

nexus

An analysis of the data collected in the *nexus* census

**A report prepared for the
Australian Library and Information Association**

October 2007

Associate Professor Gillian Hallam

with the assistance of

Julie Lee



The *neXus* census was undertaken as a collaborative research activity between

Queensland University of Technology (QUT)

Australian Library and Information Association (ALIA)

CAVAL Collaborative Solutions

The research project was led by

Associate Professor Gillian Hallam
Faculty of Information Technology
QUT

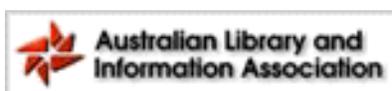
GPO Box 2434
BRISBANE Q. 4001

Tel: (07) 3138 2177

Fax: (07) 3139 1214

Email: g.hallam@qut.edu.au

Acknowledgement is made to the students and graduates
in the School of Information Systems at QUT
for their assistance with the *neXus* project, in particular
Scott Hamilton, Mayumi Sui and Karla Chisholm.



Executive Summary

At the *Library of the 21st Century Symposium* hosted by the State Library of Victoria in March 2006, Dr Vicki Williamson challenged the LIS profession to boldly face the future (Williamson, 2006):

For those of us left in the profession, collaborative research and development is the key to our future. Workforce analysis, especially around public library and academic library personnel, is needed. We also need to undertake a current workforce skills audit and plan recruitment and education strategies for the library workforce of the 21st century.

The *neXus* research project was a vital step in this process. The project was born from the fundamental belief that there was a nexus, a deep connection, or indeed a series of connections, between education, curriculum, recruitment, retention, training and development that was necessary to sustain and develop the LIS workforce in Australia. This report introduces the *neXus* research project, which was developed as a collaborative project involving Queensland University of Technology, the Australian Library and Information Association (ALIA) and CAVAL Collaborative Solutions. The project is contextualised by a discussion of the issues of demographic change and workforce planning that are impacting on both the profession as a whole and on library managers at the local level. Details of a series of workforce planning initiatives conducted both nationally and internationally provide further background information.

Launched at the ALIA Click06 Biennial Conference in Perth in September 2006, the *neXus* census was available as an online survey instrument hosted on the ALIA website. A total of 2346 valid survey responses were received, providing a rich source of data on individuals working in the LIS workforce in Australia. In this report, the research findings are presented, with an analysis of the data collected through the *neXus* census. Where relevant, comparisons are made between the data provided by professional respondents (ie librarians) and paraprofessional respondents (ie library technicians).

Consequently the report presents a vast amount of data on the Australian LIS sector in 2006. The data is presented for the respondents across the whole of Australia, with no specific geographic or sector analysis. Separate reports are being commissioned by specific LIS sectors or specific States and Territories: for further information, contact the author. The report does not seek to interpret the data: knowledge of the immediate professional context is critical to the way the data may be used to inform employment policies and practices at the local level.

The findings are presented in a series of sections in the report that cover the demographic, professional education and academic backgrounds of the respondents. With a large proportion of people entering the profession as part of a career change process, the distinction between career age and chronological age is reviewed. A major part of the report looks at employment issues, both from a career perspective of the individuals as well as the structural issues of employment arrangements and employment patterns. The workplace and professional functions of the different work levels and professional groupings are examined. Specific attention is given to the data associated with the ageing workforce, ie retirement plans and the potential loss of skills as senior members of the profession leave. These issues are closely linked to training and development factors across the profession. While the report provides an immense amount of statistical data, qualitative information in the form of comments from the respondents is included in the Appendices.

Table of Contents

1.	Introduction -----	1
2.	Background to the <i>neXus</i> project -----	2
	2.1 Demographic change and workforce planning -----	2
	2.2 Workforce planning in the LIS sector: International initiatives ----	4
	2.3 Workforce planning in the LIS sector: Australian initiatives -----	5
3.	The <i>neXus</i> research project -----	6
4.	Methodology-----	8
5.	Research findings-----	9
	5.1 Gender, age and cultural background -----	11
	5.2 LIS qualifications-----	14
	5.3 Educational background -----	18
	5.4 Career age vs chronological age -----	22
	5.5 Employment in the LIS sector -----	23
	5.6 Employment arrangements -----	33
	5.7 Employment patterns -----	38
	5.8 Workplace and professional functions-----	41
	5.9 The age old retirement issue -----	53
	5.10 Professional engagement-----	61
	5.11 Training and development-----	64
	5.12 Just nice to know... -----	72
6.	Conclusion-----	73
	References -----	76
	Appendices	

Appendix 1	Categories of respondents on entering LIS studies
Appendix 2	Academic qualifications: discipline of highest degree
Appendix 3	Areas of further study
Appendix 4	Other job titles
Appendix 5	Other reasons for leaving last job
Appendix 6	Reasons to stay with current employer
Appendix 7	Comments on working in regional or rural Australia
Appendix 8	Comments on working overseas
Appendix 9	Other job and professional functions
Appendix 10	Comments on opportunity to retire early
Appendix 11	Comments on opportunity to delay retirement
Appendix 12	Respondents' own views on training and development needs
Appendix 13	Respondents' views of employer's perspective on training and development needs
Appendix 14	Comments on factors that would increase motivation at work
Appendix 15	If I knew then what I knew now... Comments
Appendix 16	<i>neXus</i> survey instrument

1. Introduction

In recent years, workforce planning has become an increasingly important issue in the library and information services (LIS) sector, both here in Australia and in many other Western countries. In 2005, the State Library of Victoria, in conjunction with the Victorian public library network, commissioned the Workplace Research Centre to undertake an exploratory study to identify key issues that impacted on recruitment and retention of staff in the public library sector in Victoria. Full details of the research project are published in the report *Workforce sustainability and leadership: Scoping report* published in April 2006 (Van Wanrooy, 2006). One of the recommendations presented in the report was to undertake further research to gain clearer insights into the public library workforce in Victoria to better understand the recruitment and development issues in the workforce.

In early 2006, a separate research project emerged as a collaborative activity involving Queensland University of Technology (QUT), the Australian Library and Information Association (ALIA) and CAVAL Collaborative Solutions. Associate Professor Gillian Hallam represented the 'glue' between the various partners: as Course Coordinator of the postgraduate LIS program at QUT, President of ALIA in 2005-2006 and Chair of ALIA's Education Reference Group, and Visiting Scholar with CAVAL, there was an opportunity to consider in depth the relationship between education and practice in the LIS sector, between entry-level education and career-long professional development, between recruitment and retention in the profession, all in the context of immense social and technological changes in the world of libraries.

This report presents the background and rationale to the collaborative research project, which was born from the fundamental belief that there was a nexus, a deep connection, or indeed a series of connections, between education, curriculum, recruitment, retention, training and development that was necessary to sustain and develop the LIS workforce in Australia. The *neXus* project, supported by ALIA, CAVAL and QUT, sought to collect data that would begin to inform the profession about the issues it faced in terms of workforce planning as well as presenting snapshot of the profession in 2006. An understanding of who we are now was considered an essential first step in understanding where we want to go as a profession in the future and how we might be able to get there. A major survey instrument was developed to collect the data about the demographics, educational background and career details of the LIS profession in Australia in 2006. The study, launched at the ALIA biennial conference, Click06, in Perth in September 2006, was known as the *neXus* census (Hallam, 2006). The project aimed to encourage anyone and everyone in the LIS profession in Australia to think more seriously about the future of the profession.

The research team was commissioned to

The report presents the background and stimuli for the *neXus* project and discusses the initiatives that have informed the present study. The research methodology is discussed, with the substance of the report presenting the research findings to focus on the demographic, educational and career information relevant to the LIS sector in Australia.

2. Background to the *neXus* project

It is important to understand the demographic, social, economic and indeed industrial factors that are changing the workplace – and the workforce – in the 21st century.

2.1 *Demographic change and workforce planning*

Along with many other developed societies, Australians are living longer and having fewer babies. Through its population projections, the Australian Bureau of Statistics (ABS) has drawn attention to the gradual ageing of Australia's population which is the result of sustained low levels of fertility combined with increasing life expectancy at birth. In 2004, the median age of Australia's population was 36.4 years, but this is projected to increase to between 39.9 years and 41.7 years by 2021 and to between 44.6 years and 48.2 years in 2051. This means that the age composition of Australia's population will also change considerably: by 2051 there will be a much greater proportion of people aged 65 years and over, and a lower proportion of people aged under 15 years. 2004 figures indicated that 13% of the Australian population was aged 65 years and over, but this is projected to double to between 26% and 28% by 2051 and to increase further to between 27% and 31% by 2101. Meanwhile, the proportion of people aged under 15 years is likely to decrease from 20% in 2004 to between 13% and 16% in 2051, remaining around that level up to 2101 (ABS, 2006a).

The changes anticipated in Australia's population will inevitably have considerable social and economic impact, including pressure on the labour force. Already, the Australian news media carry regular reports about the emerging shortages of skilled labour. In Queensland, where the health services are seen to have reached crisis point, the keen public focus on the shortage of doctors and nursing staff has prompted the State government to respond with the offer of considerable salary increases and major recruitment drives overseas. Attention has been paid to an emerging shortage of skilled labour within the trades. After a number of years when interest in apprenticeships had waned, political parties are actively pushing policies that will encourage young people to return to vocational education. There are even reports about the imminent shortage of unskilled labour, especially in the agricultural sector. With the current resources boom enabling Australian mining companies to offer very high wages, there is a drift away from some of the more traditional educational and employment opportunities. Labour market information issued by the ABS indicates that the national unemployment rate has dropped below 5% (ABS, 2006b) for the first time in thirty years, and employers across all areas of business and industry are reporting difficulties in hiring the 'right' people.

Professions Australia (2005) initiated research into the implications of demographic change, which they believe "will develop into the challenge of replacing skilled older workers from a much smaller pool of younger workers". The Federal government itself is aware of these growing pressures: "A tighter labour market is in prospect, a factor of wider demographic shifts and the ageing of the population. In the Australian Public Service (APS) we are already experiencing shortages for some skills and will face increasing competition for others. We need to be well positioned to succeed in the 'war for talent'" (APSC, 2005). A whole raft of professions and industry sectors are loudly expressing anxiety about how they will meet their labour needs over the next five to ten years, for example the mining industry, consulting engineers, quantity surveyors, railway engineers, health professionals (Professions Australia, 2005), urban planners

and other aspects of local government, specifically in regional and rural areas (NSW, 2006). Federal, State and local governments are all examining the issues in some depth. The issues are undeniably complex, with the interplay between social and economic factors, education and training, and migration policy. Professions Australia has proposed that meaningful information should be obtained by “mapping Australia’s longer term requirements for professional skills... to develop a comprehensive overview of the professional resource issues, challenges and opportunities facing Australia over the next 5-10 years... supplemented by qualitative analysis of sector-specific and cross-sector professional workforce issues” (Professions Australia. 2005, p.15). 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.

Set against the background of demographic change and new labour market forces, information and knowledge are being increasingly recognised by business and government to be key drivers for social, technical and economic development. It is imperative that library and information professionals secure their place in this changing world. The literature abounds with references to the challenges the profession faces: “Change the lightbulb or flick the switch – our choice” (Cleyle & McGillis, 2005), “The role of the library in the wired society – compete or withdraw” (Sommers, 2004), “Ambient findability: libraries at the crossroads of ubiquitous computing” (Morville, 2005), “Libraries now have the power to be so much more, or so much less” (Tennant, n.d., cited by State Library of Queensland, 2006). These are indeed challenging times for the LIS sector. Some commentators have suggested that the specific demographic picture of the Australian LIS sector intensifies the challenges. A few years ago, in his role with the Australian Library and Information Association (ALIA) as advisor in the area of industrial relations and employment, Teece (2002) 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”. Later in 2004, Teece warned that “more effective succession planning via employment of younger people should clearly be a vital policy issue for the sector”.

In common with many international jurisdictions, it has been difficult to ascertain the exact make-up of the Australian LIS sector. The library sector is comprised of public, academic and special libraries, and people with qualifications in library and information science may work beyond traditional libraries in the areas of information and knowledge management, archives or public policy. Statistical information reports that in addition to the National Library of Australia and eight State and Territory Libraries, there are around 1800 public libraries. There are 38 university libraries and about 70 libraries in the colleges of Technical and Further Education (TAFE). The latest figures for corporate and government libraries indicated there were 1128 in 1999 (Smith, 2001). In addition there are about 9500 school libraries.

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 (2006) 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. The LIS sector has been reported as having a highly feminised, ageing workforce, with published figures stating that 60% of workers are aged 45 years or over, compared with the figure of 35% across all occupations, and only 14% are under 35 years of age, compared with 42% across all occupations (Australian Job

Search, 2006). However, this demographic picture of the ageing LIS workforce is not limited to Australia: indeed around the world professional alarm bells have been ringing, stimulating research in a number of countries such as Canada, the United States and the United Kingdom.

2.2 Workforce planning in the LIS sector: International initiatives

In Canada, a national research project culminated with the published report, “*Future of human resources in Canadian libraries*” (Ingles et al, 2005). The project, referred to as the ‘8Rs project’, was funded collaboratively by the Canadian Library Association (CLA), regional library associations and a number of key employers across the library, museum and archives sector.

In the United Kingdom, the primary focus has been on the public library sector, with the “*Recruit, retain and lead*” project (Usherwood et al, 2001), which was initially instigated by the British Library Research and Innovation Centre, with funding and responsibility passing to the Library and Information Commission, and subsequently to Re:source: the Council for Museums, Archives and Libraries. A further study, *Towards a strategy for workforce development* (Re:source, 2003), was undertaken to identify the information required for the Council to determine its role in workforce development and leadership. Re:source changed its name to the Museums, Libraries and Archives Council (MLA) in 2004. The MLA is funded by the British Department for Culture, Media and Sport. The organisation has a strong regional presence with nine district agencies providing local focus across England, and enjoys close relationships with the MLAs in Scotland, Wales and Northern Ireland. The MLA’s strategy work in turn led into the development of the “*Learning for change: Workforce development strategy*” (MLA, 2004). The MLA has committed £1.25 million to the workforce development strategy.

In the United States, the Institute for Museum and Library Science (IMLS) awarded almost US\$1 million to the University of North Carolina at Chapel Hill and a number of key partners from the University of Pittsburgh, Syracuse University, Special Libraries Association (SLA), Association of Research Libraries (ARL) and the American Society for Information Science & Technology (ASIS&T), to undertake a research study into *The future of librarians in the workforce*. At the sectoral and regional levels, the Association of College and Research Libraries (ACRL) has reported on their study, *Recruitment, retention and restructuring: Human resources in academic libraries* (ACRL, 2002) and the Library Research Service (LRS) has published its report into *Retirement, retention and recruitment: The future of librarianship in Colorado* (Steffen et al, 2004).

In England, there were concerns about the “cultural malaise” that infected many library and museum workplaces, with an increasing awareness that the sector was failing to attract the best and brightest employees. There was a sense of disaffectedness amongst the workers, as well as amongst the managers. Negative statements were repeatedly heard by the researchers: “we are all over the place”, “the position in relation to staff development is abysmal”, “the higher your position, the less training you get”, “the barrier to your training is your director” or “people treat going on a training course as if it were a punishment” (Re:source, 2003, p.4). The sector was perceived to have endemic problems: willpower was lacking, inertia ruled and there was open hostility to learning: “The barrier to training is the belief that you do not need to be trained, yet the people who don’t want to be trained are the ones that need it most” (Re:source, 2003, p.5).

These micro level concerns translate into macro level issues. These include common concerns about the ageing and the inevitable retirement of senior LIS professionals; low unemployment levels, meaning a dwindling pool of applicants to recruit from; flattening or 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 Canadian study distilled these issues in to eight key elements or the 8Rs: Recruitment, Retention, Retirement, Remuneration, Rejuvenation, Restructuring, Repatriation and Re-accreditation (Ingles et al, 2005). These elements focus in turn on the pressure to ensure there is a sufficient number of adequately trained and experienced staff, plus the critical need to rejuvenate mid-level staff who, due to downsizing and hierarchical flattening of the organisational structures in the library workplace, have not had the opportunity to develop the necessary managerial or leadership skills. Fundamental to the whole debate is the need to identify the required knowledge, skills and attributes of both current and future staff.

A number of parallels are apparent in the scope of the IMLS-funded study which seeks to identify the true nature of the anticipated labour shortages in the LIS field that may result from the retirement of older workers. The IMLS study seeks to review the importance and value of libraries, particularly from the perspective of the funding bodies, users and potential recruits into the workforce. The key questions therefore are: What job opportunities will exist for future library and information professionals? What skills will librarians need to provide effective library services? Can LIS schools educate sufficient numbers of librarians to meet the projected needs? These questions will ultimately be channeled into the LIS profession's future strategic directions: What changes in recruitment, curriculum and employment incentives will be required to meet the projected workforce needs? What strategies should in fact be developed and pursued to address the anticipated needs in terms of the recruitment, education and retention of librarians?

The complexity of these research projects cannot be denied. Inevitably a wide range of research approaches have been or are being used to capture the full range of quantitative and qualitative data which, when analysed, will inform the future direction of the LIS profession. Common to all projects has been the need:

- to conduct an in-depth review of the literature, particularly to contextualise the research within national, regional and cultural situations;
- to establish a core reference group or steering committee of industry representatives, which once again helps to contextualise the process;
- to examine the relevant statistical data already collected by key agencies in the field or the sector;
- to develop the relevant survey instruments to capture demographic, education, career and affective data from individuals and
- to capture organisational information on current workplace practices.

The IMLS study also hopes to record information about the changes that have taken place over the past five years, in terms of the types of services provided to users, the tasks and functions performed by individual staff and the knowledge, skills and attributes required by the staff to effectively perform those tasks and to deliver the services.

2.3. Workforce planning and the LIS sector: Australian initiatives

Meanwhile, what about the profession in Australia? What do we already know? How accurate were the anecdotal reports that vast numbers of LIS professionals would be retiring en masse over the next few years? Little research has been undertaken beyond the general statistical information collected by the ABS through its population census and general labour force data. The Australian Job Search website (2006) collates career-specific information including data on librarians, library technicians, library assistants, archivists and intelligence professionals. A decade ago, ALIA commissioned the Australian Centre for Industrial Relations Research and Training (ACIRRT) to conduct a survey of ALIA members to identify some of the key characteristics of the profession. A summary of the key findings, ie basic demographics, data on remuneration, casualisation of jobs, professional security and attitudes to change, was published in *InCite* (Teece, 1998), providing a very general snapshot of the profession in 1997.

