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Aims and Scope

IFLA Journal is an international journal publishing peer reviewed articles on library and information services and the social, political and economic issues that impact access to information through libraries. The Journal publishes research, case studies and essays that reflect the broad spectrum of the profession internationally. To submit an article to IFLA Journal please visit: <http://ifl.sagepub.com>

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Forty Years On

Stephen Parker

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To mark the 40th anniversary of IFLA Journal, we begin this issue with ‘A brief history of the IFLA Journal’, by Jerry W. Mansfield, Chair, IFLA Journal Editorial Committee.

This is followed by the text of the Lyon Declaration on Access to Information and Development, launched at the IFLA World Library and Information Congress in Lyon, France, 15–22 August 2014 and already signed by more than 125 organizations at the time of writing. The Declaration calls upon United Nations Member States to make an international commitment through the post-2015 development agenda to ensure that everyone has access to, and is able to understand, use and share the information that is necessary to promote sustainable development and democratic societies. Organizations who share the vision expressed in the Declaration are invited to sign the Declaration between May 2014 and August 2015.

The next item, also from the Lyon conference, is the Presidential Address to the IFLA General Assembly in Lyon by IFLA President Sinikka Sipilä.

The eight articles in this issue cover a wide spectrum of topics of interest to IFLA and its members.

We begin with ‘London pride in context: Treasures and the library treasures volume in Britain today’, by Karen Attar of the University of London. The author points out that, although the World Wide Web provides a cheap, quick and easy way for libraries to publicize their most treasured holdings, the ‘treasures’ volume, showcasing rare, beautiful, or significant items, is proliferating in 21st century Britain. Based on the author’s experience of selecting 60 items for the 2012 treasures volume, *Senate House Library, University of London*, the paper describes the rationale behind the choices and looks at other UK libraries’ treasures volumes and web displays to generalize about libraries’ presentations of themselves. It notes an emphasis on unique, distinctive, and relevant items and institutional identity, and interprets the modern treasures volume as a political document to

justify libraries’ existence by highlighting their distinguishing features.

A completely different topic is dealt with in the next paper, by Md. Shiful Islam of the University of Dhaka, Susumu Kunifuji of the Japan Advanced Institute of Science and Technology (JAIST), Motoki Miura of the Kyushu Institute of Technology and Tes-sai Hayama of the Kanazawa Institute of Technology. In ‘How library and information science academic administrators perceive e-learning in LIS schools: A qualitative analysis’, the authors examine what library and information science (LIS) academic administrators around the world see as the merits and demerits of using e-learning in their educational programmes, what types of constraints they face and how they overcome them. The respondents proposed a long-range plan for e-learning growth and the establishment of consortia across universities to overcome constraints on using e-learning in LIS education.

We remain in academia with the next paper, ‘The experience of Korean academic librarianship: A phenomenological study’, by Kaetrena Davis Kendrick of the University of South Carolina Lancaster. The paper reports on a study conducted to understand the personal experiences of Korean academic librarians working in South Korea. The results add personal context to quantitative studies about such issues as career choice, LIS education and career readiness, relationships with faculty and students, and the development of professional librarianship and academic libraries in South Korea. The phenomenological method enhances comparative librarianship literature by highlighting the universality and nuances of academic librarianship practice on a global scale.

Still in the world of academic libraries, but on a different continent, the next paper discusses ‘Information literacy in Zanzibar universities: Current situation and the way forward’. In this paper, Abbas Mohamed Omar and Haji Ali Haji of Zanzibar University and Khamis Hamad Mwitumbe of the University College of Education Zanzibar examine the

current situation and future of information literacy programs in Zanzibar universities by looking at information literacy awareness, the extent of information literacy provision and the role of university libraries in promoting it. A survey of university library staff, deans and directors of schools/ faculties, heads of departments and undergraduate students revealed that, while a certain degree of information literacy awareness exists among library and academic staff, the promotion of information literacy and associated skills are still in their infancy in Zanzibar universities. Inadequate numbers of qualified information literacy specialists, lack of background in teaching information literacy and lack of cooperation between librarians and faculty members were identified as the sources of the problems.

Moving to another part of the world, and one which has rarely, if ever, been treated in any detail in these pages, the paper, 'Micronesian libraries and archives: A review of the literature', by Christopher R.R. Todd of Northern Marianas College, aims to synthesize the limited professional literature on Micronesian libraries into one concise resource. Though rapidly modernizing, libraries in this region face distinct challenges in terms of library training, adequate funding, limited access to current information resources, and low Internet access rates. The author identifies three major needs in the region: expanded LIS education; increased awareness and inclusion of island modes of communication in library and archival services; and better opportunities for academic publication and research through the establishment of an open access journal of Micronesian library and information science.

The next paper, 'The development of library and information science in China (1840–2009)', by Yao Zhang of the University of South Carolina, provides an overview of the development of Chinese libraries and library and information science (LIS) in China from 1840 to 2009. In each of four historical periods: 1840–1897, 1898–1948, 1949–1977, and 1978–2009, the author discusses three themes: the social, economic, scientific and political context; the development of libraries and information institutions; and the LIS profession and education. The study reviews the significant library development efforts of people from different classes, and across several generations, taking into consideration the historical background, including the change of regimes, crises resulting from foreign invasion, and social progress.

We return to the subject of information literacy in the next paper, 'Information evaluation and the individual's cognitive state: some insights from a study

of British teenaged users', by Andrew K. Shenton, an independent researcher, Alison J. Pickard of Northumbria University, and Andrew Johnson of Northumberland, Tyne and Wear NHS Trust. On the basis of their cognitive states, the paper explores the inclinations of a group of young people in England with regard to evaluating Web-based information. The results of a survey present a mixed picture in terms of the probable tendencies of young people to evaluate information, suggesting that they may be inclined to accept much of what they see without challenging it.

With the final paper in this issue we end, appropriately enough, on an international note. In 'Library adoption of knowledge management using Web 2.0: A new paradigm for libraries', Md. Anwarul Islam and Mitsuru Ikeda of the Japan Advanced Institute of Science and Technology (JAIST) and Naresh Kumar Agarwal of Simmons College report on a survey of librarians in 35 countries which aimed to investigate the awareness and comfort of librarians with Web 2.0, their perceptions of the usefulness of using Web 2.0 for knowledge management, the readiness of their libraries to adopt Web 2.0 for knowledge management, and the ways in which these affect the adoption by libraries of knowledge management using Web 2.0. The results show that, while most respondents were comfortable with Web 2.0 and perceived it to be highly useful for knowledge management, they were not entirely sure if their libraries were ready to adopt it for knowledge management.

Goodbye and Hello!

This is the last issue of IFLA Journal to be edited by Stephen Parker, who retires from the position at the end of 2014 after editing the journal since 2001. The Editor would like to thank all past and present members of the Editorial Committee, IFLA officers and staff, and, not least, all readers of the journal, for their support and encouragement during the last 14 years. He extends a warm welcome to the new Editor, Steve W Witt, who will occupy the editorial chair from 1 January 2015 onwards.

As incoming editor, Mr. Witt looks forward to working closely with the Editorial Committee and IFLA to continue to promote the growth of IFLA Journal. He plans to partner with colleagues in IFLA to publish special issues that reflect emerging trends in librarianship while working with officers to encourage wider research collaboration throughout the organization.



A brief history of the IFLA Journal

Jerry W. Mansfield

IFLA Journal Editorial Committee

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This year, 2014, is the 40th anniversary of the *IFLA Journal*. The publication was launched in March 1975 as the successor to *IFLA News* as a “means of communication between members of the library profession” and with the hope “that in its articles and reports a more positive image of the contribution librarians are making to our changing society will be presented to a wider audience.”¹

For the first few years the *IFLA Journal* was jointly edited by an Editorial Committee consisting of 8–9 people, including Mrs. A. Bredsdorff (Copenhagen), M.E. Gill (Bridgetown), Mrs. S. Honoré (Paris), W. Kehr (Freiburg), Mrs. R.K. Molz (New York), I. Papp (Budapest), and R.L. Collinson (London), secretary. One additional member was W.R.H. Koops, Librarian of the Bibliotheek der Rijksuniversiteit in Groningen, The Netherlands and IFLA Publications Officer, who became the first editor with volume 7, no. 4 (1981) – a position he held until the completion of volume 15 in 1989. He was followed by longtime editor Carol Henry who first served as the secretary to the Editorial Committee from volume 6, no. 3 (1980), then for the period beginning with volume 16, no. 1 (1990) until November 2000 she served as the editor. Mr. Stephen Parker joined her at that time as acting editor, and was named editor in August 2001. He will serve through to the end of volume 40 in December 2014. Mr. Steve Witt, University of Illinois (USA), was appointed editor-designate effective August 1, 2014 and will assume full editorship with volume 41 in January 2015.

The *IFLA Journal* was published by Verlag Dokumentation in Munich until 1978 when K.G. Saur, also in Munich, assumed the publishing role. Beginning with volume 31 (2005), Sage Publications of London became the publisher and continues to be the publisher today.

The publication began as a quarterly but for the period from 1977 to 1982, six issues were published per year with issue 5/6 usually a combined issue. This continued until 2003 when the journal reverted

back to a quarterly publication. Beginning with volume 19 (1993), the table of contents and English abstracts only were available electronically. Commencing with volume 24 (1998), the entire contents – table of contents, abstracts, full-text articles and IFLA Section News was electronically accessible. Today the *IFLA Journal* is commercially indexed by numerous commercial sources including ABI/INFORM, Compendex, Information Science and Technology Abstracts, Library Literature and Information Science, Scopus, and Sociological Abstracts, to name a few.

On the occasion of the 50th anniversary of the founding of IFLA, W.R.H. Koops and J. Weider edited a special publication, *IFLA's first fifty years: Achievement and challenge in international librarianship*. IFLA Publication No. 10, 1977. Issue number 3 of the *IFLA Journal* in 1977 was also a commemorative special issue entitled, ‘IFLA and contemporary library problems.’ On an interesting historical note, in 1977, on the 50th anniversary of IFLA, the Publications Committee wrote that “the Journal does not want to be a further international professional journal, it does not strive to publish scientific articles, it does not seek to give information on the situation and progress of Librarianship in some countries. This journal wants to become the chronicler of IFLA’s life, acuity, and achievements and to give possibly an impulse to it.”² It is interesting to note that what the Journal did not want to cover was not adhered to for very long.

Throughout the 1970s and 1980s, international exchange and lending were often the topics of published articles. Similarly, anything new and promising for the profession was tried and written about, such as library automation using Fortran, Cobol, and a host of other now archaic computer programs. Beginning with volume 2, no. 2 (1976), the new column, ‘An Idea for You?’ was created to highlight news items on very special or original national library services or library gadgets which were ‘different’ and might

be of interest to colleagues worldwide. This column fizzled out after just two issues but during that time ideas for a Dutch centralized service for the reviewing and ordering of gramophone records, a library public-ity program, and user instruction were shared.

During the last 40 years more than 2,700 articles have been published by the *IFLA Journal*. Three of these articles stand out as having been downloaded more than 2,000 times each. These are: Derek Laws' December 2011 article, 'As for the Future, Your task Is Not to Foresee It, But to Enable It' with more than 2,900 downloads; Cletus Kuuni-faa's 'Access to Information Legislation as a Means to Achieve Transparency in Ghanaian Governance: Lessons from the Jamaican Experience' that appeared in June 2012 and has had more than 2,700 downloads; and the December 2006 article by Jong-Ae Kim, 'Measuring the Impact of Knowledge Management' with more than 2,100 downloads. Additionally, two articles stand out for having been cited by other authors. These are the 1996 article by Michael Koenig, 'Intellectual Capital and Knowledge Management' and Devadason and Lingam's 1997 article, 'A Methodology for the Identification of Information Needs of Users', with 15 and 13 cites respectively as of July 2014.

Today the Editorial Committee consists of nine members and the editor, who serves in an *ex officio* capacity. The Editorial Committee is appointed by and reports to the IFLA Professional Committee. Its duties include providing advice to the Professional Committee on matters relating to the editorial direction of the *IFLA Journal*, it serves as the initial pool of reviewers for submitted manuscripts, comments on and monitors the quality of submissions and proposes measures for improvement. The Editorial Committee also may identify themes for inclusion in the journal in areas of IFLA's advocacy work, the professional agenda, and topical issues in practice. The Journal also publishes original research, case studies, and essays that reflect the broad spectrum of the profession internationally. Detailed information for preparing and submitting a manuscript is available on the IFLA website (IFLA.org) under the Publications tab.

In 2014, nine external reviewers were added to supplement the work of the Editorial Committee and to constitute an expanded pool of qualified and diverse reviewers. The Governing Board and the Professional Committee also approved a policy change submitted by the Editorial Committee in the summer of 2014 related to the publishing of IFLA conference papers. Beginning with volume 41 (2015), IFLA conference papers will not be

considered for publication unless they are submitted for Editorial Committee review with a new title and at least 30 percent new content. In recent years the proportion of conference papers published each year has fallen from a high of 69 percent in 2006-2007 to 30 percent in 2013-2014. Since IFLA calendar and news items are on the IFLA website, in 2013 these items were removed from the journal to allow for more submitted journal content and to increase the scholarly nature of the *IFLA Journal*.

The international character of the journal is reflected in the fact that papers were received from 81 countries during the most recent 5-year period while membership of the Editorial Committee also reflected the geographical spread of IFLA's work with members drawn from a total of 18 countries over the same period. The *IFLA Journal* is still one of the very few international journals that publishes multi-lingual abstracts. In 2012, abstracts in Arabic and Chinese were added to those in English, French, German, Russian, and Spanish meaning that papers published in the journal are now abstracted in all official languages of IFLA.

The *IFLA Journal* has remained abreast of current technology and trends in publishing and advertising. Social media marketing and branding, begun in 2005, have steadily increased. The introduction of Twitter, Wikipedia and Facebook in 2011 attracted a new and younger readership audience. Access to the journal via mobile devices has grown especially after a new mobile optimized site was launched in 2011. By making the *IFLA Journal* more user-friendly on mobile devices, readers are able to negotiate the site more easily on iPhones, Android phones, and other mobile devices. The mobile site is presently accessible at m.ifl.safepub.com.

Notes

- 1 H. Liebaers. Foreword to the First Issue. *IFLA Journal* 1(1):2 (1975).
- 2 Editorial. *IFLA Journal* v. 3, n. 3, p. 231, 1977.

Author biography

Jerry W. Mansfield is an Information Research Specialist in the Congressional Research Service of the Library of Congress in Washington, D.C. and chair of the *IFLA Journal* Editorial Committee. He has been an elected member of IFLA since 1993 and has held the positions of chair, secretary, and treasurer multiple times in the Government Information and Official Publications Section and that of the Government Libraries Section, of which he is currently a member. He has served in academic libraries, as director of a foreign government medical library, as the

U.S. head of the National Centre for Financial and Economic Information Library of the Ministry of Finance and National Economy in Saudi Arabia, at the US Postal Service Corporate Library, and in the Congressional Research Service since 2000. His areas of research responsibility include Congress as an institution, legislative

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Lyon Declaration on Access to Information and Development

The Lyon Declaration of August 2014 was written in English. The wording of the English version shall prevail.

The United Nations is negotiating a new development agenda to succeed the Millennium Development Goals. The agenda will guide all countries on approaches to improving people's lives, and outline a new set of goals to be reached during the period 2016–2030.

We, the undersigned, believe that increasing access to information and knowledge across society, assisted by the availability of information and communications technologies (ICTs), supports sustainable development and improves people's lives.

We therefore call upon the Member States of the United Nations to make an international commitment to use the post-2015 development agenda to ensure that everyone has access to, and is able to understand, use and share the information that is necessary to promote sustainable development and democratic societies.

Principles

Sustainable development seeks to ensure the long-term socio-economic prosperity and well-being of people everywhere. The ability of governments, parliamentarians, local authorities, local communities, civil society, the private sector and individuals to make informed decisions is essential to achieving it.

In this context, a right to information would be transformational. Access to information supports development by empowering people, especially marginalised people and those living in poverty, to:

- Exercise their civil, political, economic, social and cultural rights.
- Be economically active, productive and innovative.
- Learn and apply new skills.
- Enrich cultural identity and expression.
- Take part in decision-making and participate in an active and engaged civil society.
- Create community-based solutions to development challenges.

- Ensure accountability, transparency, good governance, participation and empowerment.
- Measure progress on public and private commitments on sustainable development.

Declaration

In accordance with the findings of the High Level Panel on the Post-2015 Development Agenda, the post-2015 consultations of the United Nations Development Programme (UNDP) and the Open Working Group Focus Area Report, all of which identified the crucial role of access to information in supporting development, we, the undersigned, recognise that:

1. Poverty is multidimensional, and progress in eradicating poverty is linked to sustainable development across a variety of areas.
2. Sustainable development must take place in a human-rights based framework, where:
 - a. Inequality is reduced by the empowerment, education and inclusion of marginalized groups, including women, indigenous peoples, minorities, migrants, refugees, persons with disabilities, older persons, children and youth.
 - b. Gender equality, along with full social, economic and political engagement, can be significantly enhanced by empowering women and girls through equitable access to education.
 - c. Dignity and autonomy can be strengthened by ensuring access to employment and decent jobs for all.
 - d. Equitable access to information, freedom of expression, freedom of association and assembly, and privacy are promoted, protected and respected as being central to an individual's independence.
 - e. Public participation of all is ensured to allow them to take ownership of change needed to improve their lives.

3. Increased access to information and knowledge, underpinned by universal literacy, is an essential pillar of sustainable development. Greater availability of quality information and data and the involvement of communities in its creation will provide a fuller, more transparent allocation of resources.
4. Information intermediaries such as libraries, archives, civil society organisations (CSOs), community leaders and the media have the skills and resources to help governments, institutions and individuals communicate, organize, structure and understand data that is critical to development. They can do this by:
 - a. Providing information on basic rights and entitlements, public services, environment, health, education, work opportunities, and public expenditure that supports local communities and people to guide their own development.
 - b. Identifying and focusing attention on relevant and pressing needs and problems within a population.
 - c. Connecting stakeholders across regional, cultural and other barriers to facilitate communication and the exchange of development solutions that could be scaled for greater impact.
 - d. Preserving and ensuring ongoing access to cultural heritage, government records and information by the public, through the stewardship of national libraries and archives and other public heritage institutions.
 - e. Providing public forums and space for wider civil society participation and engagement in decision-making.
 - f. Offering training and skills to help people access and understand the information and services most helpful to them.
5. Improved ICT infrastructure can be used to expand communications, speed up the delivery of services and provide access to crucial information particularly in remote communities. Libraries and other information intermediaries can use ICTs to bridge the gap between national policy and local implementation to ensure that the benefits of development reach all communities.
6. We, the undersigned, therefore call on Member States of the United Nations to acknowledge that access to information, and the skills to use it effectively, are required for sustainable development, and ensure that this is recognised in the post-2015 development agenda by:
 - a. Acknowledging the public's right to access information and data, while respecting the right to individual privacy.
 - b. Recognising the important role of local authorities, information intermediaries and infrastructure such as ICTs and an open Internet as a means of implementation.
 - c. Adopting policy, standards and legislation to ensure the continued funding, integrity, preservation and provision of information by governments, and access by people.
 - d. Developing targets and indicators that enable measurement of the impact of access to information and data and reporting on progress during each year of the goals in a Development and Access to Information (DA2I) report.

Note

At the time of writing, 245 organizations had signed the Declaration. For complete and current list, see <http://www.lyondeclaration.org/>



Presidential Address by IFLA President Sinikka Sipilä to the IFLA World Library and Information Congress, 80th IFLA General Conference and Assembly, 2014, Lyon, France

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Dear IFLA Members, distinguished guests, colleagues, ladies and gentlemen!

I wish you have had a great conference with many new experiences and contacts and plenty of ideas to take home from the presentations and discussions here during the week. Before we part I would like to share with you some of the achievements during my first year as IFLA President and expectations I have for the second year.

I am happy to say that the IFLA activities during the past year exceeded my expectations in many ways. I have seen many developments taking place around my theme that also promotes IFLA's Strategic Plan and Key Initiatives.

When I took office as IFLA President I was looking forward to promote the progress of the important issues on the IFLA Strategic Plan and Key Initiatives throughout the world and continue to promote libraries in societies. Doing IFLA's work is very inspiring and that inspiration motivates me in my daily work for IFLA. This is especially important as I see a very strong bond between libraries and development which is the core of my Presidential theme building stronger libraries for stronger societies.

As the IFLA President, I will continue to support library development in areas of policy through our key initiatives, to empower libraries around the world. IFLA continues to grow and it is evolving and responding to the needs and challenges of libraries and society.

IFLA has over 1400 members in nearly 150 countries around the world. I have been asked if it is even possible for such a diverse organization to speak with one voice. I have answered yes, it is possible. As I mentioned in my Opening Address, the Article 19 of the United Nations Universal Declaration of the

Human Rights, concerning the freedom of opinion and expression, is the leading principle of IFLA and the library and information sector. This is the principle that unites all the libraries, whether a small rural library or a big research library in a developing, transitioning or developed country. They all work for the same goal: to offer as wide access as possible to as much information and knowledge as possible to as many people as possible. This democratic ideal of freedom of access to information is one of the core pillars of strong libraries.

As you may be aware, the current IFLA Key initiatives will come to an end in 2014 and the IFLA GB started the discussion process for the new Key Initiatives for 2015–2016 here in Lyon, defining the priorities of IFLA activities for the next two years.

To help embrace the concept of Digital Democracy and how libraries can encourage citizens participation in the digital age, speakers were invited to the president's session during the conference to further deliberate on my presidential theme, 'Strong Libraries, Strong Societies', building on the IFLA Trend Report.

It is my firm belief that what makes a society strong is its ability to include all of its members in decision-making processes. The President's session, looked at the fundamental conditions necessary for citizen participation in decision making online, including media and information literacy competencies. Availability of local and relevant content, and awareness of how the emerging participatory digital society works in practice remained our focus.

With more governments embracing the idea of citizen driven policy initiatives, panellists examined how these ideas work in practice and assessed the extent to which law makers will take up the challenge of citizen participation in the years to come.

The IFLA Trend Report has been discussed all around the world and created positive impact on the role played by libraries in many countries. The Report has been used for instance in drafting library policies and strategies to position libraries in the evolving digital information environment. Although there has been this positive development, IFLA would continue to rely on your input to further develop the Trend Report for the next cycle. So please share with us the outcomes of your discussions on the Trend Report Platform. Send us summaries, videos, photos and blogs where the five key trends have been discussed in your libraries, in your library associations or at your conferences in your respective countries. We discuss the Trend Report also at my second President's Meeting in Istanbul, Turkey on 37–5 June 2015.

Access to information has always been a key priority for IFLA. With a shift from a print environment to a digital one, IFLA increased its advocacy on reforming the copyright laws that shape the ways in which libraries are able to provide their patrons with digital content. Indeed, this has been a focus of IFLA's advocacy efforts at the World Intellectual Property Organisation (WIPO) for nearly a decade.

We need to appreciate all efforts and positive gains so far, including all lessons learned from the two meetings with WIPO Standing Committee on Copyright & Related Rights (SCCR) this year. Although the meeting did not end conclusively, there has been positive feedback from many WIPO Member states and the WIPO Secretariat during the first meeting. The future work plan of the committee (and fate of libraries and archives) must be decided at the WIPO General Assembly in September 2014. Through IFLA, Libraries are asking for a further extension of the work plan for another two years, and equal time to be given to libraries and archives, alongside broadcasting, on the agenda.

Meanwhile, IFLA will continue to increase its efforts on influencing copyright reform at the national level through its new capacity building grant from Global Libraries. It is for US\$4.9 million over 4 years to "support policy change at national, regional and international levels by building capacity in library networks to advocate for policy frameworks that support public access to digital information in the public libraries."

Advocacy for the Lyon Declaration that was launched on Monday at this conference is our next big effort. The Lyon Declaration on Access to

Information and Development was developed to provide IFLA with an advocacy document that can be used to positively influence the content of the United Nations post-2015 development agenda. More than 200 institutions and associations from within and beyond the library have signed pre-launch, already making the Lyon Declaration the most successful campaign of its type that IFLA has ever undertaken. Following the launch, IFLA will continue to seek signatories over the next year to increase the profile of the Declaration, and more importantly, the advocacy message that access to information be recognised in the United Nations post-2015 development framework. We need your support in taking it to your library communities and especially to your governments and representatives in the UN. It is very useful if you contact the officials and decision makers in your countries and explain the importance of access to information for development. Because, without information there is no development.

One of the key areas that IFLA is focusing on is our cultural heritage. We need to protect our heritage especially in times of disaster and conflict, as we have seen in Timbuktu, Haiti, Indonesia, to name just a few.

Over the coming year, IFLA will launch the IFLA Risk Register for Documentary Cultural Heritage for documentary cultural heritage collections and information resources in areas at risk from natural disasters or conflict; with the broader aim of being compatible with the Blue Shield (ICBS) and UNESCO activities in this area.

IFLA will approach institutions with questionnaires about their documentary cultural heritage and create a secure database with the data gathered. The database will only be accessible for the Blue Shield partners and UNESCO.

Dear IFLA members, dear colleagues, these are just a few highlights of IFLA that will help in building stronger libraries and with their support stronger societies where equality, democracy, social and economic development and general well-being would be possible to reach by as many citizens of the world as possible.

I am looking forward to work with you for the next year, to see these plans come true, to advance the library and information service sector in our societies so that they meet the needs and challenges of library users in an evolving information environment.

I thank you. Merci.



London pride in context: Treasures and the library treasures volume in Britain today

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Abstract

The treasures volume, showcasing rare, beautiful, or significant items, is proliferating in 21st century Britain. This is despite the alternative of the World Wide Web to provide a cheaper, quicker, easier way for libraries to publicize their choicest holdings. But what is the treasures volume really doing, and how indicative are its contents of our most valuable items? This article is based upon the author's experience of selecting 60 items for the 2012 treasures volume, *Senate House Library, University of London*. It describes the rationale behind the choices and contextualizes within the genre in the United Kingdom more widely, looking at other treasures volumes and at web displays, to generalize about libraries' presentations of themselves. It notes emphasis on unique, distinctive, and relevant items and on institutional identity, and interprets the modern treasures volume as a political document to justify libraries' existence by highlighting their distinguishing features.

Keywords

library treasures, treasures volumes, rare books, Britain

Introduction

In 'Library Brought to Book' (Brown 2010a), Iain Brown reflects upon the choice of just 162 highlights for the National Library of Scotland's treasures volume *Rax Me That Buik* (Brown 2010b). The dilemma will be familiar to all editors of the burgeoning genre of library treasures volumes. While the broad principles of selection can normally be derived from the content, the precise reasoning is less apparent. What in the 21st century defines a library treasure? The modern treasures volume is not just a showcase for the holding library, but a financial venture; how does that influence selection? How much of a dichotomy is there between what we feature in treasures volumes as permanent printed markers of what we value and what we mount on our websites, or between the contents of treasures volumes and the items we preserve with the greatest care as our most precious items?

This article is based upon the author's experience of selecting 60 books and manuscripts, with 60 contributors, for the treasures volume *Senate House Library, University of London* (Pressler and Attar 2012). It describes the rationale behind the choices

and contextualizes within the genre in the United Kingdom more widely to generalize about how libraries currently choose to present themselves.

Perceptions of treasures

Institutions can overwork the noun 'treasure' to equate with 'feature' or 'highlight', as in 'treasure of the week/month' (offered by several libraries and archives), or in such declarations as: "Treasures of the Ruskin Library focuses on some of the most interesting, as well as representative items in the collection" (Ruskin Library 2006), whereby 'interesting' and 'representative' replace 'valuable'. Notionally, a 'treasure' remains, subjectively, anything valued and preserved as precious (*Oxford English Dictionary*, meaning 2), with the nature of the judge, whether an

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individual or wider society, left open, and much depending on collection context. “A treasure, like beauty, is in the eye of the beholder”, Pat Donlon noted in her preface to *Treasures from the National Library of Ireland* (Kissane 1994, vii), and: “. . . what about all those things that our mothers dubbed ‘rubbish’ and swept quickly into bins? It is truly a case of one man’s dust being another’s treasure” (Kissane 1994, viii). Fifteen years later Oxford’s Bodleian Library underlined this openness by introducing a debate entitled ‘What is a treasure?’ to accompany a treasures exhibition (Bodleian Library, 2011).

Our treasures must perforce depend on our holdings. Our ‘special’ books are therefore to a large extent those which private collectors of the past have valued and preserved, and which have subsequently entered libraries through the antiquarian trade or by donation. Thus institutions perpetuate earlier personal values, as suggested by the fact that C.H. Hartshorne’s title *The Book Rarities in the University of Cambridge* echoes the title of Thomas Dibdin’s 1811 catalogue of Earl Spencer’s private library (some 90 years later to become institutional in Manchester), *Book Rarities . . . Chiefly in the Collection of the Right Honourable George John Earl Spencer*.

These values have remained constant. Identifying private collecting values of the late 19th century, Tony West (2001:38) specified early Bibles, *editiones principes* of classics, early Italian literature, and Caxtons and other early English literature. These resemble both the values summarized by Thomas Dibdin in 1809 and those noted by the bookseller John Carter in 1970: Dibdin listed large paper copies (equated with limited editions), illustrated (i.e. extra-illustrated) copies, unique copies, copies printed upon vellum, first editions (and specifically Shakespeare’s First Folio and Greek and Latin classics), true editions (i.e. editions with variants), unopened copies, and to an extent black letter, and further noted books printed by Caxton and Wynkyn de Worde and Aldines (Dibdin 2007:56–74), while Carter wrote: “The collecting of early printed books, fine bindings and the masterpieces of typography and illustration of all periods continued strongly during the last quarter of the nineteenth century, *as it continues today*” (Carter 1970:21; my italics). In this 180-year time-span rarity, beauty, and cultural significance recur: three features picked out again in an institutional context in a German library treasures volume of 1989, in answer to the question ‘Was ist kostbar?’ (‘What is precious?’ Gattermann 1989:7). Speaking for institutions in 1882, the librarian Henry Bradshaw further identified local antiquities as treasures (Thornton 1966:133), adding a dimension of geographical identity.

The exhibition ‘Printing and the Mind of Man’ (PMM) held at the British Museum and at Earls Court London in 1963 and “arranged to illustrate the history of western civilization and the means of the multiplication of literary texts since the XV century” (Printing and the Mind of Man 1963:2), helped to define a canon of treasures in terms of intellectually transforming works, an approach reinforced popularly by Melvyn Bragg’s more selective *Twelve Books that Changed the World* (Bragg 2006). The obvious culturally transformative or otherwise noteworthy works, such as Newton’s *Principia*, the 1482 *editio princeps* of Euclid, the Nuremberg Chronicle, Shakespeare’s First Folio, the 1611 King James Bible, and the first edition of Copernicus’s *De revolutionibus*, are often not beautiful, and are not in fact rare: recent censuses record 232 known copies of the First Folio (Rasmussen and West 2012), 174 of the King James Bible (Brake and Hellstern 2011),¹ and 227 of Copernicus (Gingerich 2002), while the Incunabula Short Title Catalogue (ISTC) lists 324 copies of the 1482 Euclid and some 1,160 of the Nuremberg Chronicle, excluding fragments. Advancing in time, an ongoing census (Darwin Online 2009) had in 2009 located 275 copies of Charles Darwin’s *On the Origin of the Species* (1859), in both ‘Printing and the Mind of Man’ and Bragg. A single element – rare, beautiful, or significant – may suffice to label an item a ‘treasure’.

The treasures volume: an overview

The volume *Senate House Library, University of London* does not exist in a vacuum. David McKitterick recently traced the concept of the library treasures volume, excluding glossy coffee-table associations, back at least to S.W. Kershaw’s *Art Treasures of Lambeth Library* (1873) (McKitterick 2013: 25), and if one excludes illustrations one might go back still further, to C.H. Hartshorne’s *The Book Rarities in the University of Cambridge* (1829). Various types of treasures volumes appeared in the 20th century: the collection-based volume such as that for Cambridge University Library, examining groups of books rather than single items (Fox 1998); exhibition catalogues with a few illustrations, mostly black and white, such as Elspeth Yeo and John Morris’s *Treasures of the National Library of Scotland* (1979) and Paul Quarrie’s *Treasures of Eton College Library* (1990); and books very like the 21st century treasures volume, such as *Wertvolle Handschriften und Einbände aus der ehemaligen Oettingen-Wallersteinschen Bibliothek* (Frankenberger and Rupp 1987) and *Kostbarkeiten aus der Universitätsbibliothek Düsseldorf* (Gattermann 1989). Leading up to the modern treasures volume in

Britain, with its emphasis on visual attractiveness, are such volumes as *The Brotherton Collection* (Brotherton Library 1986), albeit with black-and-white illustrations, and David Rogers's *The Bodleian Library and its Treasures* (1991), albeit with the treasures woven into a consecutive narrative.

What marks the 21st century is not the published record of treasures as such, but the proliferation of treasures volumes at a time when, as never before, the World Wide Web provides a cheap and easy alternative option for promotion, and the publication in rapid succession of lavish colour-illustration-driven volumes for libraries of various types and sizes. Volumes for the Wellcome Library for the History of Medicine and Durham University Library (Gameson) appeared in 2007. There followed the British Library in 2008 (Howard); St Andrews University Library (Reid 2010), the National Library of Scotland (Brown 2010b) and Lambeth Palace Library (Palmer and Brown) in 2010; the City of London, with particular focus on archives (Pearson 2011) and Aberdeen University Library (Beavan, Davidson and Stevenson) in 2011; Eton College Library (restricted to items acquired since 1965) in 2012 (Meredith 2012); and the library of a stately home in the possession of the National Trust, Anglesey Abbey, in 2013 (Purcell, Hale and Pearson). The trend is continuing, with volumes in preparation, for example, for Merton College in Oxford and St John's College in Cambridge, Dr Williams's Library in London (a research library for English Protestant nonconformity), Edinburgh University Library, the John Rylands Library at the University of Manchester, and (featuring exclusively incunabula) Cambridge University Library. It is pronounced enough for Alison Cullingford, in *The Special Collections Handbook*, to have mentioned independent treasures volumes as a marketing method (Cullingford 2011:128), whereas eight years earlier Daniel Traister, discussing the promotion of special collections in the United States, referred to treasures volumes purely as exhibition catalogues (Traister 2003:90). The fashion appears to be primarily British and Irish, although one volume comes from as far away as New Zealand (Jones and Matthews 2011). Reviewing the 2007 treasures volume for Durham University Library, David Pearson questioned the purpose and audience of such volumes in an Internet era, concluding that they raise the profile and make a statement about the worth of an institution (Pearson 2009:138); and in 2013 Karen Attar reflected on the benefits for Senate House Library of its treasures volume (considerations overlapping, although not identical, with purpose: Attar 2013). The items chosen may reveal particular agendas, as explored below.

Unique and distinctive

A strong desire when selecting items for the Senate House Library treasures volume was individuality; to avoid substantially duplicating other libraries' treasures volumes or holdings and thereby inviting invidious comparison. This wish to emphasize unique and distinctive items led to the selection of a high proportion of manuscripts and archives (20 items, one-third of the whole). Manuscripts ranged from obviously significant items, such as a Piers Plowman manuscript from about 1400 and an unfinished holograph canto of Byron's *Don Juan*, to the homely: a letter to ghost-hunter Harry Price from Sir Arthur Conan Doyle, on the basis that Doyle is a household name; a letter from classical historian and London Vice-Chancellor George Grote's fiancée Harriet about her engagement, for romantic appeal. The drive for distinctiveness also led to a high proportion of incunabula (five of Senate House Library's 134 incunabula, accounting for 8.3 percent of the volume), because most incunabula are rare as editions, and there is considerable scope for copy-specific variation. One of the five chosen, Granollachs's *Lunarium ab anno 1491 ad annum 1550* (ISTC ig00340700), was the only complete copy known, while the others had copy-specific interest, ranging from a fine penwork initial to contemporary annotations or binding.

Some items selected were rare at the time of printing. The second issue of John Sibthorp's *Flora Graeca* appeared in 40 copies only, and Franz Michael Regenfuss's *Auserlesene Schnecken* (1758) is one of a small number of copies to have been printed for King Frederick V of Denmark and Norway to present to others, as shown by the fact that the frontispiece portrait is red, not blue. These were sumptuous publications. Two other books were rare because their form was intended to be temporary: Emilie Bertrin's *Secretair der Liebe, oder Galante Hieroglyphen* (1808), with designs meant to be cut out for use as valentines, and the original parts of the Mayhew brothers' *The Greatest Plague in Life, or, The Adventures of a Lady in Search of a Good Servant* (1847), intended ultimately to be bound. Other books chosen for rarity were common when printed and became rare because they were ephemeral, or because they were not the kind of material to be valued by the academic libraries that are the major preservers of early books. This lent a demotic flavour to the volume, with school textbooks from the 18th and 19th centuries, a badly printed early 19th century chapbook, broadsides, a 17th century duodecimo shorthand manual, what looked like a very average Victorian children's book, and 17th century pamphlets. The most common of

these items, Thomas Peedle and Thomas Cozbie's *Falacie of the Great Water-Drinker Discovered* (1650) is recorded on ESTC in five copies (three in Great Britain and two in the United States of America); several are unique.

Wanting rarity also meant a certain focus on translations, because translations into languages other than English are not the standard fare of libraries in English-language countries. The third Italian translation of Fénelon's *Aventures de Télémaque* (the only recorded copy in any English-speaking country) came into this category, as did the French translation of George Grote's acclaimed *History of Greece*. Included in the drive for rarity was the choice of items distinguished by copy-specific features: *Theatrum Geographiae Veteris, Duobus Tomis Distinctum* by Petrus Bertius (1618–19), with hand-coloured maps and a royal Stuart binding; Elizabeth Barrett Browning's *Aurora Leigh* annotated by Thomas Carlyle; Walter de la Mare's *Peacock Pie* marked up by its author for a new edition.

The publishing context

To an extent the choice was influenced by what had already been given prominence elsewhere, excepting censuses on account of their specialized audiences. Senate House Library's copy of the first edition of Copernicus's *De revolutionibus* (1543) would have been an obvious 'treasures' candidate for the annotations of its immediate former owner, the mathematician Augustus De Morgan (1806–1871), as explained by De Morgan on the title page: "Aug. 4, 1864. I have this day entered all the corrections required by the Congregation of the Index (1620) so that any Roman Xtian may read the book with a good conscience". Yet precisely for that reason it featured in David Pearson's *Books as History* (Pearson 2008:131), intended for the general reader who might conceivably also read the treasures volume, and was therefore excluded; the same applies to Oscar Wilde's *Salomé*, inscribed to his friend Aubrey Beardsley as "the only artist, who, besides myself, knows what the dance of the seven veils is, and can see that invisible dance" (Pearson 2008:137).

Especially relevantly, the volume *Senate House Library, University of London* appeared just a few months after a booklet *Director's Choice* (Pressler 2012), featuring 30 books and manuscripts at Senate House Library. The remit of the two publications differed: *Director's Choice* was intended as a personal selection of items that appealed, with quirkiness as its major criterion. Yet several items which might otherwise have appeared in *Senate House Library*,

University of London had already been chosen for *Director's Choice*: William Caxton's translation and printing of Jacobus de Cessolis's *Game of Chess* ([1483]), popular for its woodcuts and therefore often requested for display purposes; a copy of Karl Marx's *Das Kapital* (1872) inscribed by Marx to fellow-emigré Peter Imandt; the first edition of Terry Pratchett's *The Carpet People*, one of fewer than six copies in which Pratchett hand-coloured and signed the full-page illustrations. Repetition between the two was eschewed repetition between books in case it led to the supposition that the Library had nothing else worth highlighting.

Institutional identity

Several items were selected for their particular significance for Senate House Library as a corporate body or for the University of London more widely, to convey a sense of institutional identity (cf. Bradshaw). Items from the University Archive in particular fell into this category: the University's first charter, from 1836; an early degree certificate for a woman, because the University of London was the first in England to grant women full degrees; a photograph album capturing the construction of the Senate House in Bloomsbury, because the central University's move from obscurity in South Kensington to a contentious and iconic building in Bloomsbury was a milestone in its history; an early examination register, because the University of London was unusual in functioning for the first 70-odd years of its existence purely as an examining body, and because it pioneered long-distance degrees. A German National Socialist register of British firms and individuals of interest for when it had conquered Britain also entered the treasures volume on the basis of institutional identity, as a gift after the Second World War from the Ministry of Information, which had co-existed with the Library in Senate House during the war. Printed books reinforced the emphasis on identity: a landmark of early music printing as part of a small collection given in connection with the University's decision to establish a music faculty; the Gregynog Aesop above any other attractive private press book (such as an obviously valuable Kelmscott Press publication) because a set of specially bound Gregynog Press books had been donated by Professor Sir David Hughes Parry, a University Vice-Chancellor and the founder and Director of its Institute of Advanced Legal Studies.

One item contributed to the Library's sense of its purpose within the University. *Ihesus. The Floure of the Commaundementes of God*, an exposition of the Ten Commandments printed by Wynkyn de Worde in 1521, is a defective copy. The University was,

however, eager to purchase it in 1951 for the sake of the printer, at the time holding no other work by any of England's first three major printers (William Caxton, Richard Pynson and Wynkyn de Worde). Archival documentation about the relationship between the University Library and the libraries of the University's colleges made clear that the purchase of early printed books should distinguish the University Library from the college libraries.

Some items appeared in the treasures volume for their position within the named special collections which constitute a significant part of Senate House Library's special collections overall. Sir Edwin Durning-Lawrence's copy of Shakespeare's *Second Folio* (STC 22274b) is less fine than the two issues of the *Second Folio* which later entered Senate House Library as part of Sir Louis Sterling's collection (STC 22274 and 22274a), and was in contemporary financial terms less valuable than Durning-Lawrence's copies of the other early *Folios*; but Durning-Lawrence, a prominent Baconian, valued it for what he argued was its proof that Sir Francis Bacon wrote the plays of Shakespeare. As such it is a cornerstone of Senate House Library's earliest literary special collection. Dionysius Lardner's *Railway Economy* (1850) is intrinsically neither rare nor financially valuable: a search on AbeBooks on 28 January 2014 yielded a copy for GBP5.87. But one of the Senate House Library copies contains an inscription by the economist Herbert Somerton Foxwell (1849–1936) explaining how he bought the volume, at the suggestion of fellow-economist William Stanley Jevons, and stating: "This purchase was the first step in the formation of my economic collection" – the alleged foundation of an internationally renowned collection which transformed the University Library upon its receipt in 1903 and remains the Library's largest and most important special collection.

