IFLA

Contents

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

Interconnections in economic development and the free-flow of information as drivers for libraries and the information professions

Steve Witt

The field of Library and Information Science represents a wide-ranging array of activities and professional practices. The field spans cultural, linguistic, and political boundaries yet is also distinguished by distinct compartments of work and mission that connect people to knowledge while simultaneously preserving cultural output for short and long-term use. When one narrows the vision of the field toward LIS research, the aspect is smaller yet the diversity of opinions, questions, and methods of inquiry retain the width and breadth of the field. This creates an unsettling range of issues for a field of research and an exciting complexity as a profession. The current issue of *IFLA Journal* reflects this diversity and provides a unique lens by which to view inter-connections among libraries and information professions as they engage the emerging challenges and needs of the societies and individuals they serve around the world.

The trends of the field are informed by localized and specific contexts around which institutions, services, and practices arise, yet are all impacted profoundly by developments in the larger profession as well as the global context of policy making and governance. Research that addresses this aspect of libraries adds relevance to the comparative and international perspectives advanced by *IFLA Journal* yet also builds upon a growing body of interdisciplinary literature. This literature reveals the manner by which information professions and practitioners are imbedded in a wider social dialogue that impacts technical innovation, R & D initiatives, literacy objectives, and the prospects of cultures and peoples sharing knowledge and advancing common goals.

As IFLA prepares for the World Library and Information Congress in Cape Town, South Africa, in August of 2015, a focal point for the issue lies in Africa. In her paper that focuses on South Africa's libraries since 1994, Ujala Satgoor contextualizes the manner by which libraries and LIS education function within society, focusing on the important role for libraries in national development goals to bolster democratic practices and a well-educated citizenry in South Africa. The role of libraries in development is also central to another article focused on an African nation, which draws our attention to attitudes and solutions to the problem of academic plagiarism among university students in Nigeria. This article situates the universal problem of plagiarism among university students in the context of the need to foster open-access to knowledge and a nation's desire to increase its research capacity through academic programs. Clearly, library research that increasingly links LIS to global trends in education and economic development resonates through Africa and beyond.

Responses to national research and economic development initiatives are also seen as drivers behind trends in libraries at other academic institutions. Case studies from Mamtora, Yang, and Singh provide a transnational view of open access repository development in Australia, Hong Kong, and Malaysia that follows international trends in digital repositories but are enacted in a manner that mirrors global efforts in higher education to create international knowledge hubs through research and development. In these instances, the expansion of open-access repositories in libraries becomes a strategic component of economic development initiatives based upon innovation and knowledge development.

Globalization of higher education and the need to understand common social, economic, and technical drivers for library development are also highlighted in Lee and Song's comparison of mobile information-seeking behavior among students in Korea and the United States. This study offers a glimpse of the differences seen in the use of similar technologies within different cultural settings, providing insights

into how libraries might wish to create new services for mobile device users while grounding implementation within local needs and practices. Smith's study of library associations also focuses on the manner by which international trends in higher education are impacting libraries with a focus on efforts to exchange expertise in library management and human resource development. Both articles draw upon themes of the rise of technology and mobility within the educational arena.

Internationalization of education is also at the core to trends in understanding reading and literacy on a global scale. Through an analysis of the Programme for International Students Assessment (PISA) scores on reading and literacy in over 70 countries, Adkins and Brendler provide a broad view of reading levels and motivations as they relate to the role of libraries in advocating and supporting literacy. The rise of international benchmarking tools such as PISA impact library development through their broad influence on curricula and learning objectives – a topic that requires further research from the perspectives of LIS.

The role of globalization and international norms that impact libraries and information dissemination is also at the core of Sturges' essay on limits to freedom of expression in the wake of religiously motivated attacks on artists, authors, and publishers. Sturges analyzes laws that prohibit certain categories of speech in the context of wide advocacy for freedom of expression undertaken by organizations such as IFLA. Again, this speaks to the manner by which libraries are called upon to interpret, apply, and often advocate what have become international norms within a localized or specific context.

On the whole, this research represents a view of the manner by which the global library community is increasingly tied together professionally through technology, governance structures, standards, and common economic goals. At the same time, however, local context, indigenous practices, and cultural values exert a tremendous amount of power to impact the manner by which the profession makes choices, advocates its role in society, and determines what is important. As we continue to explore this phenomena and the intersection of our global profession with local needs, further research, new methodologies, and a broader diversity of voices are needed.

Coming-up in the next issue of *IFLA Journal*

Issue 41.3 is a special issue focused on Cultural Heritage and guest edited by Douwe Drijfhout, Programme Executive: Preservation Services of the National Library of South Africa, and Tanja de Boer, Head Collection Care at the National Library of the Netherlands.

Ideas for future special issues are always welcome.

Celebrating libraries in 20 years of democracy: An overview of library and information services in South Africa

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Abstract
Since the establishment of the first public library in 1818, the South African library and information services landscape has also been a reflection of the socio-political order and developments in the country. This article presents an historical perspective as well as an overview of libraries in South Africa since 1994, the context within which libraries function, library governance and legislative framework, government funding for redress, library technologies, library and information services education and the professional association. The article further highlights the importance of libraries in meeting the goals of the national development agenda towards entrenching a strong democracy and an educated and informed nation.

Keywords
Libraries, South Africa, library legislation, professional association, development partner

Introduction

1994 was a turning point for South Africa. It was the year when the shackles of apartheid were officially replaced by a democratic dispensation led by Nelson Rolihlahla Mandela. As a fledgling democracy, every effort is being made to redress the inequalities perpetrated by 46 years of apartheid, an official policy of racial segregation involving political, legal, social and economic discrimination.

Post-apartheid South Africa, therefore, has the responsibility to provide free and open access to information to all its citizens to ensure that history does not repeat itself. It is also important to develop a society and individuals that are informed, able to exercise their democratic rights and play an active role in society. The Bill of Rights, enshrined in the Constitution of the Republic of South Africa, is upheld as a cornerstone of South African democracy. It clearly articulates the fundamental rights of South Africans, including access to information, which forms the basis of the mandate for the South African library and information services (LIS) sector.

Since 1994 great strides have been made to build new public and school libraries, merge academic libraries and upgrade historically disparate library facilities throughout the country. The burgeoning of the LIS sector in South Africa has resulted in a wide network of libraries that currently serves 51.7 million South Africans. This network of libraries includes:

- the National Library of South Africa with campuses in Pretoria and Cape Town
- the South African Library for the Blind
- Library of Parliament
- five legal deposit libraries
- nine Research Council libraries
- 23 higher education libraries
- 1993 public libraries (1612 provincial/381 metro)
- approximately 2000 school libraries
- special libraries, which include corporate libraries, law libraries, government libraries, prison libraries, etc.
- independent and private libraries, including UNIC, Goethe Institut, US Embassy and Consulates, Room to Read, Monash University, the Brenthurst Library, etc.

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This tangible national web of libraries gives South Africans predominantly free access to information and knowledge from all types of libraries located around the country. The introduction and inclusion of information and communication technologies (ICTs) has further created the opportunity for a dynamic networked and connected society.

There is the growing acknowledgement and acceptance of libraries as knowledge and cultural institutions because they provide the public with spaces for information and learning and are accessible to all groups of society, regardless of gender, age and ethnic affiliation. Hence in South Africa, the public library especially has a critical role to play not only in the nurturing and growing of a democracy but also to be a gateway to participation in society through lifelong learning and access to information for its citizens.

Understanding the South African LIS context

Historical overview

The foundation of libraries in South Africa, dating back to the turn of the 19th century, are steeped in British and Dutch colonial histories as well as the histories of religious, voluntary, cultural and political organizations that shaped the growth of reading and readers, and promoted the establishment of libraries, resulting in a mixed but rich library heritage and legacy (Dick, 2007).

According to records held by the National Library of South Africa (see Figure 1), in 1818 Lord Charles Somerset, Governor of the Cape Colony, issued a proclamation launching the first South African Public Library with the stipulation that a wine tax be levied:

> to place the means of knowledge within the reach of the youth of this remote corner of the Globe, and bring within their reach what the most eloquent of ancient writers has considered to be one of the first blessings of life, 'Home Education'. (National Library of South Africa, n.d.)

In 1873 it became the legal deposit library for the Cape Colony. From 1916 until 1954 it received all printed items published throughout the country.

While the South African Public Library was playing a role in the Cape Colony, similar developments were unfolding in the Transvaal where the Staats-Bibliotheek der Zuid-Afrikaansche Republiek (the State Library of the South African Republic) was created with a donation of books from the Maatschappij der Nederlandsche Letterkunde. The Staats-Bibliotheek

Figure 1. South African public library (circa 1871), NLSA.

was formally constituted on 21 September 1887. The demand for a public library was met in 1878; however, the inability to continue this service resulted in the State Library adopting a dual role in 1893 as public library and national library until 1964. Interestingly the first exchange agreement was signed between the State Library and the Smithsonian Institution of Washington in 1898. From the early 1930s, the State Library began to evolve as a central library for South Africa, with a national lending system and a centre for bibliographic information (Committee of Higher Education Librarians of South Africa, 2015).

Given the nature and stature of these libraries, South Africa then had two national libraries co-existing until 1 November 1999 when they were amalgamated into the new National Library of South Africa under the National Library of South Africa Act (Act 2 of 1998).

Libraries were also influenced by the spatial divide, which resulted in separate facilities ranging from well-constructed library buildings to container libraries to mobile libraries to areas with no facilities available for the majority of people. The former four provinces (Transvaal, Natal, Orange Free State and Cape Province) of the historical dispensation had well-structured public library services, which are still in existence today. In 1974 the doors of the Johannesburg Public Library and the Natal Society Library, Pietermaritzburg, historically white or European libraries, were opened to all. Other city libraries followed this trend.

The introduction of Bantu education under the Bantu Education Act of 1953 resulted in entrenching an inferior education for black South Africans. This was exacerbated by the closure or destruction of many functioning black school libraries or community libraries, the deliberate under-resourcing of schools

and the provision of inferior education. The 16 June 1976 school uprising in Soweto, which escalated to other parts of the country, impacted indelibly on the socio-political landscape in South Africa. The historical legacy of race-based higher education institutions; separate LIS training facilities; and the quality of LIS education have had a far-reaching impact on current LIS practice, professional mindsets and development.

While mainstream library services were affected by the complexities of apartheid in South Africa, Dick (2007) provides a fascinating history of alternative libraries that shaped education, literacy and political thinking in historically disadvantaged areas during the course of the 19th and 20th centuries.

The current nine provinces, which incorporated the former homelands, have all established provincial LIS systems. However, the inequalities and disparities in service delivery in certain provinces reflects the disparities of historically disadvantaged areas. The history of South Africa therefore makes it a national imperative to build an informed nation, remove inequalities, create self-reliance amongst individuals through access to information technologies, and build vibrant sustainable communities. The 20 years since democracy have seen a concerted effort to redress these inequalities and reinvent libraries as lifelong learning support centres as well as community development partners.

Current socio-economic context: Opportunities for libraries

Post-apartheid South Africa has experienced a myriad of changes since 1994. Government, organizations and citizens have made and are committed to making positive and constructive changes that promote a democratic civil society. While there is great national and international pride in our achievements, illiteracy, unemployment and primary basic education are fast emerging as major national challenges.

Today, many South Africans still do not have access to information, which could make a difference to the quality of their lives or circumstances. This is exacerbated by the digital divide which impairs the functional and cognitive development of the majority of South Africans.

The South African National Development Plan (NDP) 2030, launched on 15 August 2012, (National Planning Commission, 2013) aims to eliminate poverty and reduce inequality by 2030 through uniting South Africans, unleashing the energies of its citizens, growing an inclusive economy, building capabilities, and enhancing the capability of the state and leaders

working together to solve complex problems. This is an opportunity for the LIS sector to identify its role within the context of the NDP.

Key success factors for the NDP include the ability of each South African to make a contribution towards the realization of this vision and for communities to mobilize to take charge of their future. The project will assist in realizing this vision. Amongst the many milestones identified in the NDP, the following are applicable to the LIS sector.

- **NDP milestone**: Increasing the quality of education so that all children have at least two years of preschool education and all children in Grade 3 can read and write
  Current status: Over 5.6 million South Africans are under the age of four, while 4.8 million children are aged five to nine, and close to 4.6 million are between the ages of 10 and 14 (Statistics South Africa, 2012).
  Early childhood development is critical for fostering literacy and numeracy skills. Public libraries and librarians have the opportunity to influence the early development of children through age appropriate activities, access to reading material in indigenous languages, use of the play method to inculcate values and hygiene, interactive toys for developing vocabulary and language skills, and general enquiry. The fact that the majority of households do not have books means that the first interaction a child has with a book is at a library or school. The same is applicable to technology – many children encounter computers, audio-visual material and computer gaming for the very first time in a public library. Hence the critical need for products and services that address the developmental needs of children.
- **NDP milestone**: Making high-speed broadband Internet universally available at competitive prices
  Current status: According to the State of Broadband report:
  - 41% of South Africans use the Internet, thereby placing the country fifth in Africa and 92 out of 192 countries
  - South Africa is ranked 111 out of 183 countries for fixed broadband penetration with 2.2 out of every 100 people enjoying fixed broadband subscriptions
  - South Africa is ranked at number 62 out of 170 countries for mobile broadband with a connection rate of 26 out of every 100 people

○ South Africa is ranked 44 out of 128 countries on the percentage of households with internet access (25.5%). (Broadband Commission, 2013)

For many communities, the public library is the only place that provides access to computers and the Internet. Current initiatives in public libraries include the provision for Internet connectivity on a very limited scale depending on the location of the library. There is an increased demand from users for ICT services which are inadequately met due to limited ICT skills of staff, library ICT resources and bandwidth; and on the other hand there is a huge need to create an awareness of and the skill in the use of ICTs for access to information amongst communities.