It is acknowledged that a number of other initiatives are being undertaken, indicating that there is indeed a growing concern about workforce development issues, leadership and succession planning across the different areas of the LIS sector. Generally speaking, the studies are fairly informal, conducted by individual institutions or small consortia. The University of Melbourne was the first organisation to explore the issue of workforce planning in Australian academic libraries, highlighting the lack of long term planning for the future of the workforce (Bridgland, 1999). The Libraries of the Australian Technology Network (LATN) (ATN being the consortium of 'technology universities' in Australia) engaged Canadian consultant Vicki Whitmell to work with the individual institutions and the group as a whole "to identify overall issues and concerns relating to succession planning and workforce planning among the ATN libraries" (2005). Individual ATN libraries, eg Queensland University of Technology, are subsequently progressing the work stimulated by Whitmell (McCarthy, 2005), while other related consortia, such as the Queensland University Libraries Office of Cooperation (QULOC) are also exploring the impact of the issues on their members.

A number of other library organisations in Australia are engaged in workforce planning activities within their sector. As noted, the State Library of Victoria itself has recently been examining some of the key issues as part of their *Workforce sustainability and leadership* project (van Wanrooy, 2006) to inform workforce strategies that will support the ongoing development of the Victorian public library network. Other State libraries, major public libraries and university libraries are debating the issues and drafting preliminary workforce development plans. This is a positive situation, but as much of this work is being undertaken as internal processes, there are possibly some negative factors such as the duplication of effort across the organisations and a failure to share ideas to potentially develop models of best practice. It was therefore felt that 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 employment policies and practices at the institutional level to help the sector obtain "a comprehensive overview of the [LIS] professional resource issues, challenges and opportunities" (Professions Australia. 2005, p.15). In terms of planning for the future, the LIS sector cannot afford to ignore the key issues that represent 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.

3. The *neXus* research project

The *neXus* research project sought to build on these earlier research initiatives. The 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 One is reviewed in detail in this report, with the focus on the data relevant to the public library sector in Victoria.

Stage Two aims to investigate workforce policies and practices in LIS institutions. An institutional survey was developed as the principal research instrument for Stage Two in collaboration with the Staff Development Coordinators (SDC) Committee of the CAVAL consortium of Victoria, which principally has members in the academic library sector. 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 encouraged 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. A report on the findings from this pilot study was distributed to the Board and members of CAVAL. The research instrument is being reviewed and refined to be used in a far wider study of policies and practices across a range of institutions in the LIS sector in Australia. A proposal to undertake Stage Two is currently with the Board of Directors of ALIA.

In addition, an international study tour was undertaken (October-December 2006) to make the most of the opportunity to understand some of the international perspectives that are relevant to the research 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 is possible in a one-day PD 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 avenues 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. Subsequently, in May 2007, meetings were also held with the research team running *The future of librarians in the workforce* project at the University of North Carolina, Chapel Hill, USA.

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.

4. Methodology

The *neXus* survey instrument (Appendix 16) 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 individual *neXus* survey was initially launched at the ALIA Biennial Conference held in Perth, Western Australia in September 2006. 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. 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.

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. The data collection process produced a total of 2346 valid responses.

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 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% (Ingles and et al, 2005, 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 options 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.

5. Research findings

There were a total of 2,346 valid responses to the *neXus* census. For the purposes of analyzing the data, comparative data sets are presented to encompass all respondents across Australia. These groupings of respondents are referred to as the national, state and sector cohorts.

The distribution of all respondents (i.e. Australia wide) by LIS sector is presented in Figure 1.

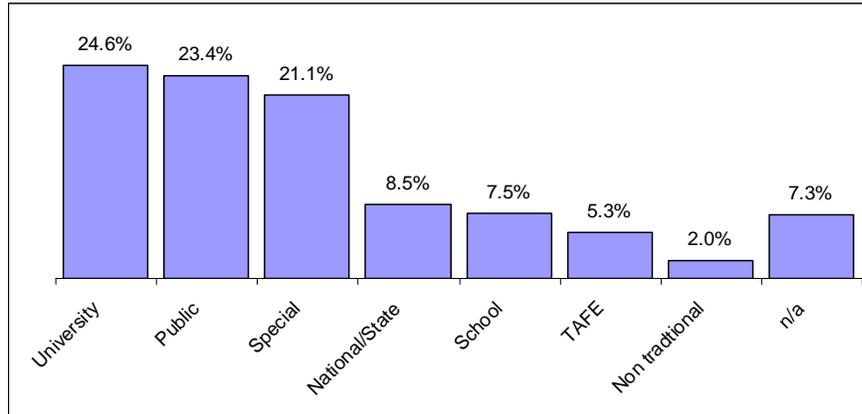


Figure 1. Distribution of respondents by LIS sector: all respondents

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, 2006c) presented in Table 1. 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 30.9% 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 1. Geographic distribution comparing *neXus* respondents with Australian Job Search (2006) and ABS (2006c) figures

In terms of geographic distribution, respondents were asked to indicate whether they were located in a capital city, in a regional town or city or in a non-metropolitan or rural area (Table 2).

Location	Australia
Capital city	70.8%
Regional town/city	22.7%
Non-metropolitan/rural	6.5%

Table 2. Breakdown of respondents by location

The data shows that the vast majority of LIS workers are employed in capital cities.

The size of the organisation that respondents worked for varied, with the majority of respondents working in organizations with more than 50 paid staff (Table 3).

No of paid staff	Australia
Less than 5	17.2%
5-10	10.0%
11-20	9.2%
21-50	15.0%
Over 50	41.2%

Table 3. Size of organisation by number of paid staff

The majority of respondents indicated that they were employed by large library and information institutions: more than half (56%) worked in agencies with more than, with 41% in agencies with over 50 staff (41%).

5.1 Gender, age and cultural background

The data has been analysed to present the demographics of gender and age. The gender ratio for all respondents was 85.5% female : 14.5% male.

Table 4 presents the breakdown by age for all respondents.

Age range	Australia
18-25	3.4%
26-35	17.8%
36-45	26.5%
46-55	34.1%
56-65	16.8%
66 years +	1.6%

Table 4. Age of respondents

A comparison in the age demographics captured in the *neXus* census has been made with the data reported by the Australian Job Search (2006) which provides age-related statistical data for librarians and library technicians as separate cohorts. The Australian Job Search data (2006) indicates that 24.7% of librarians are over 55 years and 65.1% are over 45 years old. However, the data collected by the *neXus* census gives a lower age demographic for librarians: it recorded that 16.1% of respondents with librarian qualifications fell into the category of 56 years and over, while 49.9% of librarian respondents are 46 years and over (Table 5).

Age range	Australia
18-25	2.8%
26-35	18.8%
36-45	28.5%
46-55	33.8%
56-65	14.5%
66 years +	1.6%

Table 5. Age of respondents: librarians

Figure 2 compares the Australian Job Search figures with the *neXus* census figures. 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 (Australian Job Search).

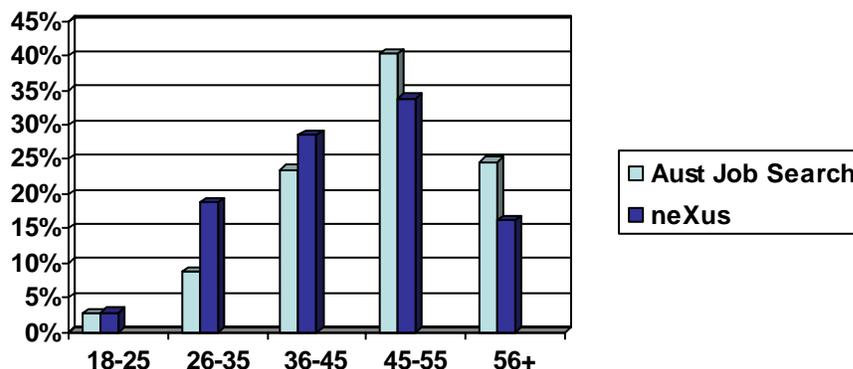


Figure 2. Age profile of librarians: *neXus* and Australian Job Search (2006)

These figures reveal that the age demographic for librarians is younger than that broadly reported to date in the professional literature, particularly in terms of numbers of workers in the 26-45 age range (Australian Job Search: 32.2% (25-44), *neXus*: Australia-wide 47.3%). It would be interesting to compare this self-reported individual data with the institutionally reported employee data in the proposed *neXus* Stage Two study.

A similar comparison can be made with the age demographic data for library technicians. Australian Job Search reports that 11.1% of library technicians are over 55 years and 46.0% are over 45 years old. Table 6 presents the age-related data for library technicians collected through the *neXus* census.

Age range	Australia
18-25	4.2%
26-35	17.8%
36-45	24.0%
46-55	36.5%
56-65	17.3%
66 years +	0.3%

Table 6. Age of respondents: library technicians

A comparison of the Australian Job Search (2006) figures with the *neXus* census again shows discrepancies in the data: while the comparison of age demographics for librarians produced a younger profile, for library technicians, there is a considerably older profile (Figure 3).

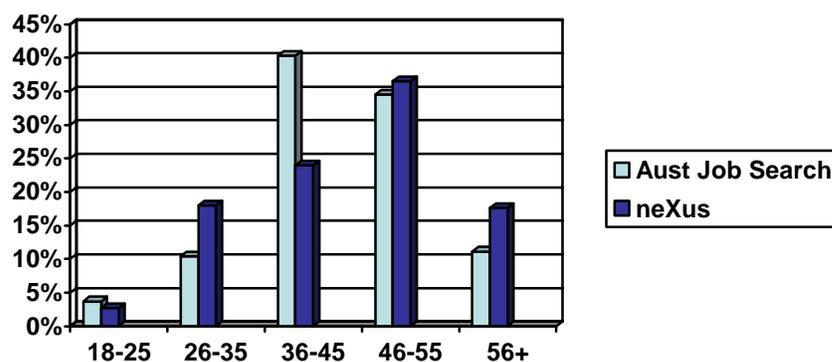


Figure 3. Age profile of library technicians: *neXus* and Australian Job Search (2006)

The Australian Job Search data reported 40.5% of library technicians being 36-45 years, whereas the *neXus* data indicates 24.0% Australia wide. Once again, it will be important to compare the self-reported data with the employer-provided figures in *neXus* Stage 2.

Respondents were asked whether or not they were from a culturally and linguistically diverse (CALD) background (Table 7). Figures for the public library sector Australia-wide mirrored the figures for all Australian respondents.

CALD background	Australia
Yes	12.1%
No	84.6%
No answer	3.2%

Table 7. Respondents with CALD background

The number of respondents who were of Aboriginal or Torres Strait Islander (ATSI) descent was very low (Table 8). Again, the figure for the public library sector Australia-wide closely matched the figures for all Australian respondents.

ATSI descent	Australia
Yes	0.7%
No	96.8%
No answer	2.5%

Table 8. Respondents with ATSI descent

If Australian libraries, whether public, academic or special, are to effectively service the communities that support them, the multicultural nature of our society must be more directly represented by the workforce employed in the sector.

5.2 LIS qualifications

For the purposes of the research, it was important to be able to differentiate between the professional, paraprofessional and non-qualified staff. The information was sought through a question regarding the type of qualification held (Figure 4). To aggregate the data, these categories included respondents who had completed their qualifications as well as respondents who were still studying.

[Only answer this question if you answered 'Already hold a formal qualification in LIS' or 'Currently studying towards an educational qualification in LIS' to question '7']
 8. What type of educational qualification in LIS do you hold / are you studying towards?
 Please choose only one of the following:

- Certificate Diploma Advanced Diploma
 Bachelor LIS course Graduate Diploma Masters by coursework
 Masters by research PhD Other Please specify _____

Figure 4. Question regarding level of LIS qualifications

Respondents with professional qualifications included those who had gained or were studying towards:

- Bachelor LIS course
- Graduate Diploma in LIS
- Masters by coursework in LIS

Further academic categories included higher degree studies through Masters by research degrees or PhDs.

Paraprofessional qualifications included the range of TAFE qualifications:

- Diploma
- Advanced Diploma

5.9% of respondents (n=139) indicated that they held no formal qualifications in LIS, nor were they undertaking any form of study. 3.6% of respondents (n=85) held TAFE Certificates and were categorised separately from the respondents with full paraprofessional qualifications.

It was determined that a small number of respondents identified other qualifications: 10 respondents indicated that they held an Associate Diploma and 7 reported holding an Associate Degree¹ (ALIA, 2007), which can be grouped with the 'paraprofessional' qualifications. A further 12 respondents stated that they had completed the 'registration examination' formerly offered by the Library Association of Australia (LAA) as the principal career pathway. The LAA registration process ceased in 1980. This grouping of respondents was considered part of the 'professional category'. 6.3% (n=147) of the respondents provided no answer, so it could not be determined whether they had (or were studying towards) professional, paraprofessional or had no LIS qualifications.

Details of the breakdown of respondents by qualification are presented in Table 9.

Qualifications	Australia
Professional	72.0%
Paraprofessional	15.3%
Certificate-level	3.6%
No answer	9.0%

Table 9. Breakdown of respondents by LIS qualifications

Another way to view the qualifications data was to examine whether or not respondents had completed their studies, were still studying or held no qualifications (Figure 5).

What is your current LIS qualification status?
Please choose only one of the following:

Already hold a formal qualification in LIS
 Currently studying towards an educational qualification in LIS
 Don't have an LIS qualification/Not studying LIS

Figure 5. Question whether LIS qualified or studying towards LIS qualification

The data revealed that 7.7% of respondents were currently studying and 5.9% were unqualified.

¹ This Associate Degree offered by Edith Cowan University prepares graduates to undertake para-professional roles in the operation, maintenance and utilisation of library systems within the educational, corporate, specialist and public sectors. They may seek employment as library and information technicians and in related fields, depending on their experience and choice of minor studies (ALIA, 2007).

Status of study	Australia
Already qualified	86.4%
Currently studying	7.7%
No qualifications	5.9%

Table 10. LIS qualified or studying towards LIS qualification

20% of all professional and paraprofessional respondents identified themselves as new graduates, ie they had gained their qualifications in LIS in the last five years.

One of the significant educational issues in Australia is the range of diverse professional qualifications in the LIS sector, including Bachelor, Graduate Diploma, and Masters by coursework. The Graduate Diploma represents the qualification attained by almost half the professional respondents, while the Bachelor course was completed by almost a third. (Table 11).

LIS qualifications	Australia
Bachelor	33.2%
Graduate Diploma	48.3%
Coursework Masters	14.7%

Table 11. Level of LIS qualifications (professional)

In terms of academic enrolment patterns, it emerged that there was an almost equal division between full-time versus part-time enrolments in professional courses (Australia-wide 50.5% part-time, 49.5% full-time). Attendance modes for all respondents differed, with more people enrolling as internal students than external students: Australia-wide the ratio was 67% internal to 33% external study mode.

As a comparison, the data was reviewed from the perspective of the new graduates from professional courses (ie completing their studies in the last five years). At the national level, the ratio for new graduates had moved to 65% part-time to 35% full-time enrolments. Nationally the ratio of external and internal study modes moved to 48% internal to 52% external. figure of 86% of new graduates had studied in part-time mode and only 12% in full-time mode. Figures for new graduates in the public library sector Australia wide were very high (78% part-time, 22% full-time).

The reasons for the selection of the particular academic institution varied across the different groupings, with location, reputation and the preference for external studies being of greatest importance (Table 12).

Reason	Australia
Closest institution	39%

Reputation of institution	19%
Preference: External	22%
Preference: Internal	5%
Recommended	6%

Table 12. Range of reasons for selection of academic institution

Looking specifically at the new graduates (qualifications were gained in the past five years), the mode of study, specifically external study, has increased in importance, over and above the value of being the closest institution, or the reputation of the institution (Table 13).

Reason	New Grads Australia
Closest institution	33%
Reputation of institution	13%
Preference: External	34%
Preference: Internal	8%
Recommended	6%

Table 13. Range of reasons for selection of academic institution: new graduates

In terms of the length of time respondents had considered enrolling in an LIS course before commencing their studies, it was apparent that the vast majority of LIS workers had not long considered their career direction (Table 14).

	Australia
Less than 6 months	29%
6-12 months	25%
1-2 years	18%
2-3 years	7%
3-5 years	5%
Over 5 years	9%

Table 14. Length of time making decision to enroll in LIS course

These figures reveal that over half the people enrolling in LIS courses have made the career decision in less than 12 months.

In considering their studies, respondents were asked to describe themselves as either entering their first career, undertaking a career change or returning to work after a break (and needing to refresh their skill set). Just under a half of all respondents were entering their first career and one third were changing careers (Table 15).

	Australia
First career	42%

Career change	33%
Return after a break	9%
Other	9%

Table 15. Categories of respondents on entering LIS studies

Reasons given by respondents ticking 'Other' highlighted reasons that included career advancement and upgrading old qualifications, especially to move from paraprofessional to professional qualifications, or to gain formal qualifications when already employed in the sector.

The picture for new graduates gaining professional qualifications indicated a higher level of career change, moving up to 44%, meaning that the number of those who had studied or were studying towards their first career dropped to 29% (Table 16).

	Australia
First career	29%
Career change	44%
Return after a break	10%
Other	18%

Table 16. Categories of respondents on entering LIS studies: new graduates

The higher number of ticking "Other" specifically commented on the reasons for studying being to upgrade, extend, enhance and add value to their knowledge and skills (Appendix 1).

The picture for paraprofessionals was a little different. 15.3% of all respondents (n=359) identified themselves as paraprofessional staff, holding either a diploma or advanced diploma from a TAFE college (Table 17). As noted earlier, a further 10 respondents reported holding an Associate Diploma and 7 respondents indicated that they had an Associate Degree in Library Technology, which makes the graduate eligible for membership of ALIA as a Library Technician (see note 1, page 14).

	Australia
All paraprofessionals	15.3%
Of those:	
Diploma	78.6%
Advanced Diploma	21.4%
TAFE Certificate	3.6%
No qualifications	5.9%

Table 17. Paraprofessional qualifications

It should be noted that 5.9% of all respondents reported that they held no formal LIS qualifications and that they were not studying.

