



The University Of Melbourne

Research & Research Training Paper for the Information Futures Commission

A PAPER FROM INFORMATION SERVICES

TABLE OF CONTENTS

Future skills for academic librarians	2
References	5
List of authors & contributors from research & research training, Scholarly Information, Information Services.	5
Document control	6





Future Skills for Academic Librarians

This brief submission in response to the 'Scholarly Information in a Digital Age' consultation paper consists of a considered prediction and identification of skills that academic librarians might require during the 10 year time frame that the consultation paper has set.

The second of the ten assumptions in the Association of College & Research Libraries Environmental Scan 2007, states that "the skill set for librarians will continue to evolve in response to the changing needs and expectations of the populations they serve, and the professional background of library staff will become increasingly diverse in support of expanded service programs and administrative needs" (ACRL, 2008, p. 4, no. 2).

In her paper (Smith, 2008) for the Council on Library and Information Resources (CLIR) *Core Functions of the Research Library in the 21st Century collection*, Smith identifies six trends in the academic research environment that are likely to shape scholarship in the next decade. They are:

- The ascendancy of science
- The development of digital humanities
- An emphasis on process over product (social networks, informal communication via blogs, wikis, pre-print archives, rather than monographic, archival publication)
- Mobile and ubiquitous computing
- Data deluge
- Rising costs and changing funding models for higher education

The aging of the current librarian workforce is well documented and McCarthy addresses this and the continuing re-assessment of the skills base of librarians due to ongoing technological advances (McCarthy, 2005). This implies the necessity of funding continuing, high quality, relevant professional development programs for academic library staff.

An Australian study analysing job advertisements over the past 30 years (Kennan, Cole and Willard, 2006) found that the range of skills expected from librarians was much broader in 2004 than in 1974. New areas included all aspects of information technology, instructional design, metadata management, teaching, marketing and business management. Good interpersonal and communication skills remained in the list along with the traditional skills such as cataloguing, collection management and reference.

Other new areas now appearing are research data management as a result of the growth of e-research, (refer to the paper by the eResearch Coffee Network in response to the Information Futures Commission Consultation Paper at <http://www.versi.edu.au/downloads/InformationFuturesConsultationPaper-eResearchCoffeeNetworkResponse.doc>).

Still in the area of e-research, Richard Luce suggests in his paper for the Council on Library and Information Resources (CLIR) *Core Functions of the Research Library in the 21st Century collection* (Luce, 2008), that the first priority for research libraries and librarians should be to "focus on developing the functional requirements of a data-archiving infrastructure". Creating workflow tools and policies around data description, data management, data access and sharing, as well as connecting research communities and supporting social software would be key roles for libraries and librarians.

Supporting e-science is an emerging new data science area where skills and training in those skills are in short supply. In-house training for librarians by local research data scientists is one option.

Holmes and Howson (2000) suggest librarians collaborate with academic staff in preparing and writing grants for research and provide a case study of a team-taught workshop at the University of North Carolina.



The University Of Melbourne

The ALIA National Advisory Congress which discusses policy and issues of relevance to the sector as a whole; and policy, issues and operational matters of relevance to the association, in its Sydney 2007 meeting (<http://www.alia.org.au/governance/nac/2007/reports/sydney.report07.pdf>) proposes a general librarian skill set, but does not define specific technological areas.

Academic librarianship is a knowledge-based profession that for many positions requires knowing the subject as a foundation to becoming an expert in a subject's information resources - the seminal works, the key authors, quality publishers, patterns of publication, culture and past and present trends in research and scholarship. In the United States, academic librarians are required to have a first degree (and often a Masters) in their subject area, as well as a Masters in Library and Information Science).