- **NDP milestone**: Broadening social cohesion and unity while redressing the inequities of the past

 Current status: The iniquities of the past were based on the withholding of information and education from the majority of Black (African, Indian and Coloured) citizens. The National Council for Library and Information Services (NCLIS), in collaboration with the Department of Arts and Culture and the National Library of South Africa, commissioned in 2008 the Library Transformation Charter 'to align the LIS sector with the spirit and values enshrined in the Constitution of South Africa and its Bill of Rights' and to address national imperatives including:
  ○ social and economic development;
  ○ poverty eradication;
  ○ social cohesion and inclusion;
  ○ nation building;
  ○ diversity and responsiveness;
  ○ entrenching a culture of reading;
  ○ developing a national literature in South Africa's indigenous languages.

 For this milestone to be achieved, freedom of access to information needs to be entrenched as a right and a reality amongst historically disadvantage communities. The local public library should be located as the community hub which is able to facilitate access to local and community information, e-governance, primary and general health information, educational opportunities, cultural awareness and understanding, etc. An informed and educated citizenry fosters social cohesion and unity.

- **NDP milestone**: Strengthening youth service programmes and introduce new, community-based programmes to offer young people life-skills training, entrepreneurship training and opportunities to participate in community development programmes.

 Current status: Of the total population of 51 million, 60% is under 35 (Statistics South Africa, 2012). The youth (15–34 years) accounts for the highest proportion (70.9%) of the unemployed (4.7 million). In this age category 31.4% or 3.3 million young people are not in employment, education or training (Statistics South Africa, November 2012). According to the General Household Survey 2011, compiled by Statistics South Africa, 'by the age of 22, 56.6% of the youth are neither attending any educational institution nor working. The youth is at risk of becoming unemployable and falling into chronic systemic poverty' (Statistics South Africa, 2011).

A more pro-active stance needs to be adopted by libraries towards community outreach and development. Communities should benefit from public libraries' educational programmes, regular in-house training programmes on how to use computers and the Internet for various purposes such as email, job searches, government information, etc. Libraries need to focus on services for youth and provide an environment for learning, development and a positive socializing support mechanism for the marginalized and unemployed youth. Such initiatives will encourage the community to perceive and realize the value that the library adds to their lives and contribution towards community upliftment.

Given this context, libraries in South Africa are poised to participate in the development of an educated and engaged citizenry. Libraries as institutions that should and want to provide access to much-needed information have made great strides in offering services, resources and information to their users.

LIS landscape at a glance

Legislation and governance

The South African LIS sector is fortunate to function within a comprehensive legislative framework. The following laws have a direct impact on the LIS sector:

- The Copyright Act (98 of 1978)
- Constitution of the Republic of South Africa (108 of 1996)

- The Legal Deposit Act (54 of 1997)
- The National Library of South Africa Act (2 of 1998)
- State Information Technology Agency Act (88 of 1998)
- The South African Library for the Blind Act (91 of 1998)
- The Public Finance Management Act (Act 1 of 1999 as amended by Act 29 of 1999)
- The National Council for Library and Information Services Act (6 of 2001)
- The South African Public Library and Information Services Bill (2010), which aims to determine the national norms and standards for public libraries.
- The Education Laws Amendment Act 31 of 2007 (amending the South African Schools Act of 1996). The Department of Basic Education gazetted for comment regulations relating to Minimum Uniform Norms and Standards for Public School Infrastructure wherein a school library/media centre is listed as a core education area together with the specifications for its minimum size.
- The Protection of Personal Information Act (4 of 2013).

In addition to the above, there are other laws and policy documents that have an implication for LIS such as:

- The National Archives and Records Services Act (43 of 1996)
- The White Paper for Post-School Education and Training (DAC, 2013)
- The United Nations Convention on the Rights of Persons with Disabilities and Optional Protocol
- The Marrakech Treaty to facilitate Access to Published Works for persons who are Blind, Visually Impaired or Otherwise print Disabled

The oversight of libraries reside within the following government agencies:

- The Department of Arts and Culture (DAC) has oversight of the nine Provincial Library Services and six Metropolitan Library Services through the US$190m Public Library Services Conditional Grant. The National Library of South Africa is also an agency of the DAC.
- The Department of Basic Education is responsible for funding school libraries and ensuring the implementation of the regulations relating to the Minimum Uniform Norms and Standards for Public School Infrastructure. There are

almost 25,000 schools with only approximately 8% with fully functioning school libraries.
- The Department of Higher Education and Training, through its subsidies to the 23 universities and 50 technical and vocational education and training (TVET) institutions, makes provision for the establishment of academic libraries in support of teaching, learning and research.
- Department of Science and Technology is responsible for scientific research, technology and innovation that contribute to economic growth and socio-economic development of the country. Libraries attached to the nine research councils and national research facilities are designed to support the research mandates of the respective entities.

The National Council for Library and Information Services

The National Council for Library and Information Services (NCLIS) was established in terms of the National Council for Library and Information Services Act, 2001 (Act No 6 of 2001). The main aim of the NCLIS is to advise the Minister of Arts and Culture, the Minister of Basic Education and the Minister of Higher Education and Training on matters relating to LIS in order to support and stimulate the socio-economic, educational, cultural, recreational, scientific research, technological and information development of all communities in the country. The functions of the Council are to develop and coordinate LIS in the country.

Members of the Council are appointed by the Minister of Arts and Culture through an open nomination process for a period of three years. The most recent and dynamic project undertaken by the NCLIS was the commissioning of the Library and Information Services (LIS) Transformation Charter, which was signed off by the Minister of Arts and Culture in 2014 and provides a clear and coherent plan for LIS in alignment with the National Development Plan so that the vision of an informed and reading nation becomes a reality (DAC and NCLIS, 2014).

National Library of South Africa

Until 1 November 1999, South Africa had two national libraries, the South African Library, founded in 1818, in Cape Town, and the State Library, founded in 1887, in Pretoria. These two libraries were subsequently amalgamated to establish a new dual-site (Cape Town and Pretoria) National Library governed by the National Library of South Africa Act, No 2 of 1998.

The primary aim of the National Library of South Africa (NLSA) (http://www.nlsa.ac.za/) is to collect, record, preserve, and give access to the national documentary heritage from its locations in Pretoria and Cape Town. It has wide-ranging collections, which includes rare books, medieval and Renaissance manuscripts, books published in South Africa, periodicals, government publications, official foreign publications, maps, technical reports, Africana and newspapers. Many of these are available on CD or microfilm, in digital format or accessible online.

In terms of Section 6 of the National Library of South Africa Act, the National Library is managed by a Board appointed by the Minister of Arts and Culture. Board members are selected from a shortlist drawn up by an advisory panel after a public call for nominations. The Chief Executive Officer of the National Library, known as the National Librarian, serves as an ex-officio member.

The National Library of South Africa's core functions are described in Section 4 subsection 1 of the National Library Act, No 92 of 1998, and cover the following broad areas:

- to build a complete collection of published documents emanating from or relating to South Africa;
- to maintain and extend any other collections of published and unpublished documents with the emphasis on documents emanating from or relating to Southern Africa;
- to promote the optimal management of collections of published documents held in South African libraries as a national resource;
- to render a national bibliographic services and to act as the national ISBN agency;
- to promote optimal access to published documents, nationally and internationally;
- to provide reference and information services, nationally and internationally;
- to act as the national preservation library and to provide conservation services on a national basis. As part of this service, the National Library is host to the only mass de-acidification facility on the African continent;
- to promote awareness and appreciation of the national published documentary heritage; and
- to promote information awareness and information literacy.

Centre for the Book, Cape Town. The Cape Town-based Centre for the Book (CFB) is the outreach unit of the NLSA for the promotion of a culture of reading, writing and publishing in the local indigenous languages through a variety of book related activities nationally. It is also host to the Children's Reading Centre, an early childhood development facility which caters for children from 0 to 7 years. The aim hereof is to provide opportunities for children to read for pleasure, write their own stories and engage with storytellers.

The CFB has initiated and continues to facilitate several projects in support of the development of children's literature and inculcating a culture of reading amongst children in South Africa. These projects include Isiqalo (First Words in Print), an IBBY award-winning project that fosters family literacy through a series of children's books written in local languages; the Mount Ayliff Children's Library located in the rural town of Mount Ayliff, Eastern Cape; children's book clubs in primary schools; and the annual promotion of International Literacy Day. From time to time the Centre for the Book, through its children's literature programme (CLP), facilitates capacity building workshops for children's authors and illustrators.

Implementation of RDA in South Africa. Since the publication of the full draft of the RDA (Resource Description and Access) in 2008, the Bibliographic Services Programme at the NLSA was tasked to form a professional committee to inform the South African cataloguing community about RDA as a replacement for the Anglo-American Cataloguing Rules as the internationally accepted standard for descriptive cataloguing (De Waal, 2013). The RDA-SA Steering Committee has hosted several national training programmes and decided in 2012 that a phased and voluntary approach would be adopted for the implementation of RDA in South Africa.

The South African Library for the Blind

Conceived and founded in 1918 by Josephine Wood in Grahamstown with a collection of 100 Braille books, the South African Library for the Blind (SALB) (http://www.salb.org.za/) is now a national legal entity constituted under the South African Library for the Blind Act 91 of 1998. It provides 'a national and international library and information service to the print-handicapped, free of charge as far as is reasonable possible, by producing reading material in alternative formats' (salb.org.za).

The SALB is mandated to:

- provide a free library and information service that is responsible for the needs of the blind and the print-handicapped user;

- build up a balance and appropriate collection of South African and other documents and on to make them accessible for the use of blind and print-handicapped readers;
- produce documents in special mediums such as Braille and audio formats for use by its readers;
- develop standards for the production of such documents;
- research production methods and technology in the appropriate in the appropriate fields;
- acquire and disseminate the technology required by blind and print-handicapped people to read.

Today the SALB is a government-funded institution with over 4000 members nationwide, 10,000 Braille books and 13,000 audio books; has an arrangement with the South African Post Office for the provision of free delivery and return of books; and holds the unique position of being the only library of its kind on the African continent.

Public libraries: Community development partners

The Transformation Charter (DAC and NCLIS, 2014) asserts that: 'the public library is an essential component of a modern democracy, an enduring agency uniquely tasked with providing opportunities for education, culture, literacy and information provision to reach all citizens free of charge'. Libraries are fast emerging as strong community partners for development and social transformation. Services and programmes are designed and offered to enhance literacy rates, a culture of reading, early childhood development, youth empowerment, socio-economic development and e-governance thereby locating them in the heart of communities.

The role of public libraries in South Africa is fast being redefined as it continuously moves away from the recreational to the educational. Public and community libraries actively support the educational priorities for both primary and secondary education, as well as adult education. Currently there are 25,000 schools of which less than 8% have active school libraries or resource centres. This has resulted in public libraries being over-burdened and at times unable to meet the demand for project material due to a large-scale dependence on print material.

The need for the development of a culture of reading is a national imperative to raise the literacy rates amongst youth and adults so that they can acquire improved or new skills to compete adequately in the labour market. Locating appropriate technologies for accessing information; repurposing physical space for new services; and training public users and staff in the

Table 1. Geographical spread of libraries, 2013 (NLSA).

Province	Population Size	Land area by province	Total no of libraries
Eastern Cape	6 562 053	13.9%	144
Free State	2 745 590	10.6%	173
Gauteng	12 272 263	1.4%	234
KwaZulu-Natal	10 267 300	7.7%	174
Limpopo	5 404 868	10.3%	74
Mpumalanga	4 039 939	6.3%	111
Northern Cape	1 145 861	30.5%	253
North West	3 509 953	8.7%	102
Western Cape	5 822 734	10.6%	347
TOTAL	**51 770 560**	**100%**	**1612**

use of appropriate ICTs are also emerging priorities for public libraries. Without access to information redressing inequalities cannot succeed.

There are currently 1612 public and community libraries which are serviced by the nine provincial library services and 381 public libraries serviced by the six metropolitan library services systems for a total population of 51 million (see Table 1). This works out to one library service point for 31,600 people. There are huge differences amongst the provincial services based on budgets, demographics and the spatial divide. Resources and service provision are hampered by the geographic spread and location of libraries. Library-related skills are also diverse and attempts are being made to standardize the policies and procedures so that the national objectives around libraries may be realized.

There is a high concentration of public libraries in urban cities of those provinces (KwaZulu-Natal, Western Cape, Gauteng, Free State) which were historically the only four provinces in the former South African dispensation with established library infrastructures. Currently the nine provinces, including the above four, now include areas from the former homelands and tribal authorities which did not have library and telecommunication infrastructures. Hence provinces together with the National Government through the conditional grant are committed to establishing library infrastructures and services but are constrained by limited budgets and appropriate skills to serve certain communities.

Public library services are a provincial competency in South Africa as declared in Part A of Schedule 5 of the South African Constitution. Prior to these constitutional provisions, this function was shared between provinces and local authorities with local authorities providing and maintaining buildings and staff, and provinces providing the professional and technical

Table 2. Connectivity in public libraries, 2013 (NLSA).