5.3 Educational background

While Section 5.2 presents the details of the LIS qualifications held, respondents were also asked to report on the other academic qualifications they held, to help develop a picture of the educational profile of the profession. In this section, a distinction is made between professional staff and paraprofessional staff. Professional staff are defined as those with a university-level LIS qualification, while paraprofessional staff have a TAFE diploma or advanced diploma in LIS studies. Respondents were asked about two specific aspects of their education:

- The highest qualification, and the discipline this was in (Figure 6)

What is your highest completed level of education?
Please choose only one of the following:

TAFE Certificate	<input type="checkbox"/>	TAFE Diploma	<input type="checkbox"/>	Degree	<input type="checkbox"/>
Honours	<input type="checkbox"/>	Graduate Diploma	<input type="checkbox"/>	Graduate Certificate	<input type="checkbox"/>
Masters	<input type="checkbox"/>	PhD	<input type="checkbox"/>		
Other	<input type="checkbox"/>	Please specify	_____		

What discipline was this in?
Please choose only one of the following:

Library and Information Studies	<input type="checkbox"/>	Law	<input type="checkbox"/>	Education	<input type="checkbox"/>
Health/Medicine	<input type="checkbox"/>	Engineering	<input type="checkbox"/>	Science	<input type="checkbox"/>
Arts	<input type="checkbox"/>	Information Technology	<input type="checkbox"/>		
Business	<input type="checkbox"/>	Please specify	_____		
Other	<input type="checkbox"/>				

Figure 6. Questions regarding highest academic qualification

- Other qualifications (non LIS) and the discipline this was in (Figure 7).

What other qualifications do you have? Please select as many as necessary.
Please choose all that apply:

None	<input type="checkbox"/>	TAFE Certificate	<input type="checkbox"/>	TAFE Diploma	<input type="checkbox"/>
Degree	<input type="checkbox"/>	Honours	<input type="checkbox"/>	Graduate Diploma	<input type="checkbox"/>
Graduate Certificate	<input type="checkbox"/>	Masters	<input type="checkbox"/>	PhD	<input type="checkbox"/>
Other	<input type="checkbox"/>	Please specify	_____		

What disciplines are your other qualifications in? Please select as many as necessary.
Please choose all that apply:

Health/Medicine	<input type="checkbox"/>	Law	<input type="checkbox"/>	Education	<input type="checkbox"/>
Arts	<input type="checkbox"/>	Engineering	<input type="checkbox"/>	Science	<input type="checkbox"/>
Business	<input type="checkbox"/>	Information Technology	<input type="checkbox"/>		
Other	<input type="checkbox"/>	Please specify	_____		

Figure 7. Questions regarding other academic qualifications

In planning the research project, it was acknowledged that for many LIS professionals, their LIS qualification would represent the highest qualification held, but as anecdotal evidence indicated that many LIS professionals had qualifications in other disciplines, or had changed careers, it was important to capture the full range of data. The highest academic qualifications are reported in Table 18.

Qualification	Australia
Bachelor	29.9%
Grad Cert	1.6%
Grad Dip	40.3%
Honours	3.6%
Master	18.5%
PhD	1.9%

Table 18. Highest academic qualification held

The figures showed that 29.9% of respondents, the bachelor degree was the highest qualification of professional level respondents, while 40.3% held a graduate diploma. In terms of higher degrees, around 18.5% held a masters degree and 1.9% had a PhD.

A significant proportion of the bachelor or graduate diploma qualifications, as the highest qualification, were in the LIS discipline (Table 19).

Qualification LIS discipline	Australia
Bachelor	69.7%
Grad Dip	84.1%

Table 19. Highest qualifications being in LIS discipline

For all respondents with a highest qualification at the bachelor degree level, 12.1% were a Bachelor of Arts and 7.9% a Bachelor of Education. Other disciplines, each around 1%-2% of respondents were Health, Business, Information Technology, Law, Science or Engineering.

For those with a masters degree as the highest qualification, the discipline area was predominantly LIS, but Arts, Business, Education and IT were all represented (Table 20).

Masters: Discipline	Australia
LIS	55.6%
Arts	13.7%
Business	8.0%
Education	8.0%
IT	7.0%

Table 20. Highest qualification at masters level, by discipline

1.9% of all respondents (n=32) held a PhD. 40.6% of these were in the LIS discipline, 21.9% in Arts, 9.4% in Health and 6.3% in Science. 40.6% of those respondents with a PhD were currently working in LIS education.

The findings revealed that LIS workers have educational qualifications that cover a very broad range of disciplines. 54% of all professional staff indicated that they also had a degree in a discipline other than LIS, 7% indicated they had a masters degree. The principal disciplines were the Arts, Education, Science, Business and IT. Other disciplines not specifically listed, but mentioned under “Other” encompassed a wide spectrum of areas in the social sciences, optometry, graphic design, theology, musicology, nautical science etc (Appendix 2). A number of respondents reported having multiple qualifications, eg 2 bachelor degrees, 2 undergraduate degrees, 2 graduate diplomas, 3 graduate diplomas, second masters degree etc.

30% of all paraprofessional respondents reported that they had a university qualification while 3.3% (n=12) of all paraprofessional respondents held a masters qualification.

Respondents were also asked about their plans for higher degree study, either currently enrolled or planning to enrol (Figure 8).

69 Are you currently enrolled in, or considering enrolling in, a higher degree program?
Please choose only one of the following:
Yes No

[Only answer this question if you answered ‘Yes’ to question ‘70’]

70 If ‘yes’, please indicate the program:
Please choose only one of the following:
 Master of Business Administration
 Master of Public Policy
 Masters by Research
 PhD
 Other. Please specify: _____

Figure 8. Question regarding plans for higher degree study

21.8% of all professional respondents indicated they were already or were planning to study further. Table 21 provides an overview of the areas of study:

Further study	Australia
Currently enrolled or planning to enroll in higher degree	21.8%
<i>of those</i>	<i>n=368</i>
MBA	9.8%
M. Public Policy	0.8%
M. Research	15.2%
PhD	13.3%

Table 21. Areas of future higher degree study, respondents identifying selves for future study

There was an element of confusion with the question, however, as a number of respondents understood the concept of ‘further study’ rather than ‘higher degree’ in the strictest academic

sense. Beyond the immediate list of higher degrees, respondents had the opportunity to name areas of study they were enrolled or planned to enrol in. While a common proposal was a coursework masters in the LIS area (upgrading from bachelor or graduate diploma in LIS), there was also a good range of related disciplines, indicating areas of specialisation such as knowledge management, marketing, business technology, counseling, education and law (Appendix 3). A couple of respondents proposed that they would enrol in a professional doctorate, a higher degree program that could be of greater interest to industry practitioners than a pure research track.

One point to note is that the figures presented in Table 22 show the percentages of professional staff who had indicated they were enrolled or planned to enrol in further study (ie 21.8% of all respondents). The percentages are naturally considerably lower if the ratio of those planning to study towards a higher degree are drawn from all professional respondents (Table 5.24).

Further study	Australia
Currently enrolled or planning to enrol	21.8%
<i>of all professional staff</i>	<i>n= 690</i>
MBA	2.1%
M. Public Policy	0.2%
M. Research	3.3%
PhD	2.9%

Table 22. Areas of higher degree study, professional respondents

This table indicates that almost 3% of LIS professionals (n=49) hope to gain a PhD qualification, with 63.3% of them currently working in LIS education. This situation could augur well for increasing the number of PhD graduates in the LIS profession (Macauley, 2004). 1.9% of the professional respondents to the survey (n=32) indicated they already had a PhD.

5.4 Career age vs. chronological age

The Australian LIS profession attracts a significant number of career change workers, ie graduates of LIS courses may be entering a second or third career. This has led to the need to distinguish between chronological age and career age. 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- 5 years experience in the sector
- Senior: 6 years or more working in the sector.

16.9% of all 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). The breakdown of career stage by professional and paraprofessional groupings is presented in Figure 9.

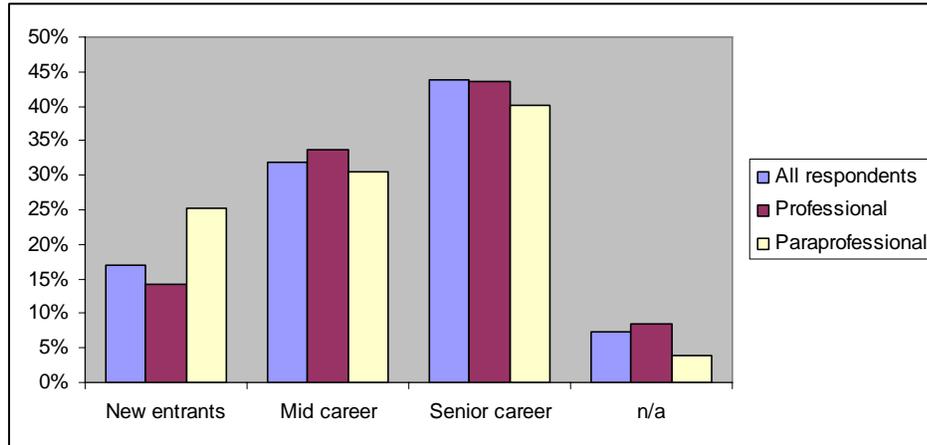


Figure 9: Career stages of respondents by professional/paraprofessional qualifications

The ratio of career ages is fairly consistent across the national, state and sector levels (Table 23).

Career age	Australia
Recent entrants (less than 5 years)	16.9%
Mid career (6-15 years)	31.8%
Senior career (More than 16 years)	43.9%
n/a	7.4%

Table 23. Distribution of career stages

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.

5.5 Employment in the LIS sector

Respondents were asked about their current employment situation, to determine their relationship with the LIS sector (Figure 10).

- Are you currently working in a library or information service?
Please choose only one of the following:
- Yes, currently working in a traditional library or information service
 - Yes, currently working in a non-traditional library or information service
 - Now working as a library educator (faculty member in university or TAFE)
 - No, but have previously worked in LIS sector
 - No, never worked in LIS sector

Figure 10 Question regarding current employment situation

It had been hoped that through the ‘snowball’ approach of recruiting possible respondents, the *neXus* census would reach people who worked in non-traditional areas of the LIS sector, who had left the sector or who had in fact, after gaining qualifications, never actually worked in the sector. Unfortunately these groupings represented only around 8% of all respondents. LIS educators represented just under 2% of respondents (n=45). The breakdown of respondents by employment situation is presented in Table 24.

Further study	Australia
Working in traditional LIS	89.0%
Working in non-trad LIS	4.3%
Working as LIS educator	1.9%
No longer in LIS sector	3.5%
Never worked in LIS sector	1.2%

Table 24. Distribution by employment situation

Library educators were specifically asked whether they had experience working as an LIS practitioner in industry. 91.9% stated that they had, and 8.9% had not.

Respondents who reported they had, but now no longer worked in the LIS sector, were asked how long ago they had left the sector (Table 25) as well as for the primary reason for leaving. As noted, 3.5% of all respondents (n=85) indicated that they had, but no longer worked in the LIS sector.

Period of time	Australia
Less than 1 year	45.8%
1-2 years	16.9%
2-3 years	8.4%
3-4 years	6.0%
5-10 years	10.8%
Over 10 years	12.0%

Table 25. Length of time since leaving LIS sector

Reasons for not currently working in the sector were also sought (Figure 11), eg moving out of the sector, being on some form of leave, being a student or recent graduate (potentially looking for work) or having retired.

[Only answer this question if you answered 'No, never worked in LIS sector' or 'No, but have previously worked in LIS sector' to question '19']

- 22 If you indicated that you are **not** currently working in a library or information service, please indicate the main reason why not:
Please choose only one of the following:
- Currently on leave (including maternity, paternity, health, education leave or sabbatical)
 - Currently working in another non-LIS sector position
 - Currently a student
 - Recently graduated
 - Retired
 - Other. Please specify _____

Figure 11. Question regarding reason why left LIS sector

It is acknowledged that information about the *neXus* census was more likely to reach people who had recently left the profession, rather than those who had left a considerable time ago. This situation could account for the high percentage of respondents who had left the LIS sector, reporting that they had left the sector within the past 12 months (45.8% nationally). The primary reason was that respondents were employed outside of the sector; the number of people on extended leave was relatively low (Table 26).

Reason left LIS	Australia
Working in non-LIS job	45.8%
Currently on some form of extended leave	6.0%
Student	8.4%
New graduate	2.4%
Retired	8.4%
Other	28.9%

Table 26. Reasons for leaving employment in LIS sector: national and state cohorts

The majority of reasons given by respondents who indicated "Other" were relocating to a new state and finding it difficult to gain employment, moving into research-based or academic activities, or the end of contract work.

Of those respondents not currently working in the LIS sector, 40.2% stated they were looking for work in the LIS sector. The length of time this cohort of respondents had been looking for work is presented in Table 27.

Period looking for LIS work	Australia
-----------------------------	-----------

Less than 6 months	62.2%
6-12 months	17.8%
1-2 years	6.7%
2-3 years	6.7%
3-5 years	2.2%
Over 5 years	4.4%

Table 27. Length of time looking for work (not currently working in LIS sector)

Those people who had been looking for work for less than 12 months (n=36), 70% had submitted between one and three job applications. 69% of those had not been invited for interview, with 16.7% attending one interview, 5.6% attending two interviews and a further 5.6% three interviews. The main reasons given for not gaining a position focused strongly on the lack of experience (and the challenge of gaining experience in the first place), the lack of completed qualifications, and the difficulty demonstrating the desired skill set to move into managerial positions.

The total number of respondents who reported no longer working in the LIS sector due to retirement was 7. It had been hoped that the views about the motivation to return to the workforce could be explored (eg better wages, less hours, more hours etc); however, the number is too small for any analysis to be made.

Respondents were asked to indicate their current level of their employment position (Figure 12).

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

32 What is the current level of your position?

Please choose only one of the following:

- Non-management
- Supervisor
- Middle management (eg department head, team leader)
- Senior management (eg chief librarian, CEO, director, regional head)

Figure 12 Question regarding current employment level

Table 28 presents the data on the levels of the positions for the respondents.

Current level	Australia
Non-management	45.0%
Supervisor	10.0%
Middle management	27.3%
Senior management	10.4%
No response	7.3%

Table 28. Current level of position

Limiting the respondents to professionals, the figures change slightly, with more respondents in the managerial levels (Table 29). Limiting the respondents to paraprofessionals then presents stronger representation in the non-managerial levels (Table 30).

Current level	Australia
Non-management	39.3%
Supervisor	9.8%
Middle management	30.7%
Senior management	11.8%
No response	8.4%

Table 29. Current level of position, professionals

Current level	Australia
Non-management	63.8%
Supervisor	12.8%
Middle management	15.0%
Senior management	4.5%
No response	3.9%

Table 30. Current level of position, paraprofessionals

Respondents were asked about the actual job title they held, with the opportunity to select from a list (Figure 13) or to provide the job title if it was not listed.

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

33 Which of the following job titles best describes your **current** LIS position?

Please choose only one of the following:

- Librarian
- Information professional
- Teacher librarian
- Library technician
- Library assistant / Library aide
- Manager
- Executive manager
- Systems librarian
- Other professional (eg personnel, finance, marketing)
- Secretary, Administrative assistant
- Other. Please specify _____

Figure 13 Question regarding current job title

The 'traditional' job titles prevailed, with more than one third of all respondents (35.9%) reporting that their job title was 'librarian' and 13.1% reporting that their job title was 'library technician'.

Table 31 presents the national, state and sector-specific data.

Job title	Australia
Librarian	35.9%
Information professional	6.6%

Teacher librarian	3.7%
Library technician	13.1%
Library assistant / aide	7.5%
Manager	14.4%
Executive manager	2.7%
Systems librarian	2.3%
Other professional	1.6%
Secretary / admin asst	0.4%
Other	4.4%
No answer	7.3%

Table 31. Job titles

Of significant interest was the terminology used by those respondents who ticked “Other” to describe job titles. There was considerable variety in the list provided, although the ‘traditional’ elements still tended to dominate (eg library manager, library officer, library services coordinator, reference librarian, research librarian) or the job title reflects the area of responsibility (eg archivist, curator, AV coordinator, web administrator, ePrints project manager, records officer etc). There were a few less-traditional titles reported reflecting the broader range of services and activities in many organisations (eg exhibition designer, search engine administrator and information architect, online education administrator, plus one peripatetic health cybrarian). The full list of job titles reported by respondents is presented in Appendix 4.

One question was aimed specifically at respondents who had worked for more than one LIS organisation, to determine the reason that they had left their previous place of employment (Figure 14). Respondents were asked to indicate up to three reasons for leaving.

[Only answer this question if you answered ‘Yes, currently working in a non-traditional library or information service’ or ‘Yes, currently working in a traditional library or information service’ to question ‘22’]

- 45 If you have worked with more than one library or information service, please indicate up to three reason(s) you left your **last** place of employment.
Please choose up to three that apply
- Moved to another geographical area for personal reasons
 - Moved to a more desirable geographical location
 - Insufficient pay/benefits
 - Insufficient opportunity for promotion
 - Excess stress from job
 - Inability to balance work with my family or personal life
 - Dissatisfaction with relationship with superiors
 - Dissatisfaction with relationship with LIS board members
 - Dissatisfaction with relationship with peers
 - Poor treatment by employer
 - Dissatisfaction with job duties
 - Dissatisfaction with all aspects of job
 - Made redundant
 - End of employment contract
 - Found a higher level position elsewhere
 - Found a better paying job elsewhere
 - Found an overall better job elsewhere
 - Decided to make a career change
 - Returned to study
 - Non-related personal reasons
 - Other reason. Please specify: _____

Figure 14 Question regarding reason for leaving last place of employment

The responses for all respondents are presented in Table 32.

Reason for leaving last job	Occurrence
Found an overall better job elsewhere	21.3%
Found a higher level position elsewhere	20.5%
Moved to another geographical area for personal reasons	17.7%
Insufficient opportunity for promotion	14.6%
End of employment contract	12.1%
Found a better paying job elsewhere	10.9%
Dissatisfaction with relationship with superiors	8.5%
Moved to a more desirable geographical location	7.8%
Excess stress from job	6.9%
Other reason	6.6%
Dissatisfaction with job duties	6.3%
Insufficient pay/benefits	6.0%
Poor treatment by employer	6.0%
Decided to make a career change	4.5%
Inability to balance work with my family or personal life	3.8%
Made redundant	3.8%
Non-related personal reasons	3.6%
Returned to study	2.8%
Dissatisfaction with all aspects of job	2.3%
Dissatisfaction with relationship with peers	1.4%
Dissatisfaction with relationship with LIS board members	0.3%

Table 32. Most common reasons for leaving the last job

The three most frequent reasons given by respondents were:

- Found a higher level position elsewhere
- Found an overall better job elsewhere
- Moved to another geographical region for personal reasons.

