACT), whereas 3.9% of library technician respondents in the *neXus* study reported being based there.

State / Territory	neXus: All respondents	neXus: Librarians	Australian Job Search: Librarians	neXus: Lib Techs	Australian Job Search: Lib Techs	ABS Est. resident population
Victoria	24.4%	23.0%	28.8%	30.9%	51.3%	24.7%
New South Wales	22.2%	22.5%	23.6%	20.6%	12.7%	33.1%
Queensland	15.6%	16.0%	15.8%	14.8%	6.1%	19.6%
Western Australia	12.9%	13.6%	12.8%	12.5%	14.7%	9.9%
South Australia	8.3%	8.9%	9.3%	5.6%	7.1%	7.5%
Australian Capital Territory	6.9%	7.6%	6.7%	3.9%	0.0%	1.5%
Tasmania	4.7%	3.6%	1.5%	11.1%	6.6%	2.3%

Northern Territory	3.4%	3.3%	1.5%	4.2%	1.5%	1.0%
Overseas	1.5%	1.5%	n/a	0.0%	n/a	n/a

Table 2: Geographic distribution to compare neXus respondents with Australian Job Search (2006) and ABS (2006) figures

Naturally enough, respondents represented the different sectors of the profession, although 7.3% of respondents chose not to provide any details. Staff from university libraries represented 24.6%, public libraries 23.4%, special libraries (eg in Federal or State/Territory government, local government, corporate or not-for-profit organizations) 21.1%, National, State and Territory libraries 8.5%, school libraries 7.5% and TAFE libraries 5.3%. A further 2.0% of respondents came from non-traditional LIS workplaces. A graphical overview of the respondents by sector is presented in Figure 3.

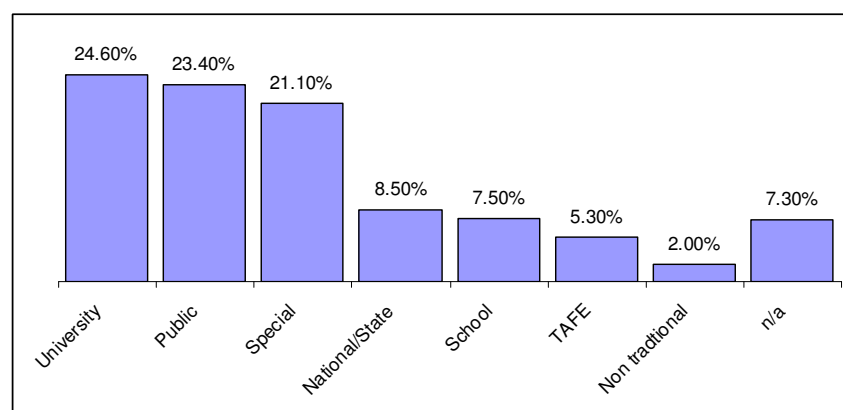


Figure 3: Respondents by LIS sector

The *neXus* data also revealed that 70.8% of respondents worked in a state or territory capital city, 22.7% in a regional town or city and 6.5% work in a non-metropolitan or rural area. As a comparison, the 2001 Census data indicates that 66.3% of the population lives in the major cities, 33.1% in regional areas and 2.6% in remote areas. While the ratio between the different age groupings remains fairly similar for both the capital cities and for the regional towns, there is a noticeable older demographic in the rural areas: 63.2% being 46 years and over, compared with an average of 52.0% for the capital cities and regional towns. At the younger end of the demographic spectrum, there is a similar drop in the number of younger people employed in the rural areas: figures indicate around 10% being in the age group 18-35 in rural areas, as opposed to the average of around 21% in the more populated areas. There was a fairly even split between respondents in the age range 18-35 regarding the willingness to seek employment in rural libraries: 43.8% indicated they would not want to, while 40.0% said they would be prepared to, if personal and family conditions made it possible. On the other hand, 72.2% of this age group declared they would be prepared to work overseas, with only 26.2% discounting the option. Personal and family issues were not seen to be a problem when considering international employment opportunities.

The *neXus* census has provided a rich body of both quantitative and qualitative information about the respondents' careers. One interesting angle to analyse is the relationship between career stages (length of time working in the LIS sector) and career paths (the number of positions held). Following the model used in the Canadian study (Ingles et al, 2005, p.43), LIS workers can be grouped into three discrete career stages:

- Recent entrants – 5 years or less in the sector
- Mid career – 6-15 years experience in the sector
- Senior – 16 years or more working in the sector.