PROVINCE	Number of libraries with Internet access (Staff)	Number of libraries with public Internet access	Number of libraries without Internet access	Total number of libraries
EASTERN CAPE	80	27	64	144
FREE STATE	171	158	2	173
GAUTENG	150	88	84	234
KWAZULU NATAL	101	68	73	174
LIMPOPO	58	38	16	74
MPUMALANGA	102	102	9	111
NORTHERN CAPE	121	77	132	253
NORTH WEST	97	97	5	102
WESTERN CAPE	203	203	144	347
TOTAL	**1083**	**858**	**529**	**1612**

services. In the current dispensation this arrangement largely continues, although the legislation does not specifically provide for this. This rather anomalous constitutional provision has resulted in the decline of services and infrastructure in certain areas over the last 10 years instead of keeping pace with the increasing demands of a modern developmental democracy. The location of public libraries has also been influenced by former apartheid spatial planning, where now every effort is being made to locate libraries in former townships, informal settlements and rural areas.

In 2007/2008 the National Government through the Department of Arts and Culture (DAC) made available Conditional Grants from the Community Library Services Grant of approx. US$190m over a period of six years to redress inequalities in the LIS sector, improve existing services, develop infrastructures and stock of books in public libraries to enable local communities to have access to information and knowledge to improve their socio-economic conditions. The intention is to have transformed urban and rural library infrastructure and services targeting previously disadvantaged communities. The six Metropolitan Library Services are autonomous entities who also benefit from the Conditional Grant. The grants have so far been used, inter alia, to:

- build more libraries and to upgrade library buildings;
- buy, equip and deliver mobile libraries and container libraries for communities;
- appoint more staff, and extend opening hours;
- expand and improve ICT connectivity;
- develop and implement a new provincial ICT system;
- upgrade security and improve library assets;
- buy more library material;
- stock more books in indigenous languages.

The Conditional Grant, while it supports the redress of providing public libraries in historically disadvantaged areas, has not totally succeeded in realizing this aim. Although there is a national strategy for this grant, implementation has been slow and a challenge at some provincial and local levels. The disparities in governance, infrastructure, staffing and conceptualization is evident in the varied results of implementation (see Table 2).

There is general acknowledgement that the provision of ICTs and relevant services in public libraries would increasingly become essential for bridging the digital divide in the country. For many urban and rural communities, the only place that provides free access to computers and the Internet is a public library. While there is an increased demand from users for ICT services this may be inadequately met due to limited ICT skills of staff and library ICT resources. Limited bandwidth capacity, slow speed, inadequate and outdated hardware and software, limited capacity for IT services and systems management challenge the sustainability of the current infrastructure. On the other hand there is a huge need to create an awareness of and the skilling in the use of ICTs for access to information amongst communities. The NLSA is currently involved in rolling out Internet connectivity to the nine provinces; the installation of a standardized library management system as well as the marketing of the Conditional Grant.

There is wide-scale cognizance that the best way to address and support the transformation of libraries into community hubs is to invest in staff development and training. The Library and Information Association of South Africa (LIASA) has adopted continuing professional development (CPD) as a strategy to ensure that library and information workers have access to current trends and developments. LIASA, through its CPD programme has identified computer literacy, social media, advocacy, library management,

library leadership, communication, marketing, library systems management, developing strategic plans and financial management as critical training needs. It believes that better-trained staff will be able to articulate clearly and effectively the role of libraries in South Africa and will encourage South Africans to take full advantage of the libraries' resources.

Given this context, public libraries in South Africa are poised to participate in the development of an educated and engaged citizenry. The opportunity exists to demonstrate how public libraries may be located as community development partners and how it contributes to the national imperatives related to education, youth unemployment, community development, and upskilling and reskilling of library professionals at a local level.

Academic and research libraries

In 2001 the National Plan for Higher Education detailed the restructuring of the South African higher education landscape, which up until 1994 was fragmented and uncoordinated. This resulted in the merging of 'historically white/historically black' universities, technikons and colleges; dismantling the divide between universities and colleges; attempting to redress the educational imbalances at historically disadvantaged institutions; strengthening the link between teaching and research; aligning research with economic goals and creating environments for learners to 'have access to quality education, and graduate with the relevant knowledge, competencies, skills and attributes that are required for any occupation and profession' (Council for Higher Education, 2000).

The merging of the 36 higher education institutions (HEIs) resulted in 23 institutions – 11 traditional universities, six comprehensive universities and six universities of technology. Two new universities were launched in 2013/2014. These mergers also posed huge challenges for the merging of libraries in these respective institutions. The culture of learning and quality of education, as part of redressing the institutional imbalances also impacted on the future of the libraries, their roles, responsibilities, resources, staffing and funding models. Many libraries sought out best practices of successful mergers to inform the tasks and processes to follow.

Academic and research libraries are increasingly playing a pivotal role in support of teaching, learning and research. Technology, library space and design, dynamic user services and staff development have emerged as strong drivers for change in academic libraries. The national research imperatives and the demand for more quality graduates has also influenced how academic and research libraries respond

and align themselves to these institutional strategic imperatives.

Academic libraries in South Africa have emerged as intensely technologically enabled and driven environments. An assessment of the sector indicates that the predominant focus is aimed at strategic alignment of services and the broader information services environment, with core elements being:

- the enhanced integration of access management services that allow for on-demand access to resources over a distributed networked environment;
- the employment of wireless technologies;
- changing procurement strategies to focus on networked-based information resources;
- the integration of ILMS functionality with other non-library related systems (finances, registration, virtual research and learning systems, access systems, etc.);
- the incorporation of web-based discovery-to-delivery and the supporting related peripheral applications.

Due to the socio-economic divide between students from historically advantaged and disadvantaged groups in South Africa; lack of library resources in school libraries; and language differences, information literacy (IL) has become a strategic imperative. Academic libraries offer IL programmes that include orientation programmes, basic library skills, introduction to the online catalogue, the use of electronic databases; and referencing and plagiarism. Some libraries have embedded IL programmes into their university curriculum.

Digital literacy has been introduced to support students with media literacy, ICT literacy, digital scholarship, and communications and collaboration in an academic context. This will enable students to participate in digital networks for learning and research; use of digital devices; study and learn in e-environments; and participate in emerging academic and research practices in a digital environment (JISC, 2014).

Web tools such as Twitter, Facebook, paper.li, libguides and other social media tools and applications greatly impact on the academic library environment. These are considered as value-added services, or potentially value-adding applications for raising the visibility of institutional research output, communication with students and marketing.

South African academic and research libraries have recognized the importance of the global Open Access (OA) Movement for the dissemination of knowledge and cultural heritage, and increasing the visibility of

its research output with the rest of the African continent and the world. Many academic libraries have taken the lead in facilitating Open Access initiatives including OA mandates, institutional repositories, observing OA Week and facilitating their institutions becoming signatories to the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities.

CHELSA. Subsequent to the higher education restructuring process and mergers, the Committee for Higher Education Librarians in South Africa (CHELSA) (http://www.chelsa.ac.za/) was established in 2004. CHELSA replaced the Committee of University Librarians and the Committee of Technikon Librarians. Core to this formation was the importance of instilling quality library services within the redefined higher education library services.

CHELSA strives through visionary and visible transformational leadership to ensure that the higher education sector is provided with optimal access to information for the purpose of learning, teaching, research and community development. CHELSA will support knowledge management practices in academic and research libraries. It has also established a memorandum between South African university libraries, which relates to the mutual rendering of certain library and information services and the cost-efficient sharing of resources for purposes of maintaining and improving library and information services for higher education and research in South Africa (CHELSA, 2015).

SANLiC. The South African National Library and Information Consortium (SANLiC) (http://www.sanlic.org.za/), a non-profit company serves the interests of South African higher education libraries and national research council libraries. SANLiC facilitates affordable access to scholarly electronic information in support of the teaching, learning and research activities of its members through collective negotiations with publishers and aggregators and actively promotes the use of high quality, open access electronic information resources. It also works closely with member institutions on the following:

- electronic information resources site licensing;
- evaluation and management of electronic information resources;
- marketing and promotion of electronic information resources;
- training;
- communication, liaison and lobbying.

School libraries

Given the legacy of apartheid's separate education policies, the right to education for all, as enshrined by the Bill of Rights, has emerged as a national legislative imperative. However the quality of education 20 years into democracy still remains vastly unequal.

The legacy of the historical fragmented education system is the majority of under-resourced Black schools in urban and rural areas. School libraries are available in only 8% of public schools, which are predominantly former Model C schools, which are government schools administered and funded by a governing body of parents and alumni, adequately resourced and staffed. The absence of school libraries denies the majority of learners access to quiet and stable learning spaces, appropriate supplementary learning and reading materials, audio-visual and digital media and other learning aids. The lack of a reading culture is exacerbated by this absence.

Active lobbying by civil society entities for new schools, upgrading of facilities, school libraries and skilled staff is premised on the belief that equality and education enable equal opportunities in life. The LIS sector has added its voice to the lobby for 'One School, One Library, One Librarian' and for the minimum norms and standards for school libraries to be implemented.

Legal deposit libraries

South Africa has five legal deposit libraries to ensure compliance with the requirements of the Legal Deposit Act (54 of 1997). The Act makes provision for:

- the preservation of the national documentary heritage through legal deposit of published documents;
- the preservation and cataloguing of, and access to, published documents emanating from, or adapted for, South Africa;
- access to government information;
- a Legal Deposit Committee.

Five copies of every book published are to be deposited with the five legal deposit libraries which are:

- Msunduzi Municipal Library, Pietermaritzburg
- Mangaung Public Library, Bloemfontein
- National Film, Video and Sound Archives
- National Library of South Africa
- Library of Parliament, Cape Town.

Special libraries

South Africa has a large array of special libraries located in government departments, national and provincial parliaments, private business or corporations, hospitals and museums, and non-governmental organizations. Like international counterparts, they advance the interests and goals of their parent organizations, and provide physical or virtual access to specialized information resources via traditional library services or knowledge management services. Special libraries are organized under various associations, which include LIASA's Special Libraries Interest Group (LiSLIG); the Special Libraries and Information Services (SLIS); the Organization of South African Law Libraries (OSALL) and the Southern African Online User Group (SAOUG) (DAC, 2014).

LIS education and training

LIS education and training in South Africa has been affected by access to information, changing user needs and demands, emerging technologies, and reforms in higher education. The Transformation Charter (DAC and NCLIS, 2014) asserts that:

> the training of librarians for the 21st century is a daunting challenge which must be faced for South Africa to become competitive as a nation. Librarians and information professionals are central to a buoyant knowledge economy. LIS staff has a double agenda: to teach the information competencies needed to redress the inequalities of the past and to build the competencies for a rapidly globalizing world.

Presently there are nine universities that offer LIS graduate programmes in support of the LIS sector. Currently there is a variety of academic programmes offered at undergraduate (diplomas and Bachelors degrees) and postgraduate (postgraduate diploma, honours, Masters and Doctoral degrees) levels. The lack of uniformity of LIS education has contributed to confusion amongst educators, students and employers. A national conversation has commenced between educators and practitioners, which will now include LIASA as the SAQA-approved professional body.

Professional association

Since its inception in 1997, the Library and Information Association of South Africa (LIASA) (www.liasa.org.za), a registered non-profit organization, has been the acknowledged professional association that represents the South African LIS sector nationally and internationally. It represents the unification of library organizations, which was a process initiated in January 1995 by the two former independent and race-based professional associations, the African Library Association of South Africa (ALASA) and the South African Institute for Library and Information Science (SAILIS).

In December 2014, the South African Qualifications Authority (SAQA) approved the recognition of LIASA as a professional body and the registration of the professional designation, Professional Librarian. This recognition was awarded as per the requirements of the National Qualifications Framework (NQF) Act, Act 67 of 2008. This recognition enables LIASA to:

- Set the standards of professional practice;
- Accredit qualifications;
- Award the designation based on proven competence;
- Ensure the CPD of practitioners;
- Supply the list of qualified librarians to the National Learners Records Database (NLRD), a database of all professional graduates in South Africa.

LIASA engages widely with the national Departments of Arts and Culture, Basic Education, and Higher Education and Training which have oversight of public, school and academic libraries respectively; is an ex-officio member of the legislated National Council of Library and Information Services (NCLIS) and engages with various international library associations.

LIASA has adopted a partnership mindset with all LIS stakeholders in support of its corporate projects, which include:

- South African Library Week;
- the annual LIASA conference, which includes grants that enable public librarians and international experts to attend and attended by approximately 700 delegates;
- the hosting of the 2007 IFLA WLIC in Durban;
- the hosting of the 2015 IFLA WLIC in Cape Town, 15–21 August 2015 with the theme *Dynamic Libraries: Access, Development and Transformation*;
- its publications, the LIASA-in-Touch http://www.liasa.org.za/publications/liasa_in_touch) and the open access South African Journal of Libraries and Information Science (http://sajlis.journals.ac.za/pub);
- continuing professional development (CPD), a strategic imperative for workplace skills development.

With a current membership of 1600, LIASA is growing steadily with a presence in all nine provinces and the broader LIS sectors. It has 10 branches and 10 interest groups representing various LIS disciplines. While LIASA has a permanent office in Pretoria on the campus of the National Library of South Africa, its strategic governance resides within the LIASA Representative Council and the LIASA Executive Committee. The core leadership comprising of the President, President-Elect, Secretary, Treasurer and Public Relations Officer are elected through an open electoral process for a two-year term. These professionals are drawn from the various LIS sectors and institutions and acknowledged for their leadership, management skills and expertise. LIASA leaders have contributed variously to national and international LIS leadership.