The next three most frequent reasons given were:

- Insufficient opportunity for promotion
- End of employment contract
- Found a better paying job elsewhere.

The most frequently occurring reasons given by all respondents were:

- Found an overall better job elsewhere
- Insufficient opportunity for promotion
- Moved to another geographical region for personal reasons.

Professional respondents reported that the three main reasons for leaving their last employer were:

- Found an overall better job elsewhere

- Found a higher level position elsewhere
- Moved to a more desirable geographical location.

Paraprofessionals recorded the following reasons:

- Found an overall better job elsewhere
- Moved to a more desirable geographical location
- Insufficient opportunity for promotion.

A number of respondents provided reasons that were not included in the list provided in the survey. These included family (pregnancy/maternity leave/raising children), the opportunity for permanent rather than casual or contract work, the need for more hours, the need for greater challenge, travel and some workplace issues like bullying, institutional values etc. The full list of reasons provided is presented in Appendix 5.

The other side of the coin was explored with a question about why respondents chose to stay with their current employer (Figure 15).

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

46 Please indicate the main reason you stay with your current employer.

I plan to remain in my current LIS position because:
Please choose only one of the following:

- I like my current job
- I like my current workplace
- I like the people I work with
- I feel loyal to my employer
- I feel loyal to my patrons/clients
- There are no other jobs available
- I could not easily get another job at my current salary/benefits
- I have not been successful in finding another job
- I do not have time to look for another job
- I am trying to gain experience so I can apply for other positions
- My partner/spouse works in the same geographical area
- I don't want to move and disrupt my children's education or friendships
- I don't want to move away from the community in which I live
- I have family members or friends in this area who need my attention
- I intend leaving and am waiting for the right opportunity
- I intend leaving and am waiting for the right opportunity

Figure 15. Question regarding reasons to stay with current employer

It was noted that the final reason ('I intend leaving and am waiting for the right opportunity') was erroneously duplicated in the survey instrument. The responses which were spread across the two identical questions have therefore been combined. Table 33 presents the responses for all respondents.

Reason to stay with current employer	Occurrence

I like my current job	28.9%
I intend leaving and am waiting for the right opportunity	16.3%
I could not easily get another job at my current salary/benefits	9.5%
I like my current workplace	8.2%
I am trying to gain experience so I can apply for other positions	5.8%
I like the people I work with	4.0%
I don't want to move away from the community in which I live	3.2%
I have not been successful in finding another job	2.0%
My partner/spouse works in the same geographical area	1.7%
I don't want to move and disrupt my children's education or friendships	1.5%
There are no other jobs available	1.2%
I have family members or friends in this area who need my attention	1.2%
I feel loyal to my employer	0.9%
I feel loyal to my patrons/clients	0.9%
I do not have time to look for another job	0.3%
No answer	14.4%

Table 33. Reasons to stay with current employer: all respondents

The three top reasons were:

- I like my current job (a very high satisfaction rate of 28.9%)
- I intend leaving and am waiting for the right opportunity
- I could not easily get another job at my current salary/benefits.

These three top reasons were common across the national, state and sector responses, and indeed across professional and paraprofessional respondents

Respondents were very generous with their comments about the reasons why they stayed with their current employer. It is clear that there a lot of very happy LIS workers!

Future employment plans were explore with a question about how long respondents planned to remain with their current employer (Figure 16).

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

- 47 How long do you expect to continue working at your **current** workplace?
Please choose only one of the following:
- | | | | |
|------------------------|--------------------------|-------------------------|--------------------------|
| Less than 1 year | <input type="checkbox"/> | Between 1 and 2 years | <input type="checkbox"/> |
| Between 2 and 3 years | <input type="checkbox"/> | Between 3 and 5 years | <input type="checkbox"/> |
| Between 6 and 10 years | <input type="checkbox"/> | For remainder of career | <input type="checkbox"/> |
| Don't know | <input type="checkbox"/> | | |

Figure 16 Question regarding length of time expected to remain at current workplace

The ratios of the responses indicated a fairly even distribution of about one quarter, spread between those planning to remain at the current workplace for up to 2 years, those planning to

continue for 3-5 years, and those continuing beyond that, with the final quarter comprising those who didn't know, or were not included in the question (ie not working in LIS) (Table 34).

Length of time	Australia
Less than 1 year	10.2%
1-2 years	14.4%
3-5 years	25.1%
6-10 years	11.4%
Rest of career	13.8%
Don't know	17.2%
n/a	7.9%

Table 34. Length of time expected to remain at current workplace

The distinction was greater, however, between the professionals who were new entrants (5 years or less in the LIS sector) and mid career professional respondents (6-15 years in the sector) (Table 35).

Length of time	New entrants	Mid career
Less than 1 year	20.7%	10.7%
1-2 years	23.2%	17.0%
3-5 years	19.9%	25.5%
6-10 years	8.7%	13.0%
Rest of career	5.8%	11.6%
Don't know	21.3%	21.3%
n/a	0.4%	0.9%

Table 35. Length of time expected to remain at current workplace: new entrants and mid career professionals

43.9% of new entrant professionals planned to remain with their current employer within the next two years. Only 4.5% considered the possibility of a long relationship with the current employer. The figure was even higher for those new entrants aged 30 years or under: 53.6% planned to change employer within the next 2 years.

Respondents were asked whether they expected changes in their employment situation to be instigated by themselves, by their employer, by factors outside the organisation, or whether they did not know. Across the three domains, national, state and sector, more respondents reported that they would personally be the instigating factor, rather than their employer or factors outside the organisation (Table 36). A significant proportion, however, decided that they did not know.

Factor	Australia
Self	36.0%

Employer	20.0%
Outside organisation	6.2%
Don't know	28.7%
n/a	9.1%

Table 36. Factors causing possible change to employment situation

New entrant professionals reported a higher level of self-driven change (45.6%), while paraprofessionals indicated a higher level of concern about employer-driven change (24.8%).

When asked about whether they would be prepared to work in regional or rural Australia, or overseas, 28% of respondents indicated that they would be prepared to relocate to regional or rural Australia, while 48.4% would be willing to work overseas, with a clear vote from the Gen Y respondents: 75% of new graduates aged 30 or under would work overseas, compared with 46.9% who would work in regional or rural Australia. The reasons given by respondents in the Victorian public library sector are presented in Appendix 7 (relocating to regional and rural Australia) and Appendix 8 (working overseas). Family reasons feature strongly in the reasons why people would prefer not to relocate to a regional area, whereas age seems to be a greater factor when considering working overseas.

5.6 Employment arrangements

Questions were asked about the general working arrangements, such as the actual employment status, annual salary, length of time of employment in the LIS sector, with the current employer and in the current position. In addition, questions covered the number of hours worked and the possible desire to increase or decrease the hours worked.

In terms of employment status, respondents were asked to report on their current work arrangements (Figure 17).

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

- 34 What is the status of your **current** LIS employment?
Please choose only one of the following:
- Full time Employed Part time Employed Job Share
Casual Employed Contract Employed Volunteer

Figure 17. Question regarding current employment status

The data revealed that around two thirds of respondents were employed on a full time basis (Table 37). The number of non-responses to the question was significant.

Employment status	Australia
Full time employed	64.2%
Part time employed	18.1%

Casual employed	2.3%
Contract employed	5.7%
Job share	1.4%
Volunteer	0.3%
No answer	7.9%

Table 37. Current employment status

There were some distinct differences in the ratios between the modes of employment in the different states and territories, with the level of full time employment reported by respondents ranging between 78.3% (Northern Territory) and 45.9% of respondents (Tasmania). The comparative data for the states and territories is presented in Table 38.

State	Full time	Part time	Contract	Casual
Northern Territory	78.9%	11.3%	7.5%	0%
Queensland	68.9%	12.8%	7.7%	1.4%
NSW	68.3%	15.5%	4.2%	2.9%
ACT	67.5%	9.8%	6.7%	3.1%
Victoria	63.2%	21.4%	3.3%	2.1%
Western Australia	59.1%	22.4%	6.3%	1.7%
South Australia	58.2%	23.0%	6.6%	5.1%
Tasmania	45.9%	32.1%	8.8%	2.8%

Table 38. Employment status: states and territories

This data reveals that Tasmanian respondents reported the highest level of part-time work (32.1%) while the ACT reported the lowest (9.8%). The highest level of contract work was in Tasmania (8.8%), with the lowest in Victoria at 3.3%. The highest level of casual employment reported was 5.8% in South Australia, compared with a low of 1.4% in Queensland.

The picture changed when the data was viewed from the perspective of career ages (new entrants: less than 5 years in the LIS sector; mid career: 6-15 years; and senior career: more than 16 years).² Figures revealed far lower full time arrangements (52.3%) and a significantly higher rate of casual (6.0%) and contract work (15.4%) for new entrants (Table 39).

Employment status	New entrants	Mid career	Senior career
Full time employed	52.3%	71.6%	74.3%
Part time employed	24.0%	20.0%	17.7%
Casual employed	6.0%	1.7%	1.7%
Contract employed	15.4%	5.1%	3.3%
Job share	1.3%	1.2%	1.9%
Volunteer	1.0%	0.3%	0.1%

Table 39. Employment status: career stages

² See Section 5.4 Career age vs chronological age.

The data was examined to determine the correlation between career age and chronological age. In Section 5.2 LIS qualifications, the different categories of respondents entering LIS studies were discussed, ie moving towards first career, career change, or returning to study to upgrade qualifications after a break. The situation of a career change means that 'new entrants' into the profession are not necessarily 'young'. In fact, the *neXus* survey data revealed that around 40% of new graduates (ie those who have qualified in the last 5 years) are making a career change, with a high proportion of respondents being aged over 40 years old (Table 40).

	Australia
New graduates	17.8%
Recent entrants	16.9%
New graduates/recent entrants	48.7%
New graduates/career change	43.2%
New graduates/over 40 yrs	45.4%
Recent entrants/over 40 yrs	37.2%
New grad/career change/ over 40 yrs	41.8%

Table 40. Correlation between career stage and chronological age

Respondents were asked to provide information about the number of hours worked each week, with broad bands of time periods to choose from (Figure 18).

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

- 36 How many hours per week do you usually work in your current LIS position?
Please choose only one of the following:
- | | | | |
|---------------------|--------------------------|---------------------|--------------------------|
| Less than 10 hours | <input type="checkbox"/> | Between 11-20 hours | <input type="checkbox"/> |
| Between 21-30 hours | <input type="checkbox"/> | Between 31-40 hours | <input type="checkbox"/> |
| Over 40 hours | <input type="checkbox"/> | | |

Figure 18. Question regarding number of hours worked

The vast majority of respondents who were working in a full time capacity predominantly reported that they worked between 31 and 40 hours (76.8%), while 21.6% worked more than 40 hours per week (Table 41).

Hours worked	Australia
31-40 hours	76.8%
More than 40 hours	21.6%

Table 41. Hours worked, full time staff

LIS workers in the ACT appeared to work the longest hours: 68.2% of ACT respondents employed in a full time capacity indicated that they worked 31-40 hours per week, with 30%

working more than 40 hours a week. The part time employment levels in the ACT were also the lowest across Australia, at 9.8%.

A comparison was made between the hours worked as reported by paraprofessional as opposed to professional respondents (Table 42), revealing that a far higher percentage of professional staff work longer than 40 hours a week.

Hours worked	Paraprofessional	Professional
31-40 hours	89.3%	73.9%
More than 40 hours	9.2%	24.6%

Table 42. Hours worked, full time staff: professionals and paraprofessionals

There was a broad distribution of the hours worked by part time staff, as depicted in Table 43, with general commonality in the pattern across the national, state and sector data, as well as across professional and paraprofessional work.

Hours worked	Australia
Less than 10 hours	1.4%
11-20 hours	30.2%
21-39 hours	56.0%
31-40 hours	10.5%
More than 40 hours	0.5%

Table 43. Hours worked, part time staff

There is anecdotal evidence to suggest that many people (mainly full time) are working longer hours than they would like to, while many part time people indicate that they would be happy to pick up extra hours of work. Respondents were therefore asked whether they would like to work more hours, less hours, or basically the same number of hours per week (Table 44).

Desirable	Australia
Less hours	30.8%
Same hours	52.0%
More hours	7.3%
No answer	9.9%

Table 44. Desire to work more or less hours

There was considerable similarity in the responses from professional and paraprofessional workers with this topic. There were, however, differences between respondents employed full time as opposed to part time: more full time workers desired to work fewer hours, while a good proportion of part-time workers desired extra hours of work (Table 45).

Desirable	Full time	Part time
-----------	-----------	-----------

Less hours	41.6%	12.2%
Same hours	54.1%	63.9%
More hours	1.6%	22.5%
No answer	2.7%	1.4%

Table 45. Desire to work more or less hours, full time and part time staff

Focusing on remuneration, respondents were asked to indicate their gross annual salary level in 2005 (Figure 19).

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

38 What was your gross annual salary in your LIS position in 2005 (before taxes and deductions)?

Please choose only one of the following:

- | | | | |
|----------------------|--------------------------|----------------------|--------------------------|
| Unpaid | <input type="checkbox"/> | \$1 to \$9,999pa | <input type="checkbox"/> |
| \$10,000 to \$19,999 | <input type="checkbox"/> | \$20,000 to \$29,999 | <input type="checkbox"/> |
| \$30,000 to \$39,999 | <input type="checkbox"/> | \$40,000 to \$49,999 | <input type="checkbox"/> |
| \$50,000 to \$59,999 | <input type="checkbox"/> | \$60,000 to \$69,999 | <input type="checkbox"/> |
| \$70,000 to \$79,999 | <input type="checkbox"/> | \$80,000 to \$89,999 | <input type="checkbox"/> |
| \$90,000 to \$99,999 | <input type="checkbox"/> | more than \$100,000 | <input type="checkbox"/> |

Figure 19. Question regarding gross annual salary levels (2005)

The data is presented for professional respondents working full time (Table 46). National data indicates that about half (52.4%) of full time professional staff earn between \$40,000 and \$60,000. Nationally 31.8% of full time professional staff earn between \$60,000 and \$80,000.

Salary range	Australia
Under \$9,999	0%
\$10,000 - \$ 9,999	0.1%
\$20,000 - \$29,999	0.8%
\$30,000 - \$39,999	4.4%
\$40,000 - \$49,999	22.0%
\$50,000 - \$59,999	30.4%
\$60,000 - \$69,999	20.4%
\$70,000 - \$79,999	11.4%
\$80,000 - \$89,999	4.5%
\$90,000 - \$99,999	2.8%
Over \$100,000	2.7%

Table 46. Gross annual salary (2005), professional full time staff

Nationally, 41.8% earn more than \$60,000 (Table 47).

Salary range	Australia
Under \$39,999	5.3%

\$40,000-\$59,999	52.4%
\$60,000 - \$79,999	31.8%
Over \$80,000	10.0%

Table 47. Distribution across broad annual salary ranges (2005), professional full time staff

Similarly, data is also presented for paraprofessionals working full time, to provide a comparison with the salary figures for professionals (Table 48).

Salary range	Australia
Under \$9,999	0.5%
\$10,000 - \$ 9,999	1.0%
\$20,000 - \$29,999	4.9%
\$30,000 - \$39,999	25.7%
\$40,000 - \$49,999	32.0%
\$50,000 - \$59,999	18.9%
\$60,000 - \$69,999	10.2%
\$70,000 - \$79,999	2.9%
\$80,000 - \$89,999	1.0%
\$90,000 - \$99,999	1.0%
Over \$100,000	1.0%

Table 48. Gross annual salary (2005), paraprofessional full time staff

These figures indicate that 16.1% of paraprofessional staff working full time earn more than \$60,000 (Table 49).

Salary range	Australia
Under \$39,999	32.1%
\$40,000-\$59,999	50.9%
\$60,000 - \$79,999	13.1%
Over \$80,000	3.0%

Table 49. Distribution across broad annual salary ranges (2005), paraprofessional full time staff

5.7 Employment patterns

The *neXus* census provided an opportunity to investigate the length of time people had been in the LIS industry, with their current employer and in their current position, as well as how many employers they had worked for. One question focused on the length of time in the LIS industry (Figure 20).

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

- 42 How long have you been employed in the LIS sector?
Please choose only one of the following:
- | | | | |
|-------------------------|--------------------------|-------------------------|--------------------------|
| Less than 1 year | <input type="checkbox"/> | Between 1 and 2 years | <input type="checkbox"/> |
| Between 2 and 3 years | <input type="checkbox"/> | Between 3 and 5 years | <input type="checkbox"/> |
| Between 6 and 10 years | <input type="checkbox"/> | Between 11 and 15 years | <input type="checkbox"/> |
| Between 16 and 20 years | <input type="checkbox"/> | Over 20 years | <input type="checkbox"/> |

Figure 20. Question regarding length of time working in LIS sector

There was a marked similarity in the data provided by all respondents at the national, state and sector levels (Table 50).

Length of time	Australia
Less than 1 year	2.5%
1-2 years	3.1%
2-3 years	3.5%
3-5 years	7.8%
6-10 years	15.5%
11-15 years	16.3%
16-20 years	13.7%
Over 20 years	30.3%
No answer	7.4%

Table 50. Length of time working in LIS sector

It was interesting to note the relatively balanced distribution of employment patterns over the three periods of up to 10 years, 11-20 years and over 20 years (Table 51).

Length of time	Australia
Up to 10 years	32.4%
11-20 years	30.0%
Over 20 years	30.3%
No answer	7.4%

Table 51. Distribution of length of time working in the LIS sector

There was a slight difference between professional and paraprofessional respondents, with a higher number of paraprofessional staff reporting that they had been employed in the LIS sector for up to 10 years (40.9%) compared with professional staff (30.2%) (Table 52).

Length of time	Paraprofessional	Professional
----------------	------------------	--------------

Up to 10 years	40.9%	30.2%
11 -20 years	28.4%	32.2%
Over 20 years	26.7%	29.2%
No answer	3.9%	8.5%

Table 52. Length of time working in the LIS sector: professional and paraprofessional staff

Table 53 presents the breakdown of data collected in response to the question about how long respondents had worked for their current employer.