Finally, it was important to represent each major named special collection and donation, to exemplify the increase and diversity of 'treasures'. Politically, it was particularly desired where possible to incorporate items from recent benefactions to indicate appreciation to living donors.

Pragmatics

Pragmatic considerations stamped choice in several ways. Each treasure needed to inspire interesting and readable text. This consideration joined lack of rarity to militate against the choice of 'Printing and the Mind of Man' books, as to say anything new and arresting about them is difficult unless copy-specific features allow discussion from a fresh angle.

Matching contributors and books was another consideration: the selection could only feature books about which somebody appropriate was prepared to write. The initial list of treasures included a rare 44-page quarto trigonometrical pamphlet, *Canon sinuum ad decempedam accomodatus, pro trigonometria geodaetarum* (Würzburg, 1625), enhanced by a note by De Morgan. But expecting an academic to read an unknown Latin work in order to write 400 words for a publication which would not benefit the contributor was unreasonable, and the item had to be discarded from the list. It was further wished to include Josiah Tucker's *The Elements of Commerce* (Bristol, 1755), although the ESTC records seven copies, because University of London Library Committee minutes record an amusing story of a reader objecting when permission to borrow the book was withheld; however, approaches to academics to write about the book were unsuccessful, and a scarce late-Victorian periodical was substituted. Occasionally the choice of a contributor preceded that of objects, and items had to be found to match individuals' interests.

Furthermore, choice depends on knowledge of library collections, gleaned from staff awareness and from documentation. At the University of London, Library Committee minutes recorded the acquisition of collections. Until about 1940 the records included full descriptions of collections, which frequently highlighted the most important items within them; in later years, records were merely brief acknowledgements. Thus items from collections acquired in the first half of the 20th century were easier to access than later ones. Rarity could be, and in the final instance was, established on an item-by-item basis by looking up records on union catalogues, especially COPAC. But it was most easily ascertained by running reports on the library management system to establish what catalogue records had not been derived from external databases, and this swayed the pool of candidates towards books which had been catalogued online. Serendipity in the form of a user query had pointed us several years earlier to the rarity of one of the treasures, Claude Hollyband's *Italian Schoole-Maister* of 1597, the Senate House Library copy of which preserves gathering D in an early, 'scurrilous' state. Another form of serendipity was responsible for the inclusion of an exposition of the Decalogue attributed to Sebastian de Granadilla (1607). It earned its place for apparent uniqueness and as the sole representative of the Eliot-Phelips Collection, a collection of early Spanish works described when it entered public ownership as unrivalled outside Spain (Anonymous 1928:13). Only some months after the publication of the treasures volume, when

Table 1. Summary of contents of some British treasures volumes.

	Bodleian	Durham	British Library	St Andrews	NLS	Lambeth Palace	SHL
% of manuscript / archival / artefactual material	57.5	52	65	62	49	67	33
% of unique items / one of 2 known copies (printed items)	28.5	12.5	9.5	5	0	10	27
% with stated copy-specific relevance	53.5	46	7	47	13	65	(20)

seeking an early cookery book to show a distinguished visitor who enjoyed cookery, was the first recipe book printed in Catalan, Roberto de Nola's *Libro de cozina* (Toledo, 1525) found to be in the same collection. It was only a little less rare than the Granadilla (copies at Harvard and Spain's Biblioteca Nacional) and was more attractive, with a modern but decorative and relevant binding: a significant factor, given that a 21st century treasures volume is a coffee-table volume relying on skilful layout, and in turn on illustration. Had the distinguished visitor come a year earlier, de Nola, not Granadilla, would have featured in the treasures volume.

For appeal value, choice was based partly on what visitors and students were known to like: Victorian part-publication, with its advertisements for such unrelated goods as ironware and wigs; 15th century woodcuts. Research value and hence library relevance also played a role. The book acknowledged the new value placed through recent academic interest in the history of reading on books containing any kind of annotation or clear provenance, renowned or not, most obviously by including a 19th century Bible which, albeit very ordinary as printed, was personalized by a devout reader's copious annotations.

The broader context

Driving forces appear to differ to an extent between treasures volumes. That for Eton College celebrates the continuation of valuable acquisitions, apparently with regard to actual and potential donors, whereas the volume for Anglesey Abbey gives the impression of having been written to persuade its owner, the National Trust, that the Trust's libraries are an asset rather than a mere adjunct to furniture, pictures, and fine gardens. The volumes for the National Library of Scotland and the London Guildhall have a clear eye to the tourist industry and use books and archives to illustrate Scottishness and the history of London respectively; the former of these may be contrasted with Yeo and Morris (1979), which, while also leaning towards books important for the history and culture of Scotland, was designed to show the riches of the National Library of Scotland more widely. The

British Library (financed directly by the taxpayer) presumably wished to popularize the library and demonstrate general value in its volume, which stands out for having been written by a journalist, not a curator, as was a later book describing the British Library's holdings in chapter form (Leapman 2012).

The factors which influenced Senate House Library's choice are present in the other British 21st century treasures volumes. Most comparable with the Senate House Library volume as *catalogues raisonnés* of single works or groups of works across entire institutional library holdings are the volumes for the Universities of Durham and St Andrews (both 50 items), the British Library (120 items), the National Library of Scotland (162 items)² and Lambeth Palace (60 items).

Table 1 summarizes the contents of treasures volumes comparable with that for Senate House Library. It includes Rogers's volume on the Bodleian Library (66 items) to expand the sample. High as the proportion of manuscript and archive material seemed to be for the Senate House Library volume in terms of its holdings, at 33 percent of the total it was low compared with other libraries, where such material ranged from 49 percent of the total selection (79 items, including photographs) for the National Library of Scotland to 62 percent of the total selection (31 items) for St Andrews. Among the printed items, uniqueness or extreme rarity of the item irrespective of copy-specific features was a stated consideration in all volumes except that for the National Library of Scotland, accounting for between 5 (St Andrews) and 28.5 percent (the Bodleian Library) of any given volume (cf. 27 percent of the Senate House Library volume); the figures rise if one recalculates to include items stated as 'rare' without further precision, or to include slightly less rare items (for example, one of three copies known (no. 28 of the St Andrews selection); one of 12 copies printed (Anna Atkins's *British Algae*; no. 13 of the British Library selection). Adding manuscript/archival and printed items together for rarity yields percentages of between 49 percent for the National Library of Scotland and 86 percent for the Bodleian Library, with a mean of 67 percent (St Andrews) and an average of 68 percent.

To determine the amount of copy-specific relevance bestowed by provenance, extra-illustration, annotations or bindings can be surprisingly difficult. In Senate House Library's case, provenance contributed to most choices, but the significance of that provenance can be subjective. The association value of a presentation copy of a book from Charles Lamb to Robert Southey, or a book owned by an English monarch, is clear; but how much do manuscript notes by Herbert Somerton Foxwell or even Augustus de Morgan contribute to value that would be meaningful outside the institution housing their libraries? In a collection with one or more major bases, such as Bishop Cosin's books at Durham, John Selden's in the Bodleian Library, and the Royal Library within the British Library, how much significance do those provenances bestow in the particular context of a treasures volume? To the extent that copy-specific relevance was emphasized in descriptions, it ranged from three of the 42 printed items (7 percent) for the British Library to 13 of the 20 printed items (65 percent) for Lambeth Palace. There was a clear distinction between the emphasis given to copy-specific features by the two national libraries with treasures books (7 percent and 13 percent) and the others, with a jump from the National Library of Scotland's 13 percent to the University of Durham's 46 percent.

The Scottishness pervading *Rax Me That Buik* has already been mentioned. All libraries except Lambeth Palace (the smallest, most focussed collection) selected items which contributed to their particular institutional or local identity. The British Library's identity emerged mainly through demonstration of the sheer range of holdings, from ancient manuscripts to a philatelic stamp, but was also apparent from the choice of an admissions register including Karl Marx. The Bodleian Library's choice included its 1604 benefaction register, the first book received under its 1610 deposit agreement with the Stationers' Company, and a rare cancel leaf of its 1620 printed catalogue. St Andrews featured a matrix of an early 15th century university seal and library receipt books and borrowing registers; Durham's, 'The Undergraduate', a portfolio of sketches by a Durham graduate. The sense of identity extended beyond the institution to local authorship, provenance, or relevance for the local region, such as a manuscript of Thomas Wright's *New Theory of the Earth* because he was a Durham man; the first large-scale map of County Durham; Oxford fly-sheets from Oxford antiquary Anthony Wood's library; and, for St Andrews, photographs of several Scottish subjects, such as a gas mask fitting at St Andrews in 1939. The desire to foster a sense of identity is not exclusively British: straying

a little further, *Treasures from the National Library of Ireland* has a strong Irish flavour, including for example Gaelic manuscripts, prints and drawings of Irish subjects, Irish newspapers, proclamations and ballads of Irish interest, photographs by Irish photographers or with Irish themes, and Ireland's first telephone directory (Kissane 1994).

These Irish examples indicate not merely Irishness, but the same demotic or ephemeral element that is present in the Senate House Library volume with its choice of school textbooks and broadsides. Selection of ephemera characterizes primarily the treasures volumes for the national libraries, with several newspapers, a handbill, a poster, and children's books in the British Library, and with a poster, a manuscript trade card, diplomas, and a peep-show among other items in the National Library of Scotland.

The volumes for Lambeth Palace and the British Library both include the Gutenberg Bible (Palmer and Brown 2010:64; Howard 2008:20), and Durham includes an unexceptional copy of the Nuremberg Chronicle (Gameson 2007:84). Generally, however, culturally iconic items must earn their place in treasures volumes for additional copy-specific reasons, such as copies of the Nuremberg Chronicle owned by Henry VIII at Lambeth Palace (Palmer and Brown 2010:82) and by Robert Fabyan, a 15th century London alderman and chronicler who annotated his copy, at the London Guildhall (Pearson 2011:28). The British Library is an exception, including among the printed items Dante's *Inferno*, Johnson's Dictionary, the Kelmscott Chaucer, and Shakespeare's First Folio – possibly reflecting the selecting journalist's predilection for familiarity and sense for public taste.

Beyond the treasures volume: Internet perceptions

As an alternative means of promotion, web displays are an obvious comparator with treasures volumes. Some criteria remain constant across media. As initial presentation on the World Wide Web is likely to be by a picture gallery; visual impact is an evident if unstated prerequisite in the web context as it is for modern treasures volumes. Rarity continues to be emphasized, such that in deliberately limited selections of treasures, the British Library (no date), the Bodleian Library (2011) and Leeds University Library (2014), the three major British libraries found with 'treasures galleries', all have a high proportion of manuscripts. Leeds, in the web context, defines treasures by "their value, rarity or distinctiveness", and the British Library ([2013]) selected for smartphone and tablet apps "over 100 unique or rare items".

The emphasis on culturally significant landmarks redolent of ‘Printing and the Mind of Man’ is far more pronounced on the Internet than in print. Thus the British Library (2014) advertises its display of treasures in the John Ritblatt Gallery with the words: “Discover some of the world’s most exciting and significant books” and Manchester Central Library highlights, alongside early printing, fine, illustrated books and private press books in the nature of Dibdin, “early copies of ground-breaking books in science, medicine, politics and philosophy” and “important books on natural history” (Manchester City Council 2014). Small as they are, treasures displays on the websites of the British Library, the Bodleian Library and the University of Leeds are quite similar in their choice of printed books. The three printed items chosen by the British Library are the Gutenberg Bible, Tyndale’s New Testament, and Shakespeare’s First Folio, all also in its treasures book. Leeds similarly features a First Folio and the Bodleian Library the Gutenberg Bible, both absent from the respective treasures volumes. Both Leeds and Oxford select a Caxton. Other works are landmarks in their areas: for Leeds, Newton’s *Principia* and Vesalius; for Oxford, Tycho Brahe, Hooke’s *Micrographia*, Audubon’s *Birds of America* and Sibthorp’s *Flora Graeca*. (Leeds also chose a unique German pamphlet from 1520.) A smaller library, that of Christ’s College Cambridge, displays 27 items, of which 13, nearly half, are manuscripts. Of its 14 printed items, 10 are clearly landmarks, such as the 1482 Euclid, the Nuremberg Chronicle, the Erasmus New Testament, the first edition of Copernicus, and Darwin’s *Origin of the Species* (Christ’s College Cambridge 2013). While the body of available evidence is too small to be definitive, a pattern begins to emerge that the emphasis with which we present ourselves differs according to the medium of presentation.

Conclusion

The modern treasures volume functions within research and technological trends. As digitization and e-publications widen availability, libraries justify their positions and status by their distinguishing features, and special collections are seen to be distinguishing features *par excellence*. The point has been so widely made (if also challenged) as to be described in the United States as “conventional wisdom” (Waters 2009, 3), and is reflected in the United Kingdom by a “unique and distinctive” strategic strand of the activity of Research Libraries UK (2014:4, for example). Rare books and manuscripts, items with post-production copy-specific features which make

for further rarity, and items instilling or reinforcing corporate identity, are a natural part of ‘unique and distinctive’. By highlighting these, treasures volumes provide evidence for such justification.

Political concern for differential features dovetails neatly with value placed on items by research interest, as the history of reading flourishes as an academic discipline, and ‘book history’, taking into account the history of books after they leave the printer, has largely supplanted ‘historical bibliography’. The addition of research value to distinctiveness is important in an environment in which special collections must be aligned with institutional missions and priorities, as noted in a survey of special collection in the British Isles (Dooley et al. 2013:5; see also Cullingford 2014). Here, too, at least in academic contexts, treasures volumes provide documentation to shore up the justification for existence. What we regard as precious becomes what ensures our survival, without always being financially valuable (the ephemera).

In some ways the modern treasures volume remains a conservative product. The Georgian appreciation of beauty is relevant for the new coffee-table context, as it is for the World Wide Web, while the rarity which marked early 19th century taste maps easily on to ‘unique and distinctive’. But ultimately the financially valuable, beautiful and intellectually significant treasures displayed on the transient World Wide Web are more conservative. These latter embody (and, with the dialogue implicit in social media, may increasingly be moulded by) a public sense of the nature of a treasure, and probably reflect the contents of our safes and disaster plans. Modern treasures volumes strike a new line in reflecting academic and professional values and attempting to influence the reader’s values in line with what we possess. These standalone publications try to show not just what we have, but who we are and why we matter to our stakeholders. As unchangeable text, they codify treasures. Yet if we are judged as to what we consider our library treasures to be on the basis of treasures volumes, the evidence will be misleading. The agenda, some of the practical reasons behind the choice of items featured in treasures volumes, and the necessary dictates of the genre to tell a story and show a picture, sway choice too greatly for them to be reliable indicators. Ultimately our treasures volumes, like the items they feature, will become historical artefacts.³

Notes

- 1 A conservative figure, as Brake’s book excludes numerous copies recorded on ESTC (<http://estc.bl.uk>).

- 2 There are 165 entries, but one item appears twice and one three times.
- 3 I should like to thank David McKitterick, Mike Mertens and David Pearson for reading and commenting on a draft of this article. All remaining deficiencies are my own.

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How library and information science academic administrators perceive e-learning in LIS schools: A qualitative analysis

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Abstract

How library and information science (LIS) academic administrators perceive e-learning (EL) in LIS schools is examined, particularly what LIS academic administrators see as the merits and demerits of using EL, what types of constraints they face in using EL to provide LIS education, and how they overcome the constraints of EL systems in LIS schools. An exploratory online email interview was conducted, using a link to a questionnaire, with 85 LIS academic administrators around the world in order to gather perceptions and experiences regarding EL usage in LIS schools. The respondents reported some major merits, demerits, and some constraints, which they face in using EL systems in their schools. They also proposed the design of a long-range plan for EL growth, the implementation of interactive and online office hours, and the establishment of consortia across universities to overcome constraints on EL usage in LIS education. The respondents had neither highly-positive nor highly-negative opinions about EL usage in LIS schools.

Keywords

e-learning, LIS education

Background

Higher educational institutions have a long tradition of using information and communication technologies (ICTs). As early as in the 1970s, institutions had started to embrace electronic media such as audio tapes or radio broadcasting as an alternative means for the distribution of learning materials (Schroeder, Minocha and Schneidert, 2010). What are now called e-learning (EL) technologies have had also a huge impact on the world economy, corporate management, and globalization trends, and they bear a tremendous potential to reshape the nature of study

environments of both conventional and distance-teaching institutions everywhere (Guri-Rosenblit, 2005). For many years, library and information science (LIS) schools throughout the globe have also been embracing and adopting the technologies to provide education. E-learning in LIS programs

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commenced at the beginning of the 1990s (Islam, Kunifuji, Hayama and Miura, 2011a). However, online learning is now about 17 years old (Andrews and Haythornthwaite, 2007, see also, Haythornwaite et al., 2007: 2). The University of Illinois offered courses via the Internet in the 1990s, the Emporia State University was the first to reach beyond their state boundaries with intensive onsite courses in the 1980s, and the University of Arizona was the first to partner with a cable provider to deliver courses nationally in the 1990s (Barron, 2002). In addition, the LIS schools of Australia, New Zealand, Canada, Japan, the UK, Germany, Taiwan, Thailand, India, and South Africa are also adopting and embracing EL to provide education.

Research motivation and questions

E-learning has become a widely-accepted and frequently-used mode of learning in higher education and company training in recent years (Cloete, 2001; Hodgson, 2002; McPherson, 2005; Nishino, Toya, Mizuno, Aoki and Fukumura, 2009). But the meaning and perceptions of EL are still somewhat vague to many LIS professionals, as well as to academics. Furthermore, there is a lack of studies about the perceptions of LIS academic administrators (e.g., LIS school deans, head or chairperson of the department, program directors, coordinators, conveners, unit leaders, etc.) with regard to EL concepts, usage, and applications in LIS schools. To explore the perceptions of LIS academic administrators regarding their understanding of EL concepts, merits, demerits, and constraints on use of EL in LIS schools, the following research questions were addressed:

- How do LIS academic administrators perceive the EL concept?
- What do they feel regarding merits and demerits of using EL in LIS schools?
- What types of constraints do LIS academic administrators face in using EL to provide LIS education?
- How do they overcome the constraints of EL systems in LIS schools?

Literature review

Existing research has focused on EL concepts, its advantages and drawbacks, its impact on LIS education and practices, and the perceptions of instructors, students, staff, and employers about EL. It is helpful to draw a conceptual map of existing works related to EL research on the following three major streams: EL concepts and its advantages and drawbacks; EL

and its impact on LIS education and practices; and perceptions of instructors, students, staff, and employers about EL.

EL concepts, and its advantages and drawbacks

In the existing literature, EL has been defined as “learning via the Internet” (Zhang and Nunamaker, 2003: 207), as “collaborative learning” (Bleimann, 2004: 193), “anytime-anywhere learning” (Mccombs and Varkili, 2005: 1587), “inside and outside classroom learning” (Aldhafeeri, Almulla and Alraqas, 2006: 713), “computer-assisted instruction” or “Internet-based” learning (Ruiz, Mintzer and Leipzig, 2006: 207), “ICT-facilitated and supported learning” (Chowdhury and Chowdhury, 2006: 75), “self-directed learning” (Manjunath and Patil, 2006: 3), “web-based interactive learning” (Hamada, 2007: 877), “innovative approach to distance-learning” (Sacchanand, 2008: 1), “ubiquitous learning” (Lau and Tsui, 2009: 324), “a broad range of online learning” (Zimnas, Kleftouris and Valkanos, 2009: 811), an “innovative way of learning to most people” (Zhang, Wen, Li, Fu and Cui, 2010: 1428), and “any type of learning delivered electronically” (Assareh and Bidokht, 2011: 791), among other terms. “The term ‘e-learning’ has also been used to encompass computer-based learning, computer-based training, technology-enhanced learning, technology-mediated learning, web-based education, or virtual learning environment” (Wang, Vogel and Ran, 2011: 261).

The advent of the World Wide Web and sophisticated ICTs has made it easier to implement an EL curriculum, and has facilitated student learning without the constraints of time and distance, giving students more opportunities to control their learning (Wang, 2007: 171). Thus, “from playing a supplementary role, it has now permeated core teaching and learning in universities” (McGill and Hobbes, 2008: 191). Over the past few years, digital media have enriched teaching and learning experiences, and have become commonplace with university students and lecturers. Within only a few years, the use of EL—that is, the application of digital media for teaching and learning (Liaw, Huang and Chen, 2007)—has increased rapidly (Paechter and Maier, 2010), due to benefits such as lower costs, EL enhanced business responsiveness, consistent or customized messages, more timely and dependable content, and learning that is always available (Rosenberg, 2001: 30).

While “the potential advantages of EL make it appealing, there are also a number of potential drawbacks, and successful implementation requires significant planning and effort” (Welsh, Wanberg, Brown

and Simmering, 2003: 249). Their study found four barriers to EL. The first was the learners, whose problems can be subdivided into financial, motivation, assessment of progress, isolation from peers, inadequate skills and experience in distance learning, affection, and social domain. The second was the teachers, with subdivision barriers such as lack of adequate knowledge about the e-teaching environment and difficulty assessing progress. Third, the curriculum barrier includes ambiguity, quality resource, the teaching process, and evaluation. Fourth, the school barrier includes organizational and structural factors (Assareh and Bidokht, 2011: 791).

EL and its impact in LIS fields

E-learning has brought great changes in all aspects of continuing education for LIS staff, and provided opportunities for renewing and expanding professional knowledge (Bhabal, 2008: 631; Song, 2005: 44). In particular, the teaching and learning that is emerging from the changing landscape of ICTs includes an active and motivated teaching corps that has worked to derive new approaches to teaching (Haythornthwaite et al., 2007: 1). Students enter online communities, learning through collaborative and peer-to-peer interaction with classmates distributed across states, countries, and time zones. Faculty enter new instructional environments, often coupled with new pedagogical approaches that stress learner-based responsibility and computer-supported collaborative learning (Koschmann, 1996; Koschmann, Hall and Miyake, 2002). Administrators oversee the introduction and management of new computer-based educational environments, negotiating with faculty and technology staff for a place in online education markets (Kazmer and Haythornthwaite, 2005: 7). E-learning has also brought many changes in library and information services, in particular, the areas of library automation, information storage and retrieval, office automation, and resources-sharing networks (Manjunath and Patil 2006: 8). In addition, some university libraries have organized web resources in a manner that suits the students' needs in relation to specific activities (Chowdhury and Chowdhury, 2006: 77).

Perceptions of instructors, students, staff, and employer about EL

The participants of one survey reported that web-based distance learning was a satisfying experience, perceived as equivalent or in many regards superior to comparable face-to-face classroom experiences. The results of the survey affirmed the

role and value of distance courses for students in master's degree programs (Carey and Gregory, 2002). Similarly, Kuntoro and Al-Hawamdeh (2003) found that the majority of respondents had a positive feeling about the future of EL in Indonesia, and they foresaw that EL would continue to exist in the country, although the adoption and development process might take longer compared to other countries. Another study found that frustrations with technology, lack of face-to-face interaction, and perceived missed professional opportunities, while troublesome, were not enough to dissuade a majority of respondents from earning a degree in a distance-education environment (Wilde and Epperson, 2006: 246). However, existing research has focused to only a limited extent on the perceptions of LIS academic administrators with regard to EL concepts, merits, demerits, and constraints on the use of EL in LIS programs worldwide.

Research method

An exploratory online email interview was used to gather experiences and data from LIS academic administrators. Meho (2006) described the advantages of using e-mail interviewing in qualitative research as a method that can provide quick, convenient, inexpensive, and high-quality data.

Research setting

In a previous study, the authors selected 370 LIS programs, based on their programs at the graduate level and web access to their homepages in the English language, to explore EL offerings worldwide. The findings revealed that 85 of the LIS programs (around 23 percent) offered EL to deliver educational services (Islam, et al. 2011a). To understand more about the state-of-art of EL in LIS schools, it was decided to explore the perceptions of LIS academic administrators in those 85 LIS schools (see Appendix-A).

Data collection

A questionnaire was created that included both open and close-ended questions in four major sections. An online link to the questionnaire was made to facilitate collecting data automatically and easily from the respondents. An email was sent to 85 LIS academic administrators that included a brief description of the research project, an invitation to participate, and the link to the questionnaire. The email was sent during the July and August 31, 2010, and sent again, either as a reminder to non-respondents, or to substitute respondents, until October 31, 2010. Forty-four responses were

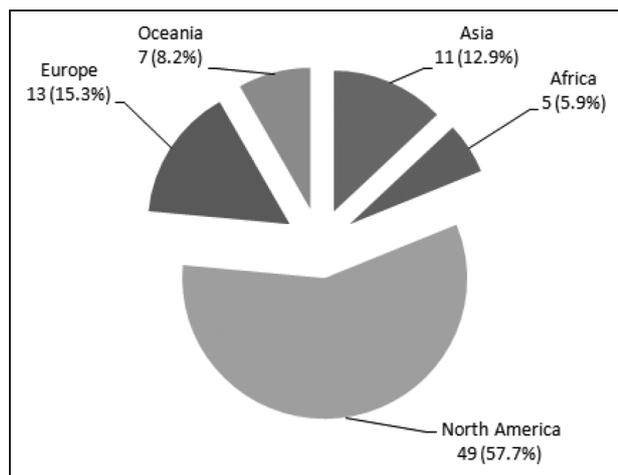


Figure 1. Geographic distribution of the sample LIS academic administrators.

received, giving a response rate of 52 percent; the number of valid responses was 43 (51 percent).

The geographic distribution of the 85 LIS academic administrators included 49 (58 percent) in North America, 13 (15 percent) in Europe, 11 (13 percent) in Asia, seven (8 percent) in Oceania, and five (6 percent) in Africa, as shown in Figure 1.

Data analysis

A wealth of data and information was accumulated through the email questionnaire, not all of which is reported here. The closed-ended questions in particular were analyzed in a different paper using SPSS 16.0 for descriptive analysis (Islam, Kunifuji, Hayama and Miura, 2011b). Presented here is data from a series of open-ended questions that probed LIS academic administrators' perceptions and experiences of EL in LIS schools. Responses to the open-ended questions were coded to identify common ideas and patterns that were observed repeatedly in the responses.

Findings

The analysis attempted to ensure that the themes emerging from the data were not unique to individual programs, but were common to multiple respondents; however, not all findings could be applied to all programs and not all demerits and constraints applied universally.

Academic and/or administrative positions of the respondents

Responses were received from five categories of respondent, in accordance with their academic and/or administrative position, as shown in Table 1.

The highest percentage of responses (35 percent) came from the director category, followed by head (33 percent), dean (14 percent), and coordinator (12 percent). Three responses (7 percent) came from professors who did not hold administrative positions but to whom the survey had been forwarded by the original addressee because they had experience with EL or as an administrator of the school or department.

Geographic distribution of the respondents

The respondents were categorized in five broad geographical regions: Asia, Africa, North America, Europe, and Oceania (see Figure 2).

Figure 2 indicates that the highest number of responses, 26 (59 percent), came from North America, including 25 from the United States and one from Canada. The second highest number of responses, 6 (14 percent), were received from Asia, including four from India, and one each from Taiwan and Thailand. This was followed by five (11 percent) from Europe, including three from the UK and one each from Estonia and Germany. Five (11 percent) were from Oceania, including four from Australia and one from New Zealand; and two (5 percent) were from Africa, with one each from South Africa and Kenya.

Understanding of the EL concept

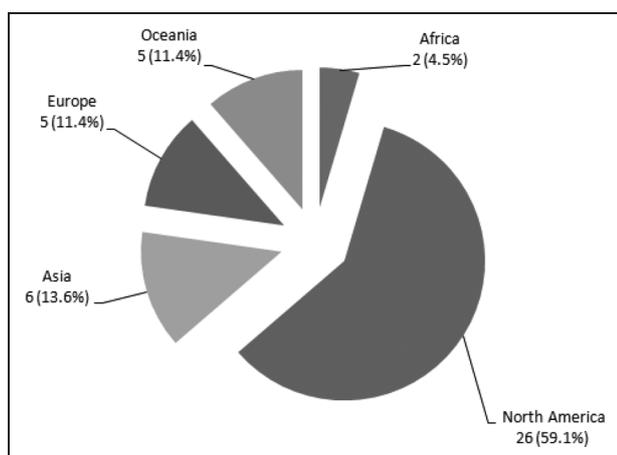
Based on the understanding of the respondents, their notions of EL were categorized in the following ways.

EL as a process of learning and teaching using ICTs. One program coordinator reported that EL is "the process of learning using information and communication technologies. The companion to EL is e-teaching, and usually the term 'e-learning' relates to both. EL can be accomplished using asynchronous modes. EL can be pure (i.e., the sole means of learning) or hybrid, that is, in combination with face-to-face teaching and learning." Similarly, one LIS school head stated that EL is "the process of teaching and learning using information and communication technologies or electronic media distributed over the Internet." Another said that the use of ICTs to provide "anyone-anytime any-where learning" is called e-learning, while a dean stated that EL is the application of ICTs by teachers and/or students to both learning and teaching (knowledge creation, storage and transfer).

EL as a technology or tool to support learning. One LIS school director reported that EL is the use of technology to provide educational services to students unable to come to campus. Another said: "E-learning is learning that is facilitated by the use of digital tools

Table 1. Academic and/or administrative positions of the LIS academic administrators.

Academic and/or administrative position	Frequency	Percent	Cumulative Percent
Associate Professor/Professor and Head/Acting Head/ Chairman/Chair/Chairperson (head)	14	32.6	32.6
Professor and Dean/Associate Dean/Assistant Dean (dean)	06	14.0	46.6
Professor and Director/Associate Director/Assistant Director/Acting Director (director)	15	34.8	81.4
Professor and Program Coordinator/Convener/Unit Leaders (coordinator)	05	11.6	93.0
Professor and presently no administrative position (professor)	03	7.0	100
Total	N = 43	100	

**Figure 2.** Geographic distribution of the respondents.

and content. It can include whole courses or programs delivered over the Internet, or it can involve components within otherwise face-to-face courses that use digital tools and content.”

EL as electronic media, means, or events of learning. One associate dean stated that “EL is the delivery of education and/or training through electronic means, and the range of interactions that occur as people use and engage with these materials, and, where appropriate, in communicative exchanges with instructors and fellow learners.” A director reported that “EL is the continuous assimilation of knowledge and skills by learners, stimulated by synchronous and asynchronous learning events, which are authored, delivered, engaged with, supported, and administered using web technologies.”

EL as a computer-based and networked digital environment for teaching and learning. One acting director argued that learning to use the Internet and computers can be defined as EL, while a dean reported that EL is learning that takes place via the Internet. EL is often

used interchangeably with online learning or web-based learning. Another LIS school head stated that:

“E-learning, as I understand it, is teaching and learning in the computer-based and networked digital environment which offers access to manifold knowledge resources, and where different forms and methods for knowledge construction can be used.”

Major merits of using EL systems in LIS schools

The merits of EL systems in LIS schools are categorized as follows, according to the responses:

EL systems enhance the speed, efficiency, and dynamism of information access and delivery. One LIS school director reported that, in an EL system, content can be delivered anywhere in the world immediately, as soon as it is developed and ready to use. It is a perception of some administrators that EL enables learners to learn three times faster, either by reducing learning time by three, or by increasing the effectiveness of learning by three. EL is always available anywhere, anytime. It works across geographic continents and time zones.

EL increases the diversity of educational opportunities and expands them for students. One director of an LIS school reported that EL expanded the geographic diversity of the student body, and better met the educational needs of working people, while an acting head reported that EL enabled his school to maintain the quality and diversity of curriculum against continuing decreases in funding.

Provide flexible schedules and programs tailored to the area of interest. There are many reasons why people turn to online learning communities (Haythornthwaite and Kazmer, 2001). One LIS school director stated that flexibility with respect to time, space, and instructor are essential and that EL is also very responsive to the needs of learners, while a dean stated that:

“Asynchronous interaction/learning, can be accessed anytime, anywhere, fits into students’ own schedules, encourages shy learners to participate and possibly to pay more individual attentions for students, conversely in synchronous learning, EL is more comfortable and natural in participation, and visual and immediate feedback to comments or questions is possible.”

EL enables students to gain technological knowledge and different types of skills. Online learning communities rely heavily on technology to support their members’ activities and to communicate with one another, and students must learn to use the Internet and new technology, and gain experience in distanced interaction, as well as learning the subject matter of the program (Haythornthwaite, Kazmer, Robins and Shoemaker, 2000; Kazmer, 2005). For example, one LIS director stated that digital content is essential for LIS students to grasp, and that LIS students need to be practiced users of digital technology, while one chairperson of an LIS department stated that EL enhanced search, communication and teamwork skills and increased the ability to manage time.

Some significant demerits of using EL systems in LIS schools

One LIS school director reported that EL required significant initial investments and there was no single world class end-to-end EL solution that dominated the world market. EL remains a supply-and-demand driven market, instead of needs-driven. The perceptions of LIS academic administrators regarding the demerits of using EL systems in their school are summarized under the following themes:

Disadvantages of synchronous and asynchronous interactions. One program coordinator remarked that in their school, one of the negative points of EL was that they taught synchronously, therefore overseas students may have had to attend class at very odd hours, such as 2:00 a.m. In addition, one dean perceived that in asynchronous mode, feedback on comments or questions was delayed. It was the perception of some administrators that learners from different geographical locations faced difficulties in scheduling, and some administrators reported that instructors faced the problem of managing the interaction process in large groups of students/learners.

Expensive and time-consuming to prepare EL resources and maintain the infrastructure. One LIS school director reported that it could be expensive and time-

consuming to prepare and deliver EL materials. Some administrators perceived that some students did better learning in groups, and it was hard to facilitate group work in an e-learning environment. An associate dean reported that there were significant up-front costs to get these types of courses up and running. There was also significant support costs required to maintain the technical infrastructure.

Poor pedagogical practices and over-reliance on tutor-prepared notes. One head of an LIS school reported that a significant demerit of EL is “poor pedagogical practice,” while another director said that:

“EL often leads to expectations that everything a student needs to know is available on the EL system, which leads to over-reliance on tutor-prepared ‘notes’ and an unwillingness to search comprehensively for relevant answers—students experience anxiety if there are no notes, and this can place a huge burden on lecturers to re-write the book for every lecture.”

Communication anxieties and faculty resistance. One head of an LIS department asserted that there was slight tension in the teaching staff between those who wished to adopt every new piece of technology, and those who felt that they were perhaps over-burdening students with different things that they might not, or could not, use. Furthermore, one LIS school director stated that faculty resistance to teaching online was one of the significant demerits of EL.

Constraints faced by LIS schools in using EL

The responses of LIS academics regarding the constraints they faced in using EL are analyzed below:

Time constraints. One program coordinator reported that the main constraint was time. EL takes more time than face-to-face teaching because instructors teach in multiple modes. In their core courses, they often have face-to-face classes for on-campus students, online classes for distance students, and a hybrid of some face-to-face and some online classes for students in a large city. It all takes time. Some administrators expressed the perception that sometimes the teacher would use a feature only once or twice a year, so forgot how to do it the next year, and it was time consuming to figure it out.

Constraints of technical support and technological infrastructure. One LIS professor reported that additional technical support personnel were needed to assist faculty with establishing and maintaining online components of courses, such as assistance with

courses being delivered through Skype. Responses received from the directors of two LIS schools were respectively “lack of IT experts” and “technical support services need improvement,” while a head of school stated that “technological infrastructural problems” were major constraints of EL.

Lack of formal training and technically-trained/appropriate staff. One departmental head reported that a lack of formal training for faculty members on EL tools and their applications and technology use, was one of the important constraints of EL, while a coordinator stated that developing and improving technical skills and additional competencies were one constraint on providing LIS education through EL. A program director stated that lack of technically-trained staff was a major constraint for EL.

Frustrations and discomfort with EL. It was a perception of some respondents that instructors find EL frustrating due to the lack of face-to-face contact; it was hard to get to know students other than as a name and photograph on a screen. Some administrators said that students were often frustrated in the same regard, and that there was student resistance to and discomfort with EL.

Recommendations of some suitable means to overcome the constraints of EL systems

The recommendations and suggestions received from the respondents are categorized under the following headings:

Preparatory training on ICTs for the teachers to equip them with technological skills. One acting director of an LIS program suggested that “preparatory training on ICTs may be arranged to get the new faculty member used to the EL tools and techniques.” A head of department suggested that the faculty of LIS schools should be more equipped with technological skills in order to be the best mentors for EL.

Financial and administrative support to design a long-range plan for EL growth. One associate dean stated that support and buy-in from the university administration, including financial investment in personnel and equipment, were essential. One professor suggested working collaboratively with the university administration to design a long-range plan for system-wide EL growth.

Emerging tools and motivational system for instructors to improve educational content. One professor reported that the only constraints were the availability of

new and emerging tools, and that his school did their best to secure these tools. An acting head recommended that a motivational system was needed to encourage teachers to use EL more actively, and to value their contribution in using new methods and forms in the teaching process. A chair of an LIS department recommended that improved educational content, such as animations, much better collaboration tools (wikis were seen as too cumbersome), good speech-to-text tools and so forth were essential for effective EL.

Interactive and online office hours, and quality control system. One director recommended real-time contact between students and faculty, and between students and students. Online office hours and dedicated phone time would help in this regard. A dean suggested that students or learners should be more interactive while they were in a synchronous environment. A director recommended a quality control system; quality incentives should be ensured and implemented more sincerely.

Consortia arrangement across universities and gathering experiences. One professor recommended that LIS schools should engage in partnerships within the university system, with consortia arrangements across universities to extend EL opportunities. A program coordinator suggested that LIS schools could overcome the constraints of EL systems by joining consortia like Web-based Information Science Education (WISE), while one program coordinator recommended that administrators in LIS schools read the literature and learn from others in order to see how it was done in other universities.

Discussion

Four research questions were examined. First, how do LIS academic administrators perceive EL concepts? This study found that the respondents understood EL concepts, including the ideas that EL is a process of learning and teaching, or a technology tool to support learning, or an electronic media, or means, or event of learning, or a computer-based and networked digital environment for teaching and learning. The second question asked what LIS academic administrators felt regarding the merits and demerits of using EL in LIS schools. This research demonstrates that the respondents considered the major merits of EL in LIS schools to be that EL enhances the speed, efficiency, continuity, and dynamism of information access and delivery; increases the diversity of educational opportunities for students; provides flexible

schedules and programs tailored to students' areas of interest; and enables students to gain technological knowledge, as well as different types of skills. The reported demerits of EL in LIS education are: the disadvantages of synchronous and asynchronous interactions; expensive and time-consuming preparation of EL resources and maintenance of infrastructure; poor pedagogical practices and over-reliance on tutor-prepared notes; communication anxieties; and faculty resistance.

The third question asked about the types of constraints LIS academic administrators faced in using EL to provide LIS education. The findings indicate that LIS academic administrators face both technical and organizational barriers to EL, which include time constraints, constraints of technical support and technological infrastructure, lack of formal training and technically-trained staff, and frustration and discomfort with EL.

The fourth question was, how do LIS schools overcome the constraints of EL systems? These results show that the respondents recommended that financial and administrative support should be provided for a long-range plan for EL growth; interactive online office hours and quality control systems should be

introduced; and consortium arrangements across universities should be established.

Conclusion

These findings offer benefits to both academics and practitioners. For academia, they show a comprehensive understanding of EL concepts, and the distinctive usages of EL in LIS education. The qualitative analysis of different merits, demerits, and constraints on EL usage in LIS education offers a complete picture of EL usage for academia, particularly for LIS schools. Therefore, the findings would be beneficial for all LIS schools for further enhancement of EL systems or adoption of EL systems. For practitioners (such as teaching faculties, administrators, etc.), these findings are offered as a set of suitable recommendations in order to overcome the constraints on the use of EL in LIS education. The findings confirm that the respondents held neither highly-positive nor highly-negative opinions about EL usage and applications in LIS schools. The respondents also reported both positive and negative aspects of EL, which could be considered in redesigning present EL systems.