16.9% of respondents indicated that they were new entrants in the profession, so had been working in the sector for 5 years or less. 31.8% can be described as mid career workers (6-15 years experience) and 43.8% fit into the category of senior career workers (16 years or more experience). 7.4% of respondents failed to answer the question. The breakdown of career stage by professional and paraprofessional groupings are presented in Table 3 and Figure 4. Further more detailed analysis by employment sector (academic, public, special libraries etc) and by state and territory will be undertaken in the future.

Career stage	All respondents	Professional	Paraprofessional
Recent entrants: < 5 years	16.9%	14.3%	25.3%
Mid career: 6-15 years	31.8%	33.7%	30.6%
Senior career: >16 years	43.8%	43.6%	40.1%
No response	7.4%	8.5%	3.9%

Table3: Career stages of respondents by qualification

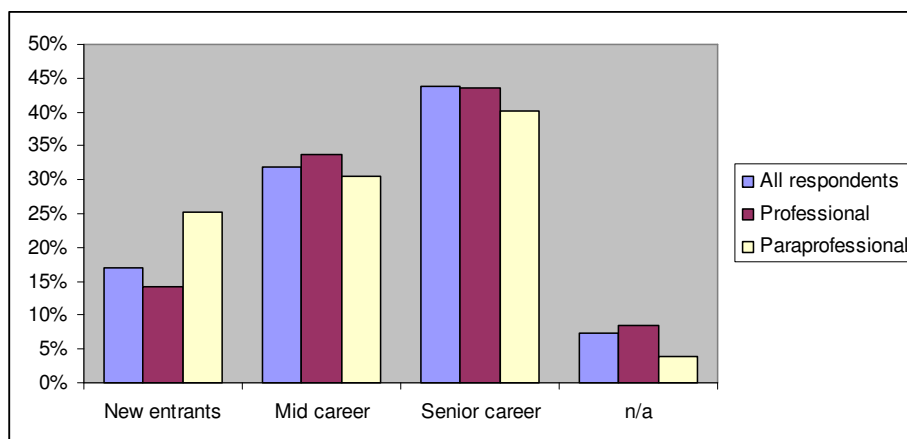


Figure 4: Career stages of respondents by professional/paraprofessional qualifications

In the context of workforce planning issues, it is important to understand the interplay between new entrants to the profession who may potentially wish to gain a variety of experience and diverse employment opportunities early in their careers, which can result in more frequent hiring

and induction processes for employers, and a stable workforce in the mid and senior career stages that may see little change in personnel, but where the jobs themselves may manifestly reflect incremental changes in the functions that individual workers may need to perform. Training and skills development are therefore critical to both these groups of workers. In terms of continuity of employment, the number of people who had been employed by the same organisation for 5 years or less was 41.7%, while 33.4% had been with the same employer for 6-15 years and 17.4% had stayed with the same institution for 16 years or more. 53.3% of respondents had held their specific job for less than five years, 19.0% had the same position for 6-10 years and 19.9% had been in the same role for more than 10 years.

The *neXus* questionnaire also sought to examine people’s retirement plans, to determine whether or not there might potentially be a dramatic exodus from the profession in the next five to ten years. In the role as ALIA’s advisor in the area of industrial relations and employment, Teece (2002) had openly challenged employers in the LIS sector, with its “acutely ageing workforce” to give serious consideration to succession planning issues to counter the predicted “crisis in labour supply that ageing of the baby-boomer population bulge [would] inevitably create”. Again in 2004, Teece warned that “more effective succession planning via employment of younger people should clearly be a vital policy issue for the sector”. The loss of older workers through retirement is directly related to the skills debate: the ability to attract and retain a skilled workforce, as well as to introduce more flexible employment options, will be a critical factor if the LIS sector is to survive – and indeed prosper – in a highly competitive labour market.

Respondents in all age groups and career stages were asked to give the age when they thought they may hope to retire. Bearing in mind that the researchers cannot anticipate the fiscal or social policies that may be introduced by governments in the years ahead that might impact on the respondents’ current viewpoints, it was found that 5.4% hoped to retire before they reached the age of 55, 27.8% suggested they hoped to retire between 55 and 60 years of age, 18.4% suggested between 61 and 65, 13.9% indicated at 65 years, and 13.7% hoped to retire after they reached the age of 65. 12.6% did not know at what age they might retire. Of course, there may be a certain degree of wishful thinking on the part of respondents, especially for those in the younger age categories where there is a higher level of uncertainty; perhaps more realistic were the responses to the question about how long it would be until respondents did retire. The demographic data collected in the *neXus* census reports that 16.4% of LIS workers (professionals and paraprofessionals) are aged 56 years or over and therefore ostensibly eligible for retirement within the next ten years, but it is acknowledged that in the 21st century, retirement decisions do not necessarily correlate with chronological age. Some workers may wish to consider early retirement and some may wish to continue working beyond age 65. Indeed, Canadian research has highlighted the prospect of ameliorating the effects of retirements by changing the rate of retirement itself, for example through the introduction of more flexible work arrangements which can encourage later and more gradual retirement (McMullin and Cooke, 2004).