As the professional association, LIASA has achieved several of the strategies (membership, corporate brand and identity, CPD, leadership development, lobbying and advocacy and regional engagement) identified in its formative years (Tise, 2004) and now as the SAQA-approved professional body, LIASA is positioned to take the LIS sector to new levels of professionalism and lead the sector, through its members as drivers of social change.

South African Library Week

South African Library Week (http://liasa.org.za/node/519) was initiated in 2001 by LIASA to be an annual national event recognized by Government to showcase all types of libraries across the country, as well as engendering an understanding of the important role that libraries play in a democratic society, namely, advancing literacy and community development, making the basic human right of freedom of access to information a reality, promoting lifelong learning and social justice, and respect for multiculturalism amongst all South Africans.

For many years Library Week was observed variously and independently during the course of the year. After extensive consultation with its membership LIASA made the following proposal in 2001:

> That the week within which 20 March falls should be South African Library Week. In the event of this day failing within a weekend, then the week preceding it would be celebrated as South African Library Week. (LIASA, 2013)

The choice of the date was based on research into the history of libraries in South Africa. The South African Public Library, now known as the National Library of South Africa (Cape Town Campus) was the first library to be established in South Africa by a government proclamation on 20 March 1818. Furthermore,

- 2002: 'Free your mind – Read!'
- 2003: 'Your Right to Read!'
- 2004: '1994–2004: Libraries in a Decade of Democracy'
- 2005: 'Libraries: Opening the doors of learning and culture to all'. This theme coincided with the 50th anniversary of the Freedom Charter.
- 2006: 'Libraries: Partners in learning, nation building and development'
- 2007: 'Libraries: Your key to the future'
- 2008: 'From local to Global @ your library'
- 2009: 'Access for all @ your library'
- 2010: 'Reading changes lives'
- 2011: 'Read in your language @ your library'
- 2012: 'Develop @ your library'
- 2013: 'Educate Yourself @ your library'
- 2014: 'Celebrating Libraries in 20 years of democracy: Check in @ your library'
- 2015: 'Connect @ your library'
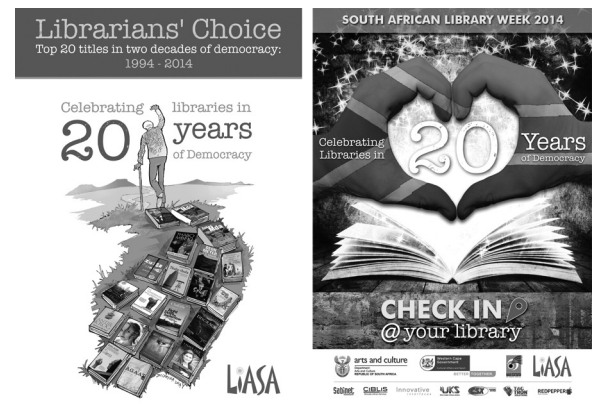
Figure 2. SALW 2002–2015 themes and SALW 2014 posters.

since 1994 South Africa has celebrated Human Rights Day on 21 March and the Bill of Rights recognizes the freedom of access to information as a basic human right. Hence SALW has been able to link an important historical event with a crucial date in our new democracy. This proposal was strongly supported by the then Department of Arts, Culture, Science and Technology,

South African Library Week was officially celebrated for the first time in 2002 and has since become a highlight on the national LIS calendar. Since then SALW has been driven by LIASA, which confirms the dates and theme every year.

SALW Themes 2002–2015 (see Figure 2)

This has now become a partnership initiative between LIASA, the Department of Arts and Culture, the National Library of South Africa and the library services of the host city and province. Exposure has been broadened through social and mainstream media.

Grants

During these 20 years huge investments have been made in the form of grants from both national and international entities that have bolstered the sector and enabled collaboration amongst various LIS stakeholders. As a sector, it has been on the receiving end of:

- approximately US$190m for public libraries that have been made available as Conditional Grants from the Community Library Services Grant that is managed by DAC;
- over US$25m in grants from external donors including the European Union, Andrew Mellon Foundation, the Carnegie Corporation of New York, and the Bill and Melinda Gates Foundation.

These grants have contributed to the enhancement of existing library buildings, design of new buildings in partnership with local governments, purchase of library resources in all formats and new technologies, training and development of librarians with a special emphasis on library leadership development (South African Library Leadership Project and the Carnegie Library Leadership Project), technology in academic libraries (Carnegie-funded M.IT programme located at the University of Pretoria), research support (Carnegie-funded Research Libraries Consortium project) and scholarships for acquiring professional qualifications (the LIASA Next Generation Public Librarians Project).

Technology in South African LIS

South African LIS automated and migrated in sync with the international trends. In certain cases, where libraries could not automate at the same time as their national counterparts, later automation initiatives slotted in with the then viewed latest technological developments, e.g. going from a completely manual-based environment to 'turnkey' library management system (LMS) solutions.

Prior to computerization, South African libraries, as with their international counterparts, also made use of manual systems, including the Brown system for circulation, accession registers for acquisitions, and cardex systems for serials. Starting in the early 1970s several libraries implemented mainframe-based technologies such as the DOBIS/LIBIS library managed system, running on IBM mainframe infrastructure or used in-house developed solutions developed to run on mainframes. From the 1980s libraries migrated to, or implemented, 'turnkey' solutions such

as the vendor-based URICA or ERUDITE library management systems. (Musiker, 1986).

In 1979 the South African National Library Advisory Council (NLAC) initiated a national project to investigate the feasibility of establishing a library network and national union catalogue, the South African Library Network (SALNET), which subsequently received consensus from South African libraries. The main purpose for the establishment of the network would be to facilitate resource sharing amongst South African libraries through shared cataloguing and an interlibrary loan service. The groundwork for this project, also known as the Computerized Cataloguing Network Project (CCNP) was laid by the former MARC Working Group of the NLAC who already started with feasibility studies as early as 1970. The MARC working group was also responsible for the development of SAMARC (South African MARC) based on UNIMARC at this time, which as a standard would have a great impact on future developments (Malan, 2008).

In describing the principles that guided the formation of the network, Malan (2008) noted their significance at that time and their application today, but that also when there were deviations from these principles, significant problems emerged. These principles were:

1. the system should be as simple as possible within the framework of a networked central library system;
2. participation in the network should be cost effective for libraries;
3. the purpose of the system should be to serve the user and not only the librarian;
4. the autonomy of local library systems and computer centers should always be taken into account;
5. the system should lend itself to the creation of a central database with high integrity; and
6. the central database should provide good coverage of materials in participating libraries.

These recommendations were presented by NLAC to the Department of National Education and were accepted by Government in 1981. The South African Bibliographic and Information Network (SABINET originally referred to as SALNET) was officially constituted on 28 February 1983 with 46 libraries and information centres making a 10-year commitment to establish the network.

After 32 years, Sabinet is still fulfilling its original mandate by providing infrastructure and service to allow libraries to share and ultimately drive down their costs.

With the changes in networking and distributed computing in the 1990s, and the advent of scale of economies approaches within the various established post-apartheid academic library consortia, several large-scale implementations through donor-funding was made possible (Thomas, 2004). The then Gauteng and Environs Library Consortia (GAELIC), Eastern Seaboard Association of Libraries (ESAL), the South Eastern Academic Libraries' System (SEALS) and the Free State Libraries and Information Consortium (FRELICO), implemented the Innovative Interfaces Inc. (III)'s Millennium integrated library management system. The exception to this was the implementation of the Aleph 500 ILMS within the Cape Library Co-operative (CALICO) (Darch et al., 1999).

In the restructuring period post-1994, numerous changes were affected in local governments as well. Numerous town and city local governments were restructured into metropolitan local governments. As with academic consortia, local governments merged and streamlined service offerings which included establishing single LMS options within a metropolitan district library services, where local library systems (such as the PALS system) were replaced by the larger Erudite system.

In the 2000s the South African library sector embraced the large-scale integration of web-based delivery services, including online content (citation indices, journals and books); digitization initiatives and access services; wireless and distributed networking; and importantly, developed infrastructure that allowed for web and Internet access. In addition, the LMS systems employed are internationally accepted solutions and thus the same developments were affected locally as international developments were incorporated into these very systems.

The post-2000 and current environment include the evolution of systems and applications that can and often do, function as external initial data retrieval systems. Being developed as perceived 'one-stop-shop' options, the traditional LMS is optionally one of the resources interrogated or link to through these systems. Examples of these systems/applications include Ex Libris' Primo, III's Encore Synergy as data retrieval applications, and Ex Libris' SFX as link resolving applications (Allwright and Van der Walt, 2012).

In addition digital content management systems, e.g. III's ContentPro, OCLC's CONTENTdm, and Ex Libris' Digitool function completely separate from the LMS, yet is integral to the delivery and discoverability of digital content (normally digitized locally). The incorporation hereof has been driven by the establishment of institutional repositories at research-intensive universities.

Cloud computing significantly impacted on the traditional LMS environment and allowed for additional options in terms of collaboration initiatives. Cloud computing allows for on-demand as required computational infrastructure over a network with the significant difference being in the rendering of LMS environments as a software-as-a-service (SaaS) option as opposed to 'ownership' and management of the infrastructure required if hosted locally. An example of enhanced collaboration is the South East Academic Libraries System (SEALS) consortium wider infrastructural and support base for collaboration within the academic Eastern-Cape region. Initially looking at a single integrated LMS, SEALS activities continually progressed to establishing means for the dissemination and discovery of information in support of teaching, learning and research at the various constituent institutions through the deployment of services within a cloud-based computing environment (Allwright and Van der Walt, 2012).

The last five years have seen unprecedented growth and use of mobile technologies (e.g. smartphones, tablets) which required libraries to adapt services to accommodate the changes in user behaviour. It is often the case now that systems librarians and related technology-focused units focus on the delivery of services and resources aimed at an increasingly larger community of users that do not necessarily, or primarily, make use of front-end computing technologies such as desktops, as well as their expectation that these applications will now allow for a level of 'interactiveness' and access in places of their choice.

Conclusion

Given its history and commitment to redress, South African LIS is well positioned to 'redefine, re-imagine, repurpose and reinvigorate' itself by locating libraries as cornerstones of democracy, reconceptualizing services, practices and LIS education, promoting libraries as desired learning and community spaces, and by entrenching our own best practices (Satgoor, 2013). In celebrating the achievement of libraries in 20 years of democracy, it also affirms that the outlook for the future of South African LIS is indeed exciting.

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Limits to freedom of expression? The problem of blasphemy

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Abstract
The idea that freedom of expression might have limits is examined in the context of the *Charlie Hebdo* murders. Authoritative statements including the universal Declaration of Human Rights (Article 19) are revisited and blasphemy laws, defamation of religion resolutions, hate speech laws and recent moves to end blasphemy laws are all discussed. The conclusion is that freedom of expression is too important to be limited because of the sensitivities of religious believers.

Introduction

Freedom of expression can get you killed. Library and information professionals might not often think about it, but the documents in their care and the content to which they give access contain arguments, statements and provocations that are capable of arousing murderous rage in some readers. A significant aspect of this is content that some people describe as blasphemy. Blasphemy is usually some sort of perceived disparagement of a god or gods, prophets and messiahs, the texts and physical copies of religious books, beliefs and practices associated with religion, religious sites and structures, and probably various other connected objects of reverence. Alleged blasphemers can be subject to a range of judicial penalties under the laws of a number of countries, up to and sometimes including the death penalty, but they also risk extra-judicial killing by enraged believers not content to rely on the law to put right their grievances.

This latter danger has been made painfully clear by the atrocity perpetrated on 7 January 2015 in Paris. Two heavily armed men entered the offices of the magazine *Charlie Hebdo* and by the time they left, 12 people had been killed and several others wounded. The *Charlie Hebdo* murders were openly a response to satirical items in the magazine and the murderers were reported as shouting as they departed: 'We have avenged the Prophet Mohammed'. Particularly offensive to them seems to have been that cartoons in the magazine included satirical depictions of the Prophet. These are prohibited in mainstream Islamic belief. In French culture and law there is no such prohibition. *Charlie Hebdo* and its secular, left-wing satire, exist in a country which has a constitutional separation between church and state. People are free to adopt any religious belief that they choose, but this is a private matter in which the state does not intervene. Religion, like politics, is open to criticism and satire and so is the conduct of public personalities, except where it is limited by the laws of defamation. France has no blasphemy laws applying to Christianity or any other religion. This is something that the killers chose not to accept and they acted on the basis of their own interpretation of Islamic principles. In doing so they acted in direct defiance of French law and culture, to which the concept of blasphemy is essentially alien. The horror of this particular set of events should not be allowed to obscure the fact that people still face judicial action for blasphemy in various parts of the world, but we will use an example from fairly distant British history to illustrate this.