Appendix-A

List of E-learning course offerings LIS schools

SL No.	University and Country	Faculty/College/School/ Department/Program	Contact Academic Administrators
1	Alagappa University, India	Department of library and Information Science	Professor and Head of the Department
2	Asian Institute of Technology, Thailand	School of Engineering and technology, Computer Science and Information Management Program	Chair Professor
3	Charles Stuart University, Australia	Faculty of Education, School of Information Studies	Professor and Head of School
4	City University London, UK	School of Informatics, Department of Information Science	Scheme Director, Information studies Scheme
5	Clarion University (of Pennsylvania),USA	College of education and Human Services,Department of Library Science	Professor and Department Chair
6	Curtin University of Technology, Australia	Department of Information Management	Professor and Postgraduate Coordinator
7	Dalhousie University, Canada	Faculty of Management, School of Information management	Associate Professor and Director
8	Dominican University, USA	Graduate school of Library and Information Science	Professor and Dean
9	Dr. Hari Singh Gour University, India	School of Arts, Education and Information Sciences, Department of Library and Information Science	Professor and Head of the Department
10	Drexel University, USA	College of Information Science and Technology, Information School	Professor and i school Program leader

(continued)

Appendix A (continued)

SL No.	University and Country	Faculty/College/School/ Department/Program	Contact Academic Administrators
11	Florida State University, USA	College of Communication and Information, School of Library and Information Studies	Coordinator of Online Learning Technologies
12	Indiana University, Bloomington and Indianapolis	School of library and Information Science	Associate Professor and Associate Dean Bloomington Campus
13	Indira Gandhi National Open University, India	Department of Library and Information Science	Professor and Head of the Department
14	International Islamic University Malaysia	Department of Library and Information Sciences	Associate Professor and Head of the Department
15	Kent State University, USA	School of Library and Information Science (SLIS)	Associate Professor and SLIS Interim Director
16	Kurukshetra University, India	Library and Information Science Program	Professor and Director of Directorate of Distance education
17	Liverpool John Moores University, UK	Department of Information and Library Management	Senior Lecturer and Program Leader for MA/MSC Information and Library Management Program
18	Long Island University, USA	College of Education and Information Science, Palmer School of Library and Information Science (PSLIS),	Director, PSLIS and Associate Dean, College of Education and Information Sciences
19	Louisiana State University, USA	School of Library and Information Science	Professor and Dean
20	Manchester Metropolitan University, UK	Department of Information and Communication	Principal Lecturer and Acting Head of the Department
21	McGill University, Canada	School of Information Studies	Associate Professor and Director
22	Moi University, Kenya	School of Information Sciences, The Department of Library, Records Management and Information Studies	Professor and Head of the Department
23	Monash University, Australia	Faculty of Information Technology, Graduate Diploma in Information and Knowledge Management Unit	Professor and Unit Leader
24	Nanyang Technological University, Singapore	WEE KIM WEE School of Information and Communication	Associate Professor and Head, Division of Information Studies
25	National Taiwan Normal University, Taiwan	Graduate Institute of Library and Information Studies	Professor and Chairperson
26	Open University of Cyprus	Department of Information Systems	Professor and Head of the Department
27	Pratt Institute, USA	School of Information and Library Science	Professor and Dean
28	Royal Melbourne Institute of Technology, Australia	Department of Information Management	Professor and Head of School
29	Rutgers, The state University of New Jersey, USA	School of Information and Communication, Department of Library and Information Science	Associate Professor and Department Chair
30	San Jose State University, USA	School of Library and Information Science	Professor and Director
31	Simmons College, USA	Graduate School of Library and Information Science	Professor and Dean
32	Southern Connecticut State University, USA	School of Education, Information and Library Science Department	Professor and Department Chairperson
33	Syracuse University, USA	School of Information Studies	Trustee professor and Dean
34	Tallinn University, Estonia	Institute of Information Studies	Professor and Director
35	Texas Woman's University, USA	School of Library and Information studies	Professor and Director

(continued)

Appendix A (continued)

SL No.	University and Country	Faculty/College/School/ Department/Program	Contact Academic Administrators
36	The Catholic University of America, USA	School of Library and Information Science	Professor and Acting Dean
37	The Emporia State University, USA	School of Library and Information Management (SLIM)	Program Directors (Emporia and Overland Park)
38	The North Carolina Central University, USA	School of library and Information Sciences	Professor and Dean
39	The Robert Gordon University, UK	Department of Information Management	Professor and Head of the Department
40	The Royal School of Library and Information Science, Copenhagen, Alborg and Denmark	Library and Information Science Program	Professor and Dean
41	The University of Applied Sciences, Germany	Faculty of Information Science	Professor and Dean
42	The University of Arizona, USA	College of Social and Behavioral Sciences, School of Information resources and Library Science	Professor and Director
43	The University of British Columbia, Canada	School of Library, Archival and Information Studies	Professor and Program Chair
44	The University of Buffalo, the State University of New York, USA	Graduate School of Education, Library and Information Studies	Professor and Department Chair
45	The University of Cape Town, South Africa	Faculty of Humanities, Department of Information and Library Studies	Professor and Head of the Department.
46	The University of Illinois at Urbana-Champaign, USA	Graduate School of Library and Information Science	Professor and Associate Dean
47	The University of Iowa, USA	School of Library and Information Science	Professor and Director
48	The University of Maryland, USA	College of Information Studies	Professor and Associate Dean
49	The University of North Carolina at Chapel Hill, USA	School of Information and Library Science	Professor and Associate Dean for Academic Affairs
50	The University of North Carolina at Greensboro, USA	Department of Library and Information Studies	Professor and Department Chair
51	The University of Pittsburgh, USA	School of Information Sciences, Library and Information Science Program	Associate Professor and Chair
52	The University of Southern Mississippi, USA	School of Library and Information Science	Associate Professor and Director
53	The University of Texas at Austin, USA	School of Information	Professor and Dean
54	The University of Western Cape, South Africa	Faculty of Arts, Department of Library and Information Sciences	Head of the Department
55	The University of Western Ontario, Canada	Faculty of Information and Media Studies, Library and Information Science Program	Professor and Associate Dean
56	The University of Wisconsin-Milwaukee, USA	School of Information Studies	Professor and Interim Dean
57	The Victoria University of Wellington, New Zealand	School of Information	Professor and Head of School
58	University of Alabama, USA	School of Library and Information Studies	Professor and Director
59	University of Alberta, Canada	Faculty of Education, School of Library and Information Studies	Professor and Acting Director
60	University of Borås, Sweden	Swedish School of Library and Information Science	Professor and Dean

(continued)

Appendix A (continued)

SL No.	University and Country	Faculty/College/School/ Department/Program	Contact Academic Administrators
61	University of Botswana, Botswana	Faculty of Humanities, Department of Library and Information Studies	Professor and Head of the Department
62	University of Canberra, Australia	Faculty of Arts and Design, Information Management	Senior Lecturer and Convener (both full time and part time online)
63	University of Central Missouri, USA	School of Graduates and Extended Studies, Library Science and Information Services	Professor and Coordinator
64	University of Hamburg, Germany	Department of Information	Professor and Head of the Department
65	University of Hawaii, USA	Colleges of Natural Sciences, Library and Information Science Program	Professor and Program Chair
66	University of Ibadan, Nigeria	Faculty of Education, Department of Library Archival and Information Studies	Head and Coordinator
67	University of Kentucky, USA	School of Library and Information Science	Professor and Director as well as Professor and Assistant Director
68	University of Madras, India	Department of Library and Information Science	Professor and Head of the Department
69	University of Missouri, USA	College of Education, School of Information Science and Learning Technologies,	Professor and Director
70	University of North Texas, USA	College of Information, Department of Library and Information Sciences	Professor and Acting Dean and Interim Department Chair Associate Professor and Associate Dean
71	University of Oklahoma, USA	School of library and Information Studies	Professor and School Director
72	University of Osijek, Croatia	Faculty of Philosophy, Department of Information Sciences	Professor and Head of the Department
73	University of Puerto Rico, USA	Information Sciences and technologies	Professor and Director Interim
74	University of Rhode Island, USA	Graduate school of Library and Information Studies	Professor, Assistant Director and Coordinator of Distance Learning
75	University of Sheffield, UK	Information School, Department of Information Studies	Professor and Head of the Department
76	University of South Florida, USA	College of Arts and Sciences, School of Information	Associate Professor and Director
77	University of Tennessee, Knoxville, USA	College of Communication and Information, School of Information Sciences	Associate Professor and Assistant Director
78	University of Tsukuba, Japan	College of Knowledge and Library Sciences, School of Library and Information Science	Professor and Dean
79	University of Wales, Aberystwyth, UK	Department of information Studies	Professor, Head of the department and Module coordinator
80	University of Washington, USA	Information School,	Director of IT and Informatics program Chair
81	University of Wisconsin-Madison, USA	School of Library and Information Studies	Professor and Director
82	University of Wollongong, Australia	School of Information Systems and Technology	Professor and Head of School
83	Valdosta State University, USA	Department of Information Studies	Professor and Director
84	Wayne State University, USA	School of Library and Information Science	Director and Associate Dean
85	Yashwantrao Chavan Maharashtra Open University, India	Library and Information Science Program	Professor and Director

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The experience of Korean academic librarianship: A phenomenological study

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Abstract

There are numerous quantitative studies about job satisfaction, career choice, and perceptions of academic librarianship in professional Library and Information Science literature; however, not much qualitative work has been done to understand the lived experience of librarianship in any setting. A phenomenological study was conducted to understand the experiences of Korean academic librarians working in South Korea. Themes covering several aspects of academic librarianship emerged, linking career choice, LIS education and career readiness, relationships with faculty and students, and the development of professional librarianship and academic libraries in South Korea. In addition to adding personal context to quantitative studies about these issues, the phenomenological method used in this study enhances comparative librarianship literature by highlighting the universality and nuances of academic librarianship practice on a global scale.

Keywords

academic librarianship, international librarianship, career choice, LIS education, South Korea

Introduction

“My people cannot write characters even though they have hands, and cannot read characters even though they have eyes. Chosun needs new characters that are suitable for the people,” declared King Sejong the Great, fourth king of Chosun. In 1443, King Sejong’s concern regarding his people’s illiteracy resulted in his masterpiece: the Korean writing system called Hangul. Originally known as Hunminjeongeum, Hangul was brought to fruition in King Sejong’s research institute and library, Jiphyeonjeon (Hall of Worthies) and is generally regarded as one of the most scientific writing systems in the world. However, Jiphyeonjeon’s creation was indicative of earlier print and writing culture in Korea: wood block print made in the eighth century and moveable type preceding the Gutenberg press by 73 years have both been discovered in the country (WLIC, 2006). Jiphyeonjeon was also followed by the creation of university libraries: in 1475, Sungkyukwan University’s library (Chonkyunggak) was opened, and through the 19th and mid-20th centuries, private university libraries like the one at Ewha Woman’s University were also founded (Lee and Um, 1994).

LIS education was established after Korea’s liberation from the Japanese in 1946. Around the same time, the Chosun Library Association was formed; however, curriculum development and library conferences were brought to a standstill when the Korean War started in 1950. After the war was over, colleges and universities experienced steady growth and almost all of them had libraries. This growth created a need for organization and education of library workers, and the Korean Library Association was reestablished in 1955. Two years later, a library school was created at Yonsei University (Lee and Um, 1994; Cho, 1996; WLIC, 2006). In the following years, tumultuous political environments and rapid economic and technological developments have both benefited and constrained library development in Korea. On one hand, several laws promoting libraries have been created; on the other hand, academic libraries race to keep pace with collection

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Table 1. Korean academic library employment statistics, 2008–2013.

Year	Full Time Regular Librarians	Temporary Librarians
2008	2140	557
2009	2161	569
2010	2120	579
2011	2187	611
2012	2139	640
2013	2071	719

development, staffing, and programs and services (WLIC, 2006).

Korea has three categories of librarians: first-grade professional librarians, second-grade professional librarians, and paraprofessional librarians. These grades are determined by education. While master's degrees in LIS are not required to become a librarian, a second-grade librarian may be promoted to a first-grade librarian by taking courses or completing a 'regular degree'; additionally, a paraprofessional librarian may be promoted to second-grade librarian rank by taking on more education or through years of service. Generally, all librarians must have at least a junior college-level education (WLIC, 2006).

Korean Ministry of Education statistics (KMOE) reveal that in 2013, there were 425 academic libraries employing 2790 full-time and temporary librarians; however, expanded KMOE data from 2008–2013 also show that more academic librarians are being hired as temporary workers, while the number of full-time regular academic librarians has declined (KMOE 2008–2013; see Table 1). It is important to note that in 2007, the South Korean government implemented the Non-Regular Workers' Protection Act, which required companies to permanently hire temporary workers who have been employed for 2 years – a move that was meant to protect temporary workers, but instead spurred employers to implement "hire and terminate" protocols (Hankyoreh Media, 2008; Lee, 2008). Additionally, Information and Communications Technologies (ICT) usage has exploded in South Korea. The European Union notes that by 2011, "South Korea topped the ranking of internet use, with more than four in every five inhabitants online" (2012:82). NAVER, a popular Internet search engine in Korea, answered its 100-millionth query in 2013 (South Korea's Internet giant, 2014), and the mobile messaging application Kakao Talk has captured 93 percent of South Korea's mobile phone users (Frier, 2013). Declining numbers of librarians, LIS job stability, and users turning to search engines and personal networks to resolve information needs are familiar concerns to LIS professionals. In Korea, where the

pursuit of higher education is rooted in tradition and highly competitive (Education, 2013), the questions of who will be managing libraries and guiding students of the Information Age are particularly pressing.

Korea's impressive print culture and academic library development tells the story of a nation that holds education in high esteem. However, its rich history and statistical data only offer a terse outline of librarianship in South Korea, rendering the lived experiences of library and information science (LIS) professionals invisible. How and why are Koreans attracted to academic librarianship? What are their day-to-day experiences within the profession? Using a phenomenological method of qualitative inquiry and applying it to the context of modern LIS practice in South Korean academic institutions, this study brings into view systemic, cultural, and other issues that affect South Korean academic librarians as they practice a myriad of specialties.

Literature review

Lawyers debate precedents in courtrooms and firefighters douse large blazes; however, the profession of LIS is different because most of the work done by librarians is unseen by the public (Nardi and O'Day, 1999; Lee and Ngatai, 2004). Nardi and O' Day assert "many of the contributions of librarians are invisible to library clients...[A]s a result, few people have much of an idea of what librarians do" (p. 82). There is a paucity of North American or international scholarly literature focusing on the self-described career and work experiences of LIS professionals; however, several studies offer some insight into issues that informed the present study.

Noh's (2010) work on the career paths of Korean librarians revealed a feminized LIS profession, gender disparities in career advancement, concern about the devaluation of library education, and motivational factors for participation in professional development; however, the theoretical study focused on career mobility and job retention rates for librarians in all kinds of environments (public, school, etc.). Kim's 2005 study primarily discussed barriers to using LIS research in practice, but it is useful to note that some barriers were linked to library organization, including "insufficient time on the job to implement new ideas," "lack of authority to make changes," and "a lack of support from other staff" (p. 441). The recent push to implement subject specialization in Korean academic libraries is also covered in LIS literature (Shin and Kim, 2002; Noh, Kim, et al., 2011; Otani and Shoko, 2012); and these works uncover Korean librarians' desires to further professionalize librarianship without

Table 2. Participant summary.*Participant*

Late career male subject specialist working at a 4 year public national college/university, with more than 15 years' experience, rank of Librarian I.
Late career male academic library policies coordinator working at a government/ministry office, rank of Librarian I.
Early career female serials/acquisitions librarian working at a 4 year private college/university, rank of Librarian II.
Early career female cataloger working at a 4 year private college/university, rank of Librarian II.
Early career female interlibrary loan/copy services librarian working at a 4 year private college/university, rank of Librarian II.
Early career female cataloger working at a 4 year private college/university, rank of Librarian II.
Late career female library administrator working at a 4 year private college/university, rank of Librarian I.
Late career male library administrator working at a 4 year private college/university, rank of Librarian II.
Late career male digital library/systems librarian working at a private college/university, rank of Librarian I.
Early career female serials/acquisitions librarian working at a 4 year private college/university, rank of Librarian II.
Late career female serials/acquisitions librarian working at a 4 year private college/university, rank of Librarian II.

invalidating the current LIS curriculum and librarian licensing systems. Additionally, Noh, Ahn and Choi's (2012) scrutiny of changes in the Korean LIS curriculum provides links between LIS education and career preparedness and offers insight into the kinds of courses practicing librarians believe would improve viability in the workplace.

Methodology

Approach

This research study is phenomenological and seeks to find meanings in South Korean academic librarians' work and career experiences. These experiences were collected via in-depth interviews covering several aspects of library career and work-life. Transcendental significance is garnered via the participant's responses, which are brought into clearer view via an exercise called *epoche*. Epoché allows researchers to approach rich data with as little prejudgment as possible in order to be more receptive to and perceive the phenomenon "freshly." (Moustakas, 1994:60). Creswell notes that the goal of phenomenology is to find the common elements of individual experiences and reduce them to a "description of the universal essence" (2007:58); thus, this study aims to build an interpretation of South Korean academic librarianship via the descriptions of those involved in this experience.

Sample

A call to participate in the study was posted on the Korean librarian mailing list 도메리 (DOMERI). Participants were invited to take part in interviews. A purposive sample of seven women and four men who identified themselves as academic librarians working in South Korea participated in this study. All participants are native Koreans; just under half were between

25–35 years of age and just over a quarter were between 46–55 years old. Participant criteria were (a) experience working in a college or university library in South Korea, and (b) if necessary, willing to travel to Seoul to be interviewed. See Table 2 for a general demographic summary of participants.

Interview procedure

During May 2013, participants were interviewed individually over the course of a week in Seoul, South Korea. A Korean-language translator assisted with the interviews and participants were not required to speak English to participate. After obtaining informed consent and completing a short demographic and career background survey, each participant answered questions in a semi-structured interview. The semi-structured interview helped maintain focus on some topics while allowing freedom for participants to bring up other issues that could be addressed by the researcher. Follow-up questions and points of clarification were negotiated with participants via email with the help of a local interpreter. All interviews were recorded for subsequent review and verbatim transcription.

Data analysis

Subsequent analysis of the present data was performed using Colaizzi's method of descriptive data analysis (1978). Participants' interview transcripts were read several times to identify overall impressions. Significant statements or phrases that directly related to the experiences of academic librarians in Korea were identified, and meanings were created from these statements. These meanings were categorized into themes, which brought focus to commonalities of the experience of Korean academic librarianship for participants.

Table 3. Examples of significant statements of Korean academic librarians and formulated meanings.

<i>Significant Statement</i>	<i>Formulated Meaning</i>
I graduated with a bachelor's degree in library science, but after I completed the degree I realized that my undergraduate studies was not enough.	Undergraduate LIS education does not offer enough preparation for a career.
I think the biggest advantage is being able to satisfy my intellectual curiosity using various channels like the Internet or looking at books or talking with students and professors.	As an academic librarian, I'm able to learn about anything I'm interested in and discuss these topics with like-minded people.
In reality, the university does not have to hire librarians. Even in some libraries in Korea, the person who works in the library is not a librarian. The university can hire anyone with a four-year college from any major and ask them to work in the library.	Librarianship is perceived as a job anyone can do, and no particular skill set is required.
When I do user education, 10 out of 10 people are surprised at the amount of information that the library can provide, they have an improved image of the library and the librarian.	Library instruction is a solid path to helping showcase the value of libraries and librarians.

Table 4. Example of one theme cluster with their formulated meanings.**Stagnant library development**

Inconsistent library leadership slows down long-term planning and results in erratic library policies

Library is headed by non-librarians

Budget cuts

Changing role of librarian

Decreasing collection development spending

Downsizing or removal of librarians

Lack of faculty support

Changes in user preferences (in-person to remote use)

Results

Eleven verbatim transcripts were produced. From those transcripts, significant statements were selected and assigned formulated meanings. From the formulated meanings, 17 themes emerged. See Tables 3 and 4 for examples of significant statements and clusters.

Theme 1: Clear career choice

In this theme, participants discussed why they became academic librarians. Participants were almost equally split between choosing librarianship based on their personality traits or value systems, filial piety, or as a matter of professionalism. A female academic librarian in her mid-20s said,

"I really like helping people. This is really rewarding and I always wanted to get involved with an educational institution. I really like to see people growing and people can get good resources from me and I think that's cool."

Another older male academic law librarian recalled his career choice for academic librarianship was because

"I liked to read books, manage books, and manage information, so I decided to do something related to that."

For other respondents, parents and family members played a large role in their career decision. A mid-career library administrator remembered, "So I happened to be a librarian because my mom decided which major I should go to." For others, their career choice was a mixture of values and educational preparation. One young cataloging librarian mentioned,

"When I thought of volunteering to society, I thought I should do something specific. So I chose library science as my major and then after that I graduated and became a librarian."

Professional recognition of the field also swayed participants' decision to pursue academic librarianship. A male academic library administrator succinctly stated that

"[i]n Korean society, working for a university as a librarian is the way to be recognized as a specialized

profession. That's why I chose to become a university librarian."

Theme 2: Transitioning career expectations

Respondents had an idea about what librarianship entailed before they began their LIS education, and they gained a clearer understanding of the skill sets LIS required after they were employed in the field.

Before beginning their LIS education and subsequent LIS careers, many participants associated librarianship with books and reading, even if they weren't sure what other skills the job required. A government employee recalled,

"I didn't know much about the job specifically, but I knew that I could have a job where I could be close to books."

Respondents gradually reconciled their original thoughts of bookish employees with more dynamic actions. A current library school graduate student and part-time library employee remembered,

"I think what I knew at the time was very little. I thought of librarians as people who just checked out books for people. But I came to realize that librarians were more involved in managing information."

Theme 3: Murky career preparation

Librarians realized during their LIS practice that they were not as prepared for a library career as they would have liked, regardless of their education levels. A serials/acquisitions librarian with a bachelor's degree noted,

"Sometimes [professors] require very specific specialized knowledge, which is insufficient with my breadth of knowledge. They have more knowledge and specific information, so I feel limited by this fact,"

while another librarian with more experience and a master's degree asserted,

"I think when I was an undergraduate student, I didn't get many computer science [classes]. But now I'm a librarian and I have some difficulty... That's why I got an ORACLE certificate last year, but I'm still having a hard time understanding."

The same participant went on to state how this knowledge gap impacted her daily work, mentioning,

"Sometimes I feel like I really need to study more because a lot of vendors are visiting us and sometimes I feel like I [don't] understand what they are saying."

Theme 4: Continuing education

Korean academic librarians discussed continuing education, noting courses available via the National Library of Korea (NLK) and the Korea Education and Research Information Service (KERIS). Fear of technological obsolescence was cited as a reason for participating in continuing education. A male librarian with 15 years' experience mentioned,

"[Technology] is just changing so fast, so it's really hard to keep up with. We take a lot of seminars or read, or try hard to keep up with technologies."

Another male librarian echoed the worry about technology, linking continuing education to modeling behaviors for colleagues and future librarians:

"The reason why I decided to pursue continuing education is because I shouldn't fall behind because of technology and also I felt that someone should do it in order for others to follow the same path."

The main benefits to continuing education were the satisfaction of self-development, networking, and remaining current about LIS practice. "I can keep up with knowledge and trends...there are lots of good seminars for academic librarians, so it makes me learn and grow more," said a serials librarian working at a private urban university. A cataloging librarian mentioned that she enjoys

"the information exchange from other librarians I meet, and I get to know about what other librarians are doing. This is invigorating and vigorous."

Theme 5: LIS curriculum limitations

Participants worried about the limitations of the LIS education system in Korea and how they related to specialization in the field. Constraints of the curriculum were often couched in the context of comparing perceptions of American library education standards. One participant noted,

"In Korea you graduate with a bachelor's degree in library science, whereas in the United States you do an undergraduate degree in a different major and then you do a master's in library science. Therefore in Korea, you don't have specialized librarians."

Another mentioned,

"Korean librarians are unable to provide services because the educational system is different. [In the United States] You have people who major in library science from the graduate level and they have specializations where they

focus on specific topics. They are able to assist with research, whereas in Korea, there is no such thing.”

Theme 6: Professionalization of librarians

Academic librarians were concerned about the professionalization of librarianship, and they engaged in activities that are generally reflective of professionals: participating in communities of practice, networking with colleagues, and building collaborative relationships with colleagues, the campus community, and library users. Regardless, these activities were overshadowed by worries about gaining society’s confidence in professional status and worries about not having control over who enters the field.

Respondents perceived that Korean society has not yet given librarians authority to be professionals. These perceptions are realized in the following statements from respondents: “Librarians in Korea are raising their voices, saying ‘we are professionalized, we have professional jobs,’ however society refuses to give them that amount of recognition,” and “[s]ometimes I’m disappointed in the lack of recognition of librarians by Korean society in general.”

Numerous paths into library practice also present problems for the field. One acquisitions librarian discussed the negative impact of not having formal educational requisites of entry into LIS practice:

“The main problem that was and still remains unresolved today is there are so many ways a person can become a librarian. The qualifications when one thinks of a librarian don’t exist. That’s the biggest threat...There’s a big difference between institutions that have formally educated librarians and librarians who are just chosen from somewhere else and then placed inside the library...You can graduate from a two- or three-year college and become a librarian or you can just be a person who hasn’t majored in library sciences and be hired and receive training and then be a librarian. These types of people, since they haven’t received a formal education in library science, they aren’t a very big help to the library. According to their level of competency, they should be given different jobs, but this is not the case, so they have misunderstanding and conflicts with faculty.”

Theme 7: Subject specialization

Specialization arose as a path to LIS professionalization in Korea; however, participants believed specialization has implications of devaluing LIS degrees at the undergraduate or graduate levels. Several respondents mentioned or discussed at length Yonsei University Library’s subject specialization program, where the library hires candidates with a degree in a non-LIS discipline and then allows them to earn the masters’ level

library degree within a certain amount of time after their employment begins. A majority of participants disagreed with this approach, and one participant discussed her own institution’s liaison training program, which focuses on helping currently licensed librarians become subject specialists. She explains:

“As an alternative to the trend of hiring people as librarians who don’t have library licenses, there was a woman librarian [at my institution] who said ‘why should we have people who don’t have library licenses become specialized librarians? Why can’t we have librarians who receive training to become specialized librarians?’ She was the one who trained us to become liaison librarians.”

A library administrator underscored LIS professionalism and its link to specialization, gravely stating,

“I’ve thought a lot about how librarians can be recognized as specialized professionals but the hard thing is in the United States there are so many different types of intellectual interests and research that’s going on, so it’s easy for a librarian to specialize in one area. But in Korean society there is a tendency where if one thing becomes popular, then everybody rushes to that one thing. So it’s hard for librarians to have a specialization in one certain thing...[Difficulties of specialization] is one thing I lose a lot of sleep over – I think about it a lot.”

Theme 8: External perceptions of librarianship

Librarians discussed how co-workers, faculty members, and students’ perceive their work. Respondents felt that university employees in other departments perceived library work as light duty, requiring no skills and minimal effort. A respondent from a private university scoffed,

“[University employees] think working in a library is very comfortable. They also send university employees who are sick or need a bit of a break to the university library.”

Respondents believed faculty members felt superior to them and that they rarely showed support for librarians. Noting the superiority faculty feels over librarians, an interlibrary loan librarian asserted that “[m]ost professors don’t see librarians as a supporter of their research, but rather as an employee who’s below them.” This sentiment is further reflected in a cataloger’s perception that professors also doubt librarians’ research skills:

“In Korea, professors don’t perceive librarians as equals who would be able to participate in their research. They

would ask, 'are librarians' able to conduct this research or role?' They kind of see librarians as inferior, like, below them."

Turning to student perceptions, respondents made distinctions between undergraduate and graduate students. An early career librarian with teaching experience noted,

"I think graduate students know much more and acknowledge librarians because they have to write theses. So they have to ask about how to write references and how to submit the dissertations. So they are really thinking, 'oh, I can ask those people about how to write a thesis and how to find articles.'"

Conversely, undergraduate students are agnostic about librarians. Said one library administrator:

"I don't think the students distinguish the staff from the librarians. All the people in the library: the ones who works at circulation or the one who works as a subject specialist, in the students' eyes they are all librarians."

External perceptions surrounding lowered work value, condescension, and lack of recognition from co-workers and library users resulted in negative emotional outcomes for academic librarians. Respondents discussed their hurt feelings due to erroneous perceptions of their careers. A respondent who began her career as a teacher-librarian in a middle school recounted,

"I had a hard time. My principal always yelled at me, 'what do you do, you're only just checking out books and that's all you do.'"

The same respondent talked about managing her hurt feelings stemming from co-workers who think library work is easy, explaining,

"When I was first working, I thought [the idea that people think my job is easy] was mean and I took it very personally. Now I think, 'well maybe people can think like that because other staff do work a lot,' so I don't want to be angry with them. I just want to be like, 'ok, people think like that but I want to keep working hard as much as I can.'"

Theme 9: Stagnant library development

In Korea, the university president or a dean of a college appoints someone – often a faculty member who is not a librarian – to run the library. A systems librarian expounds:

"The dean of the school appoints the head of the library. They have no expertise in library sciences and

they are people that don't even use the library... Usually college professors from the College of Humanities tend to become the university librarian, but they don't know about the library. The library is a very complicated organization but they don't know anything about it... They don't have any experience in management. Sometimes a professor who has experience being the head of an administrative office becomes the head of the library and that does help."

Respondents added that these administrative university librarian appointments are rotational, lasting about 2 years per incumbent. This rotation causes delays in effective leadership and contributes to inconsistent strategic planning, shown in the following responses:

"When the director first comes here, we have to report to them how jobs are done or how the library is organized, things like that. So for a couple of months we prepare documents and educate them,"

"Last year we planned the five year strategic plan and our boss told me, 'I'm not going to be here for three of the years, so it's all up to you.'"

Participants revealed other delays in library development due to erratic library leadership. Appointed library administrators may not be familiar with library management; thus, budgets may suffer, collection development policies may not reflect user preferences, and staff shortages may occur. The systems librarian noted,

"The current dean doesn't know the reality, because there is a demand for paper books. He doesn't know anything about it."

Other respondents recalled,

"The head of the library and the dean of the school have promised to reduce the size of the library,"

"Last month we opened our new international campus, but the university didn't hire anyone. So we sent the librarians from here to that library."

Theme 10: Librarian roles

In this theme, respondents' thoughts centralized on the roles of the academic librarian. Pride of librarianship was evident: "Being a librarian, we can play a very central role in the achievements of students and professors. I feel this is an advantage of being a librarian," mentioned one interviewee. However, pride was tempered with budget and employment worries:

"When there are cutbacks or layoffs in the universities, librarians tend to be the first on the list and that

phenomenon is intensifying, so libraries are unable to fulfill their role.”

These worries were underscored by a sense that librarians and libraries don't have a solid support base. A systems librarian at a private 4-year university explained,

“if the college needs something, the professors organize and they push from behind and support the college. But when the library has cutbacks on employees or budget, nobody comes to take action or support the library or complain against this type of action.”

Theme 11. The heart of a campus?

Discussing the library's role on campus, librarians responded with a quote that is frequently attributed to renowned former Harvard University President Charles W. Eliot: “The Library is the Heart of the University.” There were two schools of thought behind this idea: Inspired Action and Tired Rhetoric. The Inspired Action group discussed their wholehearted belief in Eliot's statement. For example:

“I was taught that the library is the center of the university and it's a basis for research and study. I personally believe this is true.”

This group also felt a sense of evolution with modern library spaces and services. An early career acquisitions librarian said,

“I think that the role and function of libraries is evolving now. It's not so much just an institution that's only for research, but it's a place where students can rest. It's also a multifunctional place where exhibitions go on.”

The Tired Rhetoric group often cited Eliot's quote with marked levels of disillusionment, reflected in these telling responses:

“Usually in universities, the library is said to be the heart of the university; however, amongst librarians in Korea, the joke is that it's more like the spleen,”

“Well, literally speaking, the library is the heart of the university, but in reality at [my university], the president is very focused on [a road project].”

A male librarian with over a decade of experience offered an explanation merging these two schools of thought, but with a nod to the administrative perspective:

“It's commonly said that the library is the heart of the university, but most people tend to not think of the meaning behind it, but just repeat it like a slogan. People don't tend to see why the library is the heart of the university

and why it is important. University officials who have the mind of a manager or executive – if they understood the meaning behind this saying – they would invest actively in expanding or developing the library. However those who have a business or executive mind but who don't understand this slogan just think of the library as a waste of money because it's not a place where you produce results...I personally think that the library is important and that the role of the librarian is important, but in the mind of the university official who thinks like a business executive, the library is not important.”

Despite the split regarding the academic library's role, respondents felt that outreach activities and library instruction help the campus community realize the library's value. One librarian disclosed plans for faculty instruction at her institution:

“This year we are trying to create a new library instruction class just for staff. So now they know what we actually do and this is an opportunity for us to advertise...”

A male librarian working at a suburban campus also observed the positive relationship between user education and perceptions of library value:

“When I do user education, I tell the students about discovery services and they're all surprised. These are the types of efforts that Korean librarians are trying to make via user education.”

Theme 12: Job benefits and challenges

Korean librarians enjoyed perks and identified disadvantages of practicing LIS in academia. Access to books and information and job stability were top benefits: “I think the biggest advantage is being able to satisfy my intellectual curiosity using various channels like the Internet or looking at books...” noted a law librarian. Working as an academic librarian also offers better job security, an advantage mentioned by newer and experienced librarians.

Disadvantages of academic librarianship included a down side to job stability and emotional or systemic constraints on professionalism. One serials librarian said,

“Because [academic librarianship] is such a stable job, there's no motivation and it's easy to become complacent. That's the biggest disadvantage.”

Various limits on the professional practice of LIS were also identified. One cataloging librarian at a small urban institution mentioned the emotional burden of going unnoticed and putting in efforts to be recognized:

"I think being a librarian is an invisible existence, and the department is also invisible...the effort of [becoming visible] is tiring."

A male librarian with national academic library policy experience lamented,

"Because of the very monolithic system, I'm unable to create new types of programs that are needed."

Another male library administrator insightfully noted that his desire to be a professional often conflicts with the time he has available to perform his basic duties:

"There is no opportunity to implement or show professionalism. As a librarian I'm aware of the path I should take, but there's no time for me to do anything or put in any effort."

Theme 13: Gender roles

Respondents discussed gender advantages and disadvantages in academic librarianship. Female respondents noted the benefits of working in a feminized career, including less discrimination and a perception of the career as family-friendly. Female librarian disadvantages overwhelmingly centered on preferred hiring practices and career advancement for male librarians: A female acquisitions librarian perfunctorily stated, "When they're hiring for positions they do tend to prefer men." Another female librarian implied that this preference also affects career advancement: "Team leaders here are all males." Male librarian respondents brought up the gender advantage of hiring and career mobility as well; however, they cited gendered work as a disadvantage in librarianship: "[Men] are expected to do jobs concerning manual labor and physical strength," noted a male library administrator.

Theme 14: Job satisfaction

Rather than overall job satisfaction, Korean academic librarians mentioned satisfaction with specific aspects or outcomes of their jobs. One newer acquisitions librarian responded,

"I'm satisfied that I've had a lot of various experiences in my career. I've learned a lot compared to the number of years I've worked as a librarian."

One cataloging librarian was very specific about when she is happy with her job:

"When I do user education people sometimes come up to me and say 'thank you for today's education' I feel very good about that."

When job dissatisfaction concerns arose, larger issues of recognition and parity were mentioned. A serials librarian explained,

"Librarians are dissatisfied with their jobs because even when they do work, there are no gains that come back to them. So they've just given up. There's no monetary or physical compensation, nor is there a feeling of achievement."

Theme 15: Uncertain job outlook

Korean academic libraries have joined the economic trend of hiring temporary employees; thus, academic librarians may find it hard to find permanent employment. One respondent explained Korea's Non-Regular Workers Protection Act and how it has impacted library employment and staffing:

"I don't know if you know this but in Korea – I don't know the exact name of the law but we call it 'Irregular Staff Law.' Irregular staff means that employees don't have tenure. They work full-time but if the company hires the person more than two years, they have to give them lifetime benefits. They cannot work at the company for more than two years. If the company wants to hire the person more than two years, they have to switch the employee to a regular (full time, permanent employee). That's the social problem now. Especially in librarianship, the job of librarians. More and more temporary jobs. The library won't hire librarians as full-time permanent employees. That's not only for librarianship, but in Korea in general that's a very serious problem."

Permanent full-time library jobs are rarely available. An acquisitions librarian tersely stated, "They don't want to hire any librarians," and another respondent echoed, "Speaking of my library, the numbers of librarians at my library, no new librarians are being hired." These decisions create staffing shortages in affected institutions, which, when combined with the practice of arbitrarily moving library workers to other university departments, places even more strain on current employees. A cataloging librarian said, "My library has the lowest ratio in the country of librarians per student. So the number of jobs librarians take may be a lot." A serials librarian simply declared: "Cutting down the number of librarians leads to more work on individual librarians."

The lack of job availability discouraged librarians from recruiting people to the LIS field. A recent graduate stated,

"I've heard there are students who work part-time in the library who say that they want to become librarians, but I

cannot really say, 'go ahead and study library sciences' because there are so few job openings."

Another respondent added that earning a top-notch library degree doesn't solidify gainful employment:

"I do want to encourage people to become librarians, but even [graduates of] Yonsei University, one of the top universities with library science, are unable to get full-time jobs."

Theme 16: Lowered professional engagement

As noted in Theme 4 (continuing education) and Theme 6 (professionalization), academic librarians take advantage of continuing education provided by library associations and institutions and this group also strives toward professional recognition; however, discussions about participation in professional associations reveal a disconnect between these actions and goals. Many participants were not members of professional LIS associations (e.g., Korean Library Association, Korean College and University Library Association.) A respondent explained the common practice of not joining professional associations in Korea:

"I am not a member of any association, but not being a member of an association is a common thing...The reason why people don't need to join associations in Korea is because school ties are extremely important in Korea. So if I've graduated from a school there are other people who graduated from the same school [who work] in various different libraries, so I already know what's going on in these various libraries through these connections."

Participants felt there were no benefits of joining associations. A serials librarian stated,

"The general perception among Korean librarians is 'what has the KLA done for us?' The National Library of Korea and KERIS has done more for us than KLA."

A late career acquisitions librarian also explained,

"[The university /academic library associations] are focused on libraries, not librarians! They are not interested in the quality of librarians – what librarians should be doing, the rights of librarians. They're only interested in quantity, the size of the library, and the quantity of books. The only thing concerning librarians is the number of librarians, and even this is not about how many first degree, how many second degree librarians there are – just the simple number of librarians."

Theme 17: Some LIS advocacy

Respondents discussed library advocacy within the context of national library policy, namely, the National University Library Promotion Bill, which was introduced to Parliament in 2008 and seeks to promote governmental support and create basic quality standards for college and university libraries. The bill has not been approved yet, and one respondent explained why:

"Right now, university librarians are represented by the association of university librarians, and public librarians are represented by the national library association. There's a difference of opinion between the association since one takes care of the university librarians and the other takes care of the public libraries. Right now the Ministry of Education, Science, and Technology takes care of university libraries, and the Ministry of Culture and Tourism takes care of public libraries, so the Korean government has a two-pronged management system, which makes it difficult to have a unified library policy."

Interviewees mentioned the importance of rankings in Korean education and noted that an important part of this bill's success rested on university administrators' desire to place highly in any ranking system; however, they also felt that library administrators did not place much authority in the Ministry's policies, nor would any policies have any direct influence on their work. A male library administrator summed up this conflicting feeling, stating:

"I don't think the passage of the bill will change perceptions of university libraries, [but] I think it's better than having no bill."

Discussion

In this study, Korean academic librarians made clear decisions to pursue librarianship as a career. Participants originally thought they'd be working with or caring for books; however, after gaining employment, they realized library work was much broader, and they felt unprepared to perform the full spectrum of duties. Feelings of being unprepared, especially with regard to fast changing technologies, led to participation in continuing education. Engaging in continuing education also highlighted the constraints of LIS curricula and echo Noh, Ahn and Choi's study revealing that "courses like Practicum in Organizing and Managing Web Resources, Library Planning, Marketing, and Assessment, Understanding Information Technology for Managing Digital Collections and Information and Communication in a Digital Age

need to be considered for becoming core courses” (2012:360).

Several studies have uncovered the interest in and conflicts of pursuing subject specialization in Korea, and these phenomena were an important part of experience for participants in this study. Participants felt that promoting specialization is a promising path to LIS professionalization, but the current education system is a barrier. Some libraries have created their own programs to recruit subject specialists, and many librarians are wary of such programs, feeling that they favor other disciplines over LIS. Thus, librarians in Korea are working to create programs that offer specialization training without undoing the current LIS education model in Korea.

External negative or ambivalent perceptions of what library work entails was significant, and librarians experienced negative emotions as a result. These external perceptions plagued several areas of library work, from stunted library development to tense relationships with coworkers, faculty members, and library users. Librarians try to show their worth to the Korean academic community by promoting the library’s value. They are proud of the work they do on their campuses, even though they are disappointed in how their institutions’ administrations choose to show their support of the library.

Job stability and having access to information are advantages to being an academic librarian, but complacency and arbitrary work constraints mean that librarians can have a difficult time staying motivated. As discussed in Noh’s study (2010), participants noted LIS feminization and career path differences based on gender. Female librarians believe that librarianship is a great job for women because of its stability and because the field is feminized; however, they also perceive that male workers are preferred. Male librarians also believe that the preference for male employees is an advantage – they noted they are able to advance in their careers much faster than their female colleagues.

Looking at the future, a large area of concern pertains to library employment. Some libraries are not hiring at all, and *de facto* implementation of the Non-Regular Workers’ Protection Act by many institutions has further devastated the prospects of full-time, permanent employment for librarians. Lowered opportunities for employment lowered the willingness of academic librarians to recruit people to the LIS field, which in turn endangers the sustainability of modern librarianship in Korean society.

Academic librarians in Korea do not generally join professional organizations because they don’t feel a sense of affinity for the groups and believe that these groups do not speak for them. Regardless of the lack

of direct professional engagement, there is library advocacy activity, particularly at the national level. The current library promotion bill focusing on academic libraries has been in parliament for some time. Passage of the bill will offer minimally positive outcomes and academic librarians hope that it will create a foundation for more legislation in the future.

From initial decisions about the career of LIS to the slow fight for continuing support in Korean parliament, respondents to this study reveal that the breadth and depth of academic library work remains largely unseen. Additionally, the experiences recounted in the interviews disclose that the public parts of library work are discounted or misunderstood in Korean academia.

Asking librarians to recount their career experiences revealed that liaison work (subject specialization) and outreach instruction activities could help increase visibility, especially with regard to librarians feeling more on par with faculty members and garnering support for the library when needed. Working in tandem with these domestic efforts, international study abroad programs also seem to positively impact how users view the library. A small number of participants noted that students and faculty who have attended colleges and universities abroad return to Korea with different expectations of librarians and a new perspective of the library’s role in their academic lives. Surprisingly, a minority of respondents also admitted a positive side of rotational library leadership: people who arrive to the position knowing nothing about libraries leave the position as advocates for the organization.

Implications and future research

A construction of the experiences encountered in South Korean academic librarianship has been created. This research positions LIS work and career life in South Korea as invisible and misunderstood, both to those considering librarianship and to managers and users of academic library services on college and university campuses. Those considering librarianship do not realize the true nature of the career until after beginning work; people who manage libraries often do so without understanding library organization; and those who use libraries may be agnostic about library workers’ roles in academic success. The invisibility of library work may have long-term negative impacts on the viability of librarianship in South Korea, particularly in the areas of LIS recruitment and consistent library development, which is erratic due to rotational leadership and staffing shortages or short-term employees. Areas of future inquiries include: expanding the current qualitative study to incorporate methodology triangulation (e.g.,

gathering experiential data from work journals, observations, etc.), monitoring the development of subject specialization and its relationship to LIS professionalism; objectively measuring program, outreach, and instruction activities and any links to changes in external perceptions of librarianship; and delving into the relationship between professional engagement and library advocacy in South Korea academic librarianship.