15.8% of respondents indicated that they aimed to retire from the workforce within the next five years, with the figure of 6.5% retiring within the next 3 years and 9.3% retiring between 3 and 5 years. A further 15.9% plan to retire in the period of 6-10 years time, meaning that at this point in time almost one third (31.7%) of the workforce will have retired by 2015 (see Table 4).

Years until anticipated retirement	%
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1-3 years	6.5%
3-5 years	9.3%
6-10 years	15.9%
Total 2006-2015	31.7%

Table 4 : Anticipated time until retirement

This figure is in fact almost double that of those who actually fall into the chronological age group of 56 years and older, and once again it must be stressed that current plans for early retirement may not be realised. One positive aspect of these figures is that the process is likely to be progressive, rather than a dramatic shedding of older and more experienced staff.

A closer look at retirement issues

The *neXus* study sought to determine the types of skills that would be lost when people in the senior career stage left the workforce. The research findings indicated that of those planning to retire within the next 5 years, 40.2% were at the middle management level and 21.4% were at the senior management level. These groupings of respondents were then examined from the perspective of the tasks they performed, with specific attention paid to the professional and job functions they reported performing ‘often’ or ‘very often’. It was not surprising to find that the functions performed at the senior management level had a strong administrative and managerial focus: 89.8% were regularly involved in organisational planning activities (three quarters of them ‘very often’) and 87.7% regularly involved in budget and financial activities (again, three quarters stated ‘very often’). Policy development and the management of training and staff development were also key functions (83.6% and 81.6% respectively). Other significant responsibilities included space, facilities and building management, marketing and public relations, and human resources planning and management. Senior managers moving towards retirement indicated that they were still involved, on a regular basis but to a lesser extent, in other functional areas such as collection development and evaluation, the acquisition, receipt and payment of library resources, information literacy, and liaison activities. It was noted that there was considerable similarity in the responsibilities of all senior managers, whether they planned to retire in the next five years or aimed to continue working for another six years or more, although those continuing their careers for a longer period reported a slightly higher level of involvement in the area of human resource management and staffing than those who would be retiring.

Middle managers heading towards retirement reported that they continued to be regularly involved in discipline-specific functions such as collection management (66.3%), or reference, information service and research support (58.7%). However, it was interesting to note that there were significant differences between two groups of middle managers in terms of the responsibilities and functions they reported, firstly those retiring within five years and secondly those who would be employed for a further six years or more. When compared with those at the middle management level who would be retiring within five years, those aiming to continue their careers for a longer period of time reported a higher occurrence of work in almost all functional areas of management (see Table 5 and Figure 5).

Professional functions	Middle managers	Middle managers
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	retiring within 5 years	planning to work 6 yrs +
Marketing and public relations	38.0%	52.7%
Space, facilities & buildings management	42.4%	50.3%
Managing training & staff development	48.9%	65.3%
HR planning and management	49.0%	59.0%
Policy development	53.2%	64.3%
Budgeting & financial management	60.9%	65.1%
Supervision and evaluation of staff	66.3%	77.0%
Organisational planning	67.4%	77.6%

Table 5: Comparative levels of managerial functions performed ‘often’ or ‘very often’ by middle managers retiring within 5 years and those planning to work for 6 years or more