Britain's blasphemy laws were used regularly, though not frequently, against free thinkers throughout

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the 18th, 19th and 20th centuries. But in January 1697 a Scottish student called Thomas Aikenhead was executed in Edinburgh for blasphemy, so becoming the last person in Britain to suffer this penalty. Indeed, the previous case had been in England almost a century earlier. The case of Aikenhead differs from most previous, and many current cases, where blasphemy has been alleged, in that he was not punished for offering some unorthodox form of religious expression. Aikenhead questioned the Christian religion itself, root and branch. In court it was alleged of him that he had:

> Repeatedly maintained, in conversation, that theology was a rhapsody of ill-invented nonsense, patched up partly of the moral doctrines of philosophers, and partly of poetical fictions and extravagant chimeras: that he ridiculed the holy scriptures, calling the Old Testament Ezra's fables, in profane allusion to Aesop's fables; that he railed on Christ, saying, he had learned magick in Egypt, which enabled him to perform those pranks which were called miracles; that he called the New Testament the history of the impostor Christ; that he said that Moses was the better artist and the better politician; and that he preferred Muhammed to Christ; that the Holy Scriptures were stuffed with such madness, nonsense, and contradictions, that he admired the stupidity of the world in being so long deluded by them; that he rejected the mystery of the Trinity as unworthy of refutation; and scoffed at the incarnation of Christ. (Graham, 2008:103)

This might still be shocking and distasteful to many Christians, but Aikenhead's views were not even unique in the late 17th century. We might think of him as the wrong (outspoken) atheist in the wrong place at the wrong time. Today he would be tolerated by most of those who hold part or all of the beliefs at which he sneered, even though many might heartily dislike what he had to say.

Why are the dead satirists in the *Charlie Hebdo* massacre and Thomas Aikenhead important to library and information professionals? The reason is their experience sits at the fault line between belief and questioning; between embracing orthodoxy and expressing heterodoxy. The ideas they represent are part of a longstanding tradition of free expression, and professional work with information has to be based on decisions as to whether such ideas are a valid part of what should be made available for access in libraries and other information systems. The difference between Britain in the 17th century and France today is that the scepticism that Aikenhead voiced so intemperately and the distaste for at least some aspects of religion displayed by *Charlie Hebdo*'s cartoonists are now embedded in the dominant ethos of these and

similar countries. Both are regarded as genuine manifestations of freedom of expression. The official response to Aikenhead is an example of the enduring presence of a suspicion and distaste for free expression that emerges at different times and in different levels of intensity in all human societies and has regularly been taken up and administered by states. Arguably what the *Charlie Hebdo* incident represents is a shifting of the fault line in contemporary society. The elements of this are an increased willingness by individuals and groups to take extra-judicial action on perceived blasphemy; a continuing recourse by some states to blasphemy laws that include the death penalty; and an exploration of the possibilities of other forms of law and regulation (defamation of religion, or hate speech for example). From the opposite direction, there is an ongoing campaign in favour of free expression that includes a current campaign to end blasphemy laws. We will examine each of these tendencies, but first we need to revisit the formal position on freedom of expression as set out in the most authoritative public statements, not least because this is effectively the position of IFLA as expressed in the IFLA Code of Ethics for Library and other Information Workers (IFLA, 2012).

Freedom of expression

It is important to set out the extent to which freedom of expression has a formal status in modern life. This is not to say that freedom of expression statements are any kind of gospel, above criticism in the same sort of way that religious documents are alleged to be. A secular statement, however authoritative, remains a distillation of opinion and as such it demands critical reading. We will briefly discuss the First Amendment to the American Constitution, promulgated in 1791; the United Nations' Universal Declaration of Human Rights (1947); and the European Convention on Human Rights (ECHR) (Council of Europe, 1950). There is much to praise in the way they handle the issue, but at the same time some reasons for concern, particularly in the case of the ECHR.

The US First Amendment is so short, a mere 45 words, as to seem almost perfunctory. But on the contrary its simplicity and directness has the virtue of setting out a principle with utter clarity. It has then been the task of legislators and the judiciary to interpret it in practice. This they have done throughout American history with powerful consequences for freedom of expression in the USA. All that it says is:

> Congress shall make no law respecting an establishment
> of religion, or prohibiting the free exercise thereof; or

abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances. (Findlaw, 2015)

Thus the First Amendment protects freedom of religion by rejecting a state establishment; it protects unabridged (i.e. unlimited) freedom of speech and the press against the state; and also the rights of peaceful assembly and petitioning government. What this has meant in interpretation is so significant and pervasive in American life that it makes the First Amendment a source of inspiration on freedom of expression far beyond the boundaries of the USA. Arguably no other nation offers an equally iconic statement. Cases are too numerous to sum up here, but Findlaw (2015) covers them in detail. As one example only, a State of Maryland blasphemy law was overturned in 1970 on the grounds that the First Amendment mandates government neutrality on matters of religion.

Article 19 of the UN Declaration is also a powerful and inspiring statement. It says that:

> Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers. (United Nations, 1947)

The Article is set out as a right to opinion and the expression of opinion, but (significantly for the library and information professions), it contains within it the right to freedom of access to information, expressed as the rights to seek, receive and impart information. Furthermore, although it is clearly a statement of the rights of the individual, there is clearly no intention to deny those rights to bodies of people, such as members of religions and other belief groups. By obvious inference religious expression is protected along with other opinions, be they political or scientific, trivial or important, popular or eccentric.

The protection of religion does not need to rely on Article 19 however. Article 18 of the Declaration states that:

> Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his religion or belief in teaching, practice, worship and observance. (United Nations, 1947)

What needs to be noted here is that thought, conscience and religion are offered equal protection, thus encompassing atheism and agnosticism. Furthermore,

protecting the right to change religion implies the right to proselytise on behalf of one religion to adherents of another. Open observance of religion is also protected. Essentially the message of the relevant articles of the Universal Declaration is that religion as a human choice is protected, but in a context of potentially vigorous commentary and debate. That such commentary and debate should include satire and, indeed, mockery is implicit to the extent that it does not require specific mention.

The third statement that we will examine is the European Convention on Human Rights (ECHR). Whilst the UN Universal Declaration is a statement of principle and intent on the part of the signatory countries, the ECHR binds European signatory countries with the force of law. Countries either directly incorporate it into their laws (as the UK has done in the Human Rights Act of 1998) or subject their laws to its overriding principles and permit appeals from their courts to the European Court in The Hague on alleged inconsistencies between court verdicts and the ECHR. The ECHR takes the principles set out in Article 19 of the Universal Declaration and in ARTICLE 10 on Freedom of Expression, and it says the following:

> 1. Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers. This Article shall not prevent States from requiring the licensing of broadcasting, television or cinema enterprises.
>
> 2. The exercise of these freedoms, since it carries with it duties and responsibilities, may be subject to such formalities, conditions, restrictions or penalties as are prescribed by law and are necessary in a democratic society, in the interests of national security, territorial integrity or public safety, for the prevention of disorder or crime, for the protection of health or morals, for the protection of the reputation or rights of others, for preventing the disclosure of information received in confidence, or for maintaining the authority and impartiality of the judiciary. (Council of Europe, 1950)

What the US First Amendment and the Universal Declaration's Article 19 gain from brevity, Article 10 of the ECHR arguably loses through its explicitness. In its first section it introduces media licensing before even going on to the second and much larger section. The second section's concern with a long list of consequences of duties and responsibilities said to arise in the exercise of freedom of expression seems almost to imply that limitations on freedom of expression are more important than the principle itself. By

mentioning public safety, prevention of disorder and crime, protection of morals, and the reputation of the reputation and rights of others, it introduces the presumption that freedom of expression is a dangerous enterprise, which might need to be limited. In a climate of intolerance and increasing public concern with the idea of blasphemy this might be seen as either compromising freedom of expression or, on the contrary, offering routes towards reconciling differences.

Blasphemy laws

The International Humanist and Ethical Union's Freedom of Thought report (IHEU, 2014) identifies 55 countries that have anti-blasphemy laws, with penalties including imprisonment in 39, and the death penalty in six. A slightly earlier survey (Freedom House, 2010) examined the blasphemy laws of a selection of countries. Two examples from these, one Christian and the other Muslim will show the actual effects and potential threats of these laws very clearly. In Greece, the Penal Code, in Section 7, identifies 'Offences against Religious Peace'. Article 198 opens the way to punishment for public and malicious blasphemy against God, whilst Article 199 concerns blasphemy against the Greek Orthodox Church, and other tolerated religions. State prosecutions under Article 198 do occur, despite any doubts about the very existence of a 'God' which might reasonably be raised. A particularly high profile case concerned a successful attempt to ban the screening of Martin Scorsese's movie 'The Last Temptation of Christ' in 1988 (Alivizatos, 2010: 75). Complaints leading to prosecution under Article 199 seem to have always concerned the Orthodox Church rather than the other tolerated religions. These blasphemy laws in Greece effectively serve the purpose of integrating church and state and have been used to the detriment of free speech and cultural manifestations on a regular basis.

The Muslim example, Pakistan, is even more disruptive to free speech. Pakistan introduced its current blasphemy laws as recently as 1982–1986 and they provide for penalties including life imprisonment and capital punishment. The laws prohibit offences against the religious feelings of believers, insults to religion and to the Prophet Muhammad (died 632). The problem is that to repeat in an accusation the words that were allegedly used would be to compound the blasphemy. Thus cases in which someone is alleged to have said something blasphemous, place the accused under threat of death, without the freedom to question and defend the specifics of what they might or might not have said. The case of Asia Bibi is particularly disturbing (Bibi, 2012). Bibi, a Christian woman, seems to have been involved in a dispute over a drink of water whilst she and others worked in the fields. It was claimed that Bibi uttered a blasphemy, for which she was tried and sentenced to death. The manifest injustice of this at any level at which it is examined was apparent to a prominent politician, Salman Taseer. He showed willingness to try to help Bibi in her nightmarish plight and also proposed the amendment of the blasphemy laws. For this, he was gunned down on 4 Jan 2011 by one of his bodyguards. At the time of writing Bibi still awaits the carrying out of her sentence.

Defamation of religion

The threat that a universal declaration in favour of prohibiting something called defamation of religion would be adopted in the United Nations has been present for most of the past decade. Since 2002 a series of resolutions on respect for religion, and against defamation of religion, have been brought forward in various UN forums, generally on behalf of the Organisation of the Islamic Conference. First of all, we need to say that human rights protect human beings: not the ideas that human beings might hold on the origins and subsequent order of the world or any other matter. Yet, these resolutions have usually found majority support: that of 2009 being accepted in the United Nations Human Rights Commission by 23 votes to 11 with 13 abstentions. We should examine what the resolutions mean. A statement by a Pakistani official supporting the 2009 resolution claimed that 'Defamation of religion is a serious affront to human dignity leading to a restriction on the freedom of adherents and incitement to religious violence' (UN Human Rights Council, 2010).

What this seems to say first is that what we will refer to as criticism, whether reasoned, satirical or contemptuous, of the content of certain beliefs (religion in this case) affronts the dignity of those who believe. Certainly an affront may be felt by a believer who encounters some form of criticism. In the defence of such 'affronts', we should say that human progress has been built on the replacement of untenable ideas by more solidly-based versions, even though in the process there is a chance that sound ideas will have been attacked by proponents of the unsound. This is the challenging intellectual environment that freedom of expression seeks to defend. Dignity in the defence of one's views involves the potential for dignified withdrawal from a position that proves indefensible. It certainly calls for tolerance of those who criticise or attack one's views.

The second part of the statement is even more problematic. First it is alleged that affronts to dignity lead to a restriction of freedom. This is incomprehensible. Article 18 supports the right to believe and proclaim belief in anything we choose, whether stupid or wise. There is no restriction of freedom contained in criticism: quite the opposite. Criticism offers the freedom to change one's views, or retain them if one so chooses. The suggestion that incitement to religious violence is implicit in criticism of religion is more problematic. This seems to mean that a critical assault on religion might be followed by a physical assault on the adherents of a religion by the supporters of the criticism. Those who drafted and supported the resolutions may be able to cite instances in which it is completely provable that verbal attacks on ideas, as such, incited subsequent physical attacks on people and property. What is definitely likely is that the adherents of a criticised religion might attack the critics. What is certain is that communal violence based on religious disputes is sadly common in many parts of the world. What needs to be asked is whether freedom of expression should be curtailed in matters of religion because religions harbour so many hotheads and bigots? Frankly, responding to criticism, or even insult, with violence is regressive and cannot form the basis for any interpretation of human rights. It is not encouraging that the current Roman Catholic pope shows sympathy with violence as a response to words: 'If a friend says a curse word against my mother, he can expect a punch' (Cohen, 2015).

The progress of the defamation of religions resolutions was first stemmed in March 2011, after the murder of Salman Taseer. Pakistan submitted a resolution to the UNHRC without reference to defamation of religion and this received consensus support (USCIRF, 2011). It seemed that maybe some sort of horrible lesson had been learnt from Taseer's fate. The new resolution was concerned with 'combating intolerance, negative stereotyping and stigmatisation of, and discrimination, incitement to violence, and violence against persons based on religion or belief'. The shift from protecting religious beliefs to protecting those who hold religious beliefs is much more in the spirit of human rights. The new resolution does not seek to restrict peaceful expression, but calls for positive measures, including education and awareness-building. What still concerns some defenders of human rights is that the resolution's reference to 'combating intolerance' and 'negative stereotyping' may yet contain the germ of a protection for the content of beliefs. Intolerance in debate of what one believes to be wrong may be an unattractive attitude, but it does not infringe freedom of expression.

Likewise negative stereotyping is hard to define and indeed one can see that it might be possible to argue that someone is being negatively stereotyped on the basis of a negative opinion of the religion he or she professes. However, negative stereotyping is a risk that anyone takes if they adopt a particular viewpoint or engage in controversy. There is a warning here that 'defamation of religions' might not yet have wholly gone away and that the threat it presents to freedom of expression could be reintroduced in a less direct form.