Appendix: Semi-structured interview schedule

1. Why/how did you decide to become an academic librarian?
2. Other than librarianship, what other careers did you consider?
3. Before choosing librarianship, what did you know about the career?
4. What influence did your college entrance test scores have on your career decision?
5. How often do you interact with students and faculty?
6. How do you feel about your interactions with students and faculty?
7. Would you tell me what role you think the library plays at your university?
8. What role do librarians play at your university?
9. How do you think your role is perceived by students, faculty, and college administration?
10. What do you think are the advantages and disadvantages of being a librarian?
11. What do you think are the advantages and advantages of being a male/female librarian?
12. How have you responded to problems you encounter most often as a librarian at your college/university?
13. In what ways has technology affected your job and how have you adapted to these technologies?
14. Thinking about national academic library policies (MEST), which policies have had the greatest impact on the development of academic librarianship?
15. Which policies have had the greatest impact on you and why?
16. If you have completed continuing education courses or certifications, why did you take the courses?
17. What benefits did you gain from taking the courses or completing the certification(s)? (If you haven't completed any courses or certifications, would you discuss why not?)
18. Think about academic librarianship in the next few years. What do you think are future opportunities and threats to the profession?
19. Thinking about your experiences as a librarian, tell me why you would or would not make the same career decision today.
20. What ideas do you have to recruit more people to academic librarianship in Korea?
21. Is there anything you would like to tell me that would help me understand Korean academic librarianship better?
22. What questions you would like to ask me?

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Abstract

The purpose of this paper is to examine the current situation and the future of information literacy programs in Zanzibar universities by looking at information literacy awareness, the extent of information literacy provision and the role of university libraries in promoting it. The survey was conducted in three universities of Zanzibar, where university library staff, deans and directors of schools/ faculties, heads of departments and undergraduate students were involved in the study. A total of 200 respondents participated in the study and the results were analyzed quantitatively. The findings show that a certain degree of information literacy awareness exists among library and academic staff, though promotion and provision of its skills are still in the infancy stages. Inadequate numbers of qualified information literacy specialists, lack of background in teaching information literacy and lack of cooperation between librarians and faculty members were identified as the sources of the problems. Based on the findings, the researchers made a number of recommendations to address the shortcomings, which include: organize information literacy seminars and workshops, create awareness programs, design and implement information literacy curriculum and course content.

Keywords

information literacy, university libraries, Zanzibar

Introduction

Nowadays, there is ongoing concern about teaching information literacy in higher education. Because of this, the Zanzibar Ministry of Education has established a department of ICT in education, which is intended to deal with all aspects relating to ICT in education from primary schools to all government-owned universities. Despite this effort, very little has been done to promote information literacy education, which is regarded as the foundation for learning in our contemporary environment of continuous technological change. According to Bruce (2004), information literacy is a natural extension of the concept of literacy in our information society, and information literacy education is the catalyst required to transform

the information society of today into the learning society of tomorrow. Instruction in information literacy is becoming indispensable due to the increasing use of the Internet and electronic resources as sources of information. Although there is clear evidence that technological advances have made access to information easier, there is an ongoing concern that university students are still not information literate (Somi and Jager, 2005). A number of research studies related to information literacy in universities conclude that

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today's students are faced with many challenges in finding information. The study by Li (2006) for example, reported that students have a strong preference for online sources, but they are not aware of the types of information available from the Internet or libraries' electronic resources, how it is organized, how it can be retrieved or how the quality of the information can contribute to their information needs. Concurring with this, Lwehabura and Stilwell (2008) point out that students enroll at universities and other higher learning institutions knowing very little or nothing about basic library use and information search skills, computer-related skills and other information skills in general. Recognizing this fact, there is no doubt that university libraries should play an important role in imparting information literacy skills to students who require competency in searching for knowledge by themselves when they are doing their course assignments and research. Emphasizing the role of the library in this respect, the Association of College and Research Libraries (ACRL) (2003) stated that it is a duty of university libraries to equip students with the necessary information skills to function effectively and to meet the challenges of the information age. In addition, Higgins and Cedar-Face (1998) recommended that academic libraries should support the teaching of information literacy by building relationships with students and giving them advice through different channels of information.

Objective of the study

The aim of this study was to examine the current situation and the future of information literacy programs in Zanzibar universities. Interpretation of data for this study was based on empirical information obtained from questionnaires in relation to the general and specific objectives as follows:

1. Ascertain whether Zanzibar universities are aware of information literacy skills.
2. Assess the extent to which information literacy skills are provided within the universities of Zanzibar.
3. Investigate the role played by libraries of Zanzibar universities in promotion of information literacy skills.
4. Examine the strategic plans for the development of information literacy in Zanzibar universities.
5. Suggest ways forward for the promotion of information literacy in Zanzibar universities.

University libraries in Zanzibar

Zanzibar forms part of the United Republic of Tanzania. It comprises two main islands; Unguja which

covers an area of approximately 1650 km² and Pemba, which has an area of approximately 984 km² with a number of smaller islets along the western rim of the Indian Ocean. The islands lie about 40 kilometers off the coast of mainland Tanzania. Currently, there are only three universities in Zanzibar, namely: Zanzibar University (ZU), the State University of Zanzibar (SUZA) and University College of Education Zanzibar (UCEZ). Both government-owned and private university libraries in Zanzibar resemble each other greatly in terms of quality and functionality. The libraries offer all common traditional library services to users as well as some modern library services. For example, all libraries are subscribed to electronic journals and registered to use the Program for the Enhancement of Research Information (PERI) resources. Similarly, Zanzibar University and the State University of Zanzibar have automated their daily library activities using integrated open source software. On the other hand, similar to many African universities, the Zanzibar universities are confronted with a number of challenges such as inadequate and semi-qualified staff, limited number of information literacy specialists, inadequate number of resources, and poor information technology skills among library staff. Grace (2006), referring to the situation in Nigeria, noted that many of the staff of university libraries are not computer literate because most of them were trained in traditional librarianship. Discussing information technology applications in government-owned university libraries in East Africa, Mulimila (2000) observed that the slow rate of IT applications, shortage of trained and skilled man power in IT, inadequate telecommunication facilities and power cuts and lack of co-operation among university libraries were the most critical obstacles in the implementation of information literacy programs.

Defining information literacy

In order to establish a common understanding of the information literacy concept, it is important to review some common definitions as defined by different organizations and researchers. According to the Middle States Commission on Higher Education (2003), the term 'information literacy' has evolved over the past two decades in response to the changing requirements of higher education. The same source noted that, from its beginnings as a form of library instruction, the concept now has been extended to describe a more comprehensive vision of teaching and learning in academe. In 1989, the American Library Association settled on a definition for information literacy that became widely used and accepted among professionals in the field:

“Information literacy is a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information”.

Accordingly, information literacy is also called “information competency”, which means that, to be information literate, a person must be able to recognize where and how to find information, how to evaluate and how to use it in an ethical manner. Correia and Teixeira (2003) stated that to be information literate is to be able to deal with the complexities of the current information environment and, at the same time, to have a critical thinking approach. According to the American Library Association (ALA) (2000) information literacy includes the following competencies:

- The ability to determine the nature and extent of information needed.
- The ability to assess the needed information effectively and efficiently.
- The ability to evaluate information and its sources critically and to incorporate selected information into one’s knowledge base.
- The ability to use information effectively to accomplish a specific purpose.
- The ability to understand many of the economic, legal, and social issues surrounding the use of information.
- The ability to access and use information ethically and legally.

Information and web skills are essential today. However, many people think that teaching of computer skills alone enables students to become information literate. In fact, information literacy is more than computer literacy and its fundamental goal is to build information competence, critical thinking and independent learning habits, which in return contribute to lifelong and independent learning. The importance of information literacy in this era of the information explosion is evident, and for this reason, information literacy is gaining a very high profile as an essential aspect within education and in other sectors of life (Singh, 2008). Bundy (1998) emphasized that information literacy supports, promotes and enhances teaching and research as well as creating a learning culture that encourages institutions to produce graduates with the capacity and desire for lifelong learning. Supporting this point of view, Bruce (2004) pointed out that the significance of information literacy skill lies in its potential to encourage real learning, rather than cramming, to transform dependent learners into independent, self-directed, and lifelong learners.

Role of university libraries in supporting information literacy

Today’s university students, and some instructors, rely very much on Internet search engines such as Google, Yahoo and Ask.com rather than search for information in research-oriented databases that index scholarly and peer reviewed journal articles. Li (2006) noted that many students today are over-reliant on the Google search engine and think it akin to oxygen. This situation creates a new challenge for university librarians, who must now play a more important teaching role through directing students to high-quality print and electronic sources and educating them on the need to evaluate web resources.

A number of studies have been conducted related to the role of libraries in promoting information literacy in universities. A study by Maitaouthong et al. (2012), for instance, stated that academic libraries are important organizations that support the promotion and integration of information literacy in different university courses. Li (2006) described the advantages of university libraries in this respect in that the library has information sources to support information literacy, and has personnel with expertise in information and the ability to manage it. The American Library Association (2000) established three methods for university libraries to integrate information literacy: (a) the design of teaching programs in the teaching mission, by establishing course content, teaching methods, program structures and evaluation; (b) the use of library human resources who have enough experience and expertise to educate students; and (c) acquiring teaching facilities, continuous budget allocations and librarians’ knowledge development. Fidzani (2010) recommends that libraries fulfil their roles in information literacy education by means of information literacy activities for students, such as orientation, teaching one-to-one searching methods at the reference service section, seminars, integration in various courses, teaching through web-sites, and teaching it as a curricular course.

Methodology

This study was conducted in three universities: the State University of Zanzibar, which is a government-owned institution, and the University College of Education and Zanzibar University, which are privately owned institutions. Qualitative and quantitative methods were used in the survey. Data for the study was collected using a questionnaire-based survey administered to deans and directors, heads of departments, library staff and undergraduate students. A total of 303 questionnaires was distributed

Table 1. Questionnaire responses, by university and category of respondent.

	University	Deans & Directors	Heads	Library Staff	Students	Total	%
Questionnaires sent		12	19	22	250	303	100.0
SUZA	108	4	7	10	50	71	35.5
UCEZ	77	2	5	5	39	51	25.5
ZU	118	5	5	7	61	78	39.0
Total responses	303	11	17	22	150	200	66.0
% of category		92.0	89.5	100.0	60.0	66.0	
% of total responses		5.5	8.5	11.0	75.0	66.0	

Source: Field Data, January, 2014.

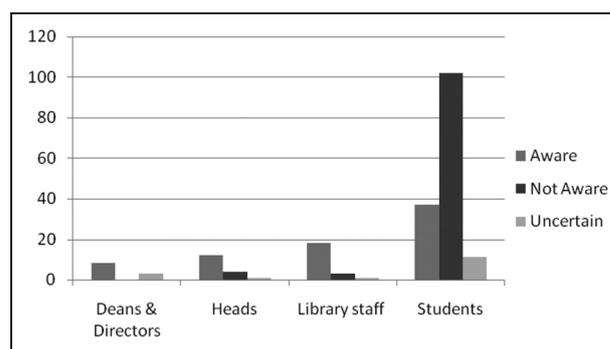
to 12 deans and directors of faculties/schools, 19 heads of departments, 22 members of library staff and 250 undergraduate students. On the one hand, the questions were designed to seek responses about the current situation of information literacy based on information literacy awareness, provision of information literacy education and the role of the library in promoting it. On the other hand, they were designed to look at the future of information literacy in Zanzibar universities. The questionnaire consisted of both closed questions, where respondents had to select one or more correct answers, and a few open-ended questions for which they had to write in their own answers. The response rates were 11 (92.0 percent of the category) for deans and directors, 17 (89.5 percent of the category) for heads of departments, 22 (100 percent of the category) for library staff and 150 (60.0 percent of the category) for students. The total number of all respondents was 200, with an overall response rate of 66.0 percent, as indicated in Table 1.

Discussion of Findings

Information Literacy Awareness

According to ITOCA¹, one of the common challenges of information literacy programs in Africa is that most of the programs are fairly new - coming into being within the past decade and still in the pioneering stages. Based on this argument, the present study was conducted to ascertain whether the respondents were aware of information literacy skills or not. The main findings are summarized in Figure 1.

Figure 1 shows that the great majority of students were not aware of information literacy. The same observation was reported in the study by Tilvawala et al. (2009), which showed that inadequate information literacy awareness and Internet skills are among the major challenges confronting university students. However, as the researchers in the present study went further to review all questions, they realized that even

**Figure 1.** Awareness of Information Literacy.

Source: Field data, January, 2014.

those who said they were aware of information literacy were confusing it with computer literacy. This is supported by Baro (2010), who reported that many people confuse information literacy with technology literacy, failing to distinguish between computer literacy and the much broader field of information literacy. Though, computer literacy is a prerequisite for information literacy, one who knows much about computer software, programming languages and graphic design cannot be considered as information literate on this basis alone. Bruce (2004) explained that these two concepts can be clearly distinguished by the difference between the intellectual capabilities involved in accessing and using information and the capabilities required for using technologies in creating databases or websites that deliver or contain information. In Zanzibar, many university students lack even basic library skills, not to mention information literacy, which broadly combines a number of literacies such as computer literacy, Internet literacy, research literacy and critical thinking skills. The study conducted by Omar (2013) on the teachers' role in fostering independent learning in high schools in Zanzibar identified the source of this problem as lack of foundation in library and information skills among students at secondary and high school levels.

Being aware of Information literacy is a vital step forward in promoting it and without awareness

Table 2. Provision of information literacy courses.

Responses	Respondents				Totals
	Deans & Directors	Heads	Library Staff	Students	
The university does not offer information literacy	9	14	15	88	126
% of respondents	81.8	82.4	68.2	58.7	63
The university offers information literacy	2	3	7	62	74
% of respondents	18.2	17.6	31.8	41.3	37
Total respondents	11	17	22	150	200

Source: Field data, January, 2014.

nothing can be done. The present study observed that some library staff were quite aware of the term, information literacy. This places them in a good position to make sure that students, academic staff and university administrations are also aware of it. Many studies on academic libraries emphasize that university librarians should plan their strategies for creating awareness and promoting information literacy by using different techniques. Lwehabura and Stilwell (2008) hold the opinion that librarians in Tanzanian universities have a crucial role in taking up the challenge to ensure that an awareness of the need and importance of information literacy is spread widely.

Provision of information literacy course

According to the Association of College and Research Libraries (ACRL) (2003), information literacy is becoming increasingly important in the contemporary environment of rapid technological change and proliferating information resources, as it is common to all disciplines, all learning environments, and all levels of education. The present study observed that some library and academic staff in Zanzibar universities have some understanding that information literacy is important to higher education. However, the study by Correia and Teixeira (2003) observed that many academic institutions have not yet realized the true nature of information literacy as one of the core skills that the labor market expects from everyone graduating from tertiary education. The present study asked respondents whether or not the surveyed universities offer information literacy courses. A total of 126 respondents (63 percent $n = 200$) said that their institutions did not offer such courses, and 74 (37 percent $n = 200$) said that the universities do offer information literacy skills programs. Table 2 summarizes these results.

From the evidence given above it is clear that most respondents indicated that information literacy courses were not offered in their institutions. The findings of a

study by Somi and Jager (2005) similarly observed that information literacy interventions have not yet been seriously considered or implemented in many African and other developing countries. Referring to Tanzania, Lwoga (2013) argued that provision of information literacy knowledge is still weak and very few public universities had integrated courses in either information literacy or e-learning into their curricula. As the present researchers went further to find out the obstacles to the provision of information literacy courses in Zanzibar, the critical point observed was that a majority of respondents (32 cases, or 64 percent: $n = 50$) indicated that, as discussed above, lack of awareness was the major challenge.

Promotion of information literacy among the universities of Zanzibar

A number of research studies have been conducted related to information literacy in universities. The findings by Somi and Jager (2005), Lwehabura and Stilwell (2008), and Maitaouthong, et al. (2012) reveal that university libraries have a role to play in supporting and promoting the teaching of information literacy by different methods. Singh (2009) emphasized that the challenge for today's teaching staff, including librarians, is to educate students effectively in information literacy skills, which include how to gather information strategically from the Internet and other sources in ways that yield the best sources in a minimal amount of time. In the present study, a question was asked to find out whether or not librarians from the surveyed universities promote information literacy. Table 3 summarizes the findings.

The table indicates that, while about one quarter of respondents (24.5 percent $n = 200$) agreed that librarians were promoting information literacy skills, many more (39.5 percent $n = 200$) opined that these skills were not being promoted by librarians, while more than one third (36 percent $n = 200$) were not sure. Thirty of the 49 respondents who provided positive

Table 3. Promotion of information literacy programs by librarians.

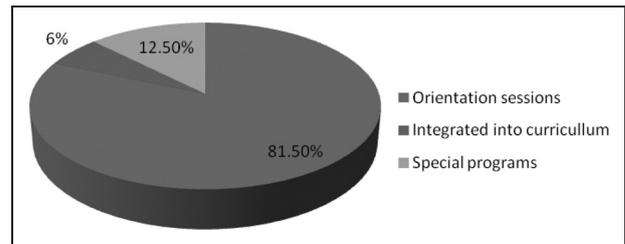
Responses	SUZA	UCES	ZU	Total	%
Agreed	12	7	30	49	24.5
Disagreed	30	20	29	79	39.5
Not sure	29	24	19	72	36.0
Total responses	71	51	78	200	100.0

Source: Field data, January, 2014.

responses to this question (61 percent) were librarians. The reality is that some kinds of information literacy skills programs were provided by librarians but they were not officially recognized by departments, faculties and schools senior staff and management. This situation has a direct negative impact on the promotion of information literacy. One of the important factors that can positively make information literacy programs successful is for information literacy to be regarded as an institutional matter. This argument has been put forward by many researchers. For example, Owusu-Ansah (2005) noted that information literacy should not exclusively be a library issue but also an institutional issue that requires the support and involvement of other stakeholders. Breivik (1998) emphasized that the challenges that need to be addressed in this regard are to facilitate a university-wide mental shift from thinking of information literacy as a library issue to understanding that it is a teaching and learning matter. Another observation from the present study was that respondents from the same university provided conflicting answers; this leads one to conclude that information literacy was not being promoted enough, otherwise all the participants would provide similar responses.

The present researchers further requested those who responded positively to indicate which methods librarians used to promote information literacy. Respondents were directed to select as many methods as applicable. The ways most frequently reported by respondents are summarized in Figure 2.

The results show that only 12 (6.0 percent $n = 200$) respondents indicated that information literacy courses were integrated into the curriculum and all of them were students and library staff from the State University of Zanzibar (SUZA), which offers an Information Science program leading to certificate and diploma awards. Thus, information literacy is taught as a topic in one of the librarianship modules, which means that only students who are taking certificate and diploma courses in librarianship receive information literacy training. Another 25 respondents (12.5 percent $n = 200$) said that information literacy

**Figure 2.** Ways to promote information literacy.

Source: Field data, January, 2014.

Table 4. Challenges in promotion of information literacy.

Indicators	Responses	%
Inadequate number of qualified information specialists	21	42.0
Lack of cooperation between librarians and academic staff	17	34.0
Weakness of librarians in presenting information literacy to management	7	14.0
Lack of management commitment	5	10.0
Total	50	100.0

Source: Field data, January, 2014.

was provided through special programs, while the great majority (163 cases; 81.5 percent: $n = 200$) mentioned orientation sessions as a method used to impart information literacy skills. This corresponds to Fidzani's (2010) observation that most African higher learning institutions teach information literacy during library orientation programs, while these programs are poorly attended, conducted in a hurry, ineffective and as a result do not enable students to become information literate. Respondents in the present study were invited to specify other methods used in teaching information literacy courses in their universities, but no responses were received.

Deans, directors, librarians and heads of departments were requested to identify possible challenges in promoting information literacy in their universities; the results are summarized in Table 4.

Inadequate number of qualified information specialists was mentioned by 21 (42 percent $n = 50$) of the respondents as the major obstacle that hinders the promotion of information literacy. Effective information literacy programs depend on qualified information specialists. If a library is staffed with less qualified librarians, their capacity for performing various activities, including teaching information literacy skills, will also be limited.

Another critical challenge, identified by 17 (34 percent $n = 50$) respondents, was a lack of cooperation between librarians and academic staff. This is supported by Maitaouthong et al. (2012), who explained

that information literacy is often seen as a 'library thing' and there is often too little understanding among academics and university leaders of the contributions that information literacy brings to research and teaching. Generally, it can be accepted that information literacy is a library-based activity, but the involvement of academic staff is still vital in order to make it effective. Hooks and Frank (2005) emphasized that, no matter how hard librarians work, without the cooperation and support of teaching staff information literacy programs will be unsuccessful or severely limited. The American Library Association (2000) noted that the involvement of teaching staff facilitates the monitoring of students and increases the likelihood of information literacy being recognized as an important learning activity within the university. Kuhlthau (2001) further observed that collaboration between librarians and teaching staff is crucial because instructional work in information literacy can be undertaken cohesively, with teachers as experts in the content and context and librarians as experts in resources and processes.

The importance of promoting information literacy needs to be advocated clearly so that strong cooperation and support can be realized from top management, but lack of qualified librarians can be an obstacle to this. Lwehabura and Stilwell (2008) noted that success would be limited if librarians failed to clearly define, defend intellectually and articulate forcefully the role and importance of information literacy to management. In the present study, 7 respondents (14.0 percent; $n = 50$) identified 'Weakness of librarians in presenting information literacy to management' as a challenge in their universities. This could well be the cause of the 'Lack of management commitment' identified as a challenge by 5 respondents (10.0 percent; $n = 50$).

Strategic plans for the development of information literacy in Zanzibar universities

Respondents other than students were requested to mention any existing strategic plans towards the development of information literacy in their institutions. The results show that nothing was mentioned by the majority of heads of departments (12 cases; 70.6 percent $n = 17$) deans of faculty (9 cases; 81.8 percent $n = 11$) and library staff (15 cases; 68.1 percent $n = 22$). These results lead one to believe that respondents failed to mention any future plans since there were no documents in their institutions which at least mentioned the issue of information literacy development. Instead, only 7 (31.8 percent $n = 22$) librarians suggested the creation of awareness among

university management as the step forward to the promotion of information literacy program. The present study not only revealed a lack of awareness and poor provision of information literacy programs (apart from what is provided by librarians through orientation programs), but also a lack of strategic plans and policies to develop such programs. This problem has been also observed by Fidzani (2010) and Massis (2011), who explained that "lack of Information literacy policy is the one of the major barriers that affects effective implementation of information literacy". The same challenge was noted by Kavulya (2003), who stated that, in Kenyan universities "inadequate support by their parent organizations, in terms of both policy and materials, is among the barriers facing information literacy". Without clearly stated strategic plans for information literacy which will show the direction towards its achievement, information literacy programs will continue to be offered only by a few people, mainly librarians, who are interested in it. Consequently, information literacy programs will not be conducted in ways which are expected. This situation leads one to conclude that information literacy programs have not yet been given the attention they deserve from various university stakeholders and that their future development in Zanzibar remains a dream.

The way forward for the promotion of information literacy in Zanzibar universities

This section aims to summarize the opinions of heads, directors, deans and librarians on what should be done to develop and promote information literacy in Zanzibar universities. The section includes suggestions of respondents which complement the researchers' recommendations.

Development of information literacy. Information literacy policy should be established and implemented in all Zanzibar universities and colleges. Information literacy policy at university level is vital since it directs and supports the adoption of information literacy education. The existence of information literacy policy will help to provide guidelines for the basic requirements regarding levels of information literacy experts, IT infrastructure and the structure of information literacy programs.

Organization of university-wide information literacy seminars and workshops. Zanzibar universities' library staff should be required to attend information literacy seminars and workshops so as to upgrade their information literacy skills. These kinds of short trainings

will enable them to be competent and confident in developing and conducting information literacy programs as well as in advocating the importance of and need for integrating information literacy courses with university curricula.

Creation of awareness programs. Creation of awareness through special information literacy programs is required for various groups such as instructors, students and administrators. In Zanzibar, information literacy is a fairly new concept, and consequently practice is crucial at a very basic stage. Librarians should seek collaboration with information literacy experts from outside the country to implement this strategy.

Design and implementation of information literacy curriculum and content. There should be strong and active collaboration between librarians and instructors in designing and delivering information literacy curriculum and content. Although librarians possess the ability to impart the necessary information skills, not all of them have capabilities that qualify them as specific subject instructors. This makes collaboration between these two groups indispensable.

Integration of information literacy skills to the university curriculum. Information literacy courses should be mandatory and should be integrated into the university curriculum. The courses should be developed in conjunction with a particular program, not apart from it, to ensure that students see the value of the courses in their academic studies.

Conclusion

This paper discussed the current situation and methods used to promote and develop information literacy in Zanzibar universities. The study revealed that university libraries in Zanzibar differ from each other in promoting information literacy skills. Although some kinds of information literacy skills are offered by librarians in very general ways (by orientation or user education), they are not sufficient for to enable students to become information literate. Various challenges were mentioned as barriers in promoting information literacy, including: inadequate number of qualified information literacy specialists; lack of background in teaching information literacy; lack of cooperation between librarians and faculty members; and lack of institutional commitment. Although the university libraries are the major learning channel with important roles in supporting the teaching and learning process – particularly in supporting worthwhile and efficient use of information sources – the

ability of these libraries to develop information literate students depends on the involvement and strong support of faculty members and university administrators. Therefore, active discussion, which must involve university management, library and teaching staff, should be conducted for the purpose of introducing and developing information literacy in universities in Zanzibar.

Note

1. Information Training and Outreach Centre for Africa (ITOCA) is a capacity building organization aimed at enhancing information and communications technology skills for librarians, information specialists, scientists, researchers and students in sub-Saharan Africa.

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Micronesian libraries and archives: A review of the literature

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Abstract

The western Pacific region of Micronesia has a unique library and archival history. Composed of largely US-affiliated islands, the libraries of Micronesia have emerged through successive waves of colonization and assertions of modern island identities. Primarily focused on peer-reviewed journal articles, this literature review synthesizes the limited previous professional literature concerning Micronesian libraries into a concise resource. Though rapidly modernizing, libraries in this region face distinct challenges in terms of library training, adequate funding, limited access to current information resources, and low Internet access rates. Upon analysis of this body of literature, the author identifies three major needs: 1) Expanded LIS education in Micronesia (particularly at the graduate level), 2) Increased awareness and inclusion of island modes of communication in library and archival services, 3) Expanded opportunities for academic publication and research through the establishment of an Open Access journal of Micronesian Library and Information Science.

Keywords

Micronesia, Oceania, Pacific libraries, Pacific archives, library distance education

Definitions and scope

For the purposes of this research, the following definition of Micronesia will be used: the inhabited islands west of the international dateline, east of the Philippines, south of Japan, and north of New Guinea and the Solomon Islands (see map). This definition includes the Marianas Islands (Guam and the Commonwealth of the Northern Mariana Islands), the Caroline Islands (Republic of Palau and the Federated States of Micronesia – Yap, Chuuk, Pohnpei, Kosrae), the Marshall Islands (Republic of the Marshall Islands), the Gilbert Islands (Republic of Kiribati), and the Republic of Nauru. This definition is consistent with the United Nations code “057: Micronesia”. (United Nations Statistics Division, 2013)

Each island has distinct cultural, linguistic, and colonial histories. The major colonial powers in the region include Spain, Germany, Japan, and the United States. After World War II, many of the islands of Micronesia were temporarily incorporated into the United Nations Trust Territory of the Pacific Islands. This was followed by a period of self-determination in which many islands chose a political union with the United States, either as an overseas territory, commonwealth, or freely-associated state.

The primary focus of this study is academic journals in library science with a secondary emphasis on published monographs. In several cases, citations to conference proceedings and authoritative sources outside of this scope are included to illustrate fully a concept or provide supporting information.

A portion of the literature surveyed deals with the Pacific region as a whole; in these cases, information relevant to the libraries and archives of Micronesia has been extracted. Care has been taken to distinguish between the use of ‘Micronesia’ in reference to the Federated States of Micronesia (FSM) or to the larger region of Micronesia.

Previous efforts

The first major attempt at a comprehensive literature review for Pacific region libraries, *Archives and Manuscripts, Libraries, and Librarianship in the*

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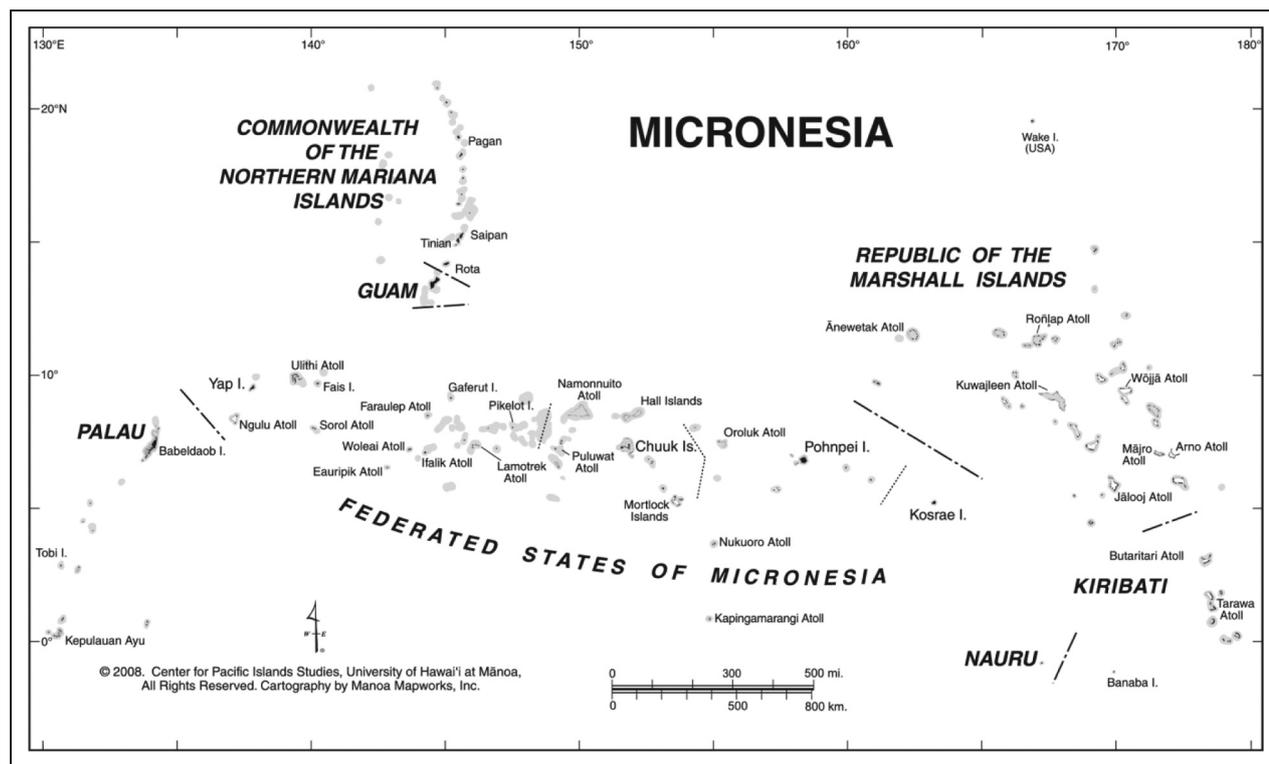


Figure 1. Reproduced with permission.

South and Central Pacific: Survey and a Bibliography of English-Language Studies, compiled 283 sources relevant to the libraries of 26 Pacific island nations, including seven Micronesian island entities: Palau, Federated States of Micronesia, Guam, Kiribati, Marshall Islands, Nauru, and the Commonwealth of the Northern Mariana Islands (CNMI). (Sperry, 1989) This work is an unannotated bibliography compiling academic, trade, and newsletter material concerning library functions in each insular area. Each island region is given a brief introduction and description of library services as seen in 1989.

Spennemann (2004) augments the work of Sperry through an outline of library development in German Micronesia. The German administration of Micronesia spanned 1886 to 1912 and established libraries throughout the region. Through analysis of colonial records, Spennemann was able to identify the locations of most of these libraries. In all cases, these are government, private, or religious libraries (with the exception of a company library on Nauru). Little is known about the content of these libraries with the exception of the library at the Joachim deBrum House in the Likiep Atoll, Republic of the Marshall Islands. This private library was assembled by a Marshallese collector between 1894 and 1937. The surviving collection of 826 books was fully inventoried in 1999. (Spennemann et al., 2003) While records indicate several libraries during the German

period, there is little evidence to support the existence of libraries in Spanish Micronesia. Documents generated by the Spanish administration are housed at the General Archive of the Indies in Seville, Spain. (Gobierno de España, 2014)

Wang (2005) continues the narrative of regional library history in *Guam and Micronesian Libraries*. This collection of essays largely focuses on the University of Guam Library System and developments in its constituent libraries (Robert F. Kennedy Memorial Library and the Micronesian Area Research Center). Wang provides a detailed record of library events and milestones throughout the 1990s with a particular emphasis on inter-island information sharing and consortia building. In an earlier journal article, Wang (1993) indicates a lack of research and publication in scholarly journals concerning Micronesian libraries. The historical lack of publishing is also noted by Gilliland et al. (2008) and Goetzfridt (2013).

Taken as a whole, the work of Sperry, Spennemann, and Wang constitutes a fragmentary history of publishing on Micronesian libraries. This literature review builds upon these foundational efforts, synthesizing the published professional literature on this subject into a concise resource. Organized thematically, this document explores the major areas of publication and offers a needs assessment for the advancement of library services in Micronesia.

Education and training

Formal library education and training remains varied throughout the region. As a result of longstanding limited access to higher education in the Pacific islands, various forms of distance education are used to educate library professionals in Micronesia. Jackson (1983) notes that radio featured heavily in early Micronesian library distance education. The University of Hawaii program PEACESAT (Pan-Pacific Education and Communication Experiment by Satellite) disseminated library training to the region through radio broadcast. A repurposed NASA weather satellite, Applications Technology Satellite (ATS-1), broadcasted lectures and instruction to the Pacific region. Early PEACESAT transmissions included library and information service instruction. Starting in 1976, monthly interactive PEACESAT sessions dealing with library science included participants from the western United States, New Zealand, and Pacific island regions. PEACESAT topics relevant to library and information science from 1976–1981 include:

“health information services, symposia for a UNESCO meeting on national bibliography, school libraries and children’s literature, literacy and libraries, training assistants in the Pacific Islands, copyright law, scientific documentation and publishing and bookselling in the Pacific Islands.” (Jackson, 1983: 180)

The ATS-1 satellite was again used in 1972 by the University of the South Pacific (USP). Based in Fiji, this regional university operated campuses throughout the Pacific region, including Kiribati and the Marshall islands. University of the South Pacific’s ATS-1 distance education program, USPNET, offered several professional developmental courses targeted to library employees. As recently as 1982, USPNET offered a four course certificate program in library science via satellite. (Jackson, 1983)

Library distance education in Micronesia has endured and strengthened alongside the increasing access to Internet technology. The monograph *Teaching with Educational Technology in the 21st Century: The Case of The Asian-Pacific Region* outlines the continued challenges of distance education in the Pacific region. The authors stress the growing need for Pacific libraries to evolve to meet the information needs of distance education learners. (Bell and Inoue, 2006).

In 2010, the University of North Texas and Pacific Resources for Education and Learning (PREL) introduced the Library Education for the American Pacific (LEAP) program. Funded by the Institute of Museum and Library Services (IMLS) through the Laura Bush

21st Century Librarian Program, LEAP provided tuition and support to a cohort of 23 MLIS-seekers in the Micronesian region. (Barnwell and Chandler, 2010) The LEAP program benefited from the shift in MLIS education to increased online course offerings.

The availability of online distance education is bolstered by the steadily increasing Internet access rates in the islands of Micronesia. The United Nations International Telecommunication Union (ITU) (2012) reported a continued increase of Internet users throughout Micronesia from 2000 to 2012. The most significant increases in individual Internet use were observed in Guam and FSM. (Note: the ITU information contains incomplete data on Internet use in Palau and the CNMI.)

As new venues and funding sources for library distance education become available to Micronesians, concerns have arisen about the cultural implications of distance education. In the chapter “Life in the Round” and the History of Libraries in Micronesia” from *Online Education for Lifetime Learning*, Goetzfridt (2007) questions the systems of organization used by libraries and providers of distance education.

“... successive Western and Japanese colonial powers essentially imposed a set of norms onto these existing indigenous structures. One is left with the basic question of whether or not librarians have and are participating in these forces of acculturation and ignoring Micronesian ‘lives in the round’ for the sake of maintaining and promoting Western models of librarianship and Western sources of information.” (Goetzfridt, 2007: 264)

Goetzfridt concludes that if library science and distance education are to be viable in Micronesia, they must include an “indigenous context” of the island community for which they operate. In a later work, Goetzfridt (2013) urges for an epistemological foundation for libraries operating in Micronesia. These sentiments are echoed by several scholars in the Archives section of this literature review.

Professional development and collaboration

A major force for professional development and library advocacy throughout the greater Pacific region is the *Pacific Island Association of Libraries and Archives* (PIALA). Cohen (1999) chronicles the formation and expansion of this professional organization. Originally formed on Saipan in 1990 as the *Western Pacific Library and Archives Association*, the organization expanded its scope in 1991 and formally incorporated as the *Pacific Island Association of Libraries and Archives*. Since its inaugural

conference in Palau, PIALA has held its annual conference on a different Micronesian island. Proceedings from these events chronicle the challenges and developments of Micronesian libraries throughout the past 23 years. Selected papers from the annual PIALA conference are indexed in the Education Resources Information Center (ERIC) database. (Education Resources Information Center, 2014)

Evidence of this collaboration can be seen in the history of Micronesian union lists and library directories. Early work in establishing a regional union list of periodicals was conducted by the Nieves M. Flores Library on Guam. The *Union List of Serials in Libraries of Guam* was published in 1987 and updated in 1989. (Nieves M. Flores Library, 1987, 1989) This project was expanded to include Micronesian libraries in 1996 with the publication of the *Union List of Serials in the Libraries of Guam and Micronesia*. (PIALA et al., 1996) A joint project of PIALA, the Guam Public Library, and the University of Guam RFK Memorial Library, this publication provided regional information on serials holdings throughout Micronesia. The fifth and final revision of this resource, *Union List of Serials in Pacific Island Libraries*, expanded the scope even further to include the Pacific island region beyond Micronesia. This final version was supported with grant funds from the Library Services and Technology Act (LSTA) administered by the Institute of Museum and Library Services (IMLS). (Cohen and Yoshida, 2002)

Another key project was the publication of the *Directory of Libraries, Archives, and Museums in Micronesia*. (Cohen, 1993) This was a collaborative effort between PIALA, the Micronesia Area Research Center, and the Guam Library Association. A product of the inaugural 1991 PIALA meeting, this publication indexes location information for libraries and archives throughout Micronesia.

Many of these projects were displaced by Internet databases and directories. To increase access to archival collections, several digital repositories have emerged in the past decade. One of the earliest, "The Marshall Islands: An Electronic Library & Archive of Primary Sources" was established in 1999 as a project of the Charles Sturt University in Australia. (Spennemann, 2004) This collection, later renamed "Digital Micronesia", expanded its focus to include information resources about the greater Micronesian region. (Charles Sturt University, 2005)

Grants to Micronesian libraries

Grant-funded projects are particularly important to the libraries of Micronesia. Federal, foundation, and

Institute of Museum and Library Services (IMLS) grants are commonly awarded to augment limited local library budgets. IMLS grants are awarded to recognized state libraries under the Competitive Grants to Territories and Freely Associated States program. All US-affiliated Micronesian islands participate in this program and many receive annual awards. (Institute of Museum and Library Services, 2014)

Medical libraries are spread widely throughout the Micronesian region. Cohen and Hadley (2010) report on a 2008 grant from the Robert Wood Johnson Foundation that was issued to the Ayuda Foundation on Guam to support the repair of the typhoon-damaged Yap State Hospital Durand Medical Library. Following the success of this project, a second grant was issued to establish or improve eight medical libraries throughout the US-affiliated Pacific. Titled *Replicating the Yap State Hospital Medical Library project in hospitals throughout the U.S.-affiliated Pacific Islands*, this grant provided \$389,754 in funds and has supported medical library projects in Palau, FSM, Marshall Islands, American Samoa, CNMI and Guam.

Archives

It is well established that paper-based collections in the tropics are highly susceptible to environmental factors, such as mold and insect damage. (Wareham, 2002) Gordon-Clark (2012) examined the potential effect of climate change on the national archives of the Pacific island region. Many of the islands of Micronesia are considered "low lying," defined as islands with a maximum elevation of less than 100 meters above sea level (indicated as 100m ASL). Low-lying islands and their archives are at particular risk in the case of significant rises in sea level. Archival collections in the Marshalls (5m ASL) and Kiribati (4m ASL) are identified as the greatest risk group in Micronesia. Many Micronesia islands are politically associated with the United States through status as a territory, commonwealth, or freely associated state. Thus, they are entitled to support from the United States Weather Service and the United States Federal Emergency Management Agency (FEMA) during weather-related emergencies. Kiribati, however, does not have a status agreement with the US. Further research is being developed by Gordon-Clark to explore the situation in Kiribati.

The structure and arrangement of the archives of Micronesia have been the subject of increased academic publishing in recent years. Many scholars

indicate that an inherent colonial influence is present in the archives of Micronesia. In many cases, colonial powers displaced oral traditions with written record-keeping. This process is further complicated by the successive colonial administrations, which introduced foreign languages and value systems. Hanlon (1999) states that the inclusion or exclusion of materials in archival selection ultimately reflects the value system of the collector. Thus, the inherent difficulty of disentangling the colonial influence from Pacific research collections. Gilliland et al. (2008) note that cultural notions of memory and record keeping in the Pacific region may be at odds with the largely Western notion of archival theory and practice.

“Little or no space exists within this paradigm for cultures with nontextual mechanisms for recording decisions, actions, relationships, or memory, such as those embodied in oral, aural, or kinetic traditions.” (Gilliland et al., 2008: 90)

Gilliland asserts that increased archival training is needed in the Pacific region and that this education should include input from Pacific island communities and should reflect local folkways and communication systems. Wareham (2002) likens Western “archivist explorers” in the Pacific to evangelists who, consciously or unconsciously, impose an outside influence on the craft of archival practice. Wareham states that:

“Repatriation of knowledge, like that of human remains which some Western museums are now conceding, could entail a return of custody of records to the communities to which they belong.” (Wareham, 2002: 204)

Salvatore (2011) notes that archives in Micronesia largely emerged at the end of the United Nations Trust Territory period and mirror Western attitudes towards cultural preservation and record keeping. Salvatore urges for a postcolonial assessment of these institutions and a movement towards increased involvement of indigenous communities.