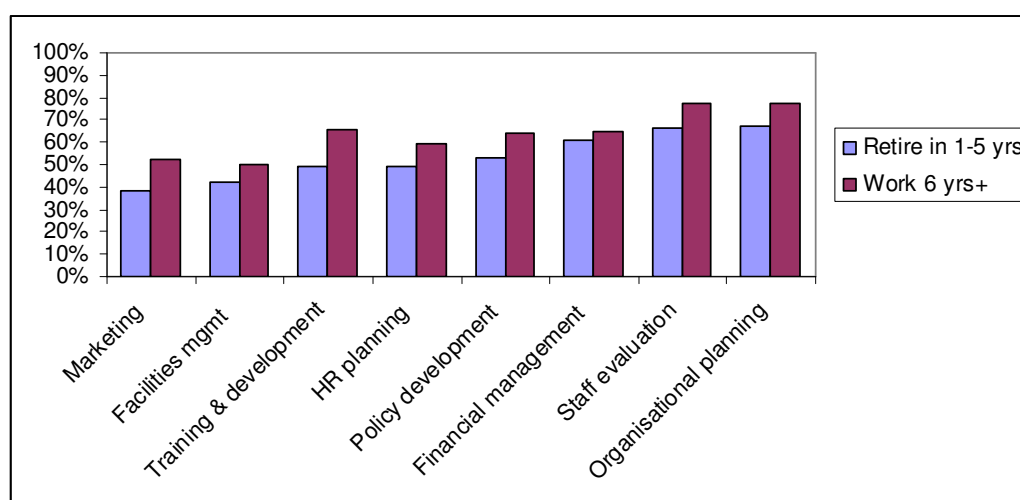


Figure 5: Comparative levels of managerial functions performed ‘often’ or ‘very often’ by middle managers retiring within 5 years and those planning to work for 6 years or more

A correlation made with the ages of these two groups of middle managers determined that those who planned to retire within five years were all 46 years and older, albeit with almost one third of those actually aged 46-55, so retiring in advance of the ‘normal’ retirement age. Those who would not be retiring within five years presented a considerably younger age demographic, with 52.8% being 45 years and under, with about 30% of those being 40 years and under. This comparison of chronological age, career stage and the professional functions performed augurs well for the future, as it could be interpreted as evidence that there is indeed some significant progress being made in terms of succession planning, with younger middle managers more regularly acquiring greater responsibility for a wide range of managerial activities, whereas this situation was less frequently the case for their older, pre-retirement colleagues. The situation may also have arisen through restructuring initiatives that have contributed to the emergence of new roles, including “the need for librarians to perform an ever-widening array of tasks, to increasingly perform management and leadership roles” (Ingles, 2005, p.179). Additional analysis will be of interest in the Australian context, to determine which specific areas of the profession (eg by sector and/or by state) are leading the way in this process. Furthermore, it would be valuable to augment these preliminary research findings by conducting focus group

discussions with the different cohorts of middle managers to discern the changes in roles performed and any similarities and differences in education, training and staff development.

A closer look at training and development issues

Stage Two of the Australian workforce planning study, the institutional study of recruitment and retention activities and the investigation into training and development policies and practices, which has been undertaken at the pilot level with the members of CAVAL, offers the opportunity to review the organisational focus on staff development issues. The findings from this institutional study will be reported in future professional forums and publications. The *neXus* survey of individuals, on the other hand, has sought to gather the views of LIS professionals and paraprofessionals about their own education and training. Questions were posed about how often people participated in either formal and informal learning activities, the areas of professional practice where people had received training, whether through course attendance or through workplace learning activities, as well to consider the extent to which respondents felt the training had contributed to improved work performance.

It was found that 39.8% of respondents ‘sometimes’ attended formal activities such as conferences, workshops or training events, while 28.4% attended ‘often’ or ‘very often’. There was greater participation in informal learning activities in the workplace, with 42.1% reporting that they were involved ‘often’ or ‘very often’ and a further 33.4% ‘sometimes’. 15.1% reported that they rarely or never attended informal learning activities, as opposed to almost a quarter of the workforce (22.7%) saying that they rarely or never attended formal training and development events. Overall, 59.1% of all respondents felt they had sufficient training opportunities in their current employment, while 47.6% actually felt that they spent too much time in training courses. Paraprofessional staff were less happy about the amount of training they received, but ironically also felt more strongly that they spent too much time in training activities. Further analysis is required to review the field of staff development and the quality of the programs offered.

When asked about specific training and development activities undertaken with their current employer and the extent to which this training contributed to improved work performance, the greatest impact was achieved from technology training, with more than 56% of respondents reporting that the training had improved their ability to do their job, while job swaps had the lowest impact at 5.8%. The relative impact of training on work performance, as viewed by the respondents themselves, is presented in Table 6:

Area of training	Perceived positive impact on work performance (to a considerable or to a great extent)
Technology training	56.8%
Job-oriented skills training (excluding technology)	53.6%
Library issues, subject specific	43.0%
Customer service	33.3%
Management skills	27.1%
Leadership skills	25.5%
Mentoring	11.0%
Job rotation	10.3%

Job share	6.6%
Job swap	5.8%

Table 6: Areas of training in current employment that have had a positive impact on the quality of work performance