Length of time	Australia
Less than 1 year	10.8%
1-2 years	9.0%
2-3 years	6.6%
3-5 years	15.3%
6-10 years	19.9%
11-15 years	13.5%
16-20 years	8.5%
Over 20 years	8.9%
No answer	7.4%

Table 53. Length of time working for current employer

These figures indicate that around 40% of respondents have been with their currently employer for less than 5 years. Nationally, 37% of respondents had been with the same employer for more than 11 years. Paraprofessional respondents indicated a longer relationship with their employer: 36% had worked with the same employer for more than 11 years, compared with 28% of professional respondents.

Respondents were asked to indicate how many different organizations they had worked for in the LIS sector during their career (Figure 21).

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

41 Please indicate the total number of library or information service organisations that you have worked in throughout your career. Various branches equate to one library or information service.

Please choose only one of the following:

1 2-3 4-5
6-7 8-9 10 or more

Figure 21. Number of LIS organizations worked in during career

52.2% of respondents had worked for between 1 and 3 organisations (Table 54).

Number of LIS	Australia
---------------	-----------

organisations	
1	18.4%
2-3	33.8%
4-5	22.4%
6-7	10.0%
8-9	3.7%
10 or more	4.4%
n/a	7.4%

Table 54. Number of LIS organizations worked for

Once again there was a strong difference between professional and paraprofessional respondents. 68.8% of paraprofessional respondents had just worked for between 1 and 3 organisations, compared with 47.5% of professional respondents. Professional respondents were considerably more mobile: 20.1% had worked for more than 6 institutions, compared with 10.9% of paraprofessional respondents.

Beyond this, respondents were also asked to report on how long they had been in their current position (Figure 22).

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

- 35 How long have you worked in this position?
Please choose only one of the following:
- | | | | |
|------------------------|--------------------------|-----------------------|--------------------------|
| Less than 1 year | <input type="checkbox"/> | Between 1 and 2 years | <input type="checkbox"/> |
| Between 2 and 3 years | <input type="checkbox"/> | Between 3 and 5 years | <input type="checkbox"/> |
| Between 5 and 10 years | <input type="checkbox"/> | More than 10 years | <input type="checkbox"/> |

Figure 22 Question regarding length of time in current position

The number of people in their current position for less than a year was interesting: 17.5% of respondents had been in the role for less than 12 months. At the other end of the scale, 19.9% of respondents had been in their current position for more than 10 years (Table 55).

Length of time	Australia
Less than 1 year	17.5%
1-2 years	11.7%
2-3 years	8.7%
3-5 years	15.3%
5- 10 years	19.0%
Over 10 years	19.9%
n/a	7.8%

Table 55. Length of time in current position: all respondents

A comparison between professional and paraprofessional respondents indicated that 16.7% of professional staff had been in the same job for more than 10 years, while 26.7% of paraprofessional staff had the same role for a decade or more. Around 58% of respondents across the national, state and sector levels who had worked for the same organisation for more than 10 years had actually also had the same job for more than 10 years.

The data was also analysed to consider employment patterns of the specific cohort of 'young new graduates', so selecting the responses of 'new graduates' (qualified within past 5 years) and aged under 30 years. 68% of young new graduates across Australia had been in their job for less than 2 years, 41% less than a year (Table 56).

Length of time	Australia
Less than 1 year	41.0%
1-2 years	27.0%

Table 56. Length of time in current position: new graduates under 30 years old

Of staff over the age of 50 years, only 15.7% had been in their job for less than 2 years, 9.6% for less than one year. As noted earlier, however, more than half of workers over 50 years old had been in their current job for more than 5 years (55.4%) and more than a third for over 10 years (33.7%). In terms of human resource planning, the activities of recruitment of younger workers to the profession and rejuvenation of older members of the profession require quite diverse strategies, but both are equally important and relevant in the current industrial and economic climate.

5.8 Workplace and professional functions

The *neXus* survey posed a series of questions about the frequency that respondents performed a range of workplace functions and activities (Figure 23). The question used a five-point Likert scale with the key (1) never, (2) rarely, (3) sometimes, (4) often and (5) very often. The key areas of activity included: Collections; Public service and outreach; Technical and bibliographic services; Information technology; Administration and management; Professional development and participation; and Other.

It was hoped that, while the six main groupings encompassed a wide range of traditional functions performed in libraries and information agencies, the category of 'Other' could potentially capture emerging or evolving areas of workplace activity, and so stimulate ideas for education, training and professional development or indeed to consider alternative organisational responsibilities.

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

39 For the next 7 questions, please indicate how frequently you perform each of the following job and professional functions:
(1=never, 2=rarely, 3=sometimes, 4=often, 5=very often)

Please choose the appropriate response for each item:

		Frequency you perform job function				
		Never		Some-times	Very often	
1. Collections						
a	Collection development, evaluation and management	1	2	3	4	5
b	Copyright clearance	1	2	3	4	5
c	Electronic licensing	1	2	3	4	5
d	Digitisation of collections	1	2	3	4	5
2. Public service and outreach						
a	Reference, information service and research support	1	2	3	4	5
b	Public programs, readers advisory, information and research support to adults	1	2	3	4	5
c	Public programs, readers advisory, information and research support to teens	1	2	3	4	5
d	Public programs, readers advisory, information and homework support to children	1	2	3	4	5
e	Instruction in information literacy, library use, library resources and research	1	2	3	4	5
f	Programs and services to special populations (eg workplace employees, people with disabilities)	1	2	3	4	5
g	Liaison activities (eg with individual faculty, assigned departments, community groups or agencies)	1	2	3	4	5

3. Technical and bibliographic services						
a	Database content management and organization of information resources (eg metadata schemes, Online Public Access Catalogues (OPACs))	1	2	3	4	5
b	Creation and maintenance of bibliographic records	1	2	3	4	5
c	Interlibrary loan activities (borrowing and lending)	1	2	3	4	5
d	Acquisition, receipt and payment of library resources	1	2	3	4	5
e	Circulation and discharge of library resources	1	2	3	4	5
f	Sorting, shelving and filing of library resources	1	2	3	4	5
g	Bindery and materials processing	1	2	3	4	5
h	Repair and conservation of library resources	1	2	3	4	5
4. Information technology						
a	Library systems, hardware and software support	1	2	3	4	5
b	Network management and technical support	1	2	3	4	5
c	Web and/or intranet development and management	1	2	3	4	5
d	Database systems creation and management	1	2	3	4	5
5. Administration and management						
a	Human resources planning and management	1	2	3	4	5
b	Supervision and evaluation of personnel	1	2	3	4	5
c	Managing training and staff development					
c	Organisational planning and decision making	1	2	3	4	5
d	Policy development	1	2	3	4	5
e	Budgeting and financial management	1	2	3	4	5
f	Managing space, facilities and building operations	1	2	3	4	5
g	Marketing and public relations	1	2	3	4	5
h	Fund raising and donor support	1	2	3	4	5
6. Professional development / participation						
a	Participation in professional organisations	1	2	3	4	5
b	Attending formal conferences, workshops and training events	1	2	3	4	5
c	Participating in informal workplace learning activities	1	2	3	4	5
d	Research and publishing in the field of librarianship	1	2	3	4	5
7. Other						
	Please specify other important job or professional functions you perform often that have not been covered in this list.					

Figure 23. Question regarding performance of job and professional functions

This question produced an immensely rich data set, which can be analysed in many different ways, eg according to the type of library; the career age of staff or the level of position held. In the current analysis, the data is viewed from the perspective of the various staffing levels in libraries and information agencies: both professional, ie all professional (Table 57), senior management (Table 58), middle management (Table 59), supervisory (Table 60) and non-management (Table 61) and paraprofessional (Table 62). The tables present the overall picture of the percentage of respondents reporting that they perform certain work activities 'often' or 'very often'.

Functions	Often	Very often
1. Collections		
Collection development, evaluation & management	23.1%	26.9%
Copyright clearance	5.7%	3.0%
Electronic licensing	4.5%	3.6%
Digitisation of collections	5.5%	3.3%
2. Public service and outreach		
Reference, information service and research support	18.4%	43.6%
Public programs, readers advisory, information and research support to adults	16.0%	23.7%
Public programs, readers advisory, information and research support to teens	10.7%	13.4%
Public programs, readers advisory, information and research support to children	5.1%	10.1%
Instruction in information literacy, library use, library resources and research	22.4%	28.3%
Programs and services to special populations (eg workplace employees, people with disabilities)	9.8%	9.8%
Liaison activities (eg with individual faculty, assigned departments, community groups or agencies)	18.5%	21.1%
3. Technical and bibliographic services		
Database content management and organisation of resources (eg metadata schemes, OPACs)	13.1%	16.4%
Creation and maintenance of bibliographic records	13.7%	17.1%
Interlibrary loan activities (borrowing and lending)	8.1%	9.4%
Acquisition, receipt and payment of library resources	10.9%	15.7%
Circulation and discharge of library resources	14.1%	24.9%
Sorting, shelving and filing of library resources	10.1%	18.5%
Bindery and materials processing	3.6%	4.1%
Repair and conservation of library resources	3.1%	3.0%
4. Information technology		
Library systems, hardware and software support	13.0%	12.6%
Network management and technical support	6.4%	5.9%
Web and/or intranet development and management	11.6%	10.7%
Database systems creation and management	6.2%	7.5%
5. Administration and management		
Human resources planning and management	14.1%	16.3%
Supervision and evaluation of personnel	16.9%	24.0%
Managing training and staff development	18.0%	18.1%
Organisational planning and decision making	18.5%	22.0%
Policy development	19.1%	16.6%
Budgeting and financial management	16.3%	20.1%
Managing space, facilities and building operations	13.6%	14.6%
Marketing and public relations	19.5%	13.7%
Fund raising and donor support	2.9%	2.2%
6. Professional development / participation		
Participation in professional organizations	17.2%	13.8%
Attending formal conferences, workshops and training events	21.1%	9.1%
Participating in informal workplace learning activities	29.7%	14.1%
Research and publishing in the field of librarianship	4.0%	1.8%

Table 57.. Job and professional functions performed: professional respondents

Functions	Often	Very often
1. Collections		
Collection development, evaluation & management	25.6%	31.2%
Copyright clearance	9.0%	3.0%
Electronic licensing	11.1%	5.0%
Digitisation of collections	4.5%	2.5%
2. Public service and outreach		
Reference, information service and research support	22.6%	28.6%
Public programs, readers advisory, information and research support to adults	17.6%	15.6%
Public programs, readers advisory, information and research support to teens	8.5%	12.1%
Public programs, readers advisory, information and research support to children	6.5%	10.1%
Instruction in information literacy, library use, library resources and research	18.6%	24.1%
Programs and services to special populations (eg workplace employees, people with disabilities)	13.1%	8.0%
Liaison activities (eg with individual faculty, assigned departments, community groups or agencies)	26.6%	27.6%
3. Technical and bibliographic services		
Database content management and organisation of resources (eg metadata schemes, OPACs)	17.6%	12.1%
Creation and maintenance of bibliographic records	22.1%	8.5%
Interlibrary loan activities (borrowing and lending)	7.5%	8.5%
Acquisition, receipt and payment of library resources	13.1%	23.6%
Circulation and discharge of library resources	14.6%	16.1%
Sorting, shelving and filing of library resources	6.5%	10.6%
Bindery and materials processing	5.5%	2.0%
Repair and conservation of library resources	1.5%	2.0%
4. Information technology		
Library systems, hardware and software support	18.1%	14.6%
Network management and technical support	14.1%	7.0%
Web and/or intranet development and management	15.1%	8.0%
Database systems creation and management	9.0%	9.0%
5. Administration and management		
Human resources planning and management	23.6%	57.3%
Supervision and evaluation of personnel	24.1%	63.8%
Managing training and staff development	28.6%	50.3%
Organisational planning and decision making	18.1%	72.9%
Policy development	21.6%	64.3%
Budgeting and financial management	21.6%	69.3%
Managing space, facilities and building operations	21.1%	51.8%
Marketing and public relations	34.2%	37.2%
Fund raising and donor support	12.6%	8.5%
6. Professional development / participation		
Participation in professional organizations	29.6%	26.6%
Attending formal conferences, workshops and training events	38.7%	16.6%
Participating in informal workplace learning activities	42.7%	17.6%
Research and publishing in the field of librarianship	7.0%	2.0%*

Table 58. Job and professional functions performed: professional staff, senior management

Functions	Often	Very often
1. Collections		
Collection development, evaluation & management	31.8%	35.3%
Copyright clearance	6.0%	3.1%
Electronic licensing	8.9%	5.2%
Digitisation of collections	5.6%	3.5%
2. Public service and outreach		
Reference, information service and research support	19.8%	45.3%
Public programs, readers advisory, information and research support to adults	17.9%	28.1%
Public programs, readers advisory, information and research support to teens	13.3%	14.3%
Public programs, readers advisory, information and research support to children	6.7%	11.9%
Instruction in information literacy, library use, library resources and research	27.4%	26.8%
Programs and services to special populations (eg workplace employees, people with disabilities)	12.1%	11.2%
Liaison activities (eg with individual faculty, assigned departments, community groups or agencies)	23.9%	25.0%
3. Technical and bibliographic services		
Database content management and organisation of resources (eg metadata schemes, OPACs)	15.6%	17.3%
Creation and maintenance of bibliographic records	13.7%	12.1%
Interlibrary loan activities (borrowing and lending)	8.7%	7.9%
Acquisition, receipt and payment of library resources	15.4%	21.0%
Circulation and discharge of library resources	15.2%	24.7%
Sorting, shelving and filing of library resources	10.4%	15.8%
Bindery and materials processing	1.9%	2.5%
Repair and conservation of library resources	2.3%	2.3%
4. Information technology		
Library systems, hardware and software support	15.6%	16.6%
Network management and technical support	8.7%	7.5%
Web and/or intranet development and management	12.3%	13.9%
Database systems creation and management	6.9%	9.4%
5. Administration and management		
Human resources planning and management	28.5%	28.5%
Supervision and evaluation of personnel	30.6%	44.7%
Managing training and staff development	31.4%	31.0%
Organisational planning and decision making	38.2%	37.4%
Policy development	37.6%	24.7%
Budgeting and financial management	32.8%	31.2%
Managing space, facilities and building operations	26.2%	23.3%
Marketing and public relations	29.9%	19.8%
Fund raising and donor support	3.9%	2.3%
6. Professional development / participation		
Participation in professional organizations	22.9%	17.3%
Attending formal conferences, workshops and training events	27.6%	12.9%

Participating in informal workplace learning activities	34.9%	17.3%
Research and publishing in the field of librarianship	4.8%	2.7%

Table 59. Job and professional functions performed: professional staff, middle management

Functions	Often	Very often
1. Collections		
Collection development, evaluation & management	26.1%	33.3%
Copyright clearance	5.5%	6.7%
Electronic licensing	5.5%	5.5%
Digitisation of collections	4.8%	5.5%
2. Public service and outreach		
Reference, information service and research support	26.1%	33.3%
Public programs, readers advisory, information and research support to adults	18.7%	27.3%
Public programs, readers advisory, information and research support to teens	12.1%	18.8%
Public programs, readers advisory, information and research support to children	5.5%	17.0%
Instruction in information literacy, library use, library resources and research	23.6%	40.6%
Programs and services to special populations (eg workplace employees, people with disabilities)	12.7%	10.9%
Liaison activities (eg with individual faculty, assigned departments, community groups or agencies)	21.2%	21.2%
3. Technical and bibliographic services		
Database content management and organisation of resources (eg metadata schemes, OPACs)	17.6%	22.4%
Creation and maintenance of bibliographic records	17.0%	26.7%
Interlibrary loan activities (borrowing and lending)	10.9%	12.7%
Acquisition, receipt and payment of library resources	13.9%	19.4%
Circulation and discharge of library resources	17.0%	40.6%
Sorting, shelving and filing of library resources	15.8%	29.1%
Bindery and materials processing	5.5%	4.8%
Repair and conservation of library resources	5.5%	3.0%
4. Information technology		
Library systems, hardware and software support	21.2%	20.6%
Network management and technical support	10.3%	9.7%
Web and/or intranet development and management	17.0%	15.8%
Database systems creation and management	9.7%	12.1%
5. Administration and management		
Human resources planning and management	18.8%	5.5%
Supervision and evaluation of personnel	32.1%	25.5%
Managing training and staff development	24.8%	17.0%
Organisational planning and decision making	21.8%	12.7%
Policy development	24.2%	7.3%
Budgeting and financial management	15.8%	12.7%
Managing space, facilities and building operations	13.3%	9.1%
Marketing and public relations	19.4%	10.3%
Fund raising and donor support	0.6%	2.4%
6. Professional development / participation		

Participation in professional organizations	15.2%	13.9%
Attending formal conferences, workshops and training events	23.0%	5.5%
Participating in informal workplace learning activities	29.1%	17.0%
Research and publishing in the field of librarianship	2.4%	3.0%

Table 60. Job and professional functions performed: professional staff, supervisory

Functions	Often	Very often
1. Collections		
Collection development, evaluation & management	19.8%	23.3%
Copyright clearance	5.7%	2.6%
Electronic licensing	2.4%	1.5%
Digitisation of collections	4.5%	4.4%
2. Public service and outreach		
Reference, information service and research support	19.5%	53.4%
Public programs, readers advisory, information and research support to adults	16.7%	26.9%
Public programs, readers advisory, information and research support to teens	11.3%	14.7%
Public programs, readers advisory, information and research support to children	4.4%	9.2%
Instruction in information literacy, library use, library resources and research	24.2%	33.8%
Programs and services to special populations (eg workplace employees, people with disabilities)	8.3%	10.5%
Liaison activities (eg with individual faculty, assigned departments, community groups or agencies)	15.0%	20.6%
3. Technical and bibliographic services		
Database content management and organisation of resources (eg metadata schemes, OPACs)	11.6%	18.9%
Creation and maintenance of bibliographic records	13.4%	24.8%
Interlibrary loan activities (borrowing and lending)	8.9%	12.0%
Acquisition, receipt and payment of library resources	8.3%	11.7%
Circulation and discharge of library resources	15.3%	29.2%
Sorting, shelving and filing of library resources	11.7%	24.2%
Bindery and materials processing	4.7%	6.8%
Repair and conservation of library resources	4.4%	4.5%
4. Information technology		
Library systems, hardware and software support	10.1%	9.6%
Network management and technical support	2.7%	4.5%
Web and/or intranet development and management	11.1%	10.1%
Database systems creation and management	5.3%	6.0%
5. Administration and management		
Human resources planning and management	1.8%	0.8%
Supervision and evaluation of personnel	3.8%	0.8%
Managing training and staff development	6.6%	2.6%
Organisational planning and decision making	6.5%	1.8%
Policy development	6.8%	1.8%
Budgeting and financial management	5.4%	2.7%
Managing space, facilities and building operations	4.5%	1.2%
Marketing and public relations	11.1%	5.7%
Fund raising and donor support	0.5%	0.5%