The “lack of space” for non-Western modes of memory mentioned by Gilliland and the need for “repatriation of knowledge” discussed by Wareham have been widely echoed in the archival literature. Acknowledging this issue, innovative approaches are being utilized to include indigenous voices in the archival process. An example of this can be seen in the collaborative nature of the *Traditional Micronesian Navigation Collection*, a part of the University of Hawai’i Digital Collections. This archive is comprised of over 2,000 digitized images of traditional ocean navigation as practiced on the Western

Micronesian atoll of Satawal between 1983 and 1984. Along with the image metadata, the University of Hawai’i allows online users to provide information about each image in an open comments section. In this manner, Satawal communities are able to digitally identify photographed individuals and places, adding to the value of the image collection. (University of Hawai’i, 2010)

Smith (2008) argues that the collaborative nature of the *Traditional Micronesian Navigation Collection* introduces a modern oral history component to the collection. This model establishes a framework for a “digital repatriation” of images in which indigenous communities are active participants in the archival description process.

Conclusions

This literature review presents a record of the sparse academic publishing on Micronesian libraries. An analysis of the literature presented here yields several common needs. These statements are applicable to all islands in the region:

1. The need for expanding educational opportunities for librarians in Micronesia

This need is greatest at the graduate level. Distance education is the dominant mode of library education in the region due to a lack of local institutions. The cohort-based University of North Texas LEAP program has emerged as a possible model for funding and delivery of this education.

2. The need for an “indigenous context” in Micronesian library and archival services

Many of the referenced scholars acknowledge that the library systems used in Micronesia intrinsically include transplanted Western notions of value and systems of organization. Greater research in this area is needed to explore the unique needs and cultural climate of each community. A feedback-based methodology such as that utilized by the “Pluralizing the Archival Paradigm Through Education” project could gauge these information needs. (Gilliland et al., 2008) Additionally, further research is needed to determine island-level information seeking behavior and local epistemology. These findings, used in tandem, could be the basis for creating library and archival systems with a greater sensitivity to local modes of communication and value systems throughout Micronesia.

3. The need for further research and publication in the field of Micronesian library and information science

Of the thirteen journal articles presented here, only four were published before 2000. This can be seen as a marked increase in scholarly communication on the libraries and archives of Micronesia. As scholarly activity increases in the area, increased publishing venues will be needed to disseminate and archive research findings. An academic journal dedicated to the study of library and information science in Micronesia is a necessary next step. Limited access to subscription databases, the high cost of importing journals, the climate's negative impact on paper, and increasing Internet availability all suggest that an Open Access publication would be the most appropriate for the region. Partnering with a university or scholarly society would be crucial to the success and validity of such a journal. Funding could be raised through PIALA and augmented with competitive grant writing. Once stable funding and institutional sponsorship are established, a Platinum Open Access model (no use fees, no author fees) would encourage widespread journal access throughout the region.

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The development of library and information science in China (1840–2009)

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Abstract

The purpose of this study is to give an overview of the development of Chinese libraries and library and information science (LIS) in China during 1840 to 2009. The discussion is divided into four historical periods: 1840–1897, 1898–1948, 1949–1977, and 1978–2009. In each of these periods, the author discusses three themes that have had a major influence in the development of libraries and LIS: the social, economic, scientific and political climate in China that influenced the development of libraries and information institutions, and LIS education, which supported the growing profession. In sum, this study reviews the accomplishment of library and information science in China from 1840 to 2009, and the significant efforts of people from different classes, and across several generations, combining the historical background, including the change of regimes, crisis from foreign invasion, and social progress.

Keywords

history of library and information science, China

Introduction

This paper provides a brief historical overview of the development of libraries and library and information science (LIS) in China during the period 1840–2009. The discussion is broken into four different periods: 1840–1897, 1898–1948, 1949–1977, and 1978–2009. The discussion of each of the four periods will be centered on three recurring themes that greatly influenced the development of libraries and LIS: social, economic, scientific, and political conditions; the struggle to develop libraries and information institutions; and the rising influence of the LIS profession through advanced education.

1840 to 1897

The social, economic, scientific and political context

The year 1840 is the beginning of the modern history of China. The first Opium War and the intrusion of Great Britain forced the Qing Empire to open the gate of China. The traditional Chinese self-sufficiency and the small-scale agriculture-based economy began to shatter. In this economy, family and villages were the basic social units. The only industry that existed was

the handicraft industry maintained by apprenticeships, which could not carry out mass industrial production (Chow, 1960). Furthermore, the feudal emperors in the Qing Dynasty had consistently implemented the policy of “attaching importance to agriculture and restraining commerce,” giving little sympathy or support to merchants, entrepreneurs and practical inventions (Guo, 1987). The policy bound the peasant to the farm and this enabled the landlord class to monopolize wealth. It blocked emerging industry by depriving it of the two key elements for industrialization: labor and capital. It also limited the expansion of domestic markets and inhibited early capitalism. The low level of industrialization generated low demand for the labor force. Education was not compulsory. The illiteracy rate of the population stayed at 80 percent for much of China’s history (Ni, 2001).

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Defeated in the Opium War in 1842, and accepting the Treaty of Nanjing, Imperial China changed to a semi-feudal, semi-colonial society. It gradually lost power because of invasion by western countries. Witnessing this, members of the educated elite strongly advocated changes in Chinese society. The earliest group was composed of feudal officials, represented by Lin Zexu (1785–1850) and Wei Yuan (1794–1856). In the 1840s, they started to translate geography books from the western countries, which had great significance in a closed China. Among these materials the first description of western modern libraries was found (Zeng, 1998).

In the 1850s, some of the educational elites and pioneering ministers realized the importance of learning science and technology from the West. Beginning in the 1860s, Chinese diplomats were sent to Europe and North America for cultural exchange. This enabled the diplomats to gain first-hand information about modern libraries. Their interests also included the modern technology used in the Western countries, such as Western printing technology, and the application of steam engines, telegraphs and telephones in daily life. Their visits to Europe convinced them of the necessity and importance of industrialization in China and made them believe that the establishment of modern libraries and education would be indispensable measures needed to strengthen the country.

The development of libraries and information institutions

The collection of documents and books in China is as old as Chinese recorded history, but modern libraries did not come into being until the beginning of the 20th century (Lin, 1985). Government, private, academy (Shu yuan), and temple book repositories were the four major types of book repositories in the Qing Dynasty (1636 AD–1911 AD). *The Complete Library of the Four Treasures* was the greatest accomplishment of government book repositories in the imperial era (221 BC–1911 AD). This work was completed in 1782 and contained 79,337 volumes covering 3,578 different titles. They were categorized by the four-type classification system: classics, history, philosophy, and literature (Gong and Gorman, 2000). The activities of these book repositories were restricted to basic functions, such as collecting, preserving and compiling. The provision of user services was rarely mentioned. In the late Qing era, government repositories began to suffer a long period of decline as a result of economic and social crises. In the 1850s, three out of seven government repositories,

Wenlan Pavilion in Zhejiang Province, Wenzong Pavilion and Wenhui Pavilion in Jiangsu province, were either looted or burnt during the Taiping Troop rebellion (Ren, 2001). In 1860, another government repository, Wenyuan Pavilion in Yuanming Park, Beijing, was destroyed by the joint forces of Great Britain and France during the Arrow War (1856–1860). The chaos brought immeasurable disaster to cultural heritage and book collections.

The existence and growth of private collections during this time depended to a large degree on the interest and financial status of individual collectors and few survived in the military disturbances that lasted for more than two decades. Economic transformation reallocated social wealth. The resources and wealth of the landlord class shifted to the emerging industrialists, merchants and bankers in the trade port cities like Shanghai, Guangzhou and Tianjin. Many of the former sold their books to the latter group to support their families or pay debts (Fu and Xie, 2001). The new collectors, according to their individual needs, expanded their collections with new printed materials on Western learning (Lai, 1990). Sheng Xuanhuai (1844–1916) had one of the earliest private collections. In his late years, his personal collections rose to more than 100,000 volumes and were opened to other scholars for free (Li and Huang, 2005).

The academic book repositories were associated with traditional education. Their contents focused on the Confucian classics and utilization was restricted to students and researchers. Temple book repositories were the last major type of book repository in imperial China. Most of them were attached to Buddhist temples in the Qing Dynasty (Tang, 2004). Both academic and temple repositories underwent great changes during the several modern education reforms of this period. A number of modern public libraries established afterwards were built on the sites of these repositories; the collections in these repositories were also transferred to and stored by the modern libraries.

The fourfold classification scheme was used as the major tool in cataloguing and classification in the Qing Dynasty. It did not lose this dominant position until the modern classification system was introduced to China. Traditional libraries were managed by people from the political elite. Their job responsibilities, in most cases, did not exceed bookkeeping or circulation, which require little technique or skill. As a consequence, no formal professional training was needed for the librarians. Conservative and closed Chinese librarianship, carried on for thousands of years and established on the basis of this feudal economy, was also shaken (Cheng, 1991).

LIS profession and education

A library education program had been absent for millennia and no discussion about the need for it occurred in this period.

1898 to 1948

The social, economic, scientific and political context

After being defeated in the Sino-Japanese War of 1894–1895, Imperial China fell into financial crisis and social turbulence. A group of pioneering scholars believed that only by learning from the invaders and adopting their ideas could they help China counter foreign influence and get rid of the unfair treatment caused by a variety of treaties. In 1898, their representatives, Kang Youwei (1858–1927) and Liang Qichao (1873–1929) led the bourgeois reform movement in Beijing. The reformers advocated changes in Chinese society along the Western pattern and created many “radical programs aimed particularly at education of the mass” (Gong and Gorman, 2000: 18), including establishing a modern school system, founding a translation bureau and setting up libraries. In terms of libraries, they reiterated their educational functions and wide access to users regardless of their strata in society. Unfortunately, the movement lasted a mere 100 days. Their proposition on modern libraries was put into practice, though on a very small scale.

The Bourgeois Democratic Revolution in 1911 ended the reign of the Qing and was a symbol that the bourgeois class had formally stepped into the political arena. China’s politics, economy and culture changed enormously after the event. Although leaping one more step towards a democratic country, China was unable to cast off the intervention of foreign powers.

China was also involved in World War I, under the pressure of foreign intervention, and ended up on the victorious side. However, the victorious reputation did not bring the country any benefit and no release from the status of miserable slavery. The rights and benefits of colonization were just transferred from the country defeated, for example, Germany, to those which chose the right side, like Japan. The significance of this power shift is more than a redistribution of compensation or jurisdiction, as Japan took this chance to enlarge its invasion and increase industrial investment, which by all means laid a base for the following round of invasion and occupation (1937–1945).

This period is the time of the rising of the bourgeois class and the national industry they established. It first appeared in the coastal colonized cities in the 1870s, where there were a lot foreign-invested industries.

Most of the class, at first, worked in those industries, coordinating the companies or factories with local government, suppliers and workers. Then they started business by themselves, mostly light industry, such as flour mills, match factories, textile and print works, etc. Those owners admired new technology and were willing to spend money on innovation, but rarely embraced modern management. Although both governments, the Qing and the recently founded Bourgeois, claimed to encourage national industry, under the pressure of foreign invaders and treaty limitations there was hardly anything they could do. The national industry struggled to survive till the outbreak of World War I, which distracted the invaders’ attention from China. The blossoming of Chinese national industry did not last long. Soon after the war was over, the foreigners refocused on the re-partition of rights and benefits in China. Once more, national industry was trapped in a rather difficult environment, and could only seek its vital force between the cracks. In the following 20 years, it underwent a slow and unbalanced growth.

Tragically, the decades of efforts were lost in the coming war. The Japanese invasion, starting from 1931—but officially claimed to be from 1937 to 1945—is also part of World War II. The country had not been restored after the devastation caused, even after the Japanese government surrendered. The Civil War (1945–1949) brought more damage to social and economic conditions. Not until the founding of the New China (October, 1949) did law and order resume and bring normal social and economic activity.

The development of libraries and information institutions

After the foundation of the Republic of China in 1912, the establishment of public libraries was put on the national agenda. The Bureau of Social Education in the Ministry of Education was responsible for the supervision and promotion of public libraries. In 1915, the Ministry of Education promulgated two sets of regulations: ‘The Rules Pertaining to Libraries’ and ‘The Regulations Governing Popular Libraries’. These regulations served as bases for the founding of many public libraries. ‘The Rules Pertaining to Libraries’ focused on the popularization of libraries in all provinces, while ‘The Regulations Governing Popular Libraries’ was utilized to direct the promotion, organization and administration of libraries. In 1916, the Ministry of Education implemented the legal deposit system, requiring all book publishers to offer a copy to be deposited at the Metropolitan Library and to register in its copyright bureau (Lin,

1998). This order improved the collecting and storage of new publications, promoted the communication of new publications and entitled the Metropolitan Library to function as a national library.

In 1917, the literary renaissance commenced in China, aiming at replacing the classical form of writing with colloquial language and adopting the latter as the means of literary expression. The student movement of May 4th, 1919 disseminated the spirits of science and democracy in society. Inspired by it, a large number of Chinese librarians launched the nationwide New Library Movement (1917–1925), which integrated scientific rationality and democracy into library service. This movement also catalyzed the establishment of a library education system and the foundation of a library association, two events that marked library work as a profession (Yu, 2004).

The period 1927–1937 contributes to Chinese society as an enlightenment decade by playing a role in the dissemination of New Culture. In 1927, the Nationalist government was settled in Nanjing, putting an end to the chaos of warlords' battles. Early in the administration, the government directed its attention to modern library development. The attention was mainly on administrative control and legislation on library related issues. The Ministry of Education issued library regulations in 1930, which set a high professional standard for the head librarian regarding professional training, field work experience and relevant knowledge. In 1932, another set of regulations was issued to direct combined work between libraries in the counties and cities. During these 10 years, libraries developed steadily and rapidly in number, size and the services they offered.

The first modern libraries emerged in China as early as the mid-19th century. These libraries were operated by Christian churches for the purpose of demonstrating Western culture. They were open to Chinese church members as well as foreign residents. The first of this kind was Xujiahui Public Library in Shanghai, opened in 1847, followed by Shanghai Municipal Council Public Library, in 1851. Although the two libraries provided free access to the general public, the main patrons of both the libraries were church members and Westerners (Liao, 2004). Most Chinese people at that time were unaware of the function of the library as an educational institution serving the public needs, which made a great contrast to the enthusiasm for library development and western culture raised by the bourgeois reform movement.

In 1898, the first national university, the Imperial University of Peking, was founded in Beijing. Its library, the Metropolitan University Library, became the first modern academic library in China. Li Dazhao

(1889–1926) was the head librarian at Peking University from 1918 to the mid-1920s. During his tenure, he brought Marxist librarianship into China and promulgated Marxist theory in the university. He claimed that libraries are to support social reconstruction and help guide the general public towards constructing the communist society through the distribution of literature and Marxist texts. He also developed a collection of Marxist literature and lent it directly from his office (Barclay, 1995). Mao Zedong (1893–1974), the Chinese revolutionist, who was then Li's assistant, was greatly influenced by him and benefited from the Marxist literature, and applied Li's political thoughts to library construction in New China.

Soon after the movement started, the reforming trend swept the nation. Besides the Qing court, local esquires (people of higher social rank) and provincial magnates volunteered to establish the first group of modern libraries. The first officially run public library was the Hunan Provincial Library in Changsha, Hunan Province, in 1904, followed by Hubei Provincial Library, established in Wuchang in the same year by Zhang Zhidong (1837–1909), a senior officer in the Qing court. In 1907, Jiang Nan Library was found in Nanjing; then came the Heilongjiang Library in 1908, located in Qiqiha'er. In 1909, four more provincial libraries were founded, in Shandong, Shan (the 3rd tone) xi, Henan and Yunnan. By 1914, the number of provincial libraries had increased to 18. Most of these libraries were located in Eastern China and the port cities, reflecting the imbalance in economic and educational development of the time. However, the public library movement in this period engendered public libraries only in name and form but not in essence, because these libraries, to a large degree, were established on the basis of the feudal library traditions, and were financially supported by the feudal class.

After 1911, the officially run libraries were taken over by the Nationalist Government; consequently, the collections were kept. The library system was developed under the influence of various Western ideologies at the beginning, and then by American ideology because of the influence of the New Library Movement. The number of libraries increased by a wide margin during the 10 years after the movement (Figure 1).

In general in this period there were five types of libraries: public libraries, popular libraries, school libraries, special libraries, and foreign libraries. The public libraries included national libraries, provincial libraries, country libraries, municipal libraries, privately maintained libraries, and children's libraries. Popular libraries were small-scale libraries known

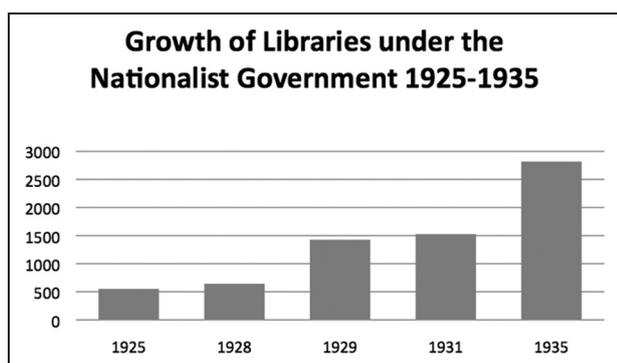


Figure 1. Growth of libraries under the Nationalist Government 1925–1935

(Source: Wu, 1936, pp. 950).

as people's education centers. These centers were set up in the late Qing Dynasty and served as places for reading, publishing, presenting and holding competitions. The term 'school libraries' referred to libraries in colleges, secondary schools and primary schools. Other than technical school libraries and governmental libraries, special libraries also included the libraries of cultural institutions. The foreign libraries mainly served the foreign residents. Table 1 displays the distribution of these five types of libraries throughout the nation in 1935.

Beginning in 1921, the Communist Party actively participated in the library development movement. As a young party, it promoted the establishment of labor libraries and country libraries to disseminate faith and ideas. Those were founded in cities like Shanghai, and also functioned as culture and ideology-disseminating institutions.

Unfortunately, the accomplishments of this period were soon mostly destroyed by the Japanese invasion and occupation (1937–1945). According to postwar statistics (Yan, 1983), more than 2000 libraries were ruined in the Southeast coastal provinces alone, and an estimated 10 million volumes lost. In 1947, only 716 public libraries and 1492 academic/school libraries remained.

LIS profession and education

Before 1919, no library school existed in China. Early knowledge of western libraries and library education were obtained from the Christian missionaries. These missionaries came to China after the Opium War to spread Western culture and the Christian doctrine. Public libraries, whose existence indicated the superiority of Western culture, were opened to Chinese church members and foreigners (Liao, 2006). In this way, early missionaries introduced public-oriented library practices to China and

Table 1. Various types of libraries in 1935.

Category	Number
Public libraries	933
Popular libraries	1002
School libraries	497
Special libraries	377
Foreign	9
Total	2,818

(Source: Wu, 1936, p. 950).

therefore helped lay the groundwork for library reform in the following decades.

One significant figure among the Christian missionaries of this period was Mary Elizabeth Wood. She was the first leading figure to introduce modern library science to China, and was entitled 'The Queen of the Modern Library Movement in China' by Li Yuanhong, the second president of the Republic of China (Zhong Hua Min Guo) (Cheng, 2000). She first worked as an English teacher in Boone School, Wuchang. Observing the extremely limited access by students to books and libraries, she suggested setting up a library in the school (Samuel, 1933; Xiao, 2007) and initiated China's library management. She also assisted two graduates, Shen Zurong and Hu Qingsheng, to study library science in New York State Library in 1914 and 1917 respectively (Tsay, 1999).

Shen was the first student sent to America to study library science. Soon after he graduated, he returned and worked with Miss Wood to establish the first library school in China. Shen believed that libraries could not serve users well without qualified managers. By 'qualified library manager' he meant those who had been systematically trained and were committed to this profession (Shen, 1922). Realizing that sending large numbers abroad to study library science was unrealistic, Shen established China's own library school. Considering China's unique cultural tradition, he believed that such schools should be tailored to the country's own needs (Shen, 1922).

Wood and Shen were convinced of the superiority of American education and wished to empower their students with American librarianship knowledge, so that they would be able to follow in the path of the most advanced system at that time. In 1920, they founded Boone Library School in Boone College, Wuchang. This school was built strictly on the American model, imitating the system of the New York Library School (Zheng et al., 2010). All the faculty members were either from the US or had been

educated in American schools (Liao, 2009). Boone Library School first recruited university graduates, then senior high school graduates. These students received 2 years of library science professional education and training. The curriculum included Chinese cataloging, Chinese library history, Western library history, introduction to Chinese reference, introduction to Western reference, library administration, library economy, classification, etc. The training focused on techniques and practice. The Boone Library was used as the student internship base. From 1920 to 1953, more than 600 students graduated from this school. The majority of them formed the backbone of modern library development in China.

Following this initiative, Shanghai National University and the University of Nanking (predecessor of Nanjing University) set up their own departments of library of science in the 1920s, and in 1947 Peking University offered a special course in library science. Also, from 1909 a theoretical framework came into shape. Sun Yuxiu (1871–1922) published an article ‘Library’ in *Education Magazine*, systematically discussing what a library is and basic library theories (Fan, 2008). In the 1920s, scholars such as Hong Youfeng, Du Dingyou, Ma Zongrong, and in the 1930s Liu Guojun, also developed their theories based on research into foreign library theories.

The 1930s was the blossoming decade for library science in China. A generation of Master’s students graduated and was devoted to this field; ample research results came out and were applied in practice. However, the progress of library education in China was suspended because of the Japanese invasion. The war blocked the communication of academic research between China and Western countries. Thus, China was soon left behind in the development of library science (Yu, 2004).

1949 to 1977

The social, economic, scientific and political context

The New China faced many challenges at its founding. China was now politically independent, for the first time in more than 100 years. However, the fight against foreign invasion and the civil war left China in an embarrassing economic situation. The conflict between classes, though no longer the center of political concern, still existed as one of the major social problems. Ideological divergence between socialism and capitalism brought tension to Sino-American relations. The confrontation between these two countries on the battlefield in the Korean War (1950–1953) pushed China one more step forward to resisting

imperialism. Meanwhile, sharing the same ideology and the same competitor, the Soviet Union, became a raw model for new China in almost all aspects. Labeled with capitalism, American and Western European librarianship, which had dominated this field for decades, was replaced with Soviet Union librarianship.

However, the close relations between China and the Soviet Union did not last for long. In 1959, China encountered a severe ecological disaster; the ecological disaster from 1959–1962 was a natural disaster which caused crop failure and starvation. Ignoring the crisis, the Soviet Union stopped all economic and technical support, and urged China to clear its debt. The different attitudes held by the two countries towards Cuba in the missile crisis finally revealed the ideological and diplomatic differences between the two socialist countries. Soviet Union librarianship lost its dominant place in China.

The decade from 1966 to 1976, labeled the Cultural Revolution, caused a great regression in modern library development in China. The Cultural Revolution is more appropriately described as an unprecedented catastrophe than a revolution. There are very few, if any, statistics or literature recording what happened to libraries in China during this time. What is known is that class conflict had been immensely maximized. Political fever took over everything, including respect for knowledge. Libraries not only suffered from destruction but also many collections were lost. Many researchers and experts in this field were persecuted. Library education also was forced to a standstill.

The development of libraries and information institutions

From 1949 to 1965, realizing the function of libraries and library service in assisting national development, the government took up library reconstruction and adopted the Soviet Union’s experience, theories and principles to rebuild libraries and library services, making them support socialist construction. The quantity of libraries and collections increased steadily. Because of the massive publication of volumes on Marxism and socialism, collection development planning also endured a change (Wu et al., 1996). The main types of libraries included national libraries, provincial libraries, country libraries, private libraries, academic libraries, government libraries and factory libraries. Table 2 shows the categorical distribution of libraries as of 1950.

In the 1950s, the introduction of the First Five Year Plan (1953–1957) drove China toward modernization and raised the demand for training and education. The

Table 2. Categorical distribution of libraries in 1950.

Category	Number
National	5
Provincial	37
Country	30
Private	44
Academic	132
Government	99
Factory	44
Total	391

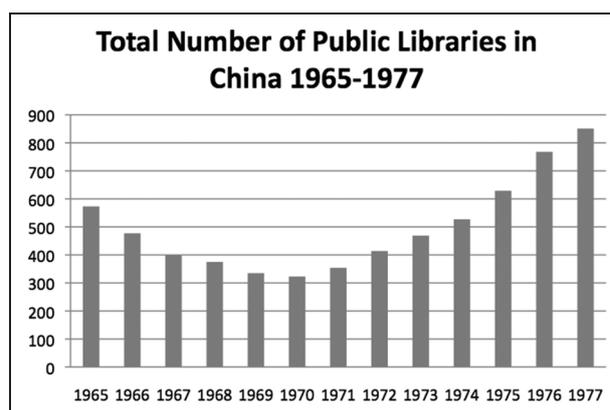
(Source: Bureau of Culture Relics, 1951, p. 24–25).

rural and factory libraries, mainly targeted at peasants and workers, flourished. It was reported that rural reading rooms had reached 182,960 units by the end of 1956 (Yu, 2001, p. 256). These reading rooms enabled the peasants and workers to study current government policies and scientific knowledge and technique. The following Great Leap Forward Movement (1958–1962), which declared an acceleration of socialist construction, proved to be unrealistic. Though library construction increased in numbers, most of the libraries and reading rooms established during this period neither had adequate collections nor were they able to provide qualified service. The declaration was suspended in 1962, but the after effects did not disappear until several years later.

The Soviet Union pattern of social development had impacted the organization of the collections, too. Huge amounts of Russian materials on library science, science, and industry, as well as Communist classics, were imported by China through both purchase and exchange. The collection of Russian materials had substantial growth (Yu, 2001), while English language collections dropped to a record low. For example, in 1949, there were 4,163 volumes in Russian in the National Library of China, accounting for less than 2 percent of the holdings of foreign language materials. By 1954, this proportion increased to 32 percent, and in 1958 it reached 59 percent (Yu, 1996). It was not until after the mid-1970s that Western language collections rebounded.

Little was recorded on library and information service development during the Cultural Revolution. Statistics (Wu, 1996) on public libraries above the country level showed a decline in the numbers of public libraries after 1966, but they had begun to recover by 1971 (see Figure 2). Overall, however, there is a lack of statistics on other types of libraries.

Since 1949, Chinese librarians had made a great effort on the standardization of classification systems and the compilation of union catalogs (Lin, 1998). In 1951, Du Dingyou's *New Manual for Library Work*

**Figure 2.** Total number of public libraries in China 1965–1977.

(Source: Wu et al, 1996, p. 117).

was revised and reissued. In 1953, the first draft of the Chinese People's University Classification Scheme appeared, modeled on the new classification of the National Lending Library in the Soviet Union (Barclay, 1995). It was revised in 1955, 1957, 1961 and 1962. According to Richnell and Nelson (1977), from 1973 to 1975 more than 30 branches under the leadership of National Library of China tried to develop a new classification scheme to replace the decimal system used before the founding of new China, due to political influence. In 1974, the National Library of China published the *Cataloging Rule for Chinese Documents*, and applied them in most libraries.

LIS profession and education

Following the end of World War II and the beginning of the Cold War, the ideological differences between Communism and capitalism forced China to renounce American ideology, including its influence on library education. Chinese library education was mainly influenced by the Soviet Union. Inevitably, it could not avoid the 'pan-politicized' and 'ideologized' features practiced by Soviet Union library education (Cheng, 2001). During 1950–1960, a great number of scholars and publications in library science emerged in China. Liu Guojun, Du Dingyou, Zhou Wenjun, Peng Feizhang were the leading scholars. Restricted by the historical and social context, their research more or less reflected the characteristics of Soviet librarianship and the ideology of the Soviet Union.

In 1958, the first information science education program was commenced at the China Science and Technology University (Xiao, 1988). In addition to Peking and Wuhan universities, 10 other institutions had launched library programs in the 1960s. From

1966 to 1976, China experienced the Cultural Revolution which sought to eradicate the old thoughts, old culture, old customs and old habits of the bourgeois class (Po Si Jiu). The library was classified as a platform of the old culture and was related to the bourgeois complex. So were the educational institutions. Many libraries were destroyed and schools were shut down. The chaos forced library education to once again stagnate.

1978 to 2009

The social, economic, scientific and political context

After the Cultural Revolution, China launched a reform and opening policy. Ever since, economic construction has been the essential task of the Chinese government. In 1978, the Chinese government authorized the re-establishment of a national library association. It has provided widespread support for the rebuilding of libraries, library collections and professional expertise (Fang, 1979).

As the political shackles were smashed, Chinese librarianship picked up diversified development again. Advanced theory, technology and management were introduced to China and have exerted a great influence in research, education and practice.

The development of libraries and information institutions

According to reports from the National Bureau of Statistics of China (National Bureau of Statistics of China, 2010), the number of public libraries in China has increased for the past 30 years (Figure 3).

In the mid-1990s, another significant issue appeared in China, the construction of digital libraries. Since 1995, research on library digitization was started in Tsinghua University, Peking University, Shanghai Communication University, Fudan University, the Southern China Institution of Technology. The China Primary Digital Library Project (CPDLP) was launched in 1996. It was a project funded by the Chinese government and developed by the association of the National Library, Shanghai Library and other public libraries. In 1998, the proposal for the China Academic Library and Information System (CALIS) was approved by the State Council. In 1999, the China Digital Library Project was set up. Meanwhile, many public libraries have developed a digital section and started offering virtual services. For example, the National Library of China now integrates the National Library of China and National Digital Library of China. There's no doubt that, with the pace with the

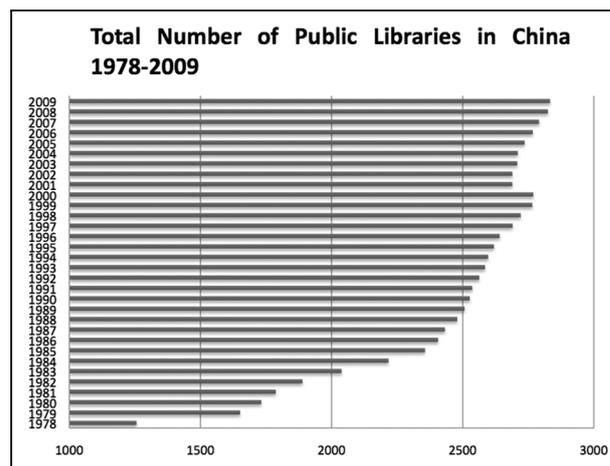


Figure 3. Total number of public libraries in China 1978–2009.

(Source: National Bureau of Statistics of China, 2010).

popularization of the Internet, digital libraries will have a bright future.

LIS profession and education

Soon after the end of the Cultural Revolution, library schools were reopened and Western thoughts were re-introduced into China. This was followed by an upsurge in library theory construction in China. Under the influence of a variety of communication theories, Chinese scholars started to explore the relationship between library science and information science. Theories from a variety of schools co-existed in this period and have raised nation-wide discussion. The clashes between different theories have not ceased since 1990. By contrast, because of the rapid development of information technology and the popularization of the concept 'information society', the situation became more complicated. The 'information wave' swept the existing system. Many researchers believe the introduction of information management will be a great opportunity to promote library science. Therefore, in some schools, the existing library science was replaced by information resource management. The new concept stimulated the public recognition of library and information science; as a consequence, it drew public attention to LIS education.

LIS education in China includes in-service education and regular education. In-service education is carried out through the tutorials mainly provided for employees in library or other information services without the need for formal education or training. The tutorials could be delivered in a variety of approaches: 1) full-time study and certification; 2) part-time study

and certification; 3) distance study; 4) short term training classes.

Regular education covers undergraduate and graduate education. The undergraduate program is a 4-year full time program. The main subjects include library management, information management, and archives management. The core modules are basic knowledge of the library, library management, introduction to information management, research in information use, information resource construction, classification, cataloguing, information retrieval in social science and natural science, consultation and decision-making etc. (Meng, 2008). The practice section includes an internship, site visit and field work, for a total of 10 weeks. By 2007, there were 26 undergraduate programs in LIS nation-wide. A large disparity exists in their geographical distribution (Pan, 2008). There are more in the East than in the West, more in the North than in the South.

The master programs in LIS increased from 21 in 2003 to 42 in 2007 and eight of them were operated by libraries. Table 3 shows the geographical distribution of the master's programs in 2009.

From 2003 to 2005, the number of doctoral programs in library and information science increased from six to eight, and has remained at eight ever since.

The two decades since 1990 show us not only the development of LIS education, but also the challenges. The first challenge is how a school is going to define itself. The Department of Information Resource Management in Nankai University, for example, was named Department of Library Science when first established in 1984. In 1987, it changed its name to Department of Library and Information Science. In 1994, it was Department of Information Resource Management but it resumed the name Department of Library Science in 1999. In 2005, it returned to the title of Information Resource Management. Nankai was not the only one struggling for identity. The same thing happened in Peking University, Zhejiang University, etc. (Xu, 2006). Indecision about these different titles is obvious evidence of the uncertainty about LIS and lack of agreement on the understanding of LIS education.

The second challenge faced by LIS education is employment for students. Dr. Liangzhi Yu, associate professor in the Department of Information Resource Management, has witnessed her students graduating from the top university in China but having trouble finding jobs. These graduates found, as they began their new profession, that they had little advantage when competing with other fields of study, sometimes including those with no

Table 3. Geographical distribution of the master's programs in 2009.

Location	Number	Location	Number
Beijing	5	Shandong	2
Jiangsu	4	Chongqing	2
Shanxi	4	Anhui	1
Shanghai	4	Fujian	1
Tianjin	3	Guangxi	1
Guangdong	2	Hebei	1
Hunan	2	Heilongjian	1
Hubei	2	Liaoning	1
Hunan	2	Shanxi	1
Jilin	2	Sichuan	1
Total		42	

(Source: China Graduate Student Admission Information Net, 2009).

professional training. Dr. Yu could not help asking "What's the future of my students?" She was concerned that if the LIS students would no longer be needed, then "What's the future of Chinese LIS education?" (Yu, 2005).

Academic exchanges between China and Western countries have also resumed. The China Society for Library Science (CSLS) was founded in 1979 and has as a major objective to conduct academic exchange and strengthen cooperation with international library organizations. China has also resumed its membership in UNESCO. In 1981, CSLS resumed its membership in IFLA, and started participating in and playing an active role in international activities. The exchanges provide great opportunities for Chinese librarians and researchers to study abroad.

Conclusion

This essay has reviewed the impacts and influences of social, economic, scientific, and political developments in China as they have impacted library and LIS development from 1840 to 2009. It is a story of both tragedy and triumph—in many instances, repeatedly! Libraries and LIS development could have been instruments of social progress and democracy, but were frequently overcome or thwarted by economic, social, scientific, and political changes. Buffeted by foreign invasions, social revolutions and several economic crises, Chinese libraries and LIS theorists, practitioners, and educators have persisted; though their struggle was sometimes hopeless, they remained largely devoted to the struggle. In retrospect it is clear that a relatively steady society is the best soil for LIS development but China, but seldom was that good 'soil' available. Instead, ideology

promoted by the central government leads the direction of development instead of the theoretical foundation or core philosophy of the field. The expectations of economic growth, political equality and the realization of social welfare have been the main impetus pushing LIS forward and narrowing the gap between China and Western countries. It is to be expected that they will continue to exert significant influence on LIS development in the future.

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Information evaluation and the individual's cognitive state: Some insights from a study of British teenaged users

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Abstract

This paper explores, on the basis of their cognitive states, the likely inclinations of a group of young people in England with regard to evaluating Web-based information. The work draws on data submitted via an online questionnaire by 82 16–18 year-olds. Frequency counts were generated and each participant received a 'trust disposition' score according to their questionnaire responses. The results present a mixed picture in terms of the probable tendencies of young people to evaluate information. The participants' data in relation to some of the issues addressed in the questionnaire suggest that they may be inclined to accept much of what they see without challenging it, although few of their overall trust disposition scores are significantly high.

Keywords

information behaviour, information evaluation, Internet trust, quantitative research, young people

Introduction

Much has been written in library and information science (LIS) about the importance of people evaluating information. The issue has attracted particular attention from both academics studying information behaviour (IB) and practitioners seeking to promote information literacy (IL). Analysis and comment have come, too, from diverse fields far beyond the LIS discipline. In cognitive science, Lewandowsky has made significant contributions to this area in discussing how our brains process information (Lewandowsky, Ecker, Seifert, Schwartz and Cook, 2012; *All in the Mind*, 2012) and, in journalism, Marr (2005) has asked how far it is defensible to rely on the claims of a single source when making a serious allegation.

In LIS, an appreciation of the need to appraise information and, especially, information sources can be traced back over decades. It is evident, for example, in some of the earliest models for teaching

information skills. More than 30 years ago, in a landmark framework, Marland (1981) cited a series of criteria that he stipulated should be borne in mind by young people when taking decisions as to whether to select or reject individual materials for use. Around the same time, in his article on 'the use of the library', Trigg (1981) presented a breakdown of evaluation skills consisting of nine elements.

Much more recently, the widespread availability of the Internet in homes, schools and libraries has raised very substantially the profile of the skill of evaluating information. Indeed, it is now a key aspect within several textbook definitions as to what IL involves. *Harrod's Librarians' Glossary and Reference Book*

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declares that IL should be regarded as the “ability to identify, locate, evaluate, organize and use information” (Prytherch, 2005: 351). Today, the evaluation aspect of IL is closely related to the notion of digital literacy (DL). According to Eisenberg, Lowe and Spitzer (2004), DL “considers the broad range of resources that are accessible online and underscores the importance of looking at each of these resources with a critical eye. Emphasis is placed on the format of the information presented and the special considerations that each type of resource presents” (p. 8).

The characteristics of the Internet that have increased the need for users to appraise information rigorously are now well accepted. The sheer volume of material that is available via the World Wide Web, the absence of gatekeepers who would be responsible for ensuring information quality and the fact that the search engines employed by so many users give no indication of the soundness of the material that has been retrieved have all led to major concerns. The controlled world of paper publishing is frequently compared favourably by commentators to the less rigorous and more uncertain environment of the Web. In the words of Madden, Bryson and Palimi (2006): “A sophisticated, well laid out Website may be the product of a professional publisher, or it may have been produced by a technically competent 15 year old with pirate software, who copied the design from another Website. Even the worst of books, in contrast, has been subject to some quality control” (p. 48). The way in which Internet users have progressed to their current status as active creators of content is also highlighted by Lewandowsky, Ecker, Seifert, Schwartz and Cook (2012). Pointing to the popularity of Twitter, YouTube and blogs, the authors affirm that whilst the Internet has revolutionised the availability of information, it has, in addition, facilitated the spread of misinformation. They note, too, the alarming trend that information on the Web “is progressively replacing expert advice” (Lewandowsky, Ecker, Seifert, Schwartz and Cook, 2012: 111).

Children and young adults are popularly portrayed as masters of digital technology, frequently because they have grown up in the electronic age and cannot remember a time before the widespread existence of the Internet. For them, we are often told, the world of keyboards, mice and monitors is as familiar as was that of books to their counterparts in previous eras. Yet, their youth can lead to problems as well. Nicholas suggests that whereas older information users have come to appreciate that traditional information sources are subject to vetting processes which lead to the stamp of quality by publishers and to organisational controls by intermediaries in libraries, many

young people have no mental framework for understanding and measuring quality in the digital environment (*Analysis: Clever.com*, 2009). Malik goes as far as to suggest, “The very people most at home on the web seem also the ones least able to make use of it” (*Analysis: Clever.com*, 2009).

This paper explores the inclination of young people to evaluate the information they retrieve in the Web environment. The following section presents a review of the pertinent literature before attention is turned to a new study of the issue, which has involved the collection of data via an online questionnaire from students aged between 16 and 18 in a high school in north-east England.

Literature review

The tendency of young people to accept without question much of the material they encounter on the Web is a theme that recurs in the literature time and time again. In a significant analysis that scrutinised many significant projects, Williams and Rowlands (2007) report that all too often young people have been seen to pay little regard to the authority of the material with which they come into contact when they search. Reflecting on the findings of research studies of various kinds, the authors conclude that “evaluative skills are barely in evidence” (Williams and Rowlands, 2007: 11). Although there are individual papers that present a different picture, the conclusions drawn by Williams and Rowlands are difficult to refute when the relevant literature is viewed as a whole.

Readers will no doubt recognise for themselves that the key concern lies in identifying why the rigorous assessment of source material is observed so rarely by researchers and information professionals when working with young people. In Bloom’s Taxonomy of Learning Objectives, the skill of evaluation – defined as the making of decisions or exercising of judgement based on criteria or a rationale – is postulated as the most difficult within the cognitive domain (Bloom, Engelhart, Furst, Hill and Krathwohl, 1956). Even in the early 1980s, long before the proliferation of information associated with today’s Information and Communications Technology (ICT), Trigg (1981) acknowledged that the evaluation of information was “an altogether longer and more complex business” than that of finding material (p. 304).

For Lewandowsky, the “default assumption” when people receive information is to accept that the material presented is true. This mindset, he maintains, is partly the result of upbringing – generally, children are raised by parents who tell them the truth for the majority of the time (*All in the Mind*, 2012). There

is firm evidence in LIS literature to corroborate Lewandowsky's stance that, for the most part, young people do not doubt what they are told. Even when children are working with paper sources, Wray and Lewis (1995) note that they often encounter material that is misleading, incorrect or biased, yet they will still "naturally tend to believe that everything they read in books written by adults who know a great deal more than them about a particular topic is bound to be true" (p. 8). The experiences of Brabazon (2007) suggest that the attitudes detected by Wray and Lewis (1995) remain prevalent in the 21st century and among older learners. According to Shenton and Dixon (2004), teenagers generally expect that material which is relevant to their area will be usable, unless, after the most cursory of explorations, "they consider there are good reasons to doubt it" (p. 38). Obvious inadequacy then leads to closer inspection. Clearly, the critical faculties of some young people become engaged at a reactive, rather than proactive, level.