Respondents were further asked to consider what areas of training would be of benefit to their current career. The value of IT skills training was acknowledged to be important by professionals and paraprofessionals alike, with 53.8% of professionals and 54.6% of paraprofessionals agreeing or agreeing strongly to the statement that their career would benefit from further IT training. With regards to management training, 56.0% of professionals agreed or strongly agreed that their career would benefit from further development activities, compared with 40.4% of paraprofessional staff. Business training was felt to be important to the careers of 48% of professional staff and 32.9% of paraprofessional staff. As a complete contrast, however, very few respondents could see the value of leadership training in the context of their own careers. Only 2.6% of professional staff responded positively, compared with 3.1% of paraprofessional staff. In fact, more paraprofessionals (1.7%) ‘strongly agreed’ that leadership training would benefit their career than professionals (0.9%). Overall, 75.7% of all respondents felt there was little or no value to their careers for them to participate in leadership training. It must be noted, however, that these responses were not aligned with the views captured by an open-ended question about the type of skills that were the most important to the individual’s future career, where 19.5% of all respondents included leadership development or advanced leadership development as one of the most critical areas for their own career advancement. The researchers are aware that considerable confusion exists within the profession – not only in Australia and perhaps not only in the LIS profession – about the definitions and scope of the two concepts of ‘management’ and ‘leadership’. It is believed that the topic of ‘leadership’ and what it means and represents is an issue which needs to be explored more deeply within the profession as a whole.

The training and development responses were also analysed from the perspective of the respondents’ ambition to be in the position of senior management in ten years’ time. While 10% of all respondents hoped to have become a senior manager within ten years, there were inevitably different levels of ambition within the different career stages. 9.1% of professional respondents in the new entrant career stage (with less than five years’ experience) reported that they would like to be in the role of senior manager in ten years’ time, compared with 1.1% of paraprofessionals; 17.6% of mid career professional respondents indicated this was their goal, compared with 1.8% of paraprofessionals; 25.8% of senior career stage people who were already senior managers hoped to continue the role (noting that 43.2% of the senior career/senior managers group aimed to have retired by 2015). Only 9.0% of senior career professional staff who did not hold senior manager positions (ie they were employed at the level of middle manager or supervisor) and 3.1% of senior career paraprofessional staff hoped to achieve the position of senior manager within ten years.

With regard to academic qualifications and experience, 77.3% agreed or strongly agreed that they had sufficient education, training and experience to effectively perform their current job. While 61.9% felt that they were actually overqualified for the position they held, a far lower figure of 29.8% believed that they had the right level of education, training and experience to be promoted

to a higher position. In response to questions about the amount of interest in further study, 20.6% of all respondents expressed interest in completing further academic qualifications. 1.8% of respondents were considering a Master of Business Administration (MBA) and 0.1% a Master of Public Policy. The low figure of interest in MBA studies contrasts further with the figure of 56% of professionals who believed that their career would benefit from management training. It is hoped that the institutional survey will provide further insights from the employer perspective about the need for management development.

The interest in higher degree programs, or research studies, was considerably lower than more general academic studies. 2.5% of all respondents indicated that they hoped to pursue PhD studies, and a further 2.9% stated that a research master's degree in LIS was in their sights. Research studies in Australia have already highlighted the low levels of interest in research work within the LIS profession (Macauley, 2004). The preliminary findings from the *neXus* study underscore the lack of enthusiasm about research and publishing within the discipline, with 5.3% of respondents indicating that they 'often' or 'very often' were involved in undertaking research or preparing professional papers. The figure was not much higher at the senior management level, with 8.8% of this group reporting active involvement in publishing or research. This means that only a very small percentage of the LIS sector makes any contribution at all to the developing the body of professional knowledge. Sadly, the gulf between research and practice looks set to continue for a long while yet.

Respondents were asked to report on the level of their involvement in professional activities, with 27.8% reporting that they were professionally active 'often' or 'very often', and a further 25.3% being professionally active 'sometimes'. Almost a half of LIS workers (47%) state that they have little or no professional engagement. The issue of professional engagement is also reflected in the figures for membership of a professional membership, with less than half of the respondents being members of the Australian Library and Information Association (ALIA): 42% of respondents said they were currently a member of ALIA, with a further 10.2% planning to join in the next 12 months. ALIA was by far the association with the highest level of membership. The next levels recorded for membership of professional associations were the Australian Law Librarians Group (ALLG) at 4.6%; Australian School Libraries Association (ASLA) 4.4%; Public Libraries Australia (2.5%) and Australian Institute of Management (AIM) 2.1%, SLA 1.4% and Records Management Association of Australia (RMAA) 1.3%. There was a scattering of memberships (0.6%-1.0%) of international associations such as the Library and Information Association New Zealand (LIANZA), Chartered Institute of Library and Information Professionals (CILIP), Canadian Library Association (CLA), American Library Association (ALA) and the International Federation of Library Associations and Institutions (IFLA). Significantly, most people who indicated membership of these other associations were also members of ALIA.