6. Professional development / participation		
Participation in professional organizations	13.2%	10.1%
Attending formal conferences, workshops and training events	14.9%	6.6%
Participating in informal workplace learning activities	28.3%	12.8%
Research and publishing in the field of librarianship	3.8%	1.2%

Table 61. Job and professional functions performed: professional staff, non-management

Functions	Often	Very often
1. Collections		
Collection development, evaluation & management	16.4%	19.8%
Copyright clearance	5.6%	3.9%
Electronic licensing	2.5%	1.9%
Digitisation of collections	4.2%	4.5%
2. Public service and outreach		
Reference, information service and research support	14.5%	37.6%
Public programs, readers advisory, information and research support to adults	14.5%	16.2%
Public programs, readers advisory, information and research support to teens	8.9%	8.9%
Public programs, readers advisory, information and research support to children	7.2%	7.8%
Instruction in information literacy, library use, library resources and research	22.6%	27.0%
Programs and services to special populations (eg workplace employees, people with disabilities)	8.1%	6.7%
Liaison activities (eg with individual faculty, assigned departments, community groups or agencies)	14.2%	12.5%
3. Technical and bibliographic services		
Database content management and organisation of resources (eg metadata schemes, OPACs)	12.5%	17.0%
Creation and maintenance of bibliographic records	15.6%	28.4%
Interlibrary loan activities (borrowing and lending)	11.4%	19.5%
Acquisition, receipt and payment of library resources	9.2%	22.3%
Circulation and discharge of library resources	14.5%	50.4%
Sorting, shelving and filing of library resources	11.7%	45.4%
Bindery and materials processing	9.7%	8.1%
Repair and conservation of library resources	9.5%	15.6%
4. Information technology		
Library systems, hardware and software support	10.0%	13.4%
Network management and technical support	5.0%	5.3%
Web and/or intranet development and management	4.5%	4.7%
Database systems creation and management	5.0%	2.5%
5. Administration and management		
Human resources planning and management	5.8%	6.4%
Supervision and evaluation of personnel	7.5%	13.6%
Managing training and staff development	10.9%	9.2%
Organisational planning and decision making	9.2%	10.0%
Policy development	9.7%	6.7%
Budgeting and financial management	7.5%	10.9%
Managing space, facilities and building operations	10.9%	7.5%

Marketing and public relations	11.7%	7.2%
Fund raising and donor support	2.2%	2.2%
6. Professional development / participation		
Participation in professional organizations	13.1%	8.6%
Attending formal conferences, workshops and training events	13.6%	7.0%
Participating in informal workplace learning activities	26.5%	10.9%
Research and publishing in the field of librarianship	2.2%	0.3%

Table 62. Job and professional functions performed: paraprofessional staff

The questions regarding work and professional functions produced a vast volume of data about the activities and responsibilities of the various levels of staff in libraries and information centres. The data can be synthesised to indicate the areas of most frequent activity at the different staffing levels. The following tables present the aggregated figures for each work level to highlight the most frequent areas of work activity. It should be noted that professional development and participation activities were excluded from this analysis.

Professional staff at the senior management level report a very high level of activity in the sphere of administration and management (Table 63). Beyond this, they report still being involved in discipline-specific activities such as collections and public service and outreach (eg liaison work, reference and information services and information literacy).

Functions performed	Often or very often
Administration and management	
Organisational planning and decision making	91.0%
Budgeting and financial management	90.9%
Supervision and evaluation of personnel	87.9%
Policy development	85.9%
Human resources planning and management	80.9%
Managing training and staff development	78.9%
Managing space, facilities and building operations	72.9%
Marketing and public relations	71.4%
Collections	
Collection development, evaluation and management	56.8%
Public service and outreach	
Liaison activities (eg with individual faculty, assigned departments, community groups or agencies)	54.2%
Reference, information service and research support	51.2%
Instruction in information literacy, library use, library resources and research	42.7%

Table 63. The highest areas of workplace activity: professional staff, senior management

Middle managers report the same areas of activity, ie administration and management, collections and public service and outreach (Table 64). The spread of activities across these areas is broader, however, with less intensity in the managerial functions.

Functions performed	Often or very often
Administration and management	
Organisational planning and decision making	75.6%
Supervision and evaluation of personnel	75.3%
Collections	
Collection development, evaluation and management	67.1%
Public service and outreach	
Reference, information service and research support	65.1%
Administration and management	
Budgeting and financial management	64.0%
Managing training and staff development	62.4%
Policy development	62.3%
Human resources planning and management	57.0%
Public service and outreach	
Instruction in information literacy, library use, library resources and research	54.2%
Administration and management	
Budgeting and financial management	49.5%
Public service and outreach	
Liaison activities (eg with individual faculty, assigned departments, community groups or agencies)	48.9%

Table 64. The highest areas of workplace activity: professional staff, middle management

Supervisory staff enjoy a more diverse range of functions, primarily cutting across the various areas of discipline-specific activity (Table 65). Their involvement in administrative and managerial functions focuses, not surprisingly, on the supervision and evaluation of personnel.

Functions performed	Often or very often
Public service and outreach	
Instruction in information literacy, library use, library resources and research	64.2%
Reference, information service and research support	59.4%
Collections	
Collection development, evaluation and management	59.4%
Administration and management	
Supervision and evaluation of personnel	57.6%
Technical and bibliographic services	
Circulation and discharge of library resources	57.6%
Public service and outreach	
Public programs, readers advisory, information and research support to adults	46.0%
Technical and bibliographic services	
Sorting, shelving and filing of library resources	44.9%
Public service and outreach	
Liaison activities (eg with individual faculty, assigned departments, community groups or agencies)	42.4%
Information technology	
Library systems, hardware and software support	41.8%
Technical and bibliographic services	
Database content management and organisation of resources (eg metadata schemes, OPACs)	40.0%

Table 65. The highest areas of workplace activity: professional staff, supervisory

Non-management professionals also perform a wide variety of activities, mainly in the public service and outreach area and the technical bibliographic services area (Table 66). Some work in the collections area is also reported. Again, activities are distributed, rather than concentrated across the range of functions.

Functions performed	Often or very often
Public service and outreach	
Reference, information service and research support	72.9%
Instruction in information literacy, library use, library resources and research	58.0%
Technical and bibliographic services	
Circulation and discharge of library resources	44.5%
Public service and outreach	
Public programs, readers advisory, information and research support to adults	43.6%
Collections	
Collection development, evaluation and management	43.1%
Technical and bibliographic services	
Creation and maintenance of bibliographic records	38.2%
Sorting, shelving and filing of library resources	35.9%
Public service and outreach	
Liaison activities (eg with individual faculty, assigned departments, community groups or agencies)	35.6%
Technical and bibliographic services	
Database content management and organisation of resources (eg metadata schemes, OPACs)	30.5%

Table 66. The highest areas of workplace activity: professional staff, non-management

As is to be expected, the main focus of the paraprofessional respondents was in the area of technical and bibliographic services, but with some activities performed in the areas of public service and outreach and collections (Table 67).

Functions performed	Often or very often
Technical and bibliographic services	
Circulation and discharge of library resources	64.9%
Sorting, shelving and filing of library resources	57.1%
Public service and outreach	
Reference, information service and research support	52.1%
Instruction in information literacy, library use, library resources and research	49.6%
Technical and bibliographic services	
Creation and maintenance of bibliographic records	44.0%
Collections	
Collection development, evaluation and management	36.2%
Technical and bibliographic services	
Acquisition, receipt and payment of library resources	31.5%
Interlibrary loan activities (borrowing and lending)	30.9%
Public service and outreach	
Public programs, readers advisory, information and research support to adults	30.7%
Technical and bibliographic services	
Database content management and organisation of resources (eg metadata schemes, OPACs)	29.5%

Table 67. The highest areas of workplace activity: paraprofessional staff,

Respondents were provided with the opportunity to list functional areas that they felt were not included in the list of questions in the survey. A large number of responses were submitted, highlighting areas such as consulting, project management, archives, records management, public programs and occupational health and safety. A full list is presented in Appendix 9. A good proportion of the responses could legitimately be included in the categories of the workplace functions presented in the survey, eg copyright, IT support, liaison work and information literacy; however, it goes beyond the scope of this report to assign the 'free' responses to the categories provided.

5.9 The age old retirement issue

As background to some of the retirement issues, the Australian Bureau of Statistics (2006d) presents the following information:

Age at retirement

The average age at retirement from the labour force for people aged 45 years and over in 2004-05 was 52 years (58 years for men and 47 years for women). Of the 1.3 million men who had retired from the labour force:

- 9% had retired aged 65 years and over;
- 55% had retired aged 55-64 years;
- 8% had retired aged 45-54 years; and
- 8% had retired aged less than 45 years.

The 1.7 million women who had retired from the labour force tended to retire earlier than men. The ages that they retired from the labour force were as follows:

- 6% had retired aged 65 years and over;
- 32% had retired aged 55-64 years;
- 29% had retired aged 45-54 years; and
- 33% had retired aged less than 45 years.

The average age at retirement for recent retirees (those who retired in the last five years) was 60 years. Of this group, the difference between the retirement age of men and women was relatively small, with women retiring approximately three years younger than men (the average retirement age for men was 61.5 years for men and 58.3 years for women).

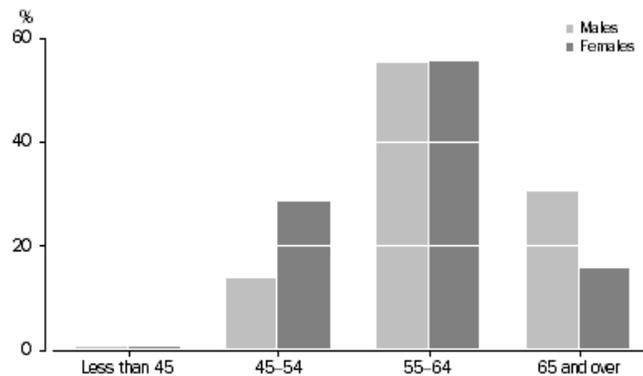


Figure 24. People who retired in the last five years: age at retirement by sex

In the *neXus* survey, respondents were asked a range of questions about their retirement plans: the age they would be when they retired; how long it would be until they retired, whether or not they might wish to retire early; whether or not they might consider delaying their retirement.

Respondents were asked to indicate the age at which they planned to retire (Figure 25).

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

51 At what age do you realistically think you will retire from the LIS profession?

Please choose only one of the following:

- Earlier than 55
- Between 55 and 60
- Between 61 and 64
- At 65
- After 65
- Don't know

Figure 25. Question regarding age of retirement

The data indicates that around one third of respondents planned to retire before they turn 60 years old (by group – national: 33.3%; state: 34.4%; sector: 37.0%) (Table 5.70). Around 14% indicated they hope to work beyond the generally recognised retirement age of 65 years.

Age of retirement	Australia
Before 55 years	5.4%
55-60 years	27.9%
61-64 years	18.4%
At 65 years	13.9%
After 65 years	13.8%
Don't know	12.6%
n/a	8.1%

Table 68. Planned age of retirement

One of the major issues associated with this question in the survey is the actual current age of respondents. 32.5% of all respondents were aged 40 years and under. The ability to accurately predict the age of retirement is indeed challenging, especially given the socio-political changes impacting on workforce planning, such as changes in the taxation law in the area of superannuation. An alternative perspective is therefore to consider the length of time before retirement, as understood by respondents, regardless of their age (Figure 26).

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

52 How long is it until you anticipate that you will retire?

Please choose only one of the following:

- Less than 1 year Between 1 and 2 years
- Between 2 and 3 years Between 3 and 5 years
- Between 6 and 10 years Between 11 and 15 years
- Between 16 and 20 years Over 20 years
- Don't know

Figure 26. Question concerning the anticipated length of time until retirement

Given the need for financial planning prior to retirement, it is potentially more accurate to explore the anticipated time until retirement, specifically in the short to medium timeframe. Table 69 presents the breakdown of data collected in the survey.

Time until retirement	Australia
Less than 1 year	1.2%
1-2 years	2.9%
2-3 years	2.5%
3-5 years	9.2%
6-10 years	15.9%
11-15 years	15.9%
16-20 years	12.8%
More than 20 years	30.9%
n/a	8.6%

Table 69. Anticipated length of time until retirement

The data indicates that almost one third of LIS workers aim to retire in the next 10 years (Table 5.72).

Time until retirement	Australia
1-3 years	6.6%
3-5 years	9.2%
6-10 years	15.9%
Total 2006-2015	31.7%

Table 70. Anticipated length of time until retirement (2006-2015)

A correlation was made between the anticipated time until retirement and the age demographics of the respondents. Taking the age of 65 as the 'accepted' age for retirement, the number of respondents reporting that they would retire in the next 10 years (2006-2015)³ were compared with the number of respondents currently aged over 56 years, ie 'eligible' to retire by 2015, taking 65 as the 'accepted' age of retirement (Table 71).

	Australia
Total retirements 2006-2015	31.7%
Respondents aged 56 yrs and over	18.4%

Table 71. Correlation between retirement plans (2006-2015) and current age of respondents

The number of people reporting that they would retire within 10 years is in fact approximately double the number of people in the age demographic for 'accepted' retirement at 65 years. This indicates that a significant people who were younger than the 'accepted' retirement age will take

³ The *neXus* survey data was collected in September-October 2006.

early retirement. The high proportion of female library and information professionals is a factor here: ABS reported 29% of women retired aged 45-54 years and 33% retired aged under 45 years (ABS, 2006d).

Taking the perspective of those who planned to retire within the next three years (ie 2006-2008), the data showed 22.5% of all respondents planned to retire by 2008 (Table 72).

Current age	Australia
Under 45 years	3.2%
46-50 years	5.8%
51-55 years	13.5%
Over 55 years	77.4%

Table 72. Respondents planning to retire in 2006-2008, by age

One issue that has been raised in many professional discussions is the range of skills that may be lost through retirement, especially as the majority of potential retirements will be from the levels of senior and middle management. As some leaders of the profession in Australia (and indeed internationally) have expressed their concerns about the quality of future management and leadership skills, the retirement data was analysed from the perspectives of the different levels of employment (senior management, middle management, supervisory level and non-management). The cohort analysed was restricted to the professional grouping. Of those professional respondents planning to retire in the next 5 years (ie 2006-2010), there was a spread of respondents across the different levels of work (Table 73).

Work level	Australia
Senior management	21.4%
Middle management	40.2%
Supervisory	10.9%
Non-management	27.5%

Table 73. Work levels of respondents planning to retire in 2006-2010

Attention is drawn to the job and professional functions performed 'often or very often' by senior management in Section 5.8 Workplace and professional functions. A comparison was made with middle managers performing the same range of tasks 'often' or very often' (Table 74).

Functions performed	Senior management	Middle management
Administration and management		
Organisational planning and decision making	91.0%	75.6%
Budgeting and financial management	90.9%	64.0%
Supervision and evaluation of personnel	87.9%	75.3%
Policy development	85.9%	62.3%
Human resources planning and management	80.9%	57.0%
Managing training and staff development	78.9%	62.4%
Managing space, facilities and building operations	72.9%	49.5%

Marketing and public relations	71.4%	49.7%
--------------------------------	-------	-------

Table 74. Managerial functions of respondents performed 'often' or 'very often': senior and middle management levels

With about 60% of all those respondents who plan to retire in the next 5 years falling into the work levels of senior management (around 20%) and middle management (around 40%), the potential loss of management knowledge and skills is considerable. Viewed another way, 24.6% respondents who are currently senior managers and 17.7% of respondents who are currently middle managers plan to retire in the next 5 years.

An interesting comparison was made between the management functions performed by those middle managers who planned to retire within 5 years and those who would be employed for longer than 6 years. It appeared that those respondents who would be working for longer than 6 years already had higher levels of managerial responsibility (Table 75).

Functions performed	Middle managers retiring within 5 yrs	Middle managers working 6+ yrs
Administration and management		
Organisational planning and decision making	67.4%	77.6%
Budgeting and financial management	60.9%	65.1%
Supervision and evaluation of personnel	66.3%	77.0%
Policy development	53.2%	64.3%
Human resources planning and management	49.0%	59.0%
Managing training and staff development	48.9%	65.3%
Managing space, facilities and building operations	42.4%	50.3%
Marketing and public relations	38.0%	52.7%

Table 75. Managerial functions of respondents: middle management retiring within 5 years and middle managers remaining in the workforce for 6 years and beyond

It was clear that those middle managers who were not planning to retire in the next 5 years had greater responsibility across all managerial functions (Figure 27).

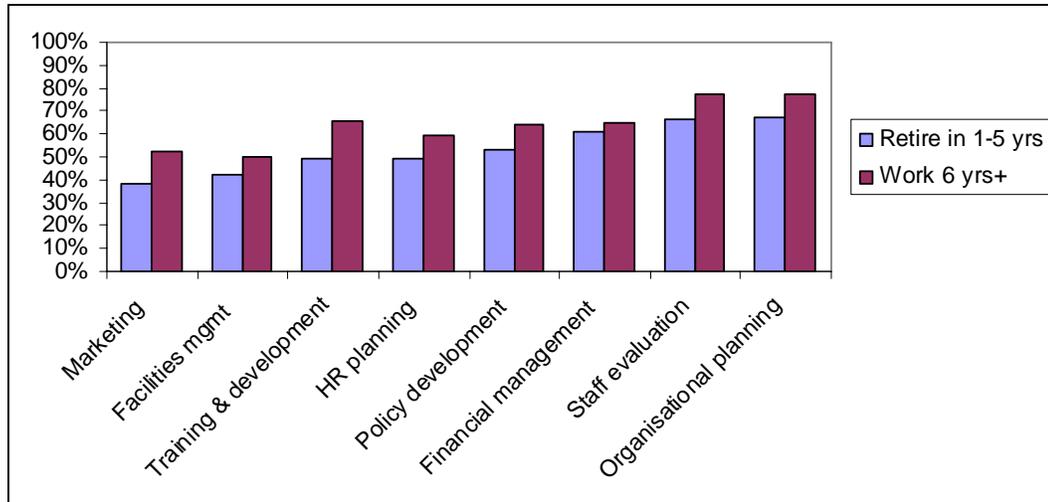


Figure 27. Comparative levels of managerial functions performed 'often' or 'very often' by middle managers retiring within 5 years and those planning to work for 6 years or more

This situation could potentially be interpreted as evidence of succession planning amongst middle managers who had a longer career path ahead of them.