Hate speech

The notion that hate speech, which incites discrimination and possible violence, should be prohibited is somewhat less controversial. However, the problem with hate speech legislation is that it can look remarkably similar to other restrictions on freedom of expression (like possible laws on defamation of religion). The difficulty begins with the lack of any generally agreed definition of what constitutes hate speech. The texts of hate speech laws in various European countries tend to agree only in a broad sense that their aim is to curb racial and religious hatred, because of the potential consequences in the form of discrimination and violence. Their starting point is the second section of the ECHR's Article 10 on Freedom of Expression, to which we have already drawn attention (Council of Europe, 1950). This obliges states, in the context of freedom of expression, to protect the reputation and rights of others, ensure public safety, and prevent disorder and crime. Fairly typical of legislation that seeks to meet these obligations is the first of a series of legal enactments in the UK, the Public Order Act of 1986, which prohibits speech if it stirs up racial hatred. The important point here is that hate speech laws, such as this, differ from the proposed ban on defamation of religion, in that they seek to prevent the fomenting of hatred towards people, not towards beliefs. In the heat of the moment, however, making a distinction between the two may tax the wits of the speaker, the listener, state authorities and the courts possibly obliged to rule on it.

This point is illustrated by the aftermath of the *Charlie Hebdo* murders. In the days immediately after 7 January about 500 cases of people accused of condoning or provoking terrorism were brought under new French legislation that outlaws *apologie du terrorisme* (Chrisafis, 2015). Many of those accused seem to have been drunk or experiencing a form of psychological crisis and to have shouted some sort of support for the *Charlie Hebdo* murderers, or those who had committed a number of separate, but linked,

anti-Semitic outrages . This law allows accelerated court procedures and several people immediately received prison sentences for what sound like intemperate and ill-considered statements fairly far from constituting incitement. This whole set of cases looks very much like the utterly contradictory suppression of free speech in the protection of free speech. The most high profile case was that of the comedian Dieudonné M'bala M'bala who responded to the flood of 'Je suis Charlie' sentiments with a statement on his Facebook page that he felt like Charlie Coulibaly (the surname of the murderer in the Jewish supermarket hostage-taking that was committed in associated with the *Charlie Hebdo* events). This meaning of what he posted is not exactly clear although it is arguably in extremely bad taste. In fact, the most accurate way to describe it might be as a satirical response, rather in the tradition of *Charlie Hebdo* itself, rather than something more sinister. Yet Dieudonné faces severe penalties if convicted. It is hardly surprising if religious believers who are suspicious of the tendencies within free expression conventions and laws see a possible injustice here.

If we dig a little deeper into the hate speech issue, a case based on the related offence of 'Holocaust denial' illustrates the problem and possible solutions rather better. Holocaust denial is not made illegal under some jurisdictions because the laws seek to establish truth: that is up to individuals themselves. It is illegal because it is effectively a form of hate speech against Jews. A British writer, David Irving, has developed a very public reputation for questioning in some detail whether there was ever a Nazi 'Final Solution' in the Second World War and arguing that the evidence for the mass murder of Jews, Gypsies, homosexuals and others was not to be trusted. In 1996 Irving decided to bring a court action under the English law of defamation, alleging that Deborah Lipstadt, a writer, and her publisher Penguin Books had libelled him as a holocaust denier (David Irving v Penguin Books and Deborah Lipstadt, 2000). The court heard extensive expert analysis of Irving's various published claims, rejected their truthfulness, and ruled that he had not been libelled. Furthermore, costs were awarded against him for the legal expenses of Lipstadt and Penguin Books. This financially bankrupted Irving. Some time later, in 2005, he was arrested under a 1989 warrant issued in Austria, relating to speeches he had made in that country. He was tried, found guilty and imprisoned. These two judgements against Irving place in clear contrast two ways of dealing with offensive speech. One (the Austrian example) makes illegal a form of speech (Holocaust denial) and convicts on the basis of evidence of

contravention. The other (British) example does not outlaw the form of speech, but makes possible the detailed analysis of factual claims in the context of alleged damage to personal reputation. Admittedly this takes us a little way from the original problem of blasphemy law, but it illustrates the difficulties experienced within systems of law on matters of expression relating to beliefs.

Dealing with the blasphemy problem

Other than attempting to take blasphemy out of the realm of law, is there anything that can be done? As suggested in Sturges (2006) it is possible to adapt the way in which comment and criticism is expressed so as to display good manners, decorum and respect for others. There is even some guidance on how this might be done in the form of Feinberg's (1988) offence principle. This offers a means to model offence through assessment of issues such as the motives behind the communication, the number of people likely to be offended, possible damage to community interests, and the extent to which the material could be avoided. This kind of reasoning offers some protection for libraries, which are not necessarily obliged to display or publicise contentious material, even though the ethical principles of the library profession require access to be made available. The reasoning later systematised by Feinberg was also essentially the line of thought adopted by England's Lord Chief Justice Coleridge in a judgement of 1883. His opinion was that critical comment on religion was not an offence if the decencies of controversy were observed, respectable opinion was not outraged, and there was, therefore, no threat to public order. The problem with this is that it effectively bases decisions on matters of what constitutes legally actionable blasphemy on public opinion. This is where Feinberg's principle might be used to assess public opinion. Although this process might make a court decision on what was blasphemy of a kind against which the law should take action somewhat more possible, it does not necessarily produce a verdict that might satisfy religious believers. The possibility remains that a few or many members of the public might protest disruptively or even, as in the *Charlie Hebdo* case, take the law into their own hands. If Feinberg ultimately provides limited help for content creators, such as cartoonists, where do we turn?

If good manners fail or are not considered appropriate by a writer, cartoonist, performer (or indeed, a librarian) we can only return to the enduring value of the questioning approach to life. What Thomas

Aikenhead wrote on his dying day in 1697 still stands as a beacon for those who engage with life without the prop of unsupported faith. He claimed that: 'It is a principle innate and co-natural to every man to have an insatiable inclination to the truth, and to seek for it as for hid treasure' (Graham, 2008: 118).

It is clear from his letter that he just could not comprehend how anyone could be punished for what he regarded as intellectual curiosity and the free expression of opinions as to what was the truth. We must enquire and debate. Good manners and respect for one's adversaries in debate are a starting point, but not an ultimate limitation. In the end we must risk offence. Some religious people give offence by their assertive presentation of views for which there is no credible evidence, and their intrusive promotion of lifestyles based on these views. Representatives of religion also evangelise. Consequently it is natural for atheists, agnostics, humanists, secularists, rationalists and adherents of other religions to criticise. Sometimes their criticisms might become intemperate, but the religious should remember that their own views and their attempts to control the lives of others can also be offensive and require tolerance (usually forthcoming) from the non-religious. To limit freedom of expression because some people might be offended is too much to ask.

There is no real justification for protecting the views of some people from criticism through the medium of blasphemy laws. As Amnesty International (2015) has put it: 'Protecting abstract concepts, religious beliefs or other beliefs or the sensibilities of people that believe them is not grounds for restricting freedom of speech'.

This is a view which attracts a wide range of support (including from tolerant religious people), and it can be reported that there is some momentum against blasphemy laws. In 2008 the British Parliament voted to remove the country's disused, but still existing, blasphemy laws from the statute book. In Ireland, which only enacted its blasphemy laws in 2009, there is a move to call a referendum that could repeal the laws. Internationally, a campaign called End Blasphemy Laws was launched on 30 January 2015. It is jointly led by the European Humanist Federation, the Atheist Alliance International and International Humanist and Ethical Union and has the support of approximately 200 national organisations. It aims to begin with pressure on the nations of the European Union, and like-minded countries such as Canada and New Zealand, to set an example by removing their largely defunct blasphemy laws from the statute book. Following from this it intends to defend and promote the international human rights consensus on the issue, as a basis for a new international network to campaign against the most severe examples of laws against alleged blasphemy.

Support for this campaign is an appropriate first step in a reasoned approach to a debate that has cost the lives of a number of defenders of free expression. However, it is clear that much more persuasion over an unlimited timescale will be necessary to change the mindset of those to whom criticism of their treasured views is blasphemy and to whom blasphemy might be a cause for bloody revenge. Library and information professionals should not regard this struggle as one from which they can be detached. Because, as we have stressed earlier, libraries seek to stock as wide and representative a collection of materials as possible, and because they offer access to resources in a manner subject to as few restrictions as possible, they are parties to the dispute concerning blasphemy, whether they like it or not. A good library is likely to provide users with materials that someone, somewhere will regard as blasphemous. So simply as a matter of self-defence, library and information professionals need to adopt a stance. The professional values of IFLA, set out in the Code of Ethics already cited, suggest such a stance should be firmly in support of freedom of expression and against both blasphemy laws and those other methods, some of them entirely extra-legal, used to suppress opinions on religion.

Acknowledgement

Funding

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Paul Sturges is Professor Emeritus, Loughborough University and Professor Extraordinary, University of Pretoria. He has travelled widely throughout the world, giving lectures and conference presentations, leading workshops on Intellectual Freedom topics, providing consultancy, and researching. His more than 200 articles, reviews, reports and books deal with a variety of issues in information science, with an emphasis on the developing world, a strong specialization in ethics of information, and a recent focus on curriculum development. He was Chair of the IFLA Freedom of Access to Information and Freedom of Expression (FAIFE) Committee 2003–2009 and is currently consultant to INASP Curriculum Development Project (since 2012, with workshops in Malawi, Vietnam, Tanzania, Kenya and Ethiopia). He was made Officer of the Order of the British Empire (OBE) in 2010 for services to libraries in the UK and overseas, and awarded the IFLA Medal in 2011.

⑤SAGE

Knowledge, perception and attitude of Nigerian students to plagiarism: A case study

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Abstract

This study investigated the knowledge, perception and attitude of Nigerian students to plagiarism. The instrument for data collection was a structured questionnaire which was self administered by the researchers to the respondents. The respondents were 282 first year students in the Faculty of Business Administration, University of Nigeria, Enugu Campus. The collected data was analyzed with frequency counts and percentage. The major findings show that the knowledge of plagiarism among the students prior to their being taught the subject was very low. However, after being exposed to the subject through teaching, their knowledge increased significantly. The respondents perceived some reasons as significant to the incidence of plagiarism among students. These included: fear of being scored poorly, awareness that other students were doing it, the opportunities for copying offered by the Internet, and the absence of punishment for plagiarism-related offences. The attitude of respondents to strategies for curbing plagiarism showed that respondents favoured corrective measures over punitive measures. The study concluded that university administrations should pay close attention to this problem by developing strategies that can help resolve it.

Introduction

As part of their academic requirements, students in Nigerian universities, like their counterparts elsewhere, are often required to write essays, term papers and similar academic exercises. The aim of this is to improve students' skills in research and writing. Being learners, students are not yet experts in their own right. The expectation therefore is that with the array of information at their disposal, they will be able (using those as building blocks) to produce original, well thought out and clearly written works. To succeed at this, students are expected to 'find, analyze and synthesize information while applying the appropriate rules of grammar and citation' (Madray, 2007:11). For many students, this expectation is rather daunting. Such students despair at the thought of undertaking this task and resort to using other

people's words, creativity, ideas or knowledge without proper referencing and/or attribution. This is considered plagiarism (Madray, 2007; William, 2002).

Plagiarism is not a recent occurrence nor can it be said to be a problem peculiar to Nigerian universities. Rather it is a major cause for concern to the academic community the world over (Park, 2003). In support, Hayes and Introna (2005) observed that it is on the rise in western countries while Danian (2009) confirmed the high incident of plagiarism among Malaysian students. However, one can say that the occurrence is higher in developing countries such as Nigeria where

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it has been described as a 'plague' (Onuoha and Ikonne, 2013). This may be because in many developing countries, students are rarely exposed to this subject, and the dangers inherent in it are low since punishment for plagiarism-related offences are rare even though the problem exists (Adeniyi and Taiwo, 2006; Orim, n.d.). On the other hand, plagiarism is recognized as an act of academic dishonesty in developed countries. As a result very concerted efforts are made in some countries to check or discourage plagiarism through a combination of strategies such as the establishment of plagiarism awareness classes/workshops, development of anti-plagiarism policies, use of plagiarism detection tools, and sometimes punitive measures (Brandt, 2002; Mundava and Chaudhri, 2010; Walker, 2008).

The danger inherent in not addressing this problem particularly in Nigeria and other developing countries is that universities where plagiarism persists unchecked will end up producing graduates who have little or no skill in research and writing; a situation that most likely would be carried on to the postgraduate level. This will invariably raise questions regarding the quality and competence of graduates from these institutions (Gillespie, 2012; Park, 2003). Moreover, plagiarism portends a threat and danger to the on-going calls for open access to literature as the Internet has been recognized as a major source of encouragement of plagiarism. Undoubtedly, when an author is not given attribution for his/her intellectual property, it lowers morale and this may lead to unwillingness or hesitance to make his/her intellectual property open or free. Bearing in mind that academic communities in developing countries are the major beneficiaries of the open access model of scholarly communication, there is no doubt that disrupting this channel of scholarly communication would impact on them negatively (Ohaji and Ibegbulam, 2010). In light of this, it is important that more attention is given to the problem of plagiarism.

Literature review

The word 'plagiarism' is derived from the Latin word 'plagiarius' which means 'kidnapper' or 'abductor'. In this regard, William (2002) considers plagiarism a serious crime because it involves stealing someone's 'creativity, ideas or language'. Plagiarism can occur in different forms. Harris (2012) has identified some of the most common forms in research papers to include:

- downloading a free research paper;
- buying a paper from a commercial paper mill;
- copying an article from the web or online electronic database;
- copying a paper from a local source;
- cutting and pasting to create a paper from several sources;
- quoting less than all the words copied;
- faking a citation.