In terms of the age of respondents who reported being a member of ALIA, the distribution was in fact closely aligned with the chronological age of all respondents, although the proportion of ALIA members in the various age brackets over 50 years was slightly higher than those in the younger age groups (Table 7). 18.4% of respondents who were members of ALIA were under 35 years, 25.0% were aged between 36-45, 35.2% were between 46-55 and 21.4% were 56 years and over.

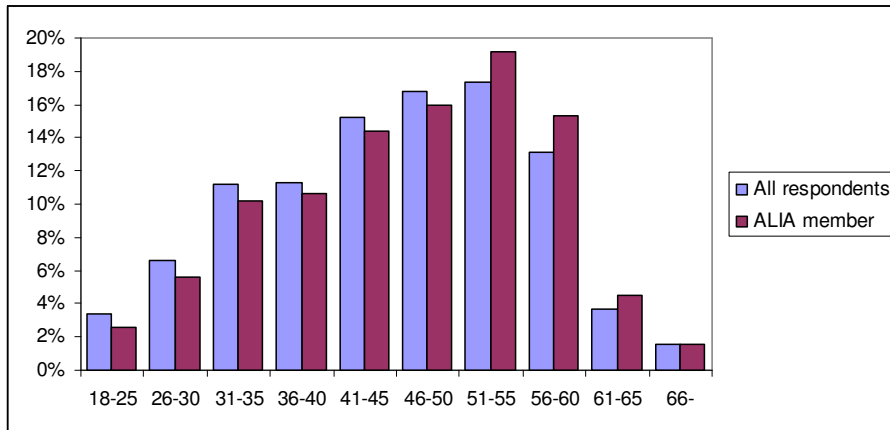


Figure 6: Comparison in age: all respondents and respondents who were members of ALIA

When the cohort of respondents who were members of ALIA was analysed from the perspective of career stage, the results showed that around 50% of senior career workers were members, around 30% of mid career members and about 20% of new entrants, again being very similar to the ratios for the career stages of all respondents (48% senior career, 32% mid career, 17% new entrants) as illustrated in Figure 4. The impact of retirement on the membership of ALIA is an important factor for the association: 16.8% of current ALIA members indicated their plans to retire within 5 years, with a further 16.3% retiring before 2015.

An interesting correlation can be made when using professional engagement as the determinant for interest and participation in training and development activities (see Figure 7).

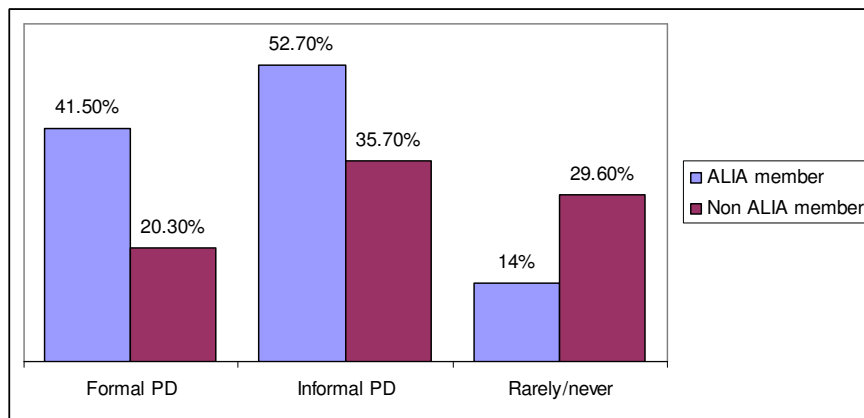


Figure 7: Correlation between membership of ALIA and participation in continuing education activities

The data collected indicates that membership of the professional association, ALIA, is directly related to the respondents' regular (ie 'often' or 'very often') attendance at formal training and development activities such as conferences, seminars or workshops, as well as participation in

informal workplace learning activities. The opposite also applies, that non-membership of the professional association is linked to higher levels of 'rarely' or 'never' participating in continuing education activities.