The age demographics of these two groups of middle managers were also examined. All middle managers who planned to retire within 5 years were aged 46 years and over. However, of those middle managers who would be employed for a further 6 years or more, 53.3% were under 45 years old, with 31% actually under 40 years old. It could be argued that this comparison between chronological age, employment levels and managerial functions augurs well for the future: younger middle managers are acquiring greater responsibility for a wide range of managerial activities, especially when compared with their older, pre-retirement colleagues.

Respondents were asked about their interest in considering an early retirement package if it was available (Figure 28), with an opportunity to comment on their response.

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

53 Would you accept an early retirement package if it were offered?

Please choose only one of the following:

Yes No Don't know

Make a comment on your choice here:

Figure 28. Question regarding interest in accepting early retirement package

The data was examined from the perspective of respondents who had reported that would retire within 5 years (Table 76). About half of the respondents agreed that they would consider early retirement if there was an opportunity.

Early retirement	Australia
Yes	49.2%
No	17.7%
Don't know	27.4%
n/a	5.6%

Table 76. Interest in accepting early retirement, respondents retiring within 5 years

Respondents were also asked about the alternative: the desire to delay retirement, again with the opportunity to provide a comment (Figure 29).

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

54 Would you consider delaying your retirement? Please give your reason.

Please choose only one of the following:

Yes No Don't know

Make a comment on your choice here:

Figure 29. Question regarding interest in delaying retirement

Again, the data is analysed from the perspective of respondents planning to retire within the next 5 years (Table 77).

Delay retirement	Australia
Yes	39.0%
No	30.9%
Don't know	26.9%
n/a	3.2%

Table 77. Interest in delaying retirement, respondents retiring within 5 years

A concluding question asked whether respondents were actually looking forward to retirement (Figure 30).

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

55 To what extent are you looking forward to retiring from your work in the LIS sector?

Please choose only one of the following:

To a great extent To some extent To no extent

Figure 30. Question regarding extent to which respondents were looking forward to retirement

The overall figure for respondents looking forward to retirement 'to a great extent' was about 12%, with about 37% not looking forward to it at all. By restricting the data to the responses given by those planning to retire soon, the level of positive feelings were far higher: 52% of those retiring in less than a year were looking forward to it 'to a great extent (Table 78).

Looking forward to retirement	Retiring in less than 1 yr	Retiring in 1-2 yrs	Retiring in 2-3 yrs
To a great extent	51.9%	42.7%	38.7%
To some extent	37.0%	45.8%	49.7%
To no extent	11.1%	9.4%	10.3%

Table 78. Extent to which looking forward to retirement, respondents retiring in near future

It would appear that respondents adjusted to the positive aspects of the idea of retirement as the event grew closer!

5.10 Professional engagement

Respondents were asked about their involvement in professional activities, eg through professional associations. 27.8% of all respondents reported that they were professionally active 'often' or 'very often', and a further 25.3% being professionally active 'sometimes'. Over one third of respondents (36.2%) stated that they had little or no professional engagement (Table 79).

Professional involvement	Australia
Very often	12.2%
Often	15.6%
Sometimes	25.3%
Rarely	18.5%
Never	17.7%
n/a	10.5%

Table 79. Participation in professional organizations

There were also differences between the professional and paraprofessional cohorts of respondents (Table 80).

Professional involvement	Professional	Paraprofessional
Very often	13.8%	8.6%
Often	17.2%	13.1%
Sometimes	27.0%	22.3%
Rarely	18.8%	18.7%

Never	12.7%	27.0%
n/a	10.4%	10.3%

Table 80. Participation in professional organisations: professionals and paraprofessionals

45.7% of paraprofessional respondents reported that they 'rarely' or 'never' participated in professional activities, while 21.7% were active 'often or very often'. 29.2% of paraprofessional respondents indicated they were currently a member of ALIA. The level of involvement amongst the professional respondents was higher, at 30.0% participating in professional activities 'often' or 'very often', with 23.2% 'rarely' or 'never' participating. 47.9% of professional respondents reported being a member of ALIA.

In terms of employment level, senior managers were the most engaged professionally, with 56.2% reporting that they participated in professional organizations 'often' 'very often' (Table 81).

Employment level	Participation 'often' or 'very often'
Senior management	56.2%
Middle management	40.2%
Supervisory	29.1%
Non-management	23.3%

Table 81. Participation in professional organisations: professional staff by employment level

In alignment with seniority, the older age groupings also indicated slightly higher levels of participation (Table 82).

Employment level	Participation 'often' or 'very often'
Under 30 years	23.6%
31-40 years	31.7%
41-50 years	28.6%
51-60 years	35.6%
61 years and over	34.2%

Table 82. Participation in professional organisations: professional staff by age group

The issue of professional engagement is also reflected in the figures for membership of a professional membership (Table 83), with less than half of all respondents being members of the Australian Library and Information Association (ALIA): 42.1% of respondents said they were currently a member of ALIA, with a further 10.2% planning to join in the next 12 months. As noted above, 47.9% of professional respondents were members of ALIA and 29.2% of paraprofessional respondents.

Membership of	Australia
---------------	-----------

ALIA	
Yes	42.3%
Was member	23.1%
Will join (12 mths)	10.5%
No	24.3%

Table 83. Membership 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 groupings of all respondents. The proportion of ALIA members in the various age brackets over 50 years was slightly higher than those in the younger age groups (Figure 31). 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.

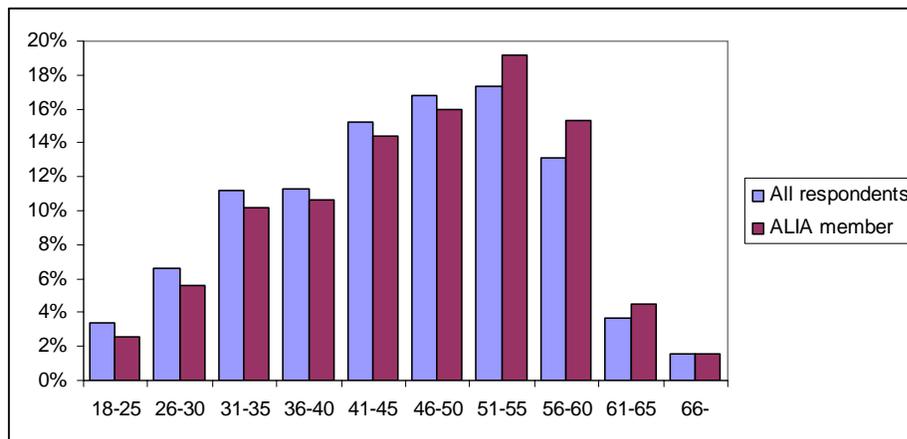


Figure 31: Comparison in age: all respondents and respondents who were members of ALIA

When the group of respondents who reported being a member 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 Table 23. The impact of retirement on the membership of ALIA is a critical 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.

The number of respondents who reported that they had attended a professional meeting was 71% (Table 84).

Attended a professional meeting	Australia
Yes	71.0%

No	24.9%
No answer	4.0%

Table 84. Attendance at professional meeting

The contrast between professionals and paraprofessionals was noted, with more professionals than paraprofessionals stating they had attended a professional meeting (Table 85).

Attended a professional meeting	Professional	Paraprofessional
Yes	76.4%	56.0%
No	20.5%	38.2%
No answer	3.0%	5.8%

Table 85. Attendance at professional meeting: professionals and paraprofessionals

Respondents were asked whether or not their employer subsidized or reimbursed their attendance at professional meetings (Table 86).

Employer subsidy/ reimbursement	Australia
Yes	37.7%
No	34.4%
No answer	27.9%

Table 86. Employer subsidy/reimbursement to attend a professional meeting

ALIA was the association with the highest level of professional association membership by far. The next levels recorded for membership of professional associations, by professional respondents, were the Australian Law Librarians Group (ALLG) – recently renamed Australian Law Librarians Association (ALLA) – at 5.6%; Australian School Libraries Association (ASLA) 5.1%; Public Libraries Australia 3.0% and Australian Institute of Management (AIM) 2.7%, SLA 1.8% and Records Management Association of Australia (RMAA) 1.7%. There was a scattering of memberships (0.8%-1.2%) of international associations such as the Library and Information Association New Zealand (LIANZA), Chartered Institute of Library and Information Professionals (CILIP), American Library Association (ALA) and the International Federation of Library Associations and Institutions (IFLA). Significantly, most respondents who indicated membership of these other associations were also members of ALIA.

5.11 Training and development

The questions about attendance at formal and informal training and development activities were incorporated into the questions about job and professional functions (Figure 32).

6. Professional development / participation						
a	Participation in professional organisations	1	2	3	4	5
b	Attending formal conferences, workshops and training events	1	2	3	4	5
c	Participating in informal workplace learning activities	1	2	3	4	5
d	Research and publishing in the field of librarianship	1	2	3	4	5

Figure 32. Questions regarding professional development and participation.

Formal training and development events included conferences, workshops etc, while informal training events covered workplace learning activities. The level of participation 'often' or 'very often' in formal training events was 28.4% although the figure for participating 'sometimes' was very strong (47.8%) (Table 87).

Formal training and development	Australia
Very often	8.6%
Often	19.8%
Sometimes	39.9%
Rarely	18.0%
Never	4.9%
n/a	8.9%

Table 87. Participation in formal training and development

Levels of participation in formal training events were higher amongst professionals than paraprofessionals (Table 88).

Training and development	Professional	Paraprofessional
Very often	9.1%	7.0%
Often	21.7%	13.6%
Sometimes	40.4%	42.9%
Rarely	16.0%	22.0%
Never	3.9%	8.1%
n/a	9.5%	6.4%

Table 88. Formal training and development: professionals and paraprofessionals

When the data for professional respondents was viewed from the national, state and sector perspectives, the numbers of respondents participating in formal training events 'often' or 'very often' were comparable, with just under one third reporting involvement (Table 89).

Formal training and development	Australia
Very often	9.1%
Often	21.1%
Sometimes	40.4%
Rarely	16.0%
Never	3.9%
n/a	9.5%

Table 89. Participation in formal training and development, professional staff

The figures for paraprofessional staff were less positive, however, with 20.6% of paraprofessional respondents participating in formal training events 'often' or 'very often'. At the other end of the scale, around one third of paraprofessional respondents reported that they 'rarely' or 'never' attended formal training (Table 90).

Formal training and development	Australia
Very often	7.0%
Often	13.6%
Sometimes	42.9%
Rarely	22.0%
Never	8.1%
n/a	6.4%

Table 90 Participation in formal training and development, paraprofessional staff

An examination of all respondents revealed that ALIA members reported more frequent attendance at formal training events (Table 91).

Formal training and development	Professional & ALIA member	Paraprofessional & ALIA member
Very often	12.3%	15.2%
Often	24.7%	16.2%
Sometimes	40.4%	39.0%
Rarely	10.9%	18.1%
Never	1.6%	3.8%
n/a	10.1%	7.6%

Table 91. Formal training and development: professional and paraprofessional staff: ALIA members

The data for informal workplace learning activities were also examined. Around about one third of all respondents across the national, state and sector cohorts participated in informal workplace learning activities 'often' or 'very often' (Table 92).

Informal workplace learning	Australia
Very often	13.1%
Often	29.1%
Sometimes	33.5%
Rarely	11.9%
Never	3.2%
n/a	9.2%

Table 92. Participation in informal workplace learning activities

Across all respondents, professional staff reported higher levels of participation 'often' or very often' (43.8%) than the paraprofessional staff (37.4%) (Table 93).

Informal workplace learning	Professional	Paraprofessional
Very often	14.1%	10.9%
Often	29.7%	26.5%
Sometimes	33.0%	33.7%
Rarely	10.4%	18.1%
Never	3.0%	4.2%
n/a	9.9%	6.7%

Table 93. Informal workplace learning activities: professional and paraprofessional staff

Amongst professional staff, there was a 43.8% regular participation rate in informal workplace learning activities (Table 94).

Informal workplace learning	Australia
Very often	14.1%
Often	29.7%
Sometimes	33.0%
Rarely	10.4%
Never	3.0%
n/a	9.9%

Table 94. Participation in informal workplace learning activities: professional staff

At the paraprofessional level, more than one third of respondents participate in informal workplace learning activities 'often' or 'very often' (Table 95).

Informal workplace learning	Australia
Very often	10.9%
Often	26.5%
Sometimes	33.7%
Rarely	18.1%
Never	4.2%
n/a	6.7%

Table 95. Participation in informal workplace learning activities: paraprofessional staff

Nevertheless, it should be noted that a significant percentage of paraprofessional staff receive little or no workplace training (22.3%).

Respondents were asked to identify areas of knowledge and skills where they had completed some form of training and development in their current workplace, and beyond this, to indicate the extent to which they felt that the training had improved their ability to perform their job (Figure 33). The areas of knowledge and skills covered topics that would be handled more often in formal training events such as workshops and seminars (eg customer-service, technology, management and leadership, or job-specific topics), as well as workplace learning (eg through mentoring, job rotation, job swaps and job sharing).

- 64 For the following list, first indicate if you have participated in the type/format of training course or on-the job workplace learning activities through your **current** workplace, and, if so, the extent to which the training improved your ability to perform your job:
(1=to no extent, 5=to a great extent)

Please choose the appropriate response for each item:

	Knowledge and skills	Extent to which improved ability to perform job					Have never participated
		To no extent				To a great extent	
a	Job-oriented skills training (excluding technology)	1	2	3	4	5	0
b	Technology skills training	1	2	3	4	5	0
c	Customer-service related training	1	2	3	4	5	0
d	Management training	1	2	3	4	5	0
e	Leadership training	1	2	3	4	5	0
f	Other professional development (eg subject speciality, library issues)	1	2	3	4	5	0
g	Mentoring	1	2	3	4	5	0
h	Job rotation	1	2	3	4	5	0
i	Job swap	1	2	3	4	5	0
j	Job sharing	1	2	3	4	5	0

Figure 33. Question regarding areas of training and development and impact on work performance

The data were reviewed from the perspective of those respondents who reported involvement in the various aspects of training and development, as well as the number of respondents reporting a positive impact on work performance (ie the ability to perform their current job had improved (ie 'to some extent' (4) or 'to a great extent' (5)) as a result of being involved in the training and development activities (Table 96).

Knowledge and skills	% participating in training	Positive impact on work performance
Job-oriented skills	79.8%	66.9%
Technology skills	83.9%	67.8%
Customer-service	59.1%	58.0%
Management	60.5%	44.7%
Leadership	59.3%	42.9%
Other professional development (eg subject speciality, library issues)	59.1%	62.0%
Mentoring	47.2%	23.3%
Job rotation	45.2%	23.2%
Job swap	41.1%	16.2%
Job sharing	41.9%	5.8%

Table 96. Participation in training and impact on work performance

Respondents were asked about the level of employer support for training and development activities, specifically support for activities outside of working hours, and if so, what costs might be reimbursed (Figure 34).

Does your employer subsidise or reimburse your participation in training and development courses taken outside of your paid working hours?

Please choose only one of the following:

Yes No

[Only answer this question if you answered 'Yes' to question '63']

63 What form of support is offered by your employer ?

Please choose all that apply:

Paid time to attend

Travel

Accommodation

Daily allowance

Registration costs / fees

Figure 34. Questions regarding employer support for training and development

About half of all respondents reported that they were reimbursed for training activities attended outside of working hours (50.7% national; 50.2% state and 48.3% sector) (Table 98).

Costs covered	Australia
Registration costs/fees	83.9%
Paid time	78.2%
Travel	64.7%

Accommodation	55.4%
Daily allowance	29.2%

Table 98. Employer support for training and development

In addition, respondents were asked to comment generally on their views about training, career development and organizational commitment (Figure 35).

- 65 Please indicate the extent to which you agree/disagree with the following statements about training, career development and organizational commitment: (1=strongly disagree, 2= disagree, 3= neutral, 4= agree, 5= strongly agree)

Please choose the appropriate response for each item:

		SD		N		SA	N/A
a	I currently have sufficient education, training and experience to allow me to perform my job effectively	1	2	3	4	5	
b	Given my education, training and experience, I am overqualified for my current position	1	2	3	4	5	
c	Given my education, training and development, I am qualified to move to a higher position	1	2	3	4	5	
d	My career would benefit from technology skills training	1	2	3	4	5	
e	My career would benefit from management skills training	1	2	3	4	5	
f	My career would benefit from business skills training	1	2	3	4	5	
g	My career would benefit from leadership skills training	1	2	3	4	5	
h	I am interested in moving to a position with more responsibility	1	2	3	4	5	
i	My organisation provides me with sufficient opportunities to participate in training	1	2	3	4	5	
j	I believe I spend too much time on training courses	1	2	3	4	5	
k	I am committed to the goals of the organisation I work for	1	2	3	4	5	
l	I would be very happy to spend the rest of my career with the organisation I work for	1	2	3	4	5	
m	I would be very happy to spend the rest of my career in my current position	1	2	3	4	5	

Figure 35. Questions regarding views about training, career development and organisational commitment.

The data are recorded for the national, state and sector cohorts for respondents who 'agreed' or 'strongly agreed' with the statements presented (Table 99). The views are indeed markedly similar across the three cohorts. One issue that stands out significantly is the view that leadership training is perceived to be of very little value to the respondents' careers.

	Australia
I currently have sufficient education, training and experience to allow me to perform my job effectively	78.0%
Given my education, training and experience, I am overqualified for my current position	59.5%
Given my education, training and development, I am qualified to move to a higher position	31.8%
My career would benefit from technology skills training	53.9%
My career would benefit from management skills training	51.6%
My career would benefit from business skills training	43.5%
My career would benefit from leadership skills training	2.8%
I am interested in moving to a position with more responsibility	52.1%
My organisation provides me with sufficient opportunities to participate in training	59.0%
I believe I spend too much time on training courses	50.4%
I am committed to the goals of the organisation I work for	39.3%

I would be very happy to spend the rest of my career with the organisation I work for	78.1%
I would be very happy to spend the rest of my career in my current position	24.5%

Table 99. Views about training, career development and organisational commitment

Respondents were asked for comments on two dimensions of future training and development needs (Figure 36): the type of training they personally felt would be helpful for their own career development, and the type of training they felt their employers would encourage and support.