Lewandowsky also maintains that, since recipients of information are inclined to believe the material presented to them, they must make a special effort to tag the information as false if it becomes obvious that it is inaccurate (*All in the Mind*, 2012). Let us assume for a moment that the process of recognising that particular information is incorrect imposes a significant burden on the individual, as Lewandowsky claims. The person's inclination to ignore the extra demand that is made may be viewed as consistent with the 'principle of least effort', which is frequently put forward in the literature to explain the nature of users' interactions with information. On the basis of findings from a range of studies, Dresang (2005) suggests that young people have often been found to display "a propensity to take the easiest path possible" (p. 181) – a course of action which goes some way in explaining the observation that young people may well "simplify Web site evaluation tasks and make credibility judgments that rely heavily on design and presentation features rather than content" (Harris, 2008: 161).

Those who subscribe to Birkhead's argument that "the spoon-feeding-and-teaching-to-the-test culture at school has drained [learners] of independent thought" (Birkhead, 2009), may lay some blame for the tendency of young people not to apply evaluative skills at the door of the education system. The American Library Association (1989) asserts quite unequivocally, "Information prepackaging in schools... encourages people to accept the opinions of others without much thought" (p. 90). This problem may reflect a more fundamental issue – the lack of priority given to IL in schools. Koltay (2010) notes the oddity

that people's lack of information literacy is frequently lamented by information practitioners; considerably less concern is expressed by professionals in education (whom we can understand to include classroom teachers), even though it is in their work with learners that the implications of such deficiencies may be most apparent.

The research of Heinström (2006) may give rise to the theory that, at least in some cases, a lack of thought as to the trustworthiness of information is indicative of insufficient real engagement on the individual's part with either the assignment they have been given or the topic under investigation. Heinström discovered that, in a school situation, intrinsically motivated young people, who have a genuine desire to learn, are more 'attentive to information quality' than extrinsically motivated young people, whose priority is simply to gather enough material to meet the requirements of the set task.

There is also a growing debate as to how the evaluation of information is best taught and some of the criticisms of the kinds of instruction often provided may result in the reader questioning the quality of the teaching. Ostenson (2014) reports that certain scholars have felt that particular models for evaluating information are "inadequate or even inaccurate" (p. 36). They may "encourage shallow thinking" or concentration on "irrelevant features of the source"; prompts designed to stimulate appraisal may not be especially helpful and some criteria may lead to "false negatives" (p. 36). Shenton and Pickard (2012) have also questioned the value of the various models that are used to foster IL.

Undoubtedly, some of the individual strategies for evaluating information are problematic. Graef (2000) maintains that material is frequently selected by users after testing the content in front of them against their past experience. Typically, the information-seeker compares the encountered information with their own knowledge of the subject. Speaking on the BBC radio programme 'The Wikipedia Story' (2007), McHenry, however, argues that such an approach is futile. In his words, "you really have to know the subject you're looking up to the point where you needn't be looking it up." An alternative avenue, and one that is consistent with Paterson's principles, lies in using other sources to verify the accuracy of the information within the work under scrutiny (Paterson, 1981). This strategy is obviously slow to execute, though, and care is needed when making decisions as to which corroborating sources should be consulted. For convenience reasons, when assessing material on a Web page the temptation may well be to compare it with other information available through the Internet. This

kind of evaluation is far from trouble-free, as questions have to be asked of the trustworthiness of the material used to make the comparison, too. The tasks of selecting appropriate sources for verification purposes and applying systematically each quality criterion in a lengthy series can seem unnecessary to an individual who can bring their work on an assignment to a swifter conclusion by merely accepting information which would seem adequate for their purposes.

It may be concluded, then, that the evaluation of information is a much more demanding task than educators tend to acknowledge and it is insufficiently valued in education. Some of the instructional models that are applied in schools have been subject to criticism and the issue of how source appraisal is best promoted remains unresolved. Undoubtedly, many young people spend at least some of their time at school tackling activities in which they feel uninvolved and these would seem especially likely to lead to an uncritical attitude to the use of information. As well as being cognitively challenging, if applied rigorously the evaluation of information is time consuming to the individual, who may not be inclined to expend the effort required to make such an assessment, even if they have taken the important first step of recognising the need to adopt a questioning attitude.

Origin of the research instrument

The questionnaire used to collect data from the teenagers who participated in the study was derived from research undertaken at Northumbria University by Alison J. Pickard, Pat Gannon-Leary and Lynne Coventry. In a project funded by the Joint Information Systems Committee (JISC), the team investigated “how users place their trust in digital information resources in the web environment” (Pickard, Gannon-Leary and Coventry, 2010: 4). The credibility judgements reached by people were found to be determined by three key sets of criteria. These pertained respectively to the individual’s cognitive state, internal cues relating to the material itself and external factors associated with the source but not intrinsically part of it. Shenton and Pickard recognised that it was possible to develop a document devoted to the first area and this could be used for both facilitating information literacy instruction and advancing research into information behaviour. In terms of the former, a carefully constructed questionnaire with prompts which, in their entirety, addressed all 16 of the cognitive state factors identified by Pickard, Gannon-Leary and Coventry (2010), could be used as an aid to stimulate reflection

by older secondary school students (i.e. Sixth Formers) on their particular predispositions in relation to their tendency to trust material they find on the Web (Shenton and Pickard, 2014). In an era when the need to evaluate information has never been so vital, it was recognised that such self-awareness could form an important starting point before the educator seeks to instruct the young people in more specific matters with regard to the appraisal of material and sources. From an information behaviour (IB) perspective, the authors also knew that since the same questionnaire could afford a means of collecting data from ‘real’ students in relation to each of the personal characteristics that had already been identified as significant, further insight could be gained as to the likelihood that people will actually evaluate the material they access in the Web environment. It is the IB project that will be reported in the paragraphs to come.

Study questions and methodology

It was determined that the IB-focused project should address two key questions.

- a) Within a particular sample of young people, how prevalent are the cognitive traits revealed in research by Pickard, Gannon-Leary and Coventry (2010) to be factors in the level of trust individuals place in Web-based information sources?
- b) What can be learnt, via statistical measurement, about the likely inclination of members of the same sample to evaluate information on the Web on the basis of the cognitive state factors identified?

To some extent, the approach taken in the work may be considered typical of the ‘alternative’ paradigm for the investigation of information behaviour often associated with Dervin and Nilan (1986). In a seminal paper, the authors isolate a series of features characteristic of this perspective. One is a focus on internal cognitions, rather than external behaviour. This emphasis is especially pertinent to the evaluation of information since much of the assessment process takes place ‘in the head’ and little may be learnt from observing the individual’s actions. Certainly, the particular territory of interest in this paper – the information user’s cognitive state – is consistent with Dervin and Nilan’s concentration on the “internal” dimension of information behaviour.

The authors also explain that the “alternative” paradigm incorporates the use of qualitative approaches by the researcher (Dervin and Nilan, 1986). Yet, the study

presented here is unequivocally quantitative; no provision was made for the students to record their ideas in their own words – they simply selected appropriate responses from a Likert scale. This stance is justifiable on the grounds that the project was never designed to identify the cognitive state factors that influence how far the individual trusts Web-based information; this has already been done, by Pickard, Gannon-Leary and Coventry (2010). As the questions above indicate, the study was devised with a view to identifying the prevalence, within a certain sample, of these criteria and then measuring, on the basis of the factors involved, the extent to which the participating young people are likely to evaluate the sources they find via the Internet.

Data collection

Having drafted the questionnaire on paper, initially for application in an information literacy context, the authors created, for the purposes of investigating information behaviour, an electronic version using the 'survey' facility provided by the Microsoft SharePoint software package, and the document ultimately created appeared as a Web page on the school intranet.

On 13th December 2013, all students in Years Twelve and Thirteen who would be invited to complete the questionnaire were briefed by the school's Head of Sixth Form on what the task would involve. At the beginning of the following week, the students were asked to fill in a copy of the questionnaire, which could be accessed via their homepage. As a questionnaire was completed, the system created a record of the individual who had replied, together with their data. The questionnaire was not removed from the intranet until the end of the week, when the Christmas holiday provided a natural break in the academic year. At this point, the researchers felt they could be confident that no more responses would be received and the process of data analysis could begin.

Data analysis

The data were analysed in two different ways, each of which was designed to enable the researchers to answer one of the project questions. Question (a) was addressed through the use of SharePoint's 'graphical summary' facility. This function generates simple counts and percentage proportions for each of the answers given in response to a particular question within a survey. The facility is invaluable when answers to multiple choice questions are involved as was the case in this research but it is much less useful when participants are required to submit their own text since the system is insufficiently sophisticated

to recognise when different respondents present in different ways what is essentially the same answer.

All the data from the SharePoint survey were imported into a Microsoft Excel file. Personal scores, or 'trust disposition' values, were then calculated via the use of 'if' statements so as to answer research question (b). In some cases, a maximum mark (i.e. 5 points) in relation to a certain statement resulted from a response that indicated strong agreement; in other instances such a mark accrued from strong disagreement. In broad terms, when the personal characteristics of the individual are considered in relation to each statement, the higher the figure the greater the participant's inclination to trust the information presented to them in the Web environment without evaluating it. An overall trust disposition score was calculated for each participant, based on the sum of their points for their 18 responses.

The school

The institution in which the study took place is a smaller than average secondary school located in northern England. At the time of the research, 560 young people ranging from 13 to 18 years of age were on roll. The Sixth Form, which consists of 156 teenagers aged between 16 and 18, is large and these learners comprise some 28 percent of the school's total student population. Males significantly outnumber females at this level, mainly as a result of the attraction that the school's Sixth Form football academy offers to boys who live in the locality.

At the time when data were collected, the school lacked a traditional library and many of the independent learning tasks that are included in lessons take place in the computer zones which are a feature of the building. Although most of these areas are used only for lessons and must be booked in advance, one – a large, ground floor computer zone that accommodates 72 workstations – is available for use by students during break, lunchtime and before and after school.

The sample

In all, 82 Sixth Formers completed questionnaires and the response rate was around 53 percent. The numbers of participants within the two year groups broadly reflect the wider balance within the Sixth Form. Many more Year Twelve students contributed data than did their Year Thirteen counterparts and this is indicative of the fact that the younger cohort is significantly larger in the school. Of the 82 students who participated, 63 percent were male and 37 percent female. This balance is virtually identical to the boy/girl proportions within the Sixth Form as a whole.

Table 1. Breakdown of student responses to the eighteen questionnaire statements.

Statement	Strongly agree	Slightly agree	Neutral	Slightly disagree	Strongly disagree
On a personal level, I'd say I'm a trusting individual.	40 (49%)	26 (31%)	10 (12%)	3 (4%)	3 (4%)
I'm a natural risk-taker in life.	16 (19%)	29 (35%)	26 (32%)	8 (10%)	3 (4%)
I like to be well informed.	42 (51%)	30 (37%)	7 (9%)	1 (1%)	2 (2%)
I enjoy exploring ideas.	30 (37%)	37 (45%)	13 (16%)	1 (1%)	1 (1%)
I feel I can rely on people to tell me the truth and be honest.	10 (12%)	31 (38%)	24 (29%)	14 (17%)	3 (4%)
Overall, I'd describe myself as of no more than average intelligence at most.	22 (27%)	18 (22%)	23 (28%)	14 (17%)	5 (6%)
I tend to leave jobs to the last moment, rather than tackle them promptly.	9 (11%)	22 (33%)	26 (32%)	16 (19%)	4 (5%)
I've a low opinion of computer-based technology.	6 (7%)	12 (15%)	26 (32%)	21 (25%)	17 (21%)
I'm confident in my understanding of how the Internet and search engines work.	44 (53%)	22 (27%)	10 (12%)	3 (4%)	3 (4%)
I don't enjoy using the Internet.	7 (9%)	6 (7%)	11 (13%)	26 (32%)	32 (39%)
I enjoy exploring information, even if the subject is less than interesting.	6 (7%)	22 (27%)	32 (39%)	13 (16%)	9 (11%)
I tend to accept any new information I encounter as potentially useful.	14 (17%)	35 (43%)	30 (37%)	2 (2%)	1 (1%)
I'm inclined to believe what I read on a Web site if I've often found the site useful in the past.	10 (12%)	38 (47%)	28 (34%)	6 (7%)	0 (0%)
When I find new information, I usually assess it against what I know already.	12 (15%)	45 (55%)	20 (24%)	4 (5%)	1 (1%)
I tend to accept whatever information I can find that seems relevant to my needs when time is short.	13 (16%)	30 (37%)	29 (35%)	9 (11%)	1 (1%)
If I've a positive image of an author or their institution, this usually comes from my past experience of them.	16 (20%)	27 (33%)	33 (40%)	4 (5%)	2 (2%)
I find the task of finding information boring, unless I'm pursuing material for personal interest.	13 (16%)	27 (33%)	26 (32%)	14 (17%)	2 (2%)
When the situation really matters, I question the information I receive.	26 (32%)	30 (37%)	25 (30%)	1 (1%)	0 (0%)

Results and discussion

In terms of question (a)

Table 1 presents a breakdown of the numbers of respondents and percentage proportions within the sample in relation to the frequency with which particular reactions were given to the questionnaire's individual statements. It is illuminating to explore how the various patterns that emerge lead to both positive and negative pictures with regard to the likely inclination of the young people to accept without question the information that they find on the Web. In terms of 'optimistic' evidence, it can be seen that 88 percent of the sample considered that they like to be well informed and 82 percent claimed that they enjoyed exploring ideas. If we assume that people who exhibit these traits may well look for information from different viewpoints rather than simply trust any material they find, these figures are encouraging. Moreover, 80 percent believed that they were confident in their understanding of how the Internet and search engines

work. Educators will hope, then, that these students appreciate the shortcomings of the provision of information on the Web. In view of the possibility that anyone who does not relish a particular task may well be inclined to bring it to a swift conclusion and lack the necessary rigour when undertaking it, the fact that just 16 percent reported that they did not enjoy using the Internet is also highly positive. Conversely, the discovery that 49 percent believed that the task of finding information was boring, unless they were pursuing material for personal interest, is disconcerting and we may wonder how many of the students are inclined to expedite the information-finding process and cut corners. Nevertheless, most of the participants seem well versed in at least one strategy for appraising information – 70 percent maintained that when they found new information, they usually assessed it against what they knew already. Finally, a high proportion of the sample recognised that, at least in some instances, it is unwise merely to accept material

Table 2. Breakdown of student scores by year group and gender.

Range	Number of Students	Composition			
		Year 12 boys	Year 12 girls	Year 13 boys	Year 13 girls
39-42	2	0	1	1	0
43-46	4	2	2	0	0
47-50	6	2	2	2	0
51-54	35	14	9	6	6
55-58	25	13	5	3	4
59-62	8	5	0	2	1
63-66	2	1	0	1	0
Totals	82	37	19	15	11

without challenging it – 69 percent were of the opinion that when the situation really mattered, they questioned the information they received.

Other discoveries, however, are more alarming. 80 percent regarded themselves as trusting individuals, although, curiously, only 50 percent felt they could rely on people to tell them the truth and be honest. Fifty-four percent thought of themselves as natural risk-takers in life. It is, of course, possible to equate risk-taking with a tendency to accept information without checking it thoroughly. If we accept Costa and Kallick's principle that intelligent problem solvers ask questions of source material (Costa and Kallick, 2007), then the fact that only 23 percent rated their intelligence as higher than average may cause concern, unless of course the participants were simply being unduly modest. Clearly, if information-finding tasks are not tackled until near the deadline, little time is left for evaluation, so the acknowledgement by 44 percent that they tend to leave jobs to the last moment would seem to have serious consequences for information behaviour. Moreover, 53 percent admitted to a tendency to accept whatever information they could find and which seemed relevant to their needs when time was short. These revelations have major implications for time management on the part of students. 46 percent disagreed with the statement, "I've a low opinion of computer-based technology." This would suggest that many of the teenagers are not especially sceptical of information that is offered by this means. We can certainly conclude from the discovery that 60 percent adjudged that they tended to accept any new information they encountered as potentially useful that a lot of these individuals do not submit to close scrutiny the material they access. It may also be the case that after a particular source has proved valuable to the student in the past, its new material is not closely evaluated; 59 percent stated that they were inclined to believe what they read on a Web site if they had often found the site useful before. This

discovery that previous personal events were a significant factor in the students' attitudes is underlined by other evidence – 53 percent considered that if they had a positive image of an author or their institution, this usually came from their past experience of them.

It is difficult to draw unequivocal conclusions from the data on one particular issue. Reactions to the statement, "I enjoy exploring information, even if the subject is less than interesting" failed to show any real consensus – 34 percent agreed, either strongly or slightly; 39 percent were neutral in their attitude; 27 percent reported some measure of disagreement.

In terms of question (b)

Once the trust disposition scores had been calculated, it became apparent that the overall range was considerable; 27 points separated the lowest (39 – recorded by a boy in Year Thirteen) and the highest (66 – registered by another male in the same year group). Yet, as can be seen from Table 2, there was much clustering of scores between 51 and 58. The mode was 52, with 10 students registering this score, and the median 54. The frequency of each of the values is shown in Figure 1. The overall pattern exhibits many of the features characteristic of a normal distribution. Since a high trust disposition score is by no means desirable, the fact that so many of the students' figures are to be found around the mid-point of the overall 18–90 scale is encouraging. So, too, is the revelation that there were no values in the top third of the scale (i.e. the 67–90 region). Lewandowsky suggests that, ideally, information users should exercise a certain degree of scepticism when receiving information, as such an attitude helps them to differentiate between what is true and what is false (*All in the Mind*, 2012). If we accept this argument, a low trust disposition score is obviously preferable.

The first time that the questionnaire was implemented was whilst one of the authors was teaching

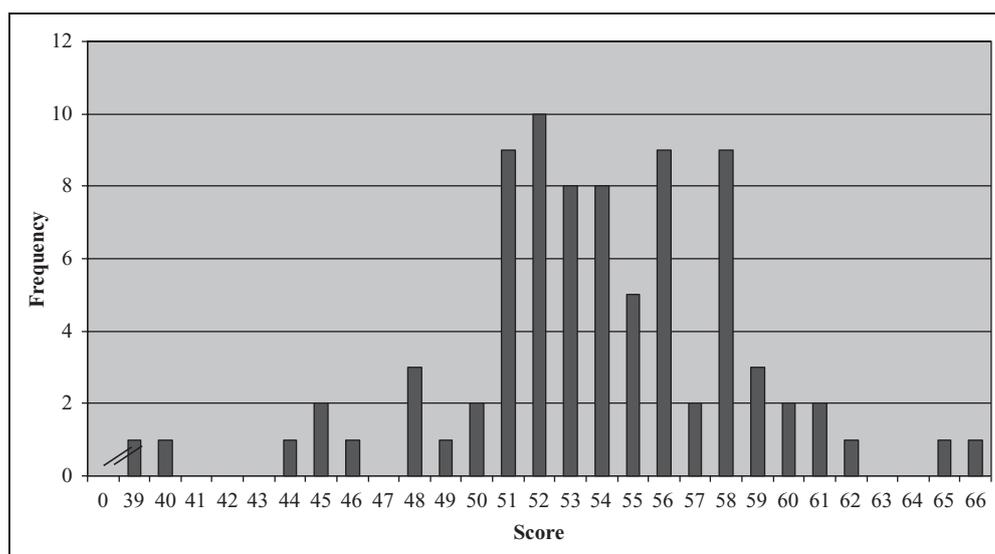


Figure 1. Frequency of the trust disposition scores.

a small group of Year Thirteen students in a session broadly devoted to good academic practice. The class consisted of three learners, whose trust disposition scores were 35, 47 and 52 respectively. When these figures are compared with those of the participants in the research project, it can be seen that 47 and 52 lie in the bottom half of the scale, and no-one taking part in the study registered a score as low as 35. At this early stage, it is difficult to ascertain the point on the scale which may be considered to represent 'high trust.' In an article for a teaching magazine in which they presented the questionnaire, Shenton and Pickard (2014) suggest that, with 90 forming the maximum total and 18 the minimum, the term could apply to a figure of 60 or more. If this benchmark is applied to the statistics here, then only seven students (around 9 percent of the sample) would exhibit this characteristic.

Whilst the project reported in this paper was taking place, another was also being staged in the same school. This was a qualitative study that explored student perspectives as to why a traditional library might be needed in the institution. Here, too, findings gave considerable grounds for optimism, with several Sixth Formers making clear their lack of trust in information available via the Internet (Shenton, 2014). It must be admitted, however, that even if young people express misgivings of this kind when contributing data for a research project it cannot be assumed that they will demonstrate comparable scepticism when they actually use the Web for information.

Conclusions

In view of the pessimism inherent in much of the debate relating to young people and the evaluation

of information, academics and practitioners can take considerable heart from the findings of this study. The most striking feature is that the trust disposition scores are not startlingly high. On an 18–90 scale, the biggest value was only 66 and a mere five students recorded scores in excess of 60. Educators can build, too, on some of the discoveries made by the researchers when answering question (a). Here it emerged that large numbers of the participants claimed they were keen to be well informed and they enjoy exploring ideas. It is not difficult to demonstrate that these are best furthered through the use of high quality information. Many of the students do appreciate the need to appraise material, and indeed maintain that they carry out such assessment if the situation is sufficiently important. A lot of the respondents also state that they exercise at least one strategy for evaluating information – they compare material that is new to them with what that they know already. There are, however, areas of concern, too; the willingness of some students to take risks and a lack of regard for time management can have unfortunate repercussions. There are instances where the results present mixed messages. The percentages of students who say that are trusting people are high, yet much lower proportions of the participants agreed with the statement, "I feel I can rely on people to tell me the truth and be honest." It is difficult to explain this apparent anomaly and the situation can probably be clarified only with the collection and analysis of more data from these young people.

It should be acknowledged that some of the frequency figures relating to individual responses to a particular statement can also be interpreted in contrasting fashions. Many of the young people claimed

to be confident in their understandings of how the Internet and search engines work. Ostensibly, this would seem heartening but some sceptical readers may feel that it is indicative of the widespread tendency of young people to overestimate their ICT/IL knowledge and skills. Latham and Gross (2013) point to the fact that research has shown that even after taking a test students with less than proficient IL skills “are unable to recalibrate their [inflated] self-views” (p. 432). Nevertheless, such a test would have been invaluable in the present study as it would at least have helped the researchers to determine whether the participants’ confidence was justified.

Readers studying the trust disposition scores recorded by the participants here – and teachers/school-based information specialists who use the questionnaire with their own students – may well seek to infer how far the young people in question are generally inclined to accept unquestioningly the information they find on the Web. It should be appreciated, however, that the trust issue is multi-faceted and, as Pickard, Gannon-Leary and Coventry (2010) demonstrate in their research, can be fully understood only if other influences are considered as well. In their overall model, the authors also highlight the importance of internal cues relating to the material itself and external factors associated with the source. Thus, whilst an analysis of the cognitive state of the individual gives us some insight into the person’s tendency to trust information found via the Internet, neither the teacher nor the student in question should believe that the data elicited by the questionnaire presented in this paper offer an entirely comprehensive picture of the situation.

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Library adoption of knowledge management using Web 2.0: A new paradigm for libraries

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Abstract

While Web 2.0 tools are increasingly being adopted by academic libraries to connect with patrons, they are not actively used to facilitate knowledge management (KM). This study investigates the awareness and comfort of librarians, their perceived usefulness of KM using Web 2.0, organizational readiness, and the ways in which these affect the library adoption of KM using Web 2.0. The survey questionnaire was completed by 101 librarians from 35 countries in 6 continents. Most respondents had heard of KM, were comfortable with Web 2.0, perceived KM using Web 2.0 to be highly useful, but were not entirely sure if their libraries were ready to adopt KM. Comfort with Web 2.0 was found to impact perceived usefulness, which in turn, strongly affected the likelihood of adoption of KM using Web 2.0. This is the first study that combines KM using Web 2.0 from the perspective of academic librarians globally, and has important implications for theory and practice.

Keywords

Web 2.0, knowledge management, libraries

Background and introduction

Academic libraries are undergoing a period of profound change, with changes in the format of information accessed and provided, and changes in the needs of users and organizational structures, as well as in the role of librarians. This necessitates libraries to become, not just providers of information and periodicals, but knowledge seekers as well – seeking knowledge both from their patrons as well as in-house knowledge of their own employees. Knowledge Management (KM) is “the capability of an organization to create new knowledge, disseminate it throughout the organization, and embody it in products, services and systems” (Nonaka and Takeuchi 1995). In non-profit organizations such as libraries, KM can improve communication among staff and between top management and can promote a culture of sharing (Teng and

Hwamdeh, 2002). The basic goal of KM within libraries is to leverage the available knowledge that may help academic librarians to carry out their tasks more efficiently and effectively (Maponya, 2004). It can help transform the library into a more efficient knowledge sharing organization (Jantz, 2001). The only studies on library and KM have focused on KM in academic libraries (Townley, 2001; Maponya, 2004), the need for KM in libraries (Wen, 2005), the relationship between KM and library (Roknuzzaman and Umamoto, 2009; Sarrafzadeh, Martin and Hazeri,

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2010), librarians' awareness or perceptions of KM (Siddike and Islam, 2011), knowledge sharing behavior (Islam, Ikeda and Islam, 2013), KM in state-of-the-art digital libraries (Islam and Ikeda, 2014) and mapping KM tools to KM cycle for libraries (Agarwal and Islam, 2014). A few academic libraries have been practicing KM to some extent. Branin (2003) describes an enterprise-wide KM system at the Ohio State University Library in the United States. The library aimed to take a broad and evolutionary approach to KM by responding to new types of digital information assets created on campuses and among individual faculty and students. They created a knowledge bank and sought to extend the expertise of librarians beyond collection management – as knowledge managers for managing all types of information. Maponya (2004) carried out a case study of the KM practices in the University of Natal, Pietermaritzburg Library, South Africa. The library focused on partnerships and collaboration with other libraries to acquire knowledge. There was knowledge sharing to some extent, but little systematic sharing of know-how, expertise and experiences among the library staff. White (2004) conducted a case study of the KM culture at the Oxford University Library Services. The study found that the library had an effective knowledge acquisition culture, they focused on mentoring/coaching for transferring knowledge from long-serving members to new staff members, monitoring of intangible assets, and other KM tools. Despite limited implementations and varying perceptions of the Library and Information Science (LIS) community towards KM, most researchers view it positively and call for full involvement of LIS practitioners in KM (Abell and Oxbrow, 2001; Southon and Todd, 2001).

The advent of Web 2.0 has also brought new opportunities for the library, and the increasing role of the patron in its decisions (Kim and Abbas, 2010). In a digital environment, knowledge can be transferred in the form of knowledge-based services and products including e-mail, Web 2.0, websites, online discussion forums, video-conferencing and other collaboration tools (Agarwal and Islam, 2014). Using these tools, librarians can share their knowledge with colleagues and respond more effectively to user needs (Michael and Maria, 2007). Web 2.0 can be leveraged to support knowledge sharing, creation and other knowledge processes. Web 2.0 applications and tools are important for libraries, especially when they are going through budgetary constraints. This is because many of these Web 2.0 tools can be adopted free, or purchased at relatively low prices. Levy (2009) points out that the features of most Web 2.0 tools have their roots in KM tools. For example, Wiki

as a Web 2.0 tool is part of the KM toolbox. Wikis can be read and edited simultaneously, helping to improve collaboration amongst library staff, between staff and patrons and even across libraries. 'Library Success: A Best Practices Wiki' (www.libsuccess.org) is used by librarians across the world to share their knowledge and successful projects, facilitating collaboration across libraries. Agarwal and Islam (2014) propose a set of technology and non-technology tools that libraries can use to implement KM, and map these to different phases of the KM cycle.

Even with these opportunities provided by KM and Web 2.0, most libraries are yet to fully embrace KM, or to leverage the use of Web 2.0 for KM goals. So far, there is little research in the area of KM using Web 2.0 as applied to libraries. It is unclear how librarians internationally perceive Web 2.0 and KM, and if they are ready to adopt KM in their libraries.

Objective of the study

The objective of the study was to investigate if librarians were aware of KM, if they were comfortable with Web 2.0, and whether their libraries were ready to adopt KM and Web 2.0. The proposition is that the more aware the librarians are of KM, and the more comfortable they are with Web 2.0 tools, the more open they would be to the idea of adopting KM using Web 2.0 in their libraries. However, this would also depend on the right conditions and organizational readiness to adopt KM being prevalent in the library.

The following research questions guide the study:

- RQ1. How aware are academic library professionals about KM and knowledge sharing practices?
- RQ2. How comfortable are they in using Web 2.0 tools?
- RQ3: How do these impact their perception of KM using Web 2.0 for libraries?
- RQ4: Based on their perception, how likely is their library to adopt KM using Web 2.0?
- RQ5: To what extent is this influenced by the library's organizational readiness to adopt KM?

Knowing the perceptions of librarians about KM is the first step in determining whether academic libraries are ready to adopt KM or not. The process of participating in the study itself might prompt libraries to start thinking about KM seriously. This is the first time an effort has been made to measure the perception of academic librarians globally to ascertain library readiness to adopt KM using Web 2.0. Insights gained from the study may trigger more such research in library areas and beyond.

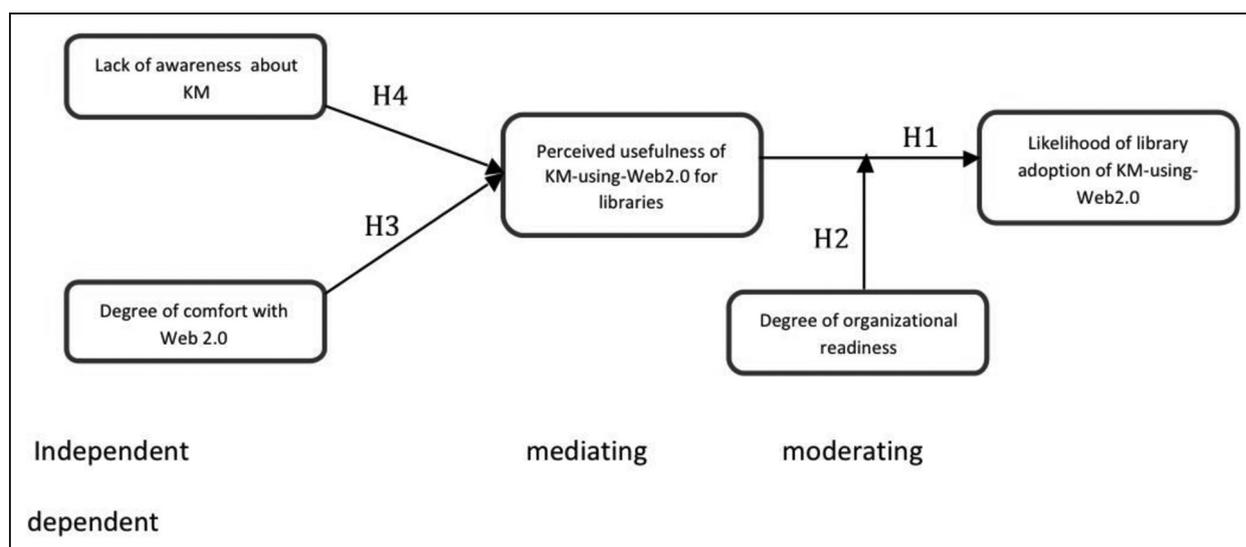


Figure 1. Research Model.

The rest of the paper is organized as follows: In the next section, we present our research model and variables. We then review the literature and arrive at hypotheses. The Technology Acceptance Model (TAM) (Davis, 1989) served as a theoretical lens for the study. This is followed by sections on methodology, findings and discussion, and conclusions and implications.

Research model

A research model is helpful in demonstrating the relationships between the variables of interest in a study. We propose a research model to study the factors affecting the likelihood of library adoption of KM using Web 2.0. It has two independent variables – ‘lack of awareness about KM’ and ‘degree of comfort with Web 2.0’, and one variable ‘perceived usefulness of KM using Web 2.0 for libraries’ that mediates the relationship between the independent variables and the dependent variable ‘likelihood of library adoption of KM using Web 2.0’. The ‘degree of organizational readiness’ is the moderating or interacting variable that moderates the relationship between ‘perceived usefulness’ and ‘likelihood of adoption’. The mediator and the dependent variable are based on the Technology Acceptance Model (TAM) by Davis (1989).

Literature review and hypotheses

‘Web 2.0’ refers to the social revolution (Birdsall, 2007) ushered in by the second generation of the web that facilitates communication, information sharing, interoperability and user centered design (King and Brown, 2009). Web 2.0 tools can be used to enhance

library services by being more proactive and personalizing outreach (Miller, 2005; Huffman, 2006; Stephens, 2006; Bradley, 2007; King and Porter, 2007; LASSIE, 2007; Tedd, 2008; Kumar and Tripathi, 2010). Hanson and Cervone (2007) identified Wiki, blog, Really Simple Syndication (RSS), Instant Messaging (IM) and podcast as the prominent Web 2.0 tools for academic libraries. Kim and Abbas (2010) found RSS and blogs to be widely adopted by academic libraries.

Parirokh, Daneshgar and Fattahi (2007) surveyed 30 American academic librarians to identify the knowledge sharing requirements in their libraries. They found that the majority were friendly towards knowledge sharing and valued its importance. Kim and Abbas (2010) identified specific Web 2.0 technologies used by academic libraries by analyzing 230 library websites. They surveyed 184 users from two universities to find that RSS and blogs were widely adopted by academic libraries, while users utilized the bookmark function. However, their study did not seek the perceptions of librarians. Also, the study was limited to two universities in the US mid-west, and did not take into account global perspectives.

There is an acute gap in the literature and initiatives on KM using Web 2.0 by library practitioners. With the recent emphasis on the creation and dissemination of knowledge with the help of Web 2.0, this study presents the perceptions of librarians on using Web 2.0 for KM in libraries. This is the first time an effort has been made globally to measure this. We hope that this study will trigger more research on this area.

Specific variables identified in the research model (Figure 1) are reviewed below, and the hypotheses arrived at.

Likelihood of library adoption of KM using Web 2.0 (dependent variable)

Intentions are the active, conscious, future aims we perceive another person to have (Rummel, 1976). The theory of planned behavior (Ajzen, 1991) suggests that perceived or behavioral intention is the most important determinant factor in predicting the decision to take a specific action or not. Past studies have used behavioral intention to forecast specific behavior, given the close relationship between intention and behavior (Ajzen, 1991). We define *likelihood of library adoption of KM using Web 2.0* as the perceived intention of the library to adopt KM using Web 2.0 from the point of view of individual librarians.

Perceived usefulness of KM using Web 2.0 for libraries (mediator)

Perceived usefulness is the degree to which the subject believes that the use of a technology will enhance performance (Davis, 1989). We define perceived usefulness of KM using Web 2.0 technologies as the extent to which librarians believe that KM using Web 2.0 will be useful for their libraries. We operationalize this as making library services more effective, making staff feel more valued, leading to increased productivity, helping to create new knowledge in libraries, improving users' satisfaction in libraries and making employee life at work easier. As per the TAM model, which has been validated in numerous studies, perceived usefulness has been found to influence behavioral intention through attitude (Davis, 1989). Therefore, we hypothesize:

Hypothesis 1: The perception of usefulness of KM using Web 2.0 for libraries will have a positive effect on the likelihood of library adoption of KM using Web 2.0.

Degree of organizational readiness (moderating variable)

We define organizational readiness as the set of factors that need to be in place, and in the right balance at the right point in time, before KM can be adopted in libraries. Many studies have found these to be the most common factors: knowledge sharing culture (Rahman, 2011), top management support (Kamath, Rodrigues and Desai, 2011), funding to set up a KM team and infrastructure (Basu and Sengupta, 2007), and timing – the right time to adopt (Holsapple and Joshi, 2000). To operationalize readiness, we include knowledge sharing culture, top management openness to ideas, funding for new initiatives, time taken to approve new initiatives, technology support and

librarians' willingness to invest time and effort. We hypothesize:

Hypothesis 2: Even if a librarian perceives KM using Web 2.0 to be useful for libraries, whether the library is likely to adopt KM using Web 2.0 will depend on the degree of organizational readiness.

Degree of comfort with Web 2.0 (independent variable)

Degree of comfort is the degree of fit between the new technology and the individual's existing experiences and job responsibility (Rogers, 2003). We define degree of comfort with Web 2.0 as the individual ease and experience that librarians feel when using Web 2.0 technologies. Agarwal, Xu and Poo (2011) posit that one's comfort level in using the system, system-knowledge, or computer-efficacy would affect use of the system/tool. The TAM model (Davis, 1989) posits that external factors affect perceived usefulness. Therefore, we hypothesize:

Hypothesis 3: The more comfortable a library staff is with Web 2.0, the more likely s/he is to perceive KM using Web 2.0 as useful for libraries.

Lack of awareness about KM (independent variable)

Awareness is focused on an internal state. We define awareness as whether the librarian has heard about KM and the degree to which s/he understands the concept. Social awareness or influence has been found to influence perceived usefulness and usage (Venkatesh and Davis, 2000). Therefore, we hypothesize:

Hypothesis 4: The more aware a library staff is about KM, the more likely s/he is to perceive KM using Web 2.0 as useful for libraries.

Methodology

We relied upon the survey questionnaire method for collecting data for this study, as the questions related to the perceptions of librarians, for which the survey method is the best suited.

Study population and sample

The target population of the study is academic librarians across the world. The scope of the study is limited to academic libraries because they have played a significant role in supporting information dissemination activities, and faculty and students stimulate the creation and transmission of knowledge. However, as it would be difficult to obtain a sampling frame consisting of academic librarians across the

world, we utilized convenience sampling to reach out to librarians. The study population was academic libraries worldwide that were accessible using the International Federation of Library Associations and Institutions (IFLA) mailing list (IFLA Mailing Lists, 2014) and the IFLA KM section mailing list. Apart from these, we also reached out to academic librarians in the UK (listing maintained by University of Wolverhampton, n.d.), the USA (listing maintained by University of Texas, n.d.), Canada (Universities in Canada, n.d.), Australia (Universities in Australia, n.d.) and other countries such as Malaysia, India, Bangladesh, Norway, Denmark, where universities were found using Web search. The purpose was to reach out to a wide pool of academic libraries from different countries whose contact details were accessible online. This ensured coverage of diverse socio-economic and educational environments. The librarians reached out to were those who had registered themselves to be part of these mailing lists, as well as those whose email addresses could be obtained from the resources referenced above. Data was gathered using a web-based questionnaire. The collected data was statistically analyzed using psychometric procedure to determine support for our hypotheses.

Instrument development

The items developed for the five variables of our research model, as well as other control variables on Web 2.0 experience, knowledge retention and training, and demographic variables, are listed in Table 1 below. The control variables were not of theoretical interest but were included to see if they had any effect on the dependent variable.

Where possible, survey items were taken from prior studies or adapted to suit the needs of this study. For other cases, the items were self-developed. The questionnaire used the 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). An introductory paragraph defining knowledge management in libraries was included in the survey. The face validity of the survey items was ascertained through discussion.

Data collection and analysis

The survey instrument was pre-tested to check for any question wording issues. The questionnaire and the design of the study were approved by the Institutional Review Board of Simmons College. Participation was voluntary. Filling out the questionnaire implied consent. A web-based version of the instrument was created using Google form. None of the questions was made compulsory. Thus, a participant could choose not to answer a question s/he was uncomfortable with.

In order to protect the identity of the librarians, no names, email addresses or library names were gathered.

Based on the names of universities gathered, the respective library websites were searched. From the listing of library staff, email addresses of librarians were gathered and collated. While some library websites listed emails of individual staff members, others had a common contact email for all external mails. We obtained the names and email addresses of 563 librarians in the UK, USA, Australia and Canada. Individual personalized emails were sent to all these. Apart from these, individual librarians were also contacted in other countries such as Malaysia, India, Bangladesh, Norway and Denmark. Mails were also sent to the IFLA and IFLA KM mailing lists. About 600 librarians were individually contacted, with the rest in mailing lists.

In total, 101 librarians from 35 countries in 6 continents filled out the questionnaire after multiple follow-up emails and efforts at reaching respondents and mailing lists. As the survey was anonymous, it was not easily to distinguish how many of the responses were from individual emails and how many from mailing lists. Thus, it would be difficult to arrive a precise number for the response rate. The response rate would be $101/(600 + \text{those registered in the mailing lists})$. For the sake of calculation, if we were to disregard the number of people in the mailing lists, the response rate would be $101/600$ or 16.83 percent. However, since there are likely to be hundreds of librarians registered in the mailing lists (some of whom might have been individually contacted), and assuming that one or more responses were from those registered in the mailing lists, the actual response rate would be even less than the 16.83 percent figure based on our calculation. As the responses were difficult to get, and the response rate not too high, no separate pilot data was gathered. Rather, exploratory factor analysis was done on the main data itself once the responses stopped coming in. Data was gathered between August 2013 and February 2014.

PSPP 0.8.2, the open source alternative to SPSS, was used for statistical data analysis. The authors also had access to IBM SPSS 22. The results generated by PSPP were found to be equivalent, and sufficient for the analysis.

Demographics

Table 2 shows the demographic distribution of the survey respondents.

The survey was truly international, with respondents coming from 35 countries in all continents excluding Antarctica. The participants were distributed almost equally between Asia and Europe (22 and 20 percent

Table 1. Variables and items included in the questionnaire.