Discussion

There is a close connection between workforce planning issues on the one hand and education and staff development issues on the other. A number of studies across the globe have reviewed the core knowledge and skills needed by LIS professionals, all of which underscore the dynamic nature of the profession as a whole and the evolving skill set that is needed for effective and innovative LIS practice (Garrod & Sidgreaves, 1998; Dalton & Nankivell, 2001; Nicholson & Tattersall, 2001; Nicolson, 2001; Pettigrew & Durrance, 2001; Dearstyne, 2002; Partridge & Hallam, 2004; Corral, 2005; Fisher, Hallam & Partridge, 2005; Ingles et al, 2005; Kajberg & Lørring, 2005; IMLS, 2006). Analyses of employment advertisements for a full variety of professional staff in different countries have allowed insights into the current employment needs, as seen through the lens of the employer and as expressed within the market place (Nicolson, 2001; Fisher, Hallam & Partridge, 2005; Marion et al, 2005; Myburgh, 2005).

While adverts are admittedly an inconsistent source of absolutes in the skill requirements of any positions they relate to, they do represent the impetus for individuals to begin to match themselves against the attributes, qualities, skills and experience that employers express in their recruitment offerings. The double helix model of DNA has been used to highlight the intertwined strands of discipline knowledge and generic capabilities that are integral to the professional make-up of the LIS worker (Partridge & Hallam, 2004; Fisher, Hallam & Partridge, 2005). Job advertisements encompass the need for candidates to have a mix of both professional and generic skills and experience. In the various studies of job advertisements, the most frequently asked for generic capabilities were communication skills, personal information technology (IT) skills, knowledge/awareness of IT systems and applications, staff management; strategic management and interpersonal skills, with candidates needing to be self-motivated, enthusiastic, committed, organised, flexible, creative team players with vision. The discipline specific skills needed were found to be user needs/user focus/customer care, information literacy/user education, cataloguing/classification/metadata, digitisation of items in the collection and collection management and promotion. In the public library arena, the major foci are reference skills, high levels of customer service skills, user education, oral communication and teamwork. In academic libraries, the need to develop the role of the LIS professionals in technology-based teaching and learning has led to an increasing emphasis on the liaison role with faculty staff, information literacy activities including networked learner support, requiring an understanding of curriculum issues, teaching and learning processes, and the development and presentation of learning materials for virtual learning environments. Skills in online research, retrieval and evaluation of electronic resources are in great demand (Fisher, Hallam & Partridge, 2005). In the corporate sector, employers were looking for staff management/team leadership, effective communication, operations management, financial management, business analysis, project management, and understanding of legal issues and IT knowledge (network and communications, website, Internet, intranet, content management, taxonomies, indexing, thesaurus construction) (Nicolson, 2001, p.2). In all sectors, the incessant push of IT-based systems and IT knowledge requirements for LIS professionals cannot be ignored.

The recent Canadian *8Rs* study sought to determine the drivers of change to the roles of LIS professionals. Not unsurprisingly, IT applications have had the greatest impact, with 87% of institutional respondents identifying the increased use of IT as “the most influential determinant of librarian role change for all library sectors” (Ingles, 2005, p.178). IT will inevitably continue to have an enormous impact on the roles and skills of staff working in library and information services. The Skills for new Information Professionals (SKIP) study conducted in the UK almost a decade ago highlighted the impact of technology on the profession: “One message is clear however and applies to staff at all levels and across the spectrum of responsibilities – whilst some staff may need a portfolio of skills, including high level IT skills, to meet the requirements of their particular function, all staff, working in today’s electronic library environment, must be comfortable working with IT” (Garrod and Sidgreaves, 1998, page 2 of 7).

On another level, both management and leadership skills are expressly sought for senior roles. Nicolson postulated that there was an undersupply of people with the skills employers are looking for, especially in the middle to senior management levels (2001, p.1). Higher level management and leadership skills need to be developed both in the workplace and through continuing professional development. Indeed, employers have the responsibility to support and encourage the development of these skills. The information leaders of tomorrow will need to engage in continuous learning, keeping a watchful eye on changes in their working environment, to ensure that their own professional skills remain current and relevant. Leaders of the profession in the 21st century will need to demonstrate flexibility, along with highly developed capabilities such as communication, both in terms of what is communicated and how it is communicated; drive, ie energy, initiative, persistence; team management, ie direction setting, motivation, conflict management, adaptability; the ability to influence peers, superiors and subordinates; problem solving and decision making; knowledge of the job and its context, as well as identifying new opportunities (Nicolson, 2001, p.3).