- 67 In thinking about your career into the future, what kind of training or development do you feel would provide you with the most important skills required for you to move into a higher position? Please be as specific as you can, eg training in conflict management, in leadership development, in negotiation, in specific computer applications.
- 68 What training or development do you think your employer believes you need and would support your attendance?

Figure 36. Questions regarding future training needs

In terms of their own personal views on training and development, a small number of respondents indicated that they would benefit from studying to attain or completing their LIS qualifications. Beyond this, themes such as business and management skills, strategic planning, project management and business communications (report writing, policy writing and submission writing) were common. The most interesting theme was 'leadership'. Only 3% (n=7) of the sector respondents indicated that their career would benefit from leadership training (Table 99).

Respondents were further asked to think about their profession and their career as compared with other professions such as teachers, engineers, IT professionals etc, and to indicate their level of agreement with a series of statements (Figure 37).

- 71 Compared with other professions, to what extent do you agree or disagree with the following statements? (Other professions include: medical professionals, educators, IT professionals, engineers, etc.)
(1=strongly disagree, 2= disagree, 3= neutral, 4=agree, 5= strongly agree)

Please choose the appropriate response for each item:

		SD		N		SA	N/A
a	My current position is secure for the foreseeable future	1	2	3	4	5	
b	My promotional prospects are good	1	2	3	4	5	
c	It will be easy to move to another LIS job	1	2	3	4	5	
d	It will be easy to move to a non-LIS job	1	2	3	4	5	
e	My organisation is well funded for the future	1	2	3	4	5	
f	There is good quality training available for my profession	1	2	3	4	5	
g	My remuneration is appropriate for my educational qualifications	1	2	3	4	5	
h	My remuneration is appropriate for the work I do	1	2	3	4	5	
i	Job satisfaction in my profession is high	1	2	3	4	5	
j	My profession is well regarded by others	1	2	3	4	5	
k	I believe people are interested in joining this profession	1	2	3	4	5	
l	There will be lots of opportunities for LIS jobs in the future	1	2	3	4	5	

Figure 37: Question regarding respondents' views of the LIS profession and their career

The data for respondents who 'agreed' or 'strongly agreed' with the statements, for national, state and sector cohorts, are presented in Table 100. There was reasonable confidence in job security, although the level of belief that the parent organisation was well funded for the future is considerably lower. There were positive views about the quality of training available, but some reticence about job mobility within and beyond the sector. There were not high levels of confidence about future job opportunities or the degree of interest to join the profession.

	Australia
My current position is secure for the foreseeable future	65.3%
My promotional prospects are good	23.7%
It will be easy to move to another LIS job	25.1%
It will be easy to move to a non-LIS job	23.3%
My organisation is well funded for the future	42.8%
There is good quality training available for my profession	54.7%
My remuneration is appropriate for my educational qualifications	42.7%
My remuneration is appropriate for the work I do	46.7%
Job satisfaction in my profession is high	48.9%
My profession is well regarded by others	39.4%
I believe people are interested in joining this profession	28.8%
There will be lots of opportunities for LIS jobs in the future	25.9%

Table 100. Views of the LIS profession and career

5.12 Just nice to know...

Section A4 of the survey asked respondents to consider the extent to which they agreed or disagreed with a series of statements about their values, job attitudes and job satisfaction. At this point in time, the research team is continuing to examine the data collected: an addendum to this report will be provided in the near future. Overall job satisfaction was high, with 88.6% of all respondents reporting that they agreed or strongly agreed that they were satisfied with their job. Professional staff appeared to have a higher level of job satisfaction (90.1%) than paraprofessional staff (82.5%). In terms of career stage, senior career workers report higher levels of job satisfaction (90.2%), along with mid career workers (89.8%), when compared with new recruits (84.9%).

A further question asked respondents to consider what might increase their motivation at work. Key factors that were mentioned included higher pay, opportunities for promotion and career progression, more enlightened management and greater responsibility and autonomy in the performance of their duties.

Respondents were asked to outline the three main reasons that they had for originally entering the LIS profession (Figure 38).

[Only answer this question if you answered 'Yes, currently working in a non-traditional library or information service' or 'Yes, currently working in a traditional library or information service' to question '22']

43 What were your main reasons for originally deciding to work in the LIS sector?
Please select up to 3 relevant reasons and rank them from 1 (most important) to 3 (least important of the 3):

- | | |
|-------------------------------------------|--------------------------|
| Family or friends working in the industry | <input type="checkbox"/> |
| Employment opportunities | <input type="checkbox"/> |
| Job security | <input type="checkbox"/> |
| Professional status | <input type="checkbox"/> |
| Salaries of LIS graduates | <input type="checkbox"/> |
| Enjoy: | |
| Working with people | <input type="checkbox"/> |
| Information technology | <input type="checkbox"/> |
| Books | <input type="checkbox"/> |
| Conducting training/instruction classes | <input type="checkbox"/> |
| Customer service | <input type="checkbox"/> |
| Research | <input type="checkbox"/> |
| Personal learning experience | <input type="checkbox"/> |
| Couldn't decide on another career path | <input type="checkbox"/> |
| No plan, just worked out that way | <input type="checkbox"/> |
| Other | <input type="checkbox"/> |

Please specify _____

Figure 38. Question regarding reasons for joining LIS profession

An analysis of the ranked data indicated that enjoyment of books was a very strong reason, given as the primary reason for 16.6% of respondents, but also given as secondary and tertiary reasons by a further 23.5% (Table 101). The second primary reason was employment opportunities, and thirdly 'no plan, it just worked out that way'. However, further reasons were

reported consistently: the enjoyment of working with people, the research process and customer service.

Reasons for joining LIS	Rank 1	Rank 2	Rank 3
Enjoy books	16.6%	12.4%	11.1%
Employment opportunities	14.0%	7.6%	6.9%
No plan, just worked out that way	12.2%	3.7%	4.7%
Enjoy working with people	12.2%	15.4%	12.2%
Enjoy research	9.9%	10.0%	10.0%
Enjoy customer service	3.3%	9.1%	9.3%
Enjoy IT	4.0%	7.3%	6.9%

Table 101. Reasons for choosing LIS as a career

A comparison was made of the primary reasons given by respondents across the different career stages. Interestingly, the enjoyment of books continues to be very significant, along with employment opportunities (Table 102). The reasons enjoying working with people and enjoying research remain important, although “falling into the career” seems to be occurring far less than it did for people in their mid and senior career stages.

Reasons for joining LIS	New recruits	Mid career	Senior career
Enjoy books	17.6%	17.1%	18.7%
Employment opportunities	17.1%	14.3%	14.9%
No plan, just worked out that way	8.3%	12.7%	15.4%
Enjoy working with people	11.8%	13.9%	13.2%
Enjoy research	11.3%	12.9%	9.0%

Table 102. Primary reason for choosing LIS as a career: career stages

One question was posed to determine whether respondents, if they knew now what they did about the LIS profession, would they make the same career choice again. More than two thirds of respondents would indeed follow the same career (69.6%), with little distinction between professional and paraprofessional staff. The degree of commitment to the career choice was in fact stronger amongst the new recruits (78.1%) than amongst mid career (75.9%) or senior career people (73.7%).

6. Conclusion

The data presented in this report has provided a range of insights into the people who work in the library and information sector in Australia. The *neXus* census gathered data on workforce participants, both professionals and paraprofessionals, those already qualified and those still studying, at different stages of their career, from new graduates to those who have recently retired. In addition to the immense amount of quantitative data, the *neXus* census has also

gathered a rich set of qualitative data about the respondents views of their education and their careers.

The findings presented in the report can potentially help the LIS sector better comprehend 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. Stage One of the *neXus* project has helped develop a clearer understanding of the individuals in the workforce, while Stage Two will seek to investigate the institutional policies and practices that govern staff recruitment and retention, as well as staff training and development.

The data collected is from people and is all about people: the people who make up the LIS workforce in Australia in late 2006. In terms of workforce planning, however, the LIS sector needs to consider how to best interpret the data and use it to inform strategies and initiatives that will help develop a strong and flexible workforce for the future. It is hoped that the research findings will 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'.

References

- Association of College and Research Libraries (ACRL) (2002). *Recruitment, retention and restructuring: human resources in academic libraries*. Chicago, IL: ACRL.
- Australian Bureau of Statistics (ABS) (2006a). *Population projections, Australia, 2004-2101 (Reissue) (ABS 3222.0)*. Retrieved June 10, 2007 from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/3222.0?OpenDocument>
- Australian Bureau of Statistics (ABS) (2006b). *Labour force, Australia, May 2006 (ABS 6202.0)*. Retrieved on June 10, 2007 from <http://www.abs.gov.au/ausstats/abs@.nsf/ProductsbyReleaseDate/5D9656C815AAD499CA2571A90014B600?OpenDocument>
- Australian Bureau of Statistics (2006c). *Australian demographic statistics*. ABS Cat.No. 3101.0. Retrieved on June 10, 2007 from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyCatalogue/6949409DC8B8FB92CA256BC60001B3D1?OpenDocument>
- Australian Bureau of Statistics (ABS) (2006d). *Retirement and retirement intentions*. ABS Cat.No. 6238.0. Retrieved on June 10, 2007 from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyCatalogue/D85E2A6345A76BF5CA2570C00748A0?OpenDocument>
- Australian Job Search (2006). *Careers: Librarians. Gender, age & hours*. Retrieved June 10, 2007 from <http://jobsearch.gov.au/joboutlook/default.aspx?pagelD=KeyInfo3&AscoCode=2292#age>
- Australian Library and Information Association (ALIA) (2007). ALIA-recognised librarianship courses: Edith Cowan University. Retrieved June 10, 2007 from <http://www.alia.org.au/education/courses/listing.html?ID=47>
- Australian Public Service Commission (APSC) (2005). *Managing and sustaining the APS workforce*. Retrieved on June 10, 2007 from <http://www.apsc.gov.au/mac/apsworkforce.htm>
- Bridgland, A. (1999). To fill or not to fill – that is the question. Succession planning and leadership development in academic libraries. *Australian Academic Libraries*, 30(1), 20-29.
- Brown, J., Culkin, N. and Fletcher, J. (2001). Human factors in business-to-business research over the Internet. *International Journal of Market Research*, 43(4), 425-440.
- Cleyle, S.E. and McGillis, L.M. (2005). Change the lightbulb or flick the switch – our choice. In S.E. Cleyle & L.M. McGillis (Eds.), *Last one out, turn off the lights. Is this the future of American and Canadian libraries?* (pp.xv-xix). Lanham, MD: Scarecrow Press.
- Granello, D.H. & Wheaton, J.E. (2004). Online data collection: Strategies for research. *Journal of Counseling & Development*, 82(4), 387-393.
- Gunter, B., Nicholas, D., Huntingdon, P. and Williams, P. (2002). Online versus offline research: implications for evaluating digital media. *Aslib Proceedings*, 54(4), 229-239.
- Hallam, G. (2006). Future perfect: will we have made it? Workforce planning issues in the library and information sector. Click06: Australian Library and Information Association 2006 Biennial Conference. Perth, 19-22 September 2006.
- Ingles, E., De Long, K., Humprey, C. and Sivak, A. (2005). *The future of human resources in Canadian libraries*. Retrieved on November 7, 2006 from <http://www.ls.ualberta.ca/8rs/8RsFutureofHRLibraries.pdf>
- Institute of Museum and Library Services (IMLS) (2006). *The future of librarians in the workforce*. Retrieved on June 10, 2007 from <http://libraryworkforce.org/tiki-index.php>

- Macauley, P. (2004). Challenging librarians: The relevance of the doctorate in professional practice. *Challenging ideas. ALIA 2004 Biennial Conference*, Gold Coast, 21-24 September 2004. Retrieved on June 10, 2007 from <http://conferences.alia.org.au/alia2004/pdfs/macaulley.p.paper.pdf>
- McCarthy, J. (2005). Planning a future workforce: An Australian perspective. *New Review of Academic Librarianship*, 11(1), 41-56.
- Morville, P. (2005). Ambient findability: libraries at the crossroads of ubiquitous computing. *Information Today*, 29(6). Retrieved on June 10, 2007 from <http://www.infotoday.com/online/nov05/morville.shtml>
- Museums, Libraries and Archives Council (MLA) (2004). *Learning for change: workforce development strategy*. Retrieved June 10, 2007 from http://www.mla.gov.uk/resources/assets/W/wfd_learning_for_change_pdf_5661.pdf
- New South Wales. Legislative Council. Standing Committee on State Development (2006). *Inquiry into skills shortages in rural and regional New South Wales*. Sydney: The Committee. Retrieved on June 10, 2007 from [http://www.parliament.nsw.gov.au/prod/parlment/committee.nsf/0/f38fab9bb76cd71aca25716b0005c993/\\$FILE/Final%20Skills%20Report%2011%20May%202006.pdf](http://www.parliament.nsw.gov.au/prod/parlment/committee.nsf/0/f38fab9bb76cd71aca25716b0005c993/$FILE/Final%20Skills%20Report%2011%20May%202006.pdf)
- Professions Australia (2005). *Skills mapping: Assessing Australia's longer term requirements for professional skills*. Retrieved on June 10, 2007 from <http://www.professions.com.au/skills.html>
- Re:source (2003). *Towards a strategy for workforce development: A research and discussion report prepared for Re:source*. Retrieved on June 10, 2007 from http://www.mla.gov.uk/resources/assets//id423rep_doc_6787.doc
- Smith, I. (2002). Staff development and continuing professional education: policy and practice in Australian academic and research libraries", in P. Layzell Ward (Ed.), *Continuing Professional Education for the Information Society*, 5th World Conference on Continuing Professional Education for the Library and Information Service Professions, Munich: KG Saur. Retrieved on December 7, 2006 from www.lib.latrobe.edu.au/about/publications/sd&cpe.pdf
- Smith, I.W. (2006). Continuing professional development and workplace learning – examining policy and practice in Australian and UK academic and research libraries. *Out of Bounds and Borders: A Trans-Tasman Collaboration*. Continuing Professional Education Conference 2006, Auckland, April 19-20 April 2006. Retrieved June 10, 2007 from <http://www.lib.latrobe.edu.au/about/publications/is-cpdwl-paper.pdf>
- Smith, K. (2001). One-person libraries in the Australian special library environment. *Rivers of knowledge. 9th ALIA Specials, Health and Law Libraries Conference*, Melbourne: 26-29 August 2001.
- Sommers, P. (2004). The library in the wired society: compete or withdraw. A business perspective. *ALIA 2004 Biennial Conference: Challenging ideas*. Gold Coast, September 21-24, 2004. Retrieved on June 10, 2007 from <http://conferences.alia.org.au/alia2004/powerpoint/patrick.sommers.ppt>
- State Library of Queensland (2006). Welcoming quotes and statistics. *Towards the future of libraries: a forum*. Brisbane, March 29, 2006. Retrieved on June 24, 2006 from <http://www.slq.qld.gov.au/data/assets/file/37145/ExpHorizons.ppt#256>
- Steffen, N., Lance, K.C., Russell, B. & Lietzau, Z. (2004). *Retirement, retention and recruitment: The future of Librarianship in Colorado*. Denver, CO: Library Research Service. Retrieved June 24, 2006 from http://www.lrs.org/documents/closer_look/RRR_web.pdf
- Teece, P. (1998). Australian library workers – who are they? *InCite* (4). Retrieved on June 24, 2006 from <http://www.alia.org.au/publishing/incite/1998/04/library.workers.html>

- Teece, P. (2002). Coming soon: a very different workforce. *InCite*, 23(3). Retrieved on December 7, 2006 from <http://alia.org.au/publishing/incite/2002/03/workwatch.html>
- Teece, P. (2004). America shows way on ageing workforce. *InCite*, 25(1-2). Retrieved on December 7, 2006 from <http://alia.org.au/publishing/incite/2004/01-02/workwatch.html>
- Usherwood, B., Proctor, R., Bower, G., Coe, C., Cooper, J. & Stevens, T. (2001). *Recruit, retain and lead. The public library workforce study*. Sheffield: Centre for the Public Library and Information in Society, Department of Information Studies, University of Sheffield. Retrieved on December 7, 2006 from <http://cplis.shef.ac.uk/workforce.pdf>
- Van Wanrooy, B. (2006). *Workforce sustainability and leadership: Scoping report*. Commissioned by the State Library of Victoria. Sydney: University of Sydney, Workplace Research Centre. Retrieved on November 17, 2006 from http://www.libraries.vic.gov.au/downloads/Public_Libraries_Unit/final_workforce_scoping_report_jul_06.pdf
- Whitmell, V. (2005). Workforce and succession planning in the libraries of the Australian Technology Network: preparing for demographic change. In A. Huthwaite (Ed.), *Managing information in the digital age: the Australian Technology Network Libraries respond*. Adelaide: University of South Australia, pp.157-178.

Appendices

<i>Appendix 1</i>	<i>Categories of respondents on entering LIS studies</i>
<i>Appendix 2</i>	<i>Academic qualifications: discipline of highest degree</i>
<i>Appendix 3</i>	<i>Areas of further study</i>
<i>Appendix 4</i>	<i>Other job titles</i>
<i>Appendix 5</i>	<i>Other reasons for leaving last job</i>
<i>Appendix 6</i>	<i>Reasons to stay with current employer: Comments</i>
<i>Appendix 7</i>	<i>Comments on working in regional or rural Australia</i>
<i>Appendix 8</i>	<i>Comments on working overseas</i>
<i>Appendix 9</i>	<i>Other job and professional functions</i>
<i>Appendix 10</i>	<i>Comments on opportunity to retire early</i>
<i>Appendix 11</i>	<i>Comments on opportunity to delay retirement</i>
<i>Appendix 12</i>	<i>Respondents' own views on training and development needs</i>
<i>Appendix 13</i>	<i>Respondents' views of employer's perspective on training and development needs</i>
<i>Appendix 14</i>	<i>Comments on factors that would increase motivation at work</i>
<i>Appendix 15</i>	<i>If I knew then what I knew now... Comments</i>
<i>Appendix 16</i>	<i>neXus survey instrument</i>