Variable	Coding	Question	Source
Likelihood of library adoption of KM using Web 2.0 (dependent)	INTN1	I expect that I will apply Web 2.0 based KM in my library-based work in the future.	Adapted from Wang and Liu (2009)
	INTN2	I am likely to recommend to my library to adopt KM using Web 2.0 in the near future.	Self-developed
	INTN3*	It is likely that my library will adopt KM using Web 2.0 in the short term.	Adapted from Agarwal, Wang, Xu and Poo, (2007); Jarvenpaa, Tractinsky and Saarinen (1999)
	INTN4	It is likely that my library will adopt KM using Web 2.0 in the longer term.	
	INTN5	It is likely that my library will adopt KM using Web 2.0.	
Perceived usefulness of KM using Web 2.0 for libraries (mediating)	PU1	Implementing KM using Web 2.0 in libraries will make library services more effective.	Adapted from Ajjan and Hartshorne (2008)
	PU2	Implementing KM using Web 2.0 in libraries will make the library staff feel more valued.	Self-developed
	PU3	Implementing KM using Web 2.0 in libraries will lead to increase in productivity.	Adapted from Ajjan and Hartshorne (2008)
	PU4	Implementing KM using Web 2.0 will help to create new knowledge in libraries.	Adapted from Panahi, Watson and Partridge (2013)
	PU5	Implementing KM with Web 2.0 will improve users' satisfaction in libraries	Adapted from Ajjan and Hartshorne (2008)
	PU6	Implementing KM with Web 2.0 will make my life at work easier.	Self-developed
	PU7	Implementing KM using Web 2.0 is useful for libraries.	
Degree of organizational readiness (moderator)	READY1	In my library, we always ask each other for work-related knowledge.	Adapted from Agarwal, Xu and Poo (2011)
	READY2	Most colleagues in my organization are ready to share their knowledge.	
	READY3	I think my library has a knowledge sharing culture.	
	READY4*	The top management of the library is always open to new ideas.	Self developed
	READY5*	My library usually gets the money for new initiatives it wants to take up.	
	READY6 ⁺	In my library, it takes a very long time to get any new initiative approved.	
	READY7	My library is well supported in its technology.	Neches et al (1991)
	READY8*	Once they understand the value of KM, library staff will be ready to invest time and effort for KM in our library.	Adapted from Matschke, Moskaliuk and Cress (2011)
	READY9	If my library were to implement KM, I think we have all the right things in place.	Self developed
Lack of awareness about KM (independent)	AWR1*	I had never heard of KM until now.	Self-developed
	AWR2	I have heard of KM but am not exactly sure of the concept.	
	AWR3	I have heard the term Knowledge Management but it has been a challenge for me to understand the area.	Adapted from Ajiferuke (2003)
	AWR4 ⁺	I have good knowledge about KM.	Self-developed

(continued)

Table 1. (continued)

Variable	Coding	Question	Source
Degree of comfort with Web 2.0 (independent) (blogs, wikis, social networking sites)	CFT1	I feel comfortable using Web 2.0 technologies.	Adapted from Kumar and Tripathi (2010)
	CFT2	I am able to clearly communicate using Web 2.0 technologies.	Self developed
	CFT3	I consider myself a heavy user of Web 2.0 technologies.	
	CFT4*	I think most of my library colleagues are comfortable with Web 2.0 technologies.	Adapted from Kumar and Tripathi (2010)
	CFT5	My library communicates with users using Web 2.0 tools.	Self-developed
Web 2.0 experience (control)	W2LIB_YRS	How long has Web 2.0 been around in your library?	Self-developed
	LIB_[]	In what forms have Web 2.0 been implemented in your library?	
	PERS_[]	Which Web 2.0 tools do you use most frequently?	
Knowledge retention (control)	RETAIN	How does your library retain the knowledge of people who leave or resign from the library?	Self-developed
Training (control)	TRNG	How does your library provide organizational knowledge to new employees?	Self-developed
Demographics (control)	EMP_CNT	No of employees in the library	Agarwal, Xu and Poo (2011)
	LOC	Library location – city, country	
	ROLE	Work role / position	
	DEPT	Department working in	Self-developed
	YRS_FLD	No of years in the library field	
	GEN	Gender	Agarwal, Xu and Poo (2011)
	AGE	Birth Year 19 __	
	EDN	Education	

Note: * These items were dropped after factor analysis.

+ These items were negatively worded, and thus, reverse coded.

Table 2. Demographics and library experience.

Gender	Age (years)	Education	No. of years in the library field	No. of employees in library
Male: 24 (23.76%)	Mean: 44.83	PhD: 9 (8.91%)	Mean: 15.58	1-19: 42 (41.58%)
Female: 76 (75.25%)	SD: 11.74	Masters: 69 (68.32%)	SD: 9.68	20-49: 14 (13.86%)
unspecified: 1 (0.99%)	Min: 25	Bachelors: 13 (12.87%)	Min: 1	50-100: 18 (17.82%)
	Max: 79	Diploma: 10 (9.9%)	Max: 37	101-500: 27 (26.73%)
	N = 90 (unspecified 11)	Others 0		

respectively), with the rest coming from the other four continents (see Table 3). Along with individual librarians reached out from university libraries in specific countries, this distribution also reflects the international nature of the mailing lists targeted.

The work roles or positions specified by the respondents were classified into three categories based on hierarchy (see Table 4).

Forty-three percent of the respondents did not specify a specific department but said they worked in the overall library in general (see Table 5).

Exploratory factor analysis

Psychometric analysis was performed as per the procedure recommended by Anderson and Gerbing

Table 3. Library location.

Continent	Countries
Asia: 22 (21.78%)	Bangladesh 6; India 4; Vietnam 3; Pakistan 2; Malaysia, Lebanon, Iran, UAE, China, Philippines and Laos 1 each
Europe: 20 (19.8%)	UK 9; Germany 2; Denmark, Belgium, France, Switzerland, Estonia, Slovenia, Italy, Hungary and Romania 1 each
South America: 16 (15.84%)	Brazil 15; Colombia 1
North America: 15 (14.85%)	USA 8; Canada 4; Puerto Rico, Jamaica and Mexico 1 each
Australia: 14 (13.86%)	Australia 14
Africa: 13 (12.87%)	Zimbabwe 4; Kenya and South Africa 3 each; Ghana 2, Nigeria 1 unspecified 1

Table 4. Work role / position.

Category	Designation
Director / Head: 20 (20%)	Head Librarian / Head of Library / Branch Head / Department Head 8; Chief Librarian / Librarian-in-chief / Bibliotecaria Chefe 4; Library Director 4; Associate Director 2; Acting / Deputy Director 2
Librarian: 65 (65%)	Librarian / Bibliotecaria 22; Academic / University / Faculty / Liaison / Research / Subject Librarian 16; Reference Librarian 6; IT / Systems / Technology / Web Applications Librarian 7; Library Services Manager 5; Head / Manager of Scholarly Communication 2; Library Coordinator 2; Senior Librarian 2; School Librarian 1; Serials Librarian 1; Lawyer 1
Library Assistant: 15 (15%)	Assistant / Sub Librarian 7; E-Repository / Institutional Repository Administrator 2; Chief Library Assistant 1; Executive 1; Junior Librarian 1; Professional Assistant 1; Returns Assistant 1; Management Support 1 unspecified 1

Table 5. Department working in.

Department	Count (%age)	Other terms used for department
Library	43 (42.57%)	information services
Reference	12 (11.88%)	information / learning / research services
Technical services	11 (10.89%)	serials / resources / collection development
Technology	10 (9.9%)	IT / systems / automation / digital library / institutional repository / media / design
Customer service	8 (7.92%)	service desk / inquiry / reader services
Administration	3 (2.97%)	library administration
Innovation	2 (1.98%)	information management and innovation / planning
Legal	1 (0.99%)	
unspecified	9 (8.91%)	

(1988). Exploratory factor analysis (EFA) is a technique within factor analysis used to uncover the underlying structure and relationships between measured variables (Norris and Lecavalier, 2009). EFA with principal component analysis (Hair et al., 1995) was used to extract the factors, followed by Varimax rotation. Six survey items – CFT4, AWR1, READY4, READY5, READY8 and INTN3 (see Table 1) were found to be problematic (both statistically and conceptually), and removed. All items loaded correctly on their respective variables. This indicates a high degree of convergent

and discriminant validity, and thus construct validity for the five variables.

A reliability analysis was carried out using Cronbach's alpha. Table 6 below shows the descriptive statistics and Cronbach's α for the five variables in the research model. The internal consistency was above 0.8 for comfort, awareness and perceived usefulness, and close to 0.8 for likelihood of adoption. This was lower for organizational readiness as it is a multi-dimensional variable.

The participants exhibited a high degree of comfort with Web 2.0 (5.49 on a scale of 1-7) and disagreed

Table 6. Descriptive Statistics and Cronbach's alpha.

Variables	No. of items	Mean (1-7 scale)	Standard Deviation	Reliability (Cronbach's α)
Degree of comfort with Web 2.0	4	5.49	1.16	0.82
Lack of awareness about KM	3	2.95	1.48	0.81
Perceived usefulness of KM using Web 2.0 for libraries	7	5.75	.98	0.93
Degree of organizational readiness	6	4.85	.91	0.7
Likelihood of library adoption of KM using Web 2.0	4	5.35	1.15	0.79

Table 7. Results of Hypothesis testing.

Part of research model analyzed	Independent Variable	Dependent Variable	Standardized Coefficients			Hypothesis
			β	t	Sig. (p)	
Effect of CFT and AWR on PU	CFT	PU	0.24	2.37	0.02	H3 *supported
	AWR	PU	-0.14	-1.38	0.17	H4 not supported
Effect of only AWR on PU	AWR	PU	-0.2	-2.03	0.05	*supported
Effect of PU and PU*READY on INTN	PU	INTN	0.39	3.13	0	H1 ***strongly supported
	PU*READY	INTN	0.15	1.19	0.24	H2 not supported
Effect of only PU*READY on INTN	PU*READY	INTN	0.39	3.8	0	***supported

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.0001$.

that they were unaware of KM. Thus, they had some exposure to KM. Most participants thought that KM using Web 2.0 would be useful for libraries. While they tended to agree that their organizations were ready for KM, it was a relatively low level of agreement (4.85 on a scale of 1-7). Finally, the participants thought that their libraries were likely to adopt KM using Web 2.0.

Hypothesis testing

After completing the validity and reliability analysis, hypothesis testing was done using multiple linear regression. It is a procedure used to attempt the relationship between two or more independent variables and a dependent variable by fitting a linear equation to observed data. Table 7 lists the results of the hypothesis testing. The leftmost column shows the part of the research model (Figure 1) analyzed in the four iterations of the regression analysis. The next two columns show the cause-effect relationship between the variables in question. The number in the significance (p) column tells what the probability of error is. The hypothesis is supported if the probability of error is less than 5 percent i.e. $p < 0.05$.

First, the left side of the research model was analyzed, looking at the effect of the two independent variables – *lack of awareness about KM* (AWR) and *degree of comfort with Web 2.0* (CFT) – on the mediating variable *perceived usefulness of KM using Web 2.0 for libraries* (PU). Hypothesis 4 (effect of AWR on PU) was not supported, while H3 (effect of CFT on PU) was supported ($p < 0.05$).

To test for Hypothesis 4 again, we analyzed the effect of only AWR on PU. Now, the effect of AWR was found to be significant ($p = 0.05$).

Next, we analyzed the right side of the model. It has two relationships. H1 shows the relationship between the mediating variable *perceived usefulness of KM using Web 2.0* (PU) on the dependent variable *likelihood of library adoption of KM using Web 2.0* (INTN). H2 is a moderating effect. It shows the relationship of the interaction between PU and the *degree of organizational readiness* (READY) on the dependent variable INTN. The moderated relationship or the interaction was modeled by including a product term (PU*READY) as an additional independent variable (Irwin and McClelland, 2001), along with PU, to see their effect on the dependent variable INTN. H1 was found to be strongly supported ($p < 0.0001$), while H2 was not supported.

We analyzed the effect of only the moderator (PU*READY) on the dependent variable (INTN). When analyzed separately, H2 was found to be strongly supported ($p < 0.0001$).

After the hypothesis tests, additional tests were carried out to see: a) any potential effect of the control variables *age, gender, education, no. of employees in the library and no. of years in the library field* on the dependent variable INTN; b) the direct effect of READY on both INTN or PU; c) the individual items for specific variables that had been deleted; and d) the nine individual items of READY on INTN. None of these were found to be significant. The only (strongly) significant effect was of READY4 (the top management of the library is always open to new ideas) on INTN ($\beta = 0.43$, $t = 4.53$, $p < 0.0001$).

Findings and discussion

In this study, we set out to answer a few research questions on the perceptions of academic library professionals about Web 2.0 and the degree to which the library is ready to adopt KM. The findings addressing the research questions and the results of hypotheses testing were summarized in Tables 7 and 8.

RQ1. How aware are academic library professionals about KM and knowledge sharing practices?

More than 71 percent of the participants strongly disagreed that they had never heard of KM, while another 10 percent disagreed. Thus, most librarians had heard of KM in some form. More than 31 percent of the participants indicated that they had good knowledge of KM. Only about 12 percent of the respondents indicated that they had heard of KM but were not exactly sure of the concept, or found it a challenge to understand. Overall, the mean response for lack of awareness was 2.95 (on a scale of 1-7; standard deviation 1.48). If we reverse *lack of awareness* to awareness, the mean response would be 5.05. The participations agreed that they were aware of KM and knowledge sharing practices, but did not consider it to be a strong agreement. Thus, most participants exhibited a relatively high degree of awareness about KM and KM practices. This is in line with past studies, e.g. by Siddike and Islam (2011), who found that 93 percent of their respondents had heard about KM in the literature. It is significant that about one-third of librarians internationally claim a good degree of knowledge in KM, which demonstrates that KM is slowly but surely finding its way in libraries.

RQ2. How comfortable are they in using Web 2.0 tools?

More than 43 percent of the respondents indicated a very high degree of comfort with Web 2.0 (those who chose 6 or 7 on a scale of 1-7). The mean response for *degree of comfort* was 5.49 with a standard deviation of 1.16. Thus, the participants were largely comfortable with Web 2.0. Of the 1.3 billion active Facebook users as of early 2014, many of these would be librarians as well. This individual comfort explains why libraries are embracing Web 2.0 (as found by Kumar and Tripathi, 2010).

RQ3. How do these impact their perception of KM using Web 2.0 for libraries?

More than 46 percent of the respondents perceived KM using Web 2.0 to be highly useful for libraries (responses of 6 and 7, on a scale of 1-7). The mean response for perceived usefulness was 5.75 with a standard deviation of .98. The relatively low standard deviation indicates that the respondents all agreed that KM would be useful for their libraries.

H3 was supported, while H4 found conditional support. The individual degree of comfort with Web 2.0 (H3) was found to affect the perceived usefulness of KM using Web 2.0 for libraries. This finding is consistent with Agarwal, Xu and Poo (2011), who found an individual's inherent lack of comfort with an information source to negatively affect the amount and order of use of that source. Thus, if a librarian likes using Web 2.0 technologies, s/he is likely to think it would be useful for libraries overall.

Finally, on its own, lack of awareness about KM (H4) was found to negatively affect the perceived usefulness of KM using Web 2.0 for libraries. If a librarian does not know enough about KM, s/he is unlikely to find KM using Web 2.0 useful for libraries. However, when analyzed along with degree of comfort with Web 2.0, the effect of AWR on PU was found to be insignificant. This might be because comfort with Web 2.0 is based on individual experience (which one can more strongly vouch for), while awareness is more subjective. Thus, between Web 2.0 comfort and KM awareness, the former is a more important factor for the librarians to perceive KM using Web 2.0 to be useful for libraries.

RQ4. Based on their perception, how likely is their library to adopt KM using Web 2.0?

About 37 percent of the participants strongly agreed that their library was likely to adopt KM using Web 2.0 (mean 5.35, SD 1.15). About 28 percent strongly

agreed that the library was likely to adopt KM using Web 2.0 in the short term, while most of them only showed a slight agreement (mean 4.46, SD 1.68). Kim and Abbas (2010) had earlier compared academic library and user utilization of Library 2.0 features in the KM perspective and found that the adoption rate greatly differs for each Library 2.0 application. Some of the library-initiated knowledge transfer functions (e.g., RSS feeds, podcast) are widely adopted among academic libraries, while some of the user-initiated functions (e.g., Tagging, Wiki, etc.) are at a burgeoning stage.

H1 was strongly supported. The strong support for H1 is intuitive as libraries are likely to adopt KM using Web 2.0 only if they perceive it to be useful. This finding is consistent with the Technology Acceptance Model (Davis, 1989), where perceived usefulness has been shown to have a significant effect on intention.

RQ5. To what extent is this influenced by the library's organizational readiness to adopt KM?

The mean value for the degree of organizational readiness was 4.85 (with a standard deviation of 0.91). Thus, the participants did not have a strong opinion on whether they thought their library was ready or not to adopt KM using Web 2.0, though they tended to think that it was.

However, the reliability of this variable was low (0.7) because it consists of multiple dimensions. We operationalized organizational readiness in terms of knowledge sharing culture (READY1-3; Cronbach's $\alpha = 0.82$), top management openness to ideas (READY4), funding (READY5), time to approve new initiatives (READY6), technology support (READY7), willingness to invest time and effort (READY8) and overall readiness (READY9). Analyzing these dimensions separately, 33 percent strongly agreed that they had a knowledge sharing culture (values of 6 and 7 on a scale of 1-7; mean 5.26, SD 1.21), more than 51 percent strongly agreed that their top management was open to new ideas (mean 5.4, SD 1.49), only 13 percent strongly agreed that they usually got funding for new initiatives, with most people disagreeing (mean 3.75, SD 1.62). About 22 percent strongly agreed that it did not take very long to get new initiatives approved, though a big percentage thought otherwise (mean 3.91, SD 1.70). These findings reflect that while top management were open to ideas, they did not always provide the money or approve new initiatives quickly. About 33 percent strongly agreed that they had technology support (mean 4.85, SD 1.4). More than 33 percent

strongly agreed that library staff would be ready to invest time and effort on KM (mean 5.05, SD 1.19). Finally, in the question for overall readiness, 22.77 percent strongly agreed that their organization was ready to adopt KM (mean 4.69, SD 1.33).

Comparing the means of the seven dimensions (on a scale of 1-7, where 1 = not ready at all and 7 = completely ready), the pecking order of readiness is management openness 5.4, knowledge sharing culture 5.26, willingness to invest time and effort 5.05, technology support 4.85, overall readiness 4.69, time taken to approve new initiatives 3.91 and funding for new initiatives 3.75. Many of these readiness factors have been identified in prior studies – knowledge sharing culture, (Rahman, 2011), top management support (Kamath, Rodrigues and Desai, 2011) and funding to set up a KM team and infrastructure (Basu and Sengupta, 2007).

H2 found conditional support. The moderating effect of READY and PU on INTN (H2) also found strong support. However, this interacting effect (when analyzed along with the effect of PU on INTN) was found to be insignificant. This could be because usefulness was perceived to be a more important factor than readiness. Also, readiness, as a factor, had lower internal consistency as it had multiple dimensions. This finding held even when we considered only one dimension – knowledge sharing culture (READY1-3; Cronbach's $\alpha = 0.82$), where the overall effect was insignificant. Thus, perceived usefulness (H1) has a more important role on adoption than readiness (H2). This finding is in accordance with the TAM Model (Davis, 1989) where numerous studies have found perceived usefulness to affect adoption.

Conclusions and implications

The study found that librarians, in general, are comfortable using Web 2.0. Thus, libraries can expand their reach in this area, making use of this expertise in their staff. Librarians disagreed that they were unaware of KM. Thus, the study shows that the awareness about KM is increasing in libraries. It is time for KM researchers to help more libraries to adopt KM using Web 2.0, as most librarians agree that it would be useful and that, given favorable conditions, the library is likely to adopt KM using Web 2.0. The part where most work is needed is for libraries to further develop their organizational readiness. While the knowledge sharing culture was found to be strong and top management open to ideas, they did not always provide the funding or approve new initiatives easily. This is a bottleneck which needs to be addressed. For KM adoption, teams will need to be formed and both

people and technology infrastructure developed. Thus, along with the openness of top management, libraries need to secure funds for KM. Other research organizations or universities could also help in this area by seeing it as a priority. Finally, libraries need to further improve their processes. They need to become more agile by responding to change quickly and by providing timely support to new initiatives. Overall, the study points to a favorable direction for KM using Web 2.0 in libraries. Adopting KM using Web 2.0 would lead to more agile libraries, service innovation, and libraries moving seamlessly towards the libraries of the future, while surviving budget cuts, competition from online sources such as Google and other difficulties.

The indirect benefits to participants are developing awareness about knowledge management, even as they fill out the questionnaire. Knowing the perceptions of librarians about KM is the first step in determining whether academic libraries are ready to adopt KM or not. The process of filling out the questionnaire itself might prompt libraries to start thinking about KM seriously.

The study also has implications for researchers in the KM, Web 2.0 and library areas. Bringing these together opens up further areas of research, and is a primary contribution of this study. We propose the term KML 2.0 to study the area of 'KM using Web 2.0 in libraries'. Researchers should note the findings and limitations of this study and continue work in this area.

The study had a few limitations. First, a bigger sample than 101 would yield more data. Two of the hypotheses were conditionally supported. A larger sample could help determine if these hypotheses are more fully supported. Second, the use of convenience sampling would limit the generalizability of our findings. Third, the construct validity of the survey items could be further improved by adopting a two-step sorting procedure described by Agarwal (2011), even before the data collection is started.

Future work could be done in a number of areas: Further analysis could be done on the qualitative data obtained on how the library retains the knowledge of people who leave or resign from the library, and how the library provides organizational knowledge to new employees. The data could be further analyzed by individual continents to see how the findings differ across librarians in the six continents. We have looked at Web 2.0 technologies as a monolithic entity. Future studies could build on the work of Kim and Abbas (2010) and investigate individual technologies separately. Finally, the findings of the study could be supplemented with interviews of librarians to get a more

in-depth picture of their perceptions about KM using Web 2.0 for libraries.

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Abstracts

قُتَطَفَات

London pride in context: Treasures and the library treasures volume in Britain today

لندن برايد: مجلات أفضل الأعمال في بريطانيا اليوم:

Karen Attar

العدد رقم 4، 40 من مجلة الإفلا: 244-253

يزيد انتشار مجلدات أهم الأعمال وعرض الأعمال النادرة والجميلة والمهمة في بريطانيا في القرن الحادي والعشرين، بغض النظر عن وجود الإنترنت كبديل، الذي يُقدّم طرق أرخص وأسرع وأسهل كي تقوم المكتبات بالدعاية لأفضل مقتنياتها، ولكن ما دور هذه المجلدات وما مدى نجاحها في أن تكون محتوياتها مؤشراً لتقييم الأعمال؟. يقوم هذا المقال على خبرة المؤلف في اختيار 60 عمل لمجلد أهم أعمال 2012، مكتبة مجلس الشيوخ، جامعة لندن. يوضح المقال الأسباب وراء هذه الاختيارات في المملكة المتحدة على نطاق أوسع، والنظر إلى المجلدات الأخرى المعروضة على الإنترنت. كما يُلقي المقال الضوء على الأعمال ذات الصلة والهوية المؤسسية، ويضع مجلدات أهم الأعمال في موضع الوثيقة السياسية لإعطاء سبب لوجود المكتبات بإلقاء الضوء على مُميزاتها.

How library and information science academic administrators perceive e-learning in LIS schools: A qualitative analysis

كيف ينظر أكاديميو علوم المكتبات والمعلومات إلى التعلّم الإلكتروني في كليات علوم المكتبات: تحليل نوعي:

Md. Shiful Islam, Susumu Kunifujji, Motoki Miura, Tessai Hayama

العدد رقم 4، 40 من مجلة الإفلا: 254-266

يبحث هذا المقال كيفية نظر الأكاديميين إلى التعلّم الإلكتروني في كليات علوم المكتبات والمعلومات، خاصةً كيف يرون مزاياه وعيوبه وما نوع المعوقات التي تواجه اللجوء للتعلّم الإلكتروني في مجال علوم المكتبات وكيفية التغلب عليها. تم إجراء لقاء استطلاعي بإرسال استقصاء عبر البريد الإلكتروني مع 85 أكاديمي في مجال علوم المكتبات والمعلومات حول العالم؛ لجمع مفاهيم وتجارب استخدام التعلّم الإلكتروني في كليات علوم المكتبات والمعلومات. ذكر من أجري عليهم الاستطلاع بعض المزايا والعيوب والعوائق الكبرى التي تواجههم في استخدام نظم التعلّم الإلكتروني، وفي النهاية لم يكن للمشاركين آراء شديدة الإيجابية أو

السلبية حول استخدام التعلّم الإلكتروني في كليات علوم المكتبات والمعلومات.

The experience of Korean academic librarianship: A phenomenological study

تجربة المكتبات الأكاديمية الكورية: دراسة الظاهرة:

Kaetrena Davis Kendrick

العدد رقم 4، 40 من مجلة الإفلا: 267-279

تضم أبحاث علوم المكتبات والمعلومات العديد من الدراسات الكمية حول الرضا الوظيفي وخيارات مجالات العمل ومفاهيم أمانة المكتبات الأكاديمية، ولكن لم تُجرى الكثير من الدراسات الكيفية؛ لفهم التجربة الحية لأمانة المكتبات. أجريت دراسة لفهم تجارب المكتبات الأكاديمية في كوريا الجنوبية، وتناولت العديد من جوانب أمانة المكتبات الأكاديمية كالربط بين اختيارات مجالات العمل وتعليم علوم المكتبات والمعلومات والاستعداد للعمل والعلاقة مع الكلية والطلاب وتنمية أمانة المكتبات التي تتسم بالمهنية والمكتبات الأكاديمية في كوريا الجنوبية. إن الفلسفة المُتبعة في هذه الدراسة إلى جانب إضافة الفئة العمرية والنوع وغيرها من المعلومات إلى الدراسات الكمية حول هذه القضايا، تطور الأبحاث المكتبية المُقارنة بإلقاء الضوء على عالمية ممارسات أمانة المكتبات الأكاديمية والفروق بينها على مستوى العالم.

Information literacy in Zanzibar universities: Current situation and the way forward

علم الإلمام بالمعلومات في جامعات زنجبار: الوضع الحالي والطريق إلى الأمام:

Abbas Mohamed Omar, Haji Ali Haji, Khamis Hamad Mwitumbe

العدد رقم 4، 40 من مجلة الإفلا: 280-288

يهدف هذا البحث إلى فحص الوضع الحالي والمستقبلي لبرامج علم الإلمام بالمعلومات في جامعات زنجبار بالنظر إلى الوعي بهذا العلم ومدى تعليم علوم الإلمام بالمعلومات ودور مكتبات الجامعات في الترويج لها. تم عمل هذا الاستطلاع في ثلاث جامعات زنجبار والذي شمل العاملين في مكتبات الجامعات والعمداء ورؤساء الأقسام والطلاب الذين لم يتخرجوا بعد. شارك أكثر من 200 شخص في هذه الدراسة وتم تحليل النتائج كميًا. توضح النتائج وجود قدر مُعين من الوعي بعلم الإلمام بالمعلومات بين

الأكاديميين والعاملين في المكتبة، ولكن مازال الترويج لمهاراته وتقديمها في مراحلها الأولى. وكانت العدد غير الكاف من أخصائي علم الإلمام بالمعلومات ونقص خبرة تعليمه ونقص التعاون بين المكتبيين وأعضاء الكليات، هي مصادر المشكلات، وبناءً على ما توصلوا إليه، كتب الباحثون عددًا من التوصيات التي تُعالج مواضيع الصور، التي تشمل: تنظيم جلسات سمينار وورش عمل لعلم الإلمام بالمعلومات وبرامج توعية ووضع مناهج لعلم الإلمام بالمعلومات وتدريبها.

Micronesian libraries and archives: A review of the literature

مكتبات ودور وثائق ميكرونيزيا: مراجعة نقدية:

Christopher R.R. Todd

العدد رقم 40،4 من مجلة الإفلا: 295-289

يتمتع إقليم غرب المحيط الهادئ في ميكرونيزيا بتاريخ مكتبي وأرشيفي مميز، ظهرت مكتبات ميكرونيزيا المكونة من جزر تابعة للولايات المتحدة، في ظل الموجات الاستعمارية المتتالية، يُحلل هذا العرض البحثي الذي يُركز في الأساس على مقالات المجلات المقارنة بنظيراتها، الأبحاث المهنية المحدودة التي أُجريت على المكتبات الميكرونيزية، وفي ظل التطور المتسارع للمكتبات، تواجه مكتبات هذه المنطقة تحديات مختلفة فيما يتعلق بالتدريب المكتبي والتمويل الكافي والإتاحة المحدودة لمصادر المعلومات الحالية وببطء معدلات سرعة الإنترنت، ويحدد المقال وفقاً لتحليل الأبحاث ثلاثة احتياجات أساسية: 1. التوسع في تعليم علوم المكتبات والمعلومات في ميكرونيزيا (خاصة على مستوى الدراسات العليا)، 2. زيادة الوعي بأساليب التواصل والاندماج في الخدمات المكتبية والأرشيفية في مكتبات ميكرونيزيا، 3. التوسع في فرص النشر والبحث الأكاديمي من خلال تأسيس مجلة حرة التداول لعلوم المكتبات والمعلومات في ميكرونيزيا.

The development of library and information science in China (1840–2009)

تطوير علوم المكتبات والمعلومات في الصين (1840-2009):

Yao Zhang

العدد رقم 40،4 من مجلة الإفلا: 306-296

تهدف هذه الدراسة إلى إلقاء نظرة على تنمية المكتبات وعلومها في الصين، في الفترة بين 1840 و2009، وهي مقسمة إلى أربعة مراحل تاريخية: 1840-1897، 1898-1948، 1949-1977، 1978-2009. يُناقش الكاتب في كلٍ من هذه المراحل ثلاثة موضوعات كان لها أكبر الأثر على تطور المكتبات وعلومها: الجانب الاجتماعي والاقتصادي والعلمي والمناخ الاقتصادي في الصين والذي أثر على نمو مؤسسات المكتبات والمعلومات وتعليم علومها وهو ما دعم نمو مهنة أمانة المكتبات نفسها. هذه الدراسة تستعرض في مجملها، ما

حققت علوم المكتبات والمعلومات في الصين في الفترة بين 1840 و2009، والجهود الواضحة التي بذلها الناس من مختلف المستويات والأجيال، على جانب توضيح الخلفية التاريخية وتغيير الأنظمة وأزمات الاحتلال والتطور الاجتماعي.

Information evaluation and the individual's cognitive state: Some insights from a study of British teenaged users

تقييم المعلومات ومعرفة الفرد: بعض الافكار من دراسة المستخدمين من المراهقين في بريطانيا:

Andrew K. Shenton, Alison J. Pickard, Andrew Johnson

العدد رقم 40،4 من مجلة الإفلا: 316-307

يستكشف هذا البحث ميول الفئات العمرية الصغيرة في إنجلترا بشأن تقييم المعلومات المتاحة على المواقع الإلكترونية، يقوم البحث على بيانات الاستبيان الذي ملأه 82 شاب بين عمر الـ16 والـ18، وأظهرت النتائج صورة مختلفة من اتجاهات الشباب في تقييم المعلومات، وأوضحت البيانات في الاستطلاع أن بعض نقاط الاستبيان تُشير إلى ميل الجمهور إلى قبول الكثير مما يشاهدون، بالرغم من ارتفاع مُعدل الثقة.

Library adoption of knowledge management using Web 2.0: A new paradigm for libraries

تبنى المكتبات لإدارة المعرفة باستخدام ويب 2.0: نموذج جديد للمكتبات:

Md. Anwarul Islam, Naresh Kumar Agarwal, Mitsuru Ikeda

العدد رقم 40،4 من مجلة الإفلا: 330-317

بالرغم من تزايد استخدام المكتبات الأكاديمية للويب 2.0؛ للتواصل مع المستخدمين، لم ينشط بعد استخدامه في تنسيق إدارة المعرفة. تستطلع هذه الدراسة وعي المكتبيين بفائدة إدارة المعرفة باستخدام ويب 2.0 والاستعداد المؤسسي لذلك. أجاب 101 مكتبي من 35 دولة في 6 قارات على هذا الاستطلاع، قد سمع معظمهم عن إدارة المعرفة ويرتاحون في استخدام ويب 2.0 بل ويرونه شديد الفائدة ولكنهم غير واثقين في استعداد مؤسساتهم لتبني فكر إدارة المعرفة. وقد كشفت الدراسة أن الراحة في استخدام ويب 2.0 تؤثر على مدى الاقتناع بفائدته، وهو ما يؤثر بدوره على الاستعداد لتبني فكر إدارة المعرفة باستخدام ويب 2.0، وهذه هي أول دراسة التي تتناول إدارة المعرفة باستخدام ويب 2.0 من منظور المكتبات الأكاديمية وللأثر المستقبلية المُحتملة لذلك على النظرية وممارستها.

摘要

London pride in context: Treasures and the library treasures volume in Britain today

纵观伦敦的骄傲：当今伦敦的珍宝及图书馆珍宝卷

Karen Attar

IFLA Journal, 40-4, 244-253

新世纪，伦敦涌现出大量珍宝卷，它们展示了罕见、璀璨或重要的物件，尽管万维网这一选择可以为图书馆宣传所藏精品提供成本更低且更为便捷的方式。不过，这些珍宝卷真正用意何在？其内容又能怎样反映我们最具价值的藏品呢？本文基于作者为伦敦大学和参众两院图书馆2012年珍宝卷选取60件藏品的经历，介绍了选取背后的理据，并将其置于英国同类题材这一更为广泛的背景下，纵览其他珍宝卷及网络展示，以此概括图书馆自我呈现的方式。文章指出了对特有、独特且相关的物件以及机构身份的重视，并将现代珍宝卷诠释为通过突出自身特色来证明图书馆存在价值的政治文件。

How library and information science academic administrators perceive e-learning in LIS schools: A qualitative analysis

图书馆和信息科学学术管理员视角下图书情报学学校的电子化学习：一项定性研究

Md. Shiful Islam, Susumu Kunifuji, Motoki Miura, Tessai Hayama

IFLA Journal, 40-4, 254-266

本文探讨了图书情报学(LIS)学术管理员如何看待图书情报学学校的电子化学习(EL)，尤其探讨了LIS学术管理员眼中使用EL的优点及缺点，他们利用EL提供LIS教育时所面临的各类制约，以及他们在LIS学校如何克服EL系统的制约。我们对世界各地85位LIS学术管理员做了探究性在线电子邮件采访，利用链接转到调查问卷，收集他们关于LIS学校EL使用的看法和经历。受访者反馈了在其所在学校使用EL系统的一些主要优势、不足

和一些制约因素。他们还建议制定EL发展长期计划，实施互动和网上办公时间安排，建立跨校联盟以克服LIS教育中使用EL时的障碍。对于EL在LIS学校的使用，受访者没有表现出明确肯定或明确否定的态度。

The experience of Korean academic librarianship: A phenomenological study

论韩国学术图书馆事业之经验：现象学视角

Kaetrena Davis Kendrick

IFLA Journal, 40-4, 267-279

在专业图书情报学文献中，已有大量关于工作满意度、职业选择和对学术图书馆事业感知方面的定量研究，但对于了解各种环境下图书馆事业亲身经验的定性研究却不多见。本文从现象学视角出发，探究韩国学术图书馆员在韩国的工作经历，呈现出涵盖学术图书馆事业众多方面的主题，将职业选择、图书情报学教育及职业准备、与师生的关系同韩国专业图书馆事业及学术图书馆的发展联系起来。本文运用的现象学研究方法不仅在对这些问题的定量研究中增加了个人视角，而且还通过凸显全球范围内学术图书馆事业的普遍性与细微差别，为比较图书馆学增添了文献。

Information literacy in Zanzibar universities: Current situation and the way forward

桑给巴尔高校信息素养：现状与出路

Abbas Mohamed Omar, Haji Ali Haji, Khamis Hamad Mwitumbe

IFLA Journal, 40-4, 280-288

本文通过研究信息素养意识、信息素养供给，以及高校图书馆对促进信息素养的作用，旨在探讨桑给巴尔高校信息素养项目的现状及未来。调查在桑给巴尔三所大学展开，调查对象包括大学图书馆工作人员、学校/院院长和主任、系主任和本科生。共有200名受访者参与了这项调查，我们对调查结果做了定量分析。调查结果显示，尽

管宣传和提供信息素养技能仍处于初始阶段，但图书馆和学术人员具有一定程度的信息素养意识。问题的根源在于缺少合格的信息素养专家，缺乏信息素养教学背景，以及图书馆员和教师之间缺少合作。基于研究结果，研究人员提出了一些弥补这些不足的建议，包括开展信息素养研讨会和工作坊，创设培养信息素养意识的项目，设计并实施信息素养课程和教学内容。

Micronesian libraries and archives: A review of the literature

密克罗尼西亚图书馆和档案馆：文献综述

Christopher R.R. Todd

IFLA Journal, 40-4, 289-295

西太平洋密克罗尼西亚地区有着独特的图书馆和档案历史。密克罗尼西亚主要由美国附属岛屿构成，其图书馆在不断延续的殖民浪潮与现代岛屿身份的认定中诞生。本文主要针对专家审稿刊物上的文章，将目前仅有的有关密克罗尼西亚图书馆的专业文献整合为一份简要资料。虽然该地区图书馆现代化进程迅速，但是依然面临巨大的挑战，表现在图书馆培训、资金充裕度、访问当前信息资源受限、互联网接入率低等方面。在对这类文献分析的基础上，作者提出三个主要需求：1)拓宽密克罗尼西亚图书馆情报学教育(尤其是在研究生阶段)，2)增强图书馆和档案服务中岛屿沟通模式的意识和利用，3)通过创建《密克罗尼西亚图书馆情报学开放获取期刊》增加学术出版和研究机会。

The development of library and information science in China (1840-2009)

中国图书馆情报学的发展(1840-2009)

Yao Zhang

IFLA Journal, 40-4, 296-306

本文旨在介绍1840年至2009年间中国图书馆情报学(LIS)的发展概况。讨论分为四个历史时期：1840年-1897年，1898年-1948年，1949年-1977年，1978年-2009年。作者探讨了每一时期内对图书

馆和LIS发展产生重要影响的三个主题，即影响图书馆、信息机构和LIS教育发展的中国社会环境、经济环境、科学与政治环境，LIS教育促进了图情行业的发展。总之，本文通过将制度变革、外族入侵危机等历史背景与社会进步相结合，回顾了1840年至2009年间不同阶层各代人对中国图书馆情报学付出的巨大努力及取得的成就。

Information evaluation and the individual's cognitive state: Some insights from a study of British teenaged users

信息评估和个体认知状态：基于英国青少年用户研究的启示

Andrew K. Shenton, Alison J. Pickard, Andrew Johnson

IFLA Journal, 40-4, 307-316

基于英国一组年轻人的认知状态，本文探究其对网络信息评估的可能倾向。文章通过在线问卷调查，对82位16-18岁用户的反馈数据进行了分析，生成了频率统计，并根据问卷反馈给每位参与者一个“信任倾向”值。结果显示，年轻人评估信息的可能倾向呈现出喜忧参半的样态。尽管其中少有整体信任倾向分值相当高者，但对问卷中的一些问题，参与者反馈的数据表明他们可能会不假思索地接受他们所看到的大部分东西。

Library adoption of knowledge management using Web 2.0: A new paradigm for libraries

图书馆采用Web 2.0进行知识管理：图书馆新范例

Md. Anwarul Islam, Naresh Kumar Agarwal, Mitsuru Ikeda

IFLA Journal, 40-4, 317-330

学术图书馆越来越多地利用Web 2.0工具与用户沟通，但却没有积极地将其运用于促进知识管理。本研究旨在探讨图书馆员对这一工具的意识 and 接受度，他们眼中使用Web 2.0进行知识管理的效度，机构的使用意愿，以及这些因素对图书馆采

用Web 2.0进行知识管理产生影响的方式。本次调查问卷由来自6大洲35个国家的101位图书馆员完成。大部分受访者听说过知识管理，接受Web 2.0，认为运用Web 2.0进行知识管理非常有效，但并不完全确定他们的图书馆是否准备采用知识

管理。研究发现对Web 2.0的接受度影响人们对效度的感知，这继而又极大地影响着采用Web 2.0进行知识管理的可能性。本文是全球从学术图书馆员的角度结合运用Web 2.0进行知识管理的第一项研究，因而具有重要的理论和实践意义。

Sommaires

La fierté londonienne dans son contexte : Des trésors et le volume des trésors bibliothécaires en Grande-Bretagne aujourd'hui

Karen Attar

Journal de l'IFLA, 40-4, 244-253

Le volume des trésors, présentant des objets rares, beaux ou importants prolifère dans la Grande-Bretagne du XXI^e siècle. Et ceci malgré l'alternative du World Wide Web à fournir un mode moins cher, plus rapide et plus simple pour des bibliothèques à publier leurs biens de premier choix. Mais que fait ce volume des trésors concrètement, et quelle indication donne son contenu de nos objets les plus précieux ? Cet article est basé sur l'expérience de l'auteur en choisissant 60 objets pour le volume des trésors 2012, *Senate House Library, Université de Londres*. Il décrit le raisonnement derrière les choix et fournit un contexte plus large sur ce genre de publication au Royaume-Uni, en regardant d'autres volumes de trésors et des affichages sur internet afin de généraliser sur la présentation des bibliothèques d'elles-mêmes. Il met l'accent sur des objets uniques, caractéristiques et pertinents et sur l'identité de l'institution et interprète le volume des trésors moderne comme un document politique pour justifier l'existence de bibliothèques en surlignant leurs spécificités distinctives.

La façon dont les administrateurs académiques de sciences de l'information et des bibliothèques perçoivent la formation en ligne (e-learning) dans des écoles de sciences de l'information et des bibliothèques : Une analyse qualitative

Md. Shiful Islam, Susumu Kunifuji, Motoki Miura, Tessai Hayama

Journal de l'IFLA, 40-4, 254-266

Cette étude porte sur la façon dont les administrateurs académiques de sciences de l'information et

des bibliothèques (SIB) perçoivent la formation en ligne (e-learning - EL) dans des écoles de SIB et particulièrement ce que les administrateurs académiques de SIB considèrent comme les avantages et les inconvénients de l'utilisation d'EL, quels types de contraintes ils rencontrent dans l'utilisation d'EL pour fournir une formation en SIB, et la manière dont ils surmontent les contraintes des systèmes d'EL dans des écoles de SIB. Une enquête d'exploration en ligne par courrier électronique a été menée, en utilisant un lien vers un questionnaire, parmi 85 administrateurs académiques de SIB autour du monde pour recueillir des points de vue et des expériences par rapport à l'utilisation d'EL dans des écoles de SIB. Les participants ont rapporté certains avantages majeurs et certains inconvénients qu'ils rencontrent dans l'utilisation de systèmes d'EL dans leurs écoles. Ils ont également proposé le projet d'un plan à long terme pour la croissance d'EL, la mise en place d'heures de travail interactives en ligne, et l'établissement de consortiums à travers des universités pour surmonter les contraintes liées à l'utilisation d'EL dans des formations de SIB. Les participants n'avaient pas d'opinions très positives ni très négatives sur l'utilisation d'EL dans des écoles de SIB.