The data collected in the *neXus* survey can be regarded as the first step in helping the LIS profession in Australia understand the demographic, educational and career paths of both professional and paraprofessional workers. Subsequent steps will involve the key stakeholders interpreting the data to determine its relevance to the different areas of university and vocational education, staff training and development and employment strategies. As further data is reported following the institutional study, it will be useful to correlate the information provided by individuals with the information provided by employers. The profession needs to critically appraise the need to manage and exploit new ICT developments to make sure that library and information services truly meet the expectations of their users and that the staff employed in the sector have the skills and confidence to deliver and evaluate the services. The

Furthermore, the profession should clarify the current confusion that exists between the concepts of management and leadership. The profession needs to be able to effectively review the opportunities for the development of the two related yet discrete dimensions of managerial and leadership skills for LIS professionals in Australia and to identify any gaps in the area of training and development, both through formal education and training programs and through workplace learning. Importantly senior managers need to have the vision to build both organisational structures and organisational cultures that will balance the factors associated with retirement of older workers and the factors associated with recruitment and retention. There must be a willingness to overcome the negative perceptions presented by a number of respondents who stated that their managers “did not care about training” or “did not believe in career

development” so that they follow the examples of those who truly “supported” and “encouraged” professional learning and development. Senior managers must think creatively to ensure that, despite the challenges of limited or even dwindling budgets, the profession has the right combination of skills and experience to contribute to the future success of their own institution, the future success of the specific LIS sector and to the future success of the profession as a whole. Further pressures are likely if, as predicted, there is increased competition for skilled workers. How can library managers best attract talented and motivated workers to the profession and how can they keep their passion and aspirations alive? They will need to understand and consider the motivations and aspirations of new entrants and mid career staff to support them as they move into management positions.

Conclusion

This paper presents the initial preliminary findings from the current research into some of the workforce issues that are pertinent to the LIS sector in Australia. The LIS profession undoubtedly faces a range of challenges as it faces a rapidly changing world of information technology, new media and the convergence of traditional and non-traditional dimensions of professional work. At the same time, there are significant changes taking place in the workforce, at both the macro and micro level, which cannot be divorced from the information environment in which the LIS profession operates. The current research project, with both Stage One, the *neXus* census, which aims to develop a clearer understanding of the individuals, their careers and their aspirations and Stage Two, which hopes to develop insights into the institutional policies and practices that govern staff recruitment and retention, as well as staff training and development, will hopefully encourage all stakeholders to work more effectively together to plan for the future of the profession in Australia. It is too dangerous to leave it all to chance; we need to “take a step forward in collaboration and create a flexible professional development system that is part of a serious, adequately-resourced, well-planned attack” (Williamson, 2006, p.559). There needs to be an ongoing focus on people entering and leaving the profession, along with the skills they bring with them, skills they need to develop as their career grows and matures, and the skills that will need replenishing as they retire. It is essential that we consider how individuals can be motivated and challenged to work keenly and productively, and to recreate the image of the library and information professional as being dynamic, engaged and in a state of perpetual growth.

If we are to achieve these goals, then career-long learning becomes integral to professional success and individual professional development needs to be supported through a combination of education, personal achievement and work-based opportunities. International studies have shown that technological developments are, and will continue to be, the most significant factors impacting on the profession and that managerial skills and leadership potential were two of the most important and difficult to fill competencies (Usherwood et al, 2001; Re:sources, 2003; Ingles et al, 2005). LIS professionals at all levels and in all roles will need ongoing training to ensure that their skill set is aligned with contemporary technological developments, not just to be competent in the functions they perform, but also to develop innovative information services that users need and expect. At the same time, research has confirmed that there is a very close link between staff development and staff retention, with the ability to retain high quality staff in a competitive market requiring a sharp focus on the qualities of the job itself, as well as a structured approach to timely and relevant training opportunities (Usherwood et al, 2001).

The LIS sector cannot ignore the reality and the impact of its own dynamic environment: the faster the pace of change, the greater imperative for staff development. The development of effective managers and perceptive leaders as part of the career development process is imperative if the progressive pace of retirement from the profession, with its associated loss of skills and experience, is to be matched by incremental staff development strategies within it. At the same time, those continuing to work in the sector cannot be allowed to stagnate, but should have the opportunity for ongoing professional growth and stimulation. The process of developing innovative, visionary and successful library and information professionals is not the sole responsibility of the individual or of the LIS educator, but must be viewed as a sector-wide process that involves the individual, universities, training providers, employers and professional associations. Importantly it is the combination of formal external development events and the informal workplace training activities that, when combined with an active professional life, offer the richest opportunities for LIS to be truly recognised as a 'learning profession'.

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