The incidence of plagiarism among students in colleges and universities runs very deep, cutting across many countries and disciplines. Pupovac et al. (2008) conducted studies in four different European countries and found that plagiarism among students was common. A survey conducted by McCabe (2006) at Duke University's Center for Academic Integrity revealed that plagiarism was on the rise with 40% of students admitting that they had engaged in plagiarism as compared to 10% reported in 1999. They also found that students engaged in plagiarism although they were generally aware that it was wrong. Gilmore et al. (2010) cited in Bretag (2013) investigated research proposals by graduate students in science, technology, engineering and mathematics and found that 42.6% contained plagiarism. Results of a mass study conducted in Rutgers University (2003) revealed that 38% of students engaged in online plagiarism.

In Malaysia, Danian (2009) reported that the rate of plagiarism in his graduating class of 1996–2000 was about 60%. He further noted that about six out of every 10 students cheated on assignment: used whole chapters, paragraphs or ideas out of textbooks or other sources with the intention of passing work off as their own. Students also visited other schools where they copied old theses which they submitted to their teachers as their original works.

The attitude of students to plagiarism has also been studied. Scanlon and Neumann (2002) summarized in Onuoha and Ikonne (2013) conducted a study in nine universities using 698 students as respondents. The study revealed that although 90% of the respondents agreed that copying and pasting text from the Internet or other sources without proper citation was wrong, 25% admitted to copying without proper references. In another study conducted by Plagiarism.org (2012), 54% of respondents agreed they often copied from the Internet, 74% agreed that they had engaged in serious cheating at least once during the past year, and 47% were of the view that their teachers deliberately ignored those who were seen cheating.

In Nigeria, Babalola (2012), sought to ascertain the awareness and incidence of plagiarism among undergraduates in a private university. The findings revealed that 8.2% agreed to often buying term papers from online paper mills, 46% said their colleagues had allowed them to copy their assignments, while 4.7% copied from their colleagues without their

knowledge or consent. Furthermore, 69.2% agreed to copying and pasting from the Internet, 65.7% admitted to quoting other authors word for word without using quotation marks, 58.5% to having included references not cited in the text of their work, and 46.77% agreed that they often handed in assignments without references. The study also revealed a significant positive relationship between levels of awareness and plagiarism, suggesting that students' awareness of what constitutes plagiarism may not be enough to deter them from engaging in it. Mundava and Chaudhuri (2007) also reported that students copied from the Internet without referencing because of the perception that information on the Internet was free.

A study conducted by Ubaka et al. (2013) sought to determine the perceptions and actual indulgence in academic dishonesty among Nigerian pharmacy students using 16 activities considered plagiarism and comparing the results with data obtained from a study conducted in Portsmouth, United Kingdom. The finding revealed that more students cheated in their coursework (54.2%) than on examinations (45.8%). In comparison with students of Portsmouth, significantly more Nigerian students engaged in all 16 selected plagiarism activities than UK students.

Orim (n.d.) carried out a pilot study which investigated plagiarism awareness, perception and attitude of Nigerian students from the Engineering Department of Coventry University in the UK. The results revealed that three out of the 15 participants in the department did not perceive plagiarism to be as bad as stealing final examinations and memorizing the answers ahead of time, 11 out of the 15 disagreed that a student should be punished if caught submitting a paper given to him/her by another student, while four out of 15 believed that it was not wrong to use their roommate's papers if permission was obtained.

A number of reasons have been associated with the incidence of plagiarism among students. These include students' inexperience in research writing and ignorance or lack of understanding of the rules of academic writing (Orim, n.d.; Thomas, 2004). In that regard, there have been attempts to distinguish between intentional and unintentional plagiarism (Cheema et al., 2011). Other reasons adduced include poor or lack of time management, defiance, pressure to succeed, heavy workload, temptation, and opportunity (Overbey and Guiling 1997; Park, 2003; Wilhoit, 1994).

The Internet is also considered a major source of encouragement for plagiarism. This is as a result of the vast amount of information and opportunities for copying which it presents. In addition, commercial 'paper mills' encourage students to buy already written term papers and essays or offer their services for a fee (Anderson, 1999; Babalola, 2012; Selwyn, 2008; Whiteneck, 2002).

Gillespie (2012) identified a cultural angle to plagiarism. Some cultures do not view plagiarism as seriously nor impose as stringent measures for plagiarism-related offences as do western countries because, in some cultures, information is believed to be owned by the whole society. Attesting to this, Scollon (1995) noted that in Asian countries with Confucian traditions such as China, Japan, Korea, and Vietnam, spoken or written words and ideas are not owned by individuals as is the case in western countries. Instead, in such countries it can be considered a mark of honour and respect to use words, works or ideas of other people who are seen as authority figures. In this sense, laws in place to protect intellectual property do not necessarily follow cultural practices regarding the ownership of ideas.

Tobin and Granger (2009) believe the incidence of plagiarism is higher among international students in Australia. Their study revealed that this was indeed the case, with Indian and Nigerian students being clearly in the lead. However, Mackay (2004) attributed the high incidence of plagiarism among international students to their low proficiency in English language, arising from the fact that they were non-native speakers.

In sharp contrast, however, Scanlon and Neumann (2002) lay the blame for plagiarism squarely on the academic community for failing to make students understand and appreciate the importance of independent scholarship.

Whatever the differences in opinion regarding the reasons that may be associated with the incidence of plagiarism among students, what is not in doubt is that the problem exists and is capable of having far-reaching consequences for the academic community if it is left unchecked. As noted by the UC Students Judicial Affairs quoted in Mundava and Chaudhuri (2007:170), 'it devalues other people's original work and takes an unfair advantage over people's efforts'. Moreover, plagiarism breeds incompetence and poor study habits among students. Mistry et al. (2006) and Tankerley (1997) agree with this view as they are of the opinion that if plagiarism is not addressed, universities will end up graduating students from degree programmes who do not possess either the skills or knowledge expected of persons with such qualifications.

Objectives of the study

The general aim of the study was to assess students' knowledge of plagiarism. Specifically, the study sought to do the following:

1. Ascertain students' knowledge of plagiarism;
2. Determine students' perception of reasons for plagiarism;
3. Find out students' attitudes to strategies for curbing plagiarism.

It is hoped that the findings of this study will provide more insight into the problem of plagiarism and encourage various university administrations the world over and Nigeria in particular to come up with policies aimed at eliminating it.

Background to the study

The University of Nigeria, Enugu Campus (UNEC) is a campus of the University of Nigeria, Nsukka and is home to six faculties: Business Administration, Environmental Studies, Dentistry, Law, Health Science/Technology, and Medicine/Surgery.

The University of Nigeria, Nsukka runs a variety of courses under the General Studies Programme (GSP). Generally, GSP courses are structured in such a way that a student's course background (i.e. Arts or Science) determines what courses the individual is expected to take from the GSP programme. However, some GSP courses such as Introduction to the Use of Library and Study Skills, the Use of English, and a few others are made compulsory for all first year students irrespective of their course of study or background.

At the inception of the GSP programme in the university, the library component of the course, although structured within the Use of English, was handled by librarians. However, as the programme evolved it was taken over and taught by lecturers in the Use of English unit. In 2009, however, the University Senate made the Use of the Library component a fully-fledged course taught by librarians. This was in line with the directives from the National Universities Commission to universities in Nigeria and was considered to be in the best interest of students who were perceived as being deficient in research and writing. As a result of this new curriculum, one of the authors, a librarian at the university library, became involved in teaching the course.

The motivation for this study was two-fold. First, the researchers observed large-scale cases of plagiarism in students' term papers in the first year student class. The rate of plagiarism was worrisome because the students were also enrolled in the Use of English, a course which teaches research and writing. This experience prompted the question of the extent to which students of the University of Nigeria, Nsukka (UNN) were aware of plagiarism. Second, it was also

observed that although cases existed where academic staff had been dismissed for plagiarism-related offences (Adeniyi and Taiwo, 2006; Elechi, 2010; Enogholase, 2008), the researchers could not find evidence of similar punishment of a student for plagiarism. In fact a thorough check of the academic regulations section of the University of Nigeria, Nsukka Calendar (2008) revealed that while examination malpractice including its punishments received extensive coverage, there was no mention of plagiarism as an academic crime. This is in spite of the fact that this problem really exists.

Methodology

A survey research method in the form of a pre-test and post-test was adopted for the study, and questions were adapted from the questionnaires of two separate studies (Madray, 2007, Razera et al., 2010). The study was carried out over a period of three months, from January to March 2014. Two hundred and eighty-two copies of the questionnaire were administered twice to students of the Faculty of Business Administration made up of Banking and Finance, Business Management and Marketing departments. The first administration of the questionnaire was done in the month of January at the first teaching contact with the students. For the first administration, which served as the pre-test, only the part of the questionnaire which contained 'knowledge' questions was administered. The purpose of this was to assess students' initial knowledge of plagiarism before it was taught. In March after the subject had been taught, a more comprehensive questionnaire which featured knowledge, perception and attitude questions was administered again to the same students. The data obtained were analyzed using frequency counts and percentages.

Findings and discussion

The completed questionnaires were analyzed based on the objectives of the study.

Table 1 shows the profile of the respondents in terms of department and gender.

In Table 2, which is the pre-test, respondents were assessed on their knowledge of plagiarism. The aim was to assess students' initial knowledge of the subject prior to instruction. It served also to provide guidance in the teaching method to adopt while teaching the subject. Analysis of the data showed that 33% did not think that summarizing someone else's ideas without crediting the source amounted to plagiarism while 17% did not know if it did. Only 24% said copying from the Internet and not crediting the source was plagiarism while as many as 71% – 200 respondents –

Table 1. Profile of respondents.

Department	Total number of students	Number of males	Number of females
Banking and Finance	106 (38%)	68 (64%)	38 (36%)
Business Management	96 (34%)	41 (43%)	55 (57%)
Marketing	80 (28%)	38 (48%)	42 (52%)
Total	282 (100%)	147 (52%)	135 (48%)

Table 2. Knowledge of plagiarism (pre-test). What is plagiarism?

Items	True	False	Don't know
Summarizing someone else's ideas without crediting the source	140 (50%)	94 (33%)	48 (17%)
Copying from the Internet and not crediting the source	68 (24%)	200 (71%)	14 (5%)
Paraphrasing someone else's words with in-text citation but not in the reference list	68 (24%)	198 (70%)	16 (6%)
Quoting a source with page reference in-text but not in reference list	142 (50%)	138 (49%)	2 (1%)
Using most of someone else's original text but changing the order and not listing in-text but in the reference list	87 (31%)	182 (65%)	13 (4%)
Using most of someone else's original text but changing the order and making reference in the reference list but not in text	87 (31%)	182 (65%)	13 (4%)
Submitting a work written by a friend to a different teacher	85 (30%)	188 (67%)	9 (3%)

Table 3. Students' knowledge of plagiarism (post-test).

Items	True	False	Don't know
Summarizing someone else's ideas without crediting the source	282 (100%)	–	–
Copying from the Internet and not crediting the source	278 (99%)	–	4 (1%)
Paraphrasing someone else's words with in-text citation but omitting source in the reference list	269 (95%)	–	13 (5%)
Quoting text verbatim with citation and page reference in-text but omitting source in reference list	269 (95%)	–	13 (5%)
Using most of someone else's original text but changing the order and not citing in-text but including source in the reference list	274 (97%)	–	8 (3%)
Using most of someone else's original text but changing the order and citing in-text but omitting source in the reference list	260 (92%)	–	22 (8%)
Submitting a work written by a friend to a different teacher	212 (75%)	68 (24%)	2 (1%)

did not think so. This finding is in line with those of Mundava and Chaudhuri (2007) as it appears that there are widespread beliefs that information on the Internet is not owned by people and so is free. Furthermore, 70% did not think paraphrasing someone's words and crediting only in-text but not in the reference list was plagiarism. Findings also showed that 49% of respondents did not think quoting a source with page reference in-text but not in the reference list constituted plagiarism, while 65% considered using most of someone else's original text, changing the order, not listing in-text but in the reference list not to be plagiarism. Also, 65% were of the view that it was not plagiarism to use most of someone else's original text, change the order and make reference in the reference list but not in-text. The responses suggest that the respondents thought that mentioning an

author whose work was used in their writing once whether in-text or in the reference list was enough credit. Finally, the majority (67%) said it was not plagiarism to submit a work done by a friend to another lecturer. The responses here suggest that the respondents were ignorant of the rules of research and writing as observed by Overbey and Guiling (1999). Other findings can be seen in Table 2.

Table 3 which served as the post-test was part of the second administration of the questionnaire and was administered after the subject was taught. Analysis of the findings showed that unlike the pre-test, all the respondents (100%) said summarizing someone else's idea without crediting the source was plagiarism. Only 1% did not know if copying from the Internet without crediting the source was plagiarism. Similarly, 5% did not know if paraphrasing someone

Table 4. Students' perception of reasons for plagiarism.