L'expérience du métier de bibliothécaire académique en Corée : Une étude phénoménologique

Kaetrena Davis Kendrick

Journal de l'IFLA, 40-4, 267-279

Il existe de nombreuses études quantitatives sur la satisfaction professionnelle, le choix de carrière et les perceptions du métier de bibliothécaire académique dans la littérature professionnelle sur les bibliothèques et les sciences de l'information ; cependant, il n'y a pas beaucoup de travail qualitatif pour comprendre l'expérience vécue du métier de bibliothécaire dans aucun cadre. Une étude phénoménologique a été menée pour comprendre les expériences de bibliothécaires académiques coréens travaillant en Corée du Sud. Des thèmes

couvrant différents aspects du métier de bibliothécaire académique ont émergé, réunissant le choix de carrière, la formation de SIB et la préparation à la carrière, la relation avec la faculté et les étudiants et le développement du métier de bibliothécaire professionnel et des bibliothèques académiques en Corée du Sud. Tout en rajoutant un contexte personnel à des études quantitatives à ces sujets, la méthode phénoménologique utilisée dans cette étude améliore également la littérature comparative sur le métier de bibliothécaire en surlignant son universalité et les nuances de la pratique du métier de bibliothécaire académique à l'échelle mondiale.

La maîtrise de l'information dans des universités de Zanzibar : La situation actuelle et le chemin du progrès

Abbas Mohamed Omar, Haji Ali Haji,
Khamis Hamad Mwitumbe

Journal de l'IFLA, 40-4, 280-288

Cet article vise à étudier la situation actuelle et l'avenir des programmes de maîtrise de l'information des universités de Zanzibar en regardant la notoriété de la maîtrise de l'information, l'étendue des dispositions pour la maîtrise de l'information et le rôle des bibliothèques universitaires dans sa promotion. L'enquête a été menée dans trois universités de Zanzibar, où le personnel des bibliothèques universitaires, des doyens et des directeurs d'écoles/ de facultés, des responsables de départements et des étudiants en licence ont été impliqués dans l'étude. Un total de 200 participants a contribué à l'étude dont les résultats ont été analysés de manière quantitative. Les résultats montrent qu'un certain degré de notoriété de la maîtrise de l'information existe parmi le personnel bibliothécaire et académique, bien que la promotion et la disposition de ses capacités soient toujours à ses balbutiements. Un nombre inadéquat de spécialistes qualifiés dans la maîtrise de l'information, un manque de formation dans l'enseignement de la maîtrise de l'information et un manque de coopération entre des bibliothécaires et des membres de la faculté ont été identifiés comme étant des sources de problèmes. Sur la base des résultats, les chercheurs ont formulé un certain nombre de recommandations pour traiter les défaillances incluant : l'organisation de séminaires et d'ateliers sur la maîtrise de l'information, la création de programmes de notoriété, la création et la mise en place d'un programme et d'un contenu d'enseignement.

Bibliothèques et archives en Micronésie : Une revue littéraire

Christopher R.R. Todd

Journal de l'IFLA, 40-4, 289-295

La région de Micronésie dans l'ouest de l'océan pacifique dispose d'une histoire unique en matière de bibliothèques et d'archives. Composée largement d'îles affiliées aux Etats-Unis, les bibliothèques de Micronésie sont apparues par des vagues successives de colonisation et les affirmations des identités modernes des îles. En premier lieu concentré sur des articles de journaux révisés par des collègues, cette revue littéraire synthétise la littérature professionnelle antérieure restreinte sur les bibliothèques micronésiennes en une source concise. Malgré leur modernisation rapide, les bibliothèques dans cette région rencontrent des défis évidents en termes de formation de bibliothécaires, de financement adapté, d'accès limité aux sources d'information actuelles et de faibles taux d'accès à l'Internet. Après l'analyse de cet ensemble littéraire, l'auteur identifie trois besoins principaux : 1) une plus large formation en SIB en Micronésie (particulièrement au niveau de licence), 2) une notoriété et intégration accrue des modes de communication des îles pour des services bibliothécaires et d'archivage, 3) des opportunités étendues pour la publication et la recherche académique grâce à la création d'un journal en libre accès sur les Sciences de l'information et des bibliothèques de Micronésie.

Le développement des sciences de l'information et des bibliothèques en Chine (1840–2009)

Yao Zhang

Journal de l'IFLA, 40-4, 296-306

L'objectif de cette étude est de proposer un aperçu du développement des bibliothèques chinoises et des sciences de l'information et des bibliothèques (SIB) en Chine entre 1840 et 2009. La discussion est divisée en quatre périodes historiques : 1840–1897, 1898–1948, 1949–1977 et 1978–2009. Pour chacune de ces périodes, l'auteur aborde trois thèmes ayant eu une influence importante sur le développement de bibliothèques et de SIB : le climat social, économique, scientifique et politique en Chine qui a influencé le développement de bibliothèques et d'organismes de l'information, et la formation en SIB, soutenant ce métier en croissance. En somme, cette étude donne une revue de la réalisation des sciences de l'information et des bibliothèques en Chine de 1840 à 2009, et les efforts importants de personnes de différentes

catégories et sur plusieurs générations en associant la situation historique, comprenant le changement de régimes, des crises dues aux invasions étrangères et le progrès social.

L'évaluation de l'information et l'état cognitif de l'individu : témoignages d'une étude sur des utilisateurs adolescents britanniques

Andrew K. Shenton, Alison J. Pickard,
Andrew Johnson

Journal de l'IFLA, 40-4, 307-316

Cet article explore, sur la base de leurs états cognitifs, les inclinaisons probables d'un groupe de jeunes en Angleterre par rapport à l'évaluation d'informations sur le Web. Le travail fait appel aux données soumises à travers un questionnaire en ligne par 82 jeunes âgés de 16 à 18 ans. Des comptages fréquents ont été générés et chaque participant a reçu un score de « disposition à faire confiance » selon leurs réponses au questionnaire. Les résultats présentent une image mitigée quant aux tendances vraisemblables des jeunes à évaluer des informations. Les données des participants par rapport à certains sujets abordés dans le questionnaire suggèrent qu'ils pourraient être enclin à accepter une grande quantité de ce qu'ils voient sans remise en question, bien que peu de leurs scores globaux quant à leur disposition à faire confiance ne soient particulièrement élevés.

L'adoption par des bibliothèques de la gestion de connaissances à l'aide du Web 2.0 : un nouveau paradigme pour les bibliothèques

Md. Anwarul Islam, Naresh Kumar Agarwal, Mitsuru Ikeda

Journal de l'IFLA, 40-4, 317-330

Tandis que les outils du Web 2.0 sont adoptés de plus en plus par des bibliothèques académiques pour la connexion des utilisateurs, ils ne sont pas utilisés activement pour favoriser la gestion des connaissances (knowledge management - KM). Cette étude recherche la notoriété et l'aisance parmi les bibliothécaires, l'utilité perçue par eux de KM utilisant Web 2.0, la préparation de l'organisation et la façon dont ces éléments affectent l'adoption de KM utilisant Web 2.0 par les bibliothèques. Le questionnaire d'enquête a été rempli par 101 bibliothécaires dans 35 pays sur 6 continents. La plupart des participants avaient entendu de KM, étaient à l'aise avec le Web 2.0, considéraient le KM utilisant Web 2.0 comme très utile, mais n'étaient pas tout à fait certains que leurs bibliothèques étaient prêtes à adopter le KM. L'aisance avec le Web 2.0 avait une influence sur l'utilité perçue, qui à son tour avait un effet important sur la probabilité de l'adoption de KM utilisant Web 2.0. Il s'agit de la première étude alliant le KM utilisant Web 2.0 au point de vue de bibliothécaires académiques au niveau mondial et elle a des implications importantes en matière de théorie et de pratique.

Zusammenfassungen

London pride in context: Treasures and the library Treasures Volume in Britain today

[Londoner Stolz im Kontext: Die Schätze und das Library Treasures Volume im heutigen Großbritannien]

Karen Attar

IFLA-Journal, 40-4, 244-253

Das Treasures Volume mit seinen seltenen, besonders schönen beziehungsweise signifikanten Inhalten erfreut sich stark zunehmender Beliebtheit im Großbritannien des 21. Jahrhunderts – und das trotz der Alternative des World Wide Web, mit dem die Bibliotheken ihre besten Bestände kostengünstiger, schneller und leichter an die Öffentlichkeit bringen können. Was aber tut das Treasures Volume wirklich und

inwiefern ist sein Inhalt repräsentativ für unsere wertvollsten Bestände? Der vorliegende Artikel stützt sich auf die Erfahrungen der Autorin bei der Auswahl von 60 Exponaten für das 2012 Treasures Volume, *Senate House Library, University of London*. Sie beschreibt hier die Auswahlprinzipien und kontextualisiert dieses Thema auf einer breiteren Ebene innerhalb des Genres im Vereinigten Königreich, wobei auch andere Treasures Volumes und Webdisplays hinzugezogen werden, um allgemeine Aussagen über die Eigenpräsentationen der Bibliotheken machen zu können. Dabei liegt der Schwerpunkt auf einzigartigen, unverwechselbaren, relevanten Stücken, wobei auch auf das institutionelle Selbstverständnis eingegangen wird; und die Autorin interpretiert das moderne Treasures Volume als ein politisches Dokument zur Rechtfertigung der Existenz der Bibliotheken, indem sie ihre charakteristischen Merkmale unterstreicht.

How library and information science academic administrators perceive e-learning in LIS schools: A qualitative analysis

[Das computergestützte Lernen (E-Learning) an den LIS-Schulen aus der Perspektive der wissenschaftlichen Mitarbeiter der Bibliotheks- und Informationswissenschaften: Eine qualitative Analyse]

Md. Shiful Islam, Susumu Kunifuji, Motoki Miura, Tessai Hayama

IFLA-Journal, 40-4, 254-266

Dieser Beitrag beleuchtet die Perspektive der wissenschaftlichen Mitarbeiter in den Bibliotheks- und Informationswissenschaften (Library and Information Science, LIS) in Bezug auf das computergestützte Lernen (E-Learning, EL) an den LIS-Schulen, insbesondere im Hinblick auf die Vor- und Nachteile des EL in den Augen der wissenschaftlichen Mitarbeiter der LIS, der Einschränkungen, denen sie bei der Nutzung des EL im Rahmen der bibliotheks- und informationswissenschaftlichen Ausbildung unterliegen, und die Methoden zur Überbrückung der Probleme der EL-Systeme an den LIS-Schulen. In diesem Zusammenhang wurde auch ein exploratorisches Online-Interview per E-Mail mit einem Link auf einen Fragebogen durchgeführt, an dem 85 wissenschaftliche Mitarbeiter der Bibliotheks- und Informationswissenschaften aus der ganzen Welt teilgenommen haben, um deren Erkenntnisse und Erfahrungen mit dem computergestützten Lernen an LIS-Schulen zu sammeln. Die Befragten wiesen auf einige wichtige Vorteile, Nachteile und Hemmnisse hin, die sie im Zusammenhang mit den EL-Systemen an ihren Schulen festgestellt haben. Außerdem schlugen sie die Entwicklung eines langfristigen Plans für das EL-Wachstum, die Implementierung interaktiver Bürozeiten und Online-Bürozeiten sowie die Einrichtung von universitätsübergreifenden Arbeitsgemeinschaften vor, um die Hemmnisse des computergestützten Lernens bei der LIS-Ausbildung aus dem Weg zu räumen. Die Befragten hatten weder sehr positive noch sehr negative Meinungen über das computergestützte Lernen im Kontext der LIS-Schulen.

The experience of Korean academic librarianship: A phenomenological study

[Die Erfahrungen des Bibliothekswesens an den Universitäten in Korea: Eine phänomenologische Studie]

Kaetrena Davis Kendrick

IFLA-Journal, 40-4, 267-279

In der professionellen Literatur über die Bibliotheks- und Informationswissenschaften finden sich zahllose quantitative Studien über Arbeitszufriedenheit, Berufswahl und Karriereplanung sowie die Vorstellungen des Bibliothekswesens an den Universitäten; es gibt jedoch nicht viele qualitative Studien, die sich mit dem Verständnis der praktischen Erfahrungen des Bibliothekswesens in einem beliebigen Kontext befassen. Im Rahmen einer phänomenologischen Studie sollten die Erfahrungen koreanischer Universitätsbibliothekare in Südkorea kartiert werden. Dabei schälten sich Themen im Zusammenhang mit diversen Aspekten des Bibliothekswesens an den Universitäten heraus und es zeigte sich ein Zusammenhang zwischen der Berufswahl, der LIS-Ausbildung und der Berufsbereitschaft, den Beziehungen zum Lehrkörper und zu den Studenten sowie der Entwicklung des professionellen Bibliothekswesens und der Unibibliotheken in Südkorea. Abgesehen davon, dass es den quantitativen Studien zu diesen Themen einen persönlichen Kontext verleiht, verbessert das im Rahmen dieser Studie verwendete phänomenologische Verfahren auch die vergleichende Literaturwissenschaft im Zusammenhang mit dem Bibliothekswesen, indem es die Allgemeingültigkeit und die Nuancen des praktischen Bibliothekswesens an den Universitäten im globalen Maßstab beleuchtet.

Information literacy in Zanzibar universities: Current situation and the way forward

[Informationskompetenz an den Universitäten in Sansibar: Die aktuelle Situation und die Zukunftsaussichten]

Abbas Mohamed Omar, Haji Ali Haji, Khamis Hamad Mwitumbe

IFLA-Journal, 40-4, 280-288

Dieser Beitrag betrachtet die aktuelle Situation und die Zukunftsaussichten der Programme zur Verbesserung der Informationskompetenz an den Universitäten in Sansibar durch Analyse des Informationskompetenzbewusstseins, die Bereitstellung von Informationskompetenz und die Rolle der Unibibliotheken bei deren Förderung. Die Umfrage konzentrierte sich auf drei Universitäten in Sansibar unter Einbeziehung der Mitarbeiter an den Universitätsbibliotheken, der Dekane und Prodekane, der Fachbereichsleiter sowie der Studenten im Grundstudium. Eine Population von insgesamt 200 Personen nahm an der Studie teil und

die Ergebnisse wurden quantitativ ausgewertet. Die entsprechenden Befunde zeigen, dass die Bibliotheksmitarbeiter und die Mitglieder der Fakultäten durchaus ein gewisses Maß an Informationskompetenzbewusstsein besitzen, obwohl sich die Förderung und die Vermittlung der entsprechenden Fähigkeiten noch im Anfangsstadium befinden. Als Ursachen für die vorhandenen Probleme identifiziert dieser Beitrag die unzureichende Bereitstellung qualifizierter Spezialisten für Informationskompetenz, fehlende Grundlagen beim Unterrichten der Informationskompetenz und die ungenügende Zusammenarbeit zwischen den Bibliothekaren und dem Lehrkörper. Auf Basis dieser Ergebnisse haben die Forscher eine Reihe von Empfehlungen zur Behebung der Missstände formuliert. Diese beinhalten das Angebot von Seminaren und Workshops zum Thema Informationskompetenz, entsprechende Awareness-Programme sowie die Entwicklung und Implementierung von Bildungsplänen und Lehrinhalten, die verstärkt auf die Informationskompetenz ausgerichtet sind.

**Micronesian libraries and archives:
A review of the literature**

[Die Bibliotheken und Archive in Mikronesien:
Eine Literaturanalyse]

Christopher R.R. Todd

IFLA-Journal, 40-4, 289-295

Mikronesien, das in der westlichen Pazifikregion liegt, besitzt eine einzigartige Bibliotheks- und Archivgeschichte. Mikronesien ist ein Inselgebiet, zum Großteil mit Anbindung an die USA. Die Bibliotheken von Mikronesien sind aus einer bewegten Geschichte mit diversen Kolonisierungswellen hervorgegangen, wobei sich in der heutigen Zeit auch das Selbstverständnis der verschiedenen Kulturen deutlich herauschält. Die vorliegende Literaturstudie konzentriert sich schwerpunktmäßig auf wissenschaftlich referierte Artikel in Fachzeitschriften und erfasst die aus früheren Zeiten stammenden begrenzten professionellen Literaturquellen über die Bibliotheken in Mikronesien so, dass damit nun eine wichtige Ressource vorliegt. Obwohl in Mikronesien schnelle Modernisierungstendenzen zu erkennen sind, sehen sich die Bibliotheken in dieser Region mit klaren Herausforderungen konfrontiert, was die Bibliotheksausbildung, die nicht ausreichenden finanziellen Mittel, den begrenzten Zugang zu den aktuellen Informationsressourcen und die niedrigen Internetzugangsraten betrifft. Auf Basis der Analyse dieser Literatursammlung identifiziert der Autor drei vorrangige Bedarfsbereiche: 1) Erweiterung der Ausbildung in

den Bibliotheks- und Informationswissenschaften in Mikronesien (insbesondere auf Doktorandenniveau), 2) Verstärkte Wahrnehmung der Kommunikation bei den Bibliotheks- und Archivdiensten und deren Realisierung im Inselbetrieb, 3) Erweiterte Möglichkeiten zur wissenschaftlichen Publizistik und Forschung durch Einrichtung eines Open Access-Journals der Bibliotheks- und Informationswissenschaften in Mikronesien.

The development of library and information science in China (1840–2009)

[Die Entwicklung der Bibliotheks- und Informationswissenschaften in China (1840–2009)]

Yao Zhang

IFLA Journal, 40-4, 296-306

Die vorliegende Studie verschafft einen Überblick über die Entwicklung der Bibliotheken sowie der Bibliotheks- und Informationswissenschaften (LIS) in China im Zeitraum zwischen 1840 und 2009. Insgesamt bezieht sich dieser Beitrag auf vier geschichtliche Epochen: 1840–1897, 1898–1948, 1949–1977 beziehungsweise 1978–2009. Im Zusammenhang mit jeder dieser Epochen bespricht der Autor drei Themen, die einen starken Einfluss auf die Entwicklung der Bibliotheken sowie der Bibliotheks- und Informationswissenschaften gehabt haben. Der Berufsstand hat von dem sozialen, wirtschaftlichen, wissenschaftlichen und politischen Klima in China profitiert, das auch die Entwicklung der Bibliotheken und der informationswissenschaftlichen Institutionen sowie die Ausbildung in den Bibliotheks- und Informationswissenschaften beeinflusst hat. Insgesamt beleuchtet diese Studie die Leistungen der Bibliotheks- und Informationswissenschaften in China innerhalb des Beobachtungszeitraums zwischen 1840 und 2009 und weist auf die erheblichen Anstrengungen der Menschen unterschiedlicher Herkunft aus verschiedenen Generationen hin, indem sie auch den historischen Kontext mit Regimewechsel, Krisen aufgrund ausländischer Invasionen und sozialen Fortschritten einbezieht.

Information evaluation and the individual's cognitive state: Some insights from a study of British teenaged users

[Informationsauswertung und der kognitive Zustand des Individuums: einige Erkenntnisse aus einer Studie mit britischen Teenagern]

Andrew K. Shenton, Alison J. Pickard,
Andrew Johnson

IFLA Journal, 40-4, 307-316

Der vorliegende Beitrag erforscht die wahrscheinliche Neigung einer Gruppe junger Menschen in England zur Auswertung webbasierter Informationen in Abhängigkeit von ihrem kognitiven Zustand. Diese Studie stützt sich auf Daten, die mithilfe eines Online-Fragebogens an einer 82 Teilnehmer starken Gruppe von 16- bis 18-Jährigen erhoben wurden. Dabei wurden auch Häufigkeitszählungen durchgeführt und jeder Teilnehmer erhielt einen „Trust Disposition“-Score in Abhängigkeit von den jeweiligen Reaktionen auf den Fragebogen. Im Ergebnis zeigt sich ein uneinheitliches Bild bezüglich der wahrscheinlichen Neigung junger Leute zur Auswertung der erhaltenen Informationen. Die Daten der Teilnehmer in Bezug auf einige der Themen, die im Fragebogen angesprochen wurden, weisen darauf hin, dass sie möglicherweise dazu tendieren, vieles von dem, was sie sehen, einfach zu akzeptieren, ohne es infrage zu stellen, obwohl nur wenige ihrer gesamten Trust Disposition - Scores signifikant hoch sind.

Library adoption of knowledge management using Web 2.0: A new paradigm for libraries

[Die Nutzung der Werkzeuge des Wissensmanagements (KM) mit Web 2.0 in Bibliotheken: Ein neues Paradigma für Bibliotheken]

Md. Anwarul Islam, Naresh Kumar Agarwal, Mitsuru Ikeda

IFLA-Journal, 40-4, 317-330

Während die Web 2.0 Tools von den Universitätsbibliotheken zunehmend zur Kommunikation mit den Kunden genutzt werden, werden sie nicht aktiv dazu verwendet, um das Wissensmanagement (KM) zu ermöglichen. Diese Studie untersucht die Wahrnehmung der Bibliothekare und deren Gewöhnung, den von ihnen wahrgenommenen Nutzen des KM mit Web 2.0, die organisatorische Veränderungsbereitschaft und die Art und Weise, in der diese Faktoren die Anwendung des KM mit Web 2.0 in den Bibliotheken behindern. Der Erhebungsfragebogen wurde von 101 Bibliothekaren aus 35 Ländern auf 6 Kontinenten ausgefüllt. Die meisten Auskunftspersonen hatten von KM gehört, kannten sich gut mit Web 2.0 aus, meinten, dass das KM mit Web 2.0 sehr nützlich sei, waren sich jedoch nicht ganz sicher, was die Bereitschaft ihrer Bibliotheken zur Einführung des KM betraf. Es wurde festgestellt, dass die Gewöhnung an Web 2.0 ihre Auswirkungen auf den wahrgenommenen Nutzen hatte, was wiederum die Wahrscheinlichkeit der Einführung des KM mit Web 2.0 stark verringerte. Dies ist die erste Studie, die das KM mit Web 2.0 aus der Perspektive von Universitätsbibliothekaren in der ganzen Welt kombiniert, und sie hat erhebliche Auswirkungen auf die Theorie und Praxis.

Рефераты статей

Гордость Лондона в контексте: Сокровища и сборник библиотечных сокровищ Великобритании сегодня

Карен Аттар

IFLA Journal, 40-4, 244-253

В Великобритании 21-го века быстро увеличивается объем сборника сокровищ, в котором представлены редкие, блистательные или поистине выдающиеся предметы. И это невзирая на альтернативу в виде Всемирной паутины, которая открывает библиотекам более дешевый, быстрый, простой способ представления всеобщему вниманию жемчужин своих коллекций. Но какую роль на самом деле играет этот сборник сокровищ, и насколько показательным является его содержание, в которое включены

наши наиболее ценные экспонаты? Настоящая статья основана на личном опыте автора, который участвовал в отборе 60 предметов для сборника сокровищ за 2012 год в *Библиотеке здания Совета Лондонского университета*. В статье описаны принципы, согласно которым производится отбор, кроме того, в ней проводится более обширное сопоставление в рамках данного направления в Великобритании, с учетом других томов собраний сокровищ, а также электронных экспозиций, с целью формирования общих выводов о том, как библиотеки преподносят себя. Она делает акцент на уникальных, отличительных и значимых предметах, а также на самовосприятии соответствующего учреждения, и трактует современный сборник сокровищ как политический документ, цель которого заключается в обосновании существования библиотек путем привлечения внимания к их отличительным чертам.

Как административный персонал в сфере библиотековедения и науки об информации воспринимает электронное обучение в учебных заведениях, специализирующихся на библиотековедении и науке об информации: Качественный анализ

Мд. Шифул Ислам, Сусуму Кунифуджи, Мотоки Миура, Тессаи Хайяма

IFLA Journal, 40-4, 254-266

Как административный персонал в сфере библиотековедения и науки об информации (БНИ) воспринимает электронное обучение (ЭО) в учебных заведениях, специализирующихся на БНИ, в частности, что административный персонал в сфере БНИ считает достоинствами и недостатками использования ЭО, с какими ограничивающими факторами он сталкивается при использовании ЭО для обучения БНИ, и каким образом он преодолевает ограничения систем ЭО в учебных заведениях, специализирующихся на БНИ. Для целей исследования был проведен интерактивный опрос при помощи электронной почты со ссылкой на анкету, в котором участвовали 85 административных работников в сфере БНИ со всего мира; цель заключалась в получении информации о персональном восприятии и личном опыте в области использования ЭО в учебных заведениях БНИ. Участники опроса сообщили о некоторых достоинствах, недостатках, а также о ряде сдерживающих факторов, с которыми они сталкиваются в ходе использования систем ЭО в своих учебных заведениях. Они также предложили проект долгосрочного плана развития ЭО, введение рабочего времени для работы в интерактивном режиме и режиме онлайн, а также создание совместных проектов университетов с целью преодоления ограничений в использовании ЭО при обучении БНИ. Участники опроса не выразили как в высшей степени положительного, так и крайне отрицательного мнения относительно использования ЭО в учебных заведениях БНИ.

Опыт библиотечного дела в учебных заведениях Кореи: Феноменологическое исследование

Катрена Дейвис Кендрик

IFLA Journal, 40-4, 267-279

В профессиональной литературе по вопросам библиотековедения и науки об информации существует множество количественных исследований

в области удовлетворенности выполняемой работой, выбором карьеры, а также восприятием библиотечного дела, при этом проделан небольшой объем работы для определения качественных характеристик на основании пережитого опыта работников библиотечного дела в какой-либо области. Было проведено феноменологическое исследование с целью понимания опыта специалистов библиотечного дела корейских учебных заведений, работающих в Южной Корее. Возникли вопросы, включающие в себя несколько аспектов библиотечного дела в учебных заведениях, соединяющие между собой выбор карьеры, образование в области библиотековедения и науки об информации и готовность к успешной профессиональной деятельности, взаимоотношения с преподавательским и студенческим составом, а также развитие профессионального библиотечного дела и библиотек учебных заведений в Южной Корее. Кроме того, что феноменологический метод, используемый в рамках настоящего исследования, добавляет личностный контекст к качественным исследованиям указанных вопросов, он также обогащает сравнительную литературу по библиотечному делу, проливая свет как на универсальность, так и на нюансы методов ведения библиотечного дела в мировом масштабе.

Информационная грамотность в университетах Занзибара: Текущая ситуация и дальнейшие перспективы

Аббас Мохамед Омар, Хаджи Али Хаджи, Кхамис Хамад Мвитумбе

IFLA Journal, 40-4, 280-288

Задачей настоящей работы является анализ текущей ситуации, а также перспектив развития программ информационной грамотности в университетах Занзибара путем изучения степени осведомленности об информационной грамотности, масштабов обеспечения информационной грамотности, а также роли университетских библиотек в содействии данному процессу. Исследование проводилось в трех университетах Занзибара, при этом в нем принимали участие сотрудники университетской библиотеки, деканы и директора школ / факультетов, начальники отделов, а также студенты бакалавриата. В общей сложности в исследовании приняли участие 200 респондентов, для анализа результатов использовался количественный метод. Результаты показывают, что в среде сотрудников библиотек и учебных заведений имеет

место определенный уровень осведомленности о литературной грамотности, однако при этом предоставление соответствующих навыков и содействие им все еще находится в зачаточном состоянии. Источниками проблем были названы: недостаточное количество квалифицированных специалистов в области информационной грамотности, недостаточная подготовка в области обучения информационной грамотности, а также отсутствие необходимого уровня взаимодействия между работниками библиотек и преподавательским составом. На основании полученных результатов исследователи сформировали некоторые рекомендации, направленные на устранение недостатков, в число которых входят: организация семинаров и заседаний рабочих групп, сознание ознакомительных программ, разработка и внедрение учебных курсов и программ обучения информационной грамотности.

Библиотеки и архивы Микронезии: Обзор литературы

Кристофер Р.Р. Тодд

IFLA Journal, 40-4, 289-295

Библиотеки и архивы Микронезии, расположенной в западной части Тихого океана, имеют уникальную историю. Микронезия состоит преимущественно из островов, находившихся под контролем США, и ее библиотеки создавались в условиях последовательно сменяющихся друг друга волн колонизации и отстаивания права островов на самоопределение в современном мире. Настоящий обзор литературных источников, основное внимание которого уделено прошедшим экспертную оценку статьям из журналов, объединяет скудный объем вышедшей ранее профессиональной литературы о библиотеках Микронезии в единый лаконичный источник. Несмотря на стремительную модернизацию, библиотеки данного региона сталкиваются с определенными непростыми в решении вопросами, заключающимися в обучении персонала библиотек, необходимости соответствующего финансирования, ограниченном доступе к современным источникам информации, а также низкой скорости доступа в интернет. На основании анализа такого большого объема литературы автор определяет три основные потребности: 1) Расширение обучения библиотековедению и науке об информации в Микронезии (в особенности на уровне выпускников учебных заведений), 2) Повышение информированности об островных моделях коммуникации и включение их в перечень услуг, оказываемых

библиотеками и архивами, 3) Расширение возможностей для академических публикаций и исследований посредством создания Журнала открытого доступа по вопросам библиотековедения и науки об информации Микронезии.

Развитие библиотековедения и науки об информации в Китае (1840-2009)

Яо Чжан

IFLA Journal, 40-4, 296-306

Настоящее исследование имеет своей целью представить обзор развития китайских библиотек, а также библиотековедения и науки об информации (БНИ) в Китае в период 1840 - 2009 гг. Обсуждение разделено на четыре исторических периода: 1840–1897 гг., 1898–1948 гг., 1949–1977 гг. и 1978–2009 гг. Для каждого из указанных периодов автор обсуждает три фактора, оказавших существенное влияние на развитие библиотек и БНИ: социальную, экономическую, научную и политическую обстановку в Китае, оказавшую влияние на развитие библиотек и информационных учреждений, а также образование в области БНИ, которое служило поддержкой для развивающейся профессии. В целом, в настоящей работе представлен обзор достижений в области библиотековедения и науки об информации Китая в период с 1840 по 2009 годы, а также тех выдающихся усилий, которые прилагали люди из различных классов в течение нескольких поколений на фоне исторических событий, включающих в себя смену режимов, кризис в результате иностранного вторжения, а также социальный прогресс.

Оценка информации и когнитивное состояние личности: некоторые выводы на основании исследования в Великобритании среди пользователей подросткового возраста

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IFLA Journal, 40-4, 307-316

В настоящем документе на основании когнитивных состояний группы молодых людей из Англии изучаются их вероятные склонности в части оценки информации, полученной в глобальной сети. В работе использованы данные, собранные при помощи интерактивной анкеты, которую заполнили 82 респондента в возрасте 16-18 лет. Был выполнен подсчет частоты повторений, и

каждому из участников была присвоена оценка “уровня доверия” в соответствии с их ответами на вопросы анкеты. В результате была получена смешанная картина в разрезе вероятных тенденций в оценке информации молодежью. Данные участников, касающиеся некоторых вопросов, затронутых в анкете, дают основание предполагать, что те склонны безоговорочно принимать многое из увиденного, несмотря на то, что некоторые из оценок их общего уровня доверия весьма высоки.

Внедрение библиотеками управления знаниями с использованием методики Web 2.0: Новая установка для библиотек

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IFLA Journal, 40-4, 317-330

В то время как инструменты Web 2.0 все более широко применяются библиотеками учебных заведений для связи со своими постоянными клиентами, они не используются в должной мере для

содействия управлению знаниями (УЗ). В данной работе рассматриваются такие факторы, как осведомленность библиотекарей, предоставляемое им удобство, их собственная оценка эффективности УЗ с использованием Web 2.0, организационная готовность, а также влияние, которое оказывают перечисленные факторы на внедрение библиотеками УЗ с использованием Web 2.0. В ходе исследования анкета была заполнена 101 библиотекарем из 35 стран с 6 континентов. Большинство участников опроса слышали об УЗ, считали методику Web 2.0 удобной, оценивали осуществление УЗ при помощи Web 2.0 как весьма полезное, однако не были абсолютно уверены в том, что их библиотеки готовы к внедрению УЗ. Выяснилось, что удобство использования Web 2.0 влияет на оценку эффективности данной методики, которая, в свою очередь, оказывает существенное влияние на вероятность внедрения УЗ с использованием Web 2.0. Настоящая работа является первым трудом, в котором собраны единые точки зрения на УЗ с использованием Web 2.0 сотрудников библиотек учебных заведений со всего мира, и который имеет большое значение как с теоретической, так и с практической точек зрения.

Resúmenes

Contextualización del orgullo londinense: tesoros y el volumen de tesoros de bibliotecas en Gran Bretaña hoy

Karen Attar

IFLA Journal, 40-4, 244-253

El volumen de tesoros, que muestra piezas raras, bellas o significativas, prolifera en la Gran Bretaña del siglo XXI. Esto sucede a pesar de que Internet ofrece a las bibliotecas un modo más barato, rápido y sencillo de dar a conocer sus fondos bibliográficos más preciados. Pero ¿cuál es la verdadera misión del volumen de tesoros y qué indica su contenido sobre nuestras piezas más valiosas? Este artículo se basa en la experiencia del autor de seleccionar 60 piezas para el volumen de tesoros de 2012, *Senate House Library, University of London*. Justifica sus elecciones y las contextualiza de un modo más amplio dentro del género en el Reino Unido, analizando otros volúmenes de tesoros y exposiciones virtuales, para realizar una generalización sobre presentaciones de bibliotecas. Se percibe un énfasis en piezas únicas, distintivas y relevantes y en la identidad institucional, e interpreta el volumen de

tesoros modernos como un documento político que justifica la existencia de las bibliotecas haciendo hincapié en sus características distintivas.

Percepción de los decanos del aprendizaje virtual en facultades de biblioteconomía y documentación: un análisis cualitativo

Md. Shiful Islam, Susumu Kunifuji, Motoki Miura, Tessai Hayama

IFLA Journal, 40-4, 254-266

Se analiza el modo en que los decanos de facultades de biblioteconomía y documentación (BD) perciben el aprendizaje virtual (AV) en facultades de BD, particularmente lo que los decanos consideran los méritos y deméritos del uso del AV, qué tipos de restricciones afrontan en el uso del AV para impartir educación de BD y cómo se superan las restricciones impuestas por sistemas de AV en facultades de BD. La encuesta se realizó a través del correo electrónico, con mensajes en los que se incluía un enlace a un cuestionario, y en ella participaron 85 decanos de facultades de BD de todo el mundo, que ofrecieron sus opiniones y experiencias relacionadas con el uso del AV en

facultades de BD. Los encuestados indicaron algunos méritos, deméritos y restricciones importantes a los que deben hacer frente a la hora de utilizar sistemas de AV en sus facultades. También propusieron el diseño de un plan de largo alcance para el fomento del AV, la implementación de horarios interactivos y online y el establecimiento de consorcios entre universidades para superar las limitaciones que impone actualmente el uso de AV en la enseñanza de BD. Los encuestados no tenían opiniones ni muy positivas ni muy negativas sobre el uso de AV en facultades de BD.

La experiencia de biblioteconomía especializada en bibliotecas universitarias en Corea: un estudio fenomenológico

Kaetrena Davis Kendrick

IFLA Journal, 40-4, 267-279

Existen numerosos estudios cuantitativos sobre la satisfacción en el trabajo, la elección profesional y las percepciones de la biblioteconomía especializada en bibliotecas universitarias en publicaciones profesionales de biblioteconomía y documentación; sin embargo, no se ha realizado demasiado trabajo cualitativo para entender la experiencia de la biblioteconomía en cualquier contexto. Se realizó un estudio fenomenológico para entender las experiencias de bibliotecarios de universidad coreanos que trabajaban en Corea del Sur. Surgieron temas que cubrían varios aspectos de la biblioteconomía especializada en bibliotecas universitarias, vinculando la elección profesional, la educación en BD y la predisposición profesional, las relaciones con la facultad y los estudiantes y el desarrollo de una biblioteconomía profesional y bibliotecas universitarias en Corea del Sur. Además de añadir contexto personal sobre estos asuntos a los estudios cuantitativos, el método fenomenológico aplicado en este estudio mejora la calidad de la bibliografía sobre biblioteconomía comparada destacando la universalidad y los matices de la práctica de la biblioteconomía especializada en bibliotecas universitarias a escala mundial.

Alfabetización informacional en las universidades de Zanzíbar: situación actual y pasos a seguir

Abbas Mohamed Omar, Haji Ali Haji, Khamis Hamad Mwitumbe

IFLA Journal, 40-4, 280-288

El propósito de este artículo consiste en examinar la situación actual y el futuro de los programas de

alfabetización informacional en las universidades de Zanzíbar mediante el análisis del conocimiento de la alfabetización informacional, el alcance de la provisión de alfabetización informacional y la función de las bibliotecas universitarias en su promoción. La encuesta se realizó en tres universidades de Zanzíbar, y en ella participaron el personal de la biblioteca, los decanos y directores de facultades, los jefes de departamento y estudiantes. En el estudio participaron un total de 200 encuestados y los resultados se analizaron de forma cuantitativa. Los resultados demuestran que existe cierto grado de conocimiento de la alfabetización informacional entre el personal docente y de la biblioteca, aunque la promoción y provisión de sus habilidades aún están en pañales. Como principales problemas se señalaron un número insuficiente de especialistas cualificados en alfabetización informacional, la falta de experiencia en la enseñanza de esta disciplina y la falta de cooperación entre los bibliotecarios y el personal docente. En base a estos resultados, los investigadores realizaron varias recomendaciones para abordar las deficiencias, que incluyen: la organización de seminarios y talleres sobre alfabetización informacional, la creación de programas de concienciación, el diseño y la implementación del currículo de alfabetización informacional y el contenido de los cursos.

Bibliotecas y archivos de Micronesia: revisión de la producción bibliográfica

Christopher R.R. Todd

IFLA Journal, 40-4, 289-295

La región de Micronesia, en el Pacífico occidental, cuenta con una historia única de bibliotecas y archivos. Las bibliotecas de Micronesia, compuesta de islas muy asociadas a EE. UU., han surgido mediante olas sucesivas de colonización y reivindicaciones de identidades de islas modernas. Esta revisión de la producción bibliográfica, centrada principalmente en artículos de revistas profesionales evaluadas por expertos, resume en un conciso recurso la limitada producción bibliográfica profesional anterior relacionada con bibliotecas de Micronesia. Aunque se están modernizando rápidamente, las bibliotecas de esta región afrontan retos muy particulares en términos de formación, financiación, acceso a los recursos informativos actuales y tasas de acceso a Internet. Tras analizar el corpus bibliográfico, el autor define tres necesidades importantes: 1) Ampliar la educación de BD en Micronesia (sobre todo a nivel de licenciatura), 2) Incrementar los conocimientos y la inclusión de modos de comunicación isleños en servicios de

biblioteca y archivo, 3) Aumentar las oportunidades para la publicación y la investigación académica a través del establecimiento de una revista especializada en biblioteconomía y documentación de Micro-nesia de acceso abierto.

El desarrollo de la biblioteconomía y documentación en China (1840-2009)

Yao Zhang

IFLA Journal, 40-4, 296-306

El propósito de este estudio consiste en ofrecer una panorámica del desarrollo de las bibliotecas chinas y de la biblioteconomía y documentación (BD) en China entre 1840 y 2009. El debate se divide en cuatro períodos históricos: 1840–1897, 1898–1948, 1949–1977 y 1978–2009. En cada uno de estos períodos, el autor plantea tres temas que han tenido una gran influencia sobre el desarrollo de las bibliotecas y la BD: el clima social, económico, científico y político de China, que influyó sobre el desarrollo de bibliotecas e instituciones relacionadas con la información, y la educación de BD, que apoyó el fomento de la profesión. En resumen, este estudio repasa los logros de la biblioteconomía y documentación en China de 1840 a 2009, y los importantes esfuerzos realizados por personas de diversas clases y a lo largo de varias generaciones, combinando el contexto histórico, incluido el cambio de regímenes, la crisis provocada por la invasión extranjera y los avances sociales.

Evaluación de la información y el estado cognitivo del individuo: resultados de un estudio de usuarios adolescentes británicos

Andrew K. Shenton, Alison J. Pickard, Andrew Johnson

IFLA Journal, 40-4, 307-316

Este artículo analiza las inclinaciones, basadas en sus estados cognitivos, de un grupo de jóvenes de Inglaterra a la hora de evaluar la información obtenida a través de Internet. El trabajo se basa en datos enviados a través de un cuestionario online rellenado por 82

encuestados de entre 16 y 18 años de edad. Se generaron recuentos de frecuencia y cada participante recibió una puntuación «determinación de confianza» en función de sus respuestas. Los resultados conforman un panorama variopinto en términos de tendencias probables de jóvenes a la hora de evaluar la evaluación. Los datos de los participantes en relación con algunos de los asuntos abordados en el cuestionario sugieren que pueden inclinarse a aceptar gran parte de lo que ven sin cuestionárselo, aunque pocos cuentan con puntuaciones de determinación de confianza significativamente altas.

Adopción de la gestión del conocimientos a través de la Web 2.0 en bibliotecas: un nuevo paradigma para bibliotecas

Md. Anwarul Islam, Naresh Kumar Agarwal, Mitsuru Ikeda

IFLA Journal, 40-4, 317-330

Aunque cada vez son más las bibliotecas universitarias que adoptan herramientas Web 2.0 para conectarse con sus usuarios, estas no se utilizan activamente para fomentar la gestión del conocimiento (GC). Este estudio analiza el conocimiento y el dominio de la GC por parte de los bibliotecarios, la utilidad que estos creen que tiene la GC a través de la Web 2.0, la predisposición organizativa y las formas en que todo ello afecta a la adopción de la GC a través de la Web 2.0 por parte de las bibliotecas. El cuestionario fue cumplimentado por 101 bibliotecarios de 35 países diseminados por 6 continentes. La mayoría de los encuestados había oído hablar de la GC, dominaba las herramientas de la Web 2.0 y consideraba muy útil la GC a través de la Web 2.0, pero no estaban muy seguros de si sus bibliotecas estaban listas para adoptar la GC. Se detectó que el dominio de la Web 2.0 afectaba a la percepción de la utilidad, que a su vez, afectaba a las probabilidades de adoptar la GC a través de la Web 2.0. Este es el primer estudio que combina GC a través de la Web 2.0 desde la perspectiva de los bibliotecarios universitarios a nivel mundial, y tiene importantes implicaciones para la teoría y la práctica.