With the above in mind, a broad list of current academic librarian skills will include most of the following, with a difference of emphasis depending on the type of job:

PERSONAL AND COMMUNICATION SKILLS

- Flexible, adaptable, eager & quick learners
- Good communicators, effective advocates
- Proactive & innovative
- Liaison with academics
- Marketing & promotion
- Collaboration & team-oriented
- Problem-solving skills
- Mentoring skills

MANAGEMENT SKILLS

- Resource management
- Leadership & negotiation
- Consulting & change management
- Risk management, incl. EHS legislation
- Budgets
- Customer focussed services
- Physical resources
- Electronic resources
- Virtual environments
- IT equipment
- Project management

IT SKILLS

- Electronic resource management
- LMS (Learning Management System)
- Web development
- ILMS (Integrated Library Management System) management
- Web 2.0 & social networks
- Maintain institutional repository
- Database management
- XML & URL management

LIBRARY SKILLS

- Cataloguing and metadata (Z39.50 & Dublin Core)
- Interlibrary loan & document delivery



Database searching
Archives, rare books, conservation
Records management

RESEARCH, LEARNING & TEACHING

Knowledge of higher education environment
Knowledge of developments in research practice (incl. e-research)
Bibliometrics & citation analysis
Organisational knowledge
Pedagogic skills (see p. 3, Goldenberg-Hart, 2008)
Information literacy (see p.4, Goldenberg-Hart 2008)
Research skills (knowledge of research process)
Online learning & content production
Bibliographic Software Management

If the library is to remain relevant to researchers, we believe that it does need to play a major role in the e-science and e-research areas listed below.

New, potential future skills to be considered with training implications, (who will do the training and where will the funding for it come from?)

Digitisation
Digital preservation
Data curation

Scholarly, open source e-publishing, by the Library, of University staff research

Build collaborative web spaces using social software
Customise information feeds (RSS) to researchers
Maintain discrete, different data sets & digital collections within the Repository
Registries of datasets
Maintain profiles of researchers & research groups (e.g. Find An Expert)
Registries of software toolkits
Registries of instruments and sensors



REFERENCES

- ACRL Research Committee. 2008. 'Environmental scan 2007', *Association of College & Research Libraries*, accessed 10 April 2008, from http://www.acrl.org/ala/acrl/acrlpubs/whitepapers/Environmental_Scan_2.pdf.
- Goldenberg-Hart, Diane. 2008. 'Enhancing Graduate education: a fresh look at library engagement', *ARL, a bimonthly report on Research Library Issues and Actions*, no. 256, pp. 1-8.
- Holmes, Gerald & Howson, Charna. 2000. 'Grants: interdepartmental collaboration to teach grantsmanship skills', *The bottom line: managing library finances*, 13, no. 3, pp. 146-149.
- Kennan, Mary Anne; Cole, Fletcher & Willard, Patricia. 2006. 'Changing workplace demands: what job ads tell us', *AsLib Proceedings*, 58, no. 3, pp. 179-196.
- Luce, Richard. 2008. 'A new value equation challenge: the emergence of eresearch roles for the research libraries' *Core Functions of the Research Library in the 21st Century collection*, February 27, 2008. CLIR. Accessed online 4 March, 2008 from <http://www.clir.org/activities/registration/08FebR21/Luce.pdf>.
- McCarthy, J. 2005. 'Planning a future workforce: an Australian perspective', *New Review of Academic Librarianship*, vol. 11, no. 1, pp. 41-56.
- Smith, Abby 2008, 'The research library in the 21st century: collecting, preserving and making accessible resources for scholarship' *Core Functions of the Research Library in the 21st Century collection*, February 27, 2008. CLIR. Accessed online 4 March, 2008 from <http://www.clir.org/activities/registration/08FebR21/Smith.pdf>.

LIST OF AUTHORS & CONTRIBUTORS FROM RESEARCH & RESEARCH TRAINING, SCHOLARLY INFORMATION, INFORMATION SERVICES.

- Barbara Rocchi, Manager, Research & Research training
- Carole Hinchcliff, Law Librarian
- Appy Laspagis, Discipline Librarian, Education (ERC)
- Melanie Lazarow, Discipline Librarian, Architecture, Building & Planning
- Deb Vickers, Discipline Librarian, LFR, Vet Science & Environments
- Jennifer Warburton, Research Consultant, Melbourne School of Graduate Research



Document control

Title	Research and Research Training Paper for Information Futures Commission
Short Title	R&RT paper for IFC
Project Ref	
Author	Barbara Rocchi, Carole Hinchcliff, Appy Laspagis, Melanie Lazarow, Deb Vickers, Jennifer Warburton
Status	Working
Version	V2
Version Date	07/05/08
Origination Date	21/04/08
Change History	* BW placed in template for JE