Items	Agree	Disagree	Undecided
Students are ignorant of the rules of academic research and writing	268(95%)	14(5%)	–
Students are inexperienced in the art of research and writing	248(88%)	30(10%)	6(2%)
Students lack time to do in-depth research	225(80%)	57(20%)	–
Students are overloaded with assignments	242(86%)	24(9%)	16(5%)
Students have poor time management resulting in pressure	202(72%)	80(28%)	–
Students are too lazy to do in-depth research	197(70%)	65(23%)	20(7%)
Students do not always understand the topic of study	259(92%)	21(7%)	2(1%)
Students fear being scored poorly in assignments	282(100%)	–	–
Students are aware others are doing it	282(100%)	–	–
The Internet offers ample opportunities for plagiarism	282(100%)	–	–
Plagiarism is not punished by the administration	263(93%)	12(5%)	7(2%)

else's words with in-text citation but omitting the source in the reference list was plagiarism; 5% did not know that quoting text verbatim with in-text citation and page reference but not including the source in the reference list was plagiarism. Of the respondents 3% did not know if using most of someone else's original text, changing the order and not citing in text but including source in the reference list was plagiarism, while 8% did not know if using most of someone else's original text but changing the order and citing in-text but not including a source in the reference list constituted plagiarism. Finally, only 1% did not know if submitting a work written by a friend to a different teacher amounted to plagiarism. The findings here seem to suggest that respondents' knowledge of plagiarism had improved after the subject was taught. Other findings can be seen in Table 3.

Table 4 sought to determine respondents' perception of the reasons for plagiarism using a 3-point rating scale of: Agree, Disagree and Undecided. An overwhelming majority (95%) agreed that students were ignorant of the rules of academic research and writing while only 5% disagreed. Only 30% disagreed that students were inexperienced in the art of research and writing. While 20% disagreed that students lacked time to do in-depth research, 9% and 5% respectively disagreed or were undecided that students plagiarized because they were overloaded with assignments. Furthermore, only 28% disagreed that students had poor time management resulting in pressure; 7% disagreed that students did not always understand the topic of study; while all the respondents (100%) agreed that students feared being scored poorly in assignments. Again 100% agreed that students plagiarized because they were aware others were doing so, thus corroborating the findings of McCabe (2006). Finally, 100% agreed that the Internet was a source of encouragement for plagiarism in

line with other findings (Anderson, 1999; Babalola, 2012; McCabe et al., 2001; Selwyn, 2008; Whiteneck, 2002). It was agreed by 93% that students plagiarized because it was not punished by the administration.

In recognition of the need to curb the incidence of plagiarism, Table 5 displays responses that elicit students' attitude to strategies for curbing plagiarism. Here too, a 3-point rating scale of Agree, Disagree and Undecided was used. Analysis showed that all the respondents (100%) agreed with the following as strategies to curb plagiarism: giving introductory lectures at freshmen orientation programmes; discussing plagiarism at different levels from undergraduate to postgraduate; lessening students' workload; providing students more lectures on good study habits, research and writing skills; and posting information about plagiarism on the university website. On the other hand, only 34% agreed, 62% disagreed and 4% were undecided about introducing plagiarism detection tools and mandating students to submit their papers online. Of the respondents 44% and 56% agreed and disagreed respectively that lecturers should be mandated to punish all cases of plagiarism. Finally, 18% and 82% respectively agreed and disagreed that students caught plagiarizing should be expelled. The inference to be drawn from these responses is that a greater majority of respondents favoured corrective strategies over punitive strategies in curbing plagiarism. This finding corresponds with that of Orim (n.d.).

Conclusion

There is no doubt that the incidence of plagiarism is on the rise and also recognized as a serious academic problem in higher education institutions both internationally and locally (Babalola 2012; Hayes and Introna, 2005; Park, 2003; Pupovac et al., 2008; Ubaka et. al 2013). However, unlike many developed

Table 5. Students' attitude to strategies for curbing plagiarism.

Items	Agree	Disagree	Undecided
Introductory lectures on plagiarism should be given at freshmen orientation programmes	282(100%)	–	–
Plagiarism should be discussed at different levels from undergraduate to postgraduate levels	282(100%)	–	–
Lecturers should lessen students' workload to enable them do more in-depth research	282(100%)	–	–
Students should be given lectures on good study habits/skills	282(100%)	–	–
Information about plagiarism should be posted on university notice boards and website	282(100%)	–	–
The university should introduce plagiarism detection tools and mandate students to submit their papers online	96(34%)	174(62%)	12(4%)
Lecturers should be mandated to punish all cases of plagiarism	125(44%)	157(56%)	–
Students caught plagiarizing should be expelled	50(18%)	232(82%)	–

countries, there are no serious institutional policies for checking or discouraging plagiarism in Nigeria (Onuoha and Ikonne, 2013).

This study shows that most Nigerian students come into the university with poor skills in research and writing, necessitating that in their quest for academic success students engage in plagiarism intentionally or unintentionally (Onuoha and Ikonne, 2013; Orim, n.d.; Overbey and Guiling, 1997; Thomas, 2004).

If this problem is not adequately addressed especially in Nigeria and other developing countries, their universities may end up producing only graduates who have little or no skill in research and writing. This has the potential to negatively affect postgraduate and other academic endeavours. It will invariably raise questions regarding the quality and competence of these graduates and services they can offer (Gillespie, 2012; Parks, 2003). Obviously, endemic plagiarism does not portend well for higher education in any country and so requires that students develop more skills in academic research and writing. In line with this, it is necessary that more awareness concerning the dangers inherent in plagiarism is created in academic communities through orientations, workshops, seminars, and other legitimate means as is the case internationally (Brandt, 2002; Maurer et al., 2006; Walker, 2008).

Finally, university administrators and policy makers must show more seriousness towards addressing this problem practically by developing academic integrity policies that can work to lessen the extent and impact of plagiarism and other related academic problems (McCabe, 2006; Park, 2003).

Funding

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Libraries and reading motivation: A review of the Programme for International Student Assessment reading results

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Abstract
Teenagers do better at reading when they are motivated to read. The Programme for International Student Assessment assesses reading literacy for 15-year-olds in over 70 countries worldwide, and also includes questions that explore the relationships between motivation and reading. Country-level results indicate that developing countries have lower reading scores than developed countries. However, they also indicate that students in many developing countries are more motivated to read and spend more time reading than students in developed countries. These results suggest that the ideal role for libraries is to ensure students' motivation to read through the provision of a variety of materials, a supportive environment for literacy and reading conversations, and encouraging student autonomy in making their reading choices.

Keywords
Young adult services, reading and literacy, services to user populations, information needs/behaviors of specific groups, school media centers/libraries, public libraries, types of libraries and information providers

Research suggests that student reading ability is primarily a function of students' interest in and motivation for reading. However, many students feel unmotivated to read, uninterested in the materials they are assigned to read, and as a result, perform poorly on reading assessments.

The Programme for International Student Assessment (PISA) test is administered every three years by the Organization for Economic Co-operation and Development (OECD). The test is administered to 15-year-old students in a variety of OECD and non-OECD countries and partner economies around the world, and measures reading, mathematics, and science ability in each assessment. The countries where the PISA exam is administered are classified by the World Bank as "developed" or "developing" regions (World Bank, 2014). None of the countries that participated in the PISA assessments in 2009 or 2012 were designated by the United Nations as a Least Developed Country (United Nations, 2013).

At each administration, PISA focuses on one emphasis area. In 2000 and 2009, the PISA exam looked at reading; in 2003 and 2012, the exam focused on mathematics; in 2006 and 2015, the exam will focus on science. "The PISA assessment takes a broad approach to measuring knowledge, skills and attitudes that reflect current changes in curricula, moving beyond the school-based approach towards the use of knowledge in everyday tasks and challenges" (OECD, 2009: 9).

The PISA exam attempts to measure factors beyond schooling to account for student performance, including their motivations, learning strategies, and goals. As such, the PISA exam attempts to account for

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factors involved in student performance that go beyond school-related reading and literacy instruction.

With their collections of books and other materials, and their avid support for literacy and learning, libraries and librarians clearly support reading as an activity and a passion. This is emphasized by the International Federation of Library Associations and Institutions (IFLA), which issued a professional statement calling upon libraries to provide resources and services "based on the unique needs of young adults … [addressing] their educational, informational, cultural, and leisure time needs [and promoting] literacy, lifelong learning, information literacy, and reading for pleasure" (IFLA, 2014: 3). Even school libraries, which have to support the curriculum first and student interests later, are encouraged to "[equip] students with lifelong learning skills and [develop] their imagination, thereby enabling them to live as responsible citizens" (IFLA, 2002: 4).

Sinko (2012) notes that strong PISA reading scores in Finland are associated with strong societal support for reading and libraries. However, PISA results do not actually speak to library structures, but rather, to educational structures. Libraries have the potential to strengthen weak educational structures and support strong ones. They do this by working from a person-centered approach, focusing on individuals' interests and abilities. In doing that, they support the development of a relationship wherein reading provides intrinsic rewards to the reader. Several studies have indicated that libraries are students' main source of reading materials (Krashen, 2004: 64–66). A well-stocked school library provides access to materials, without which even the best and most-motivated reader cannot develop a reading habit.

The Programme for International Student Assessment (PISA)

The definition of reading literacy used by PISA 2009 was: "understanding, using, reflecting on and engaging with written texts, in order to achieve one's goals, to develop one's knowledge and potential, and to participate in society" (OECD, 2009: 23). PISA 2009 also engaged in one of the first wide-scale measurements of reading literacy in electronic formats as well as print formats, as the two types of literacy have different requirements, with electronic literacy having less-defined boundaries, more "tools" that could potentially distract readers from the message, and requiring readers to evaluate source materials' quality (OECD, 2009: 44).

The PISA 2009 reading literacy scale contained three categories. *Access and retrieve* focused on retrieving information from a text or series of texts. *Integrate and interpret* focused on tasks that required the reader to take information from a whole text, and to relate information between parts of a text. *Reflect and evaluate* focused on tasks that required the reader to integrate knowledge from outside the text, examining the notions and ideas within the text and the form and substance of that text (OECD, 2009: 34). Standard assessment questions included both multiple choice questions that were automatically assessed and content questions that were assessed by experts. Texts differed in format (continuous text, non-continuous printed messages like lists, mixed texts which contain both continuous and non-continuous texts, and multiple texts), type (description, narration, exposition, argumentation, instruction, and transactional), and purpose (personal, public, occupational, and educational, OECD, 2009: 27).

PISA also operationalized some reading engagement concepts (OECD, 2009: 70). Individual reading motivation was made up of four characteristics: interest in reading, perceived autonomy in reading activities and choices, social interactions related to reading, and reading practices and activities. Classroom support for student reading engagement is measured by their perceptions of relevance of texts to students' lives and experiences, and support for student reading autonomy (OECD, 2009: 71). Questions assessing reading motivation asked how often students used the library, what sorts of reading materials they preferred, and their reading activities.

In addition to testing students, PISA administers additional questionnaires to schools and parents, to help illustrate factors that play into student performance on the exam. The school questionnaire is filled out by the school's principal or lead administrator, and it asks questions about the school's governance structure, school climate, and how the school supports instruction in the area being emphasized in the exam. Parent questionnaires ask about parents' education, professions, and income, as well as the parents' feelings toward and interactions with the school, and what support the parents provide for the subject area at home. For example, in 2009 the parent survey asked parents about home literacy behaviors such as reading to their children, reading the newspaper, or discussing books.

The PISA exam is intended to measure not just student performance, but the performance of various national education systems. Because PISA is administered internationally to over half a million students, the development and preparation of the PISA exam is a lengthy process. The PISA governing board works with both a subject matter expert group to design the

tests' theoretical framework, and a team of international contractors who design and implement the surveys. The PISA Questionnaire Expert Group helps to develop the context questionnaires, while PISA National Project Managers (NPMs) in each country oversee the exam's implementation and assist with marking the exams after students complete them (OECD, n.d.) The NPM describes the target population in the nation, creates a school sampling frame, and stratifies schools within that frame based on specific variables like school type or region. Once schools are identified, a list of all eligible students is provided and the NPM randomly selects students to take the exam (OECD, 2012: 62-76).

Reading motivation

There are many factors that play into reading achievement and success at reading. Among these are access to reading materials, physical ability to manipulate the book or reading material used, understanding of the material being read, and access to formats that allow people with print disabilities to take in content. Moreover, economic and social differences will affect the amount of reading a student can do by influencing the availability and quality of media in a student's environment. These factors all play their parts in students' reading performance individually and when representing their country en masse. This paper looks specifically at one factor, reading motivation, and how libraries might influence reading motivation among teenagers.

At least in the United States, much of the current literature on teen motivation and interest in learning presents a dismal picture. The National Research Council (2004) reported that half of the high school students surveyed in a three-year study thought their classes were boring. Querying 42,754 students in 27 states, the 2009 High School Survey on Student Engagement reported that "two out of three students are bored in class in high school at least every day" (Yazzie-Mintz, 2010: 6). When asked why they were bored in class, 75% of the students responded that the material was not interesting, and 39% responded that the material was not relevant to them. This reified the results of Greenberg et al.'s (2006: 165) work which found that "students in our study are not interested in reading and spend very little time engaged in various reading activities."

Guthrie and Wigfield (2000) propose an engagement model of reading to speak to reading motivation. "Reading motivation is the individual's personal goals, values, and beliefs with regard to the topics, processes, and outcomes of reading" (p. 405). The engagement model of reading builds on motivation theories from other domains, including self-determination theory, allowing people to develop their own intrinsic motivation through the provision of choice and social support; and self-efficacy theory, people's belief that they can read effectively.

Reading motivation is multidimensional. Baker and Wigfield (1999) looked at three categories of reading motivation: competency and efficacy beliefs, reading purposes, and social purposes of readings. They found that children often have a mixture of characteristics that influence their motivation, and different children will respond differently to motivational strategies. Therefore, no one set of teaching techniques will reach all children in a classroom. Wigfield (2000: 141) further defined categories of reading motivation as "(1) intrinsic and extrinsic motivation, (2) competence and efficacy beliefs, and (3) social motivation." Intrinsically motivated students are self-regulating in their reading, setting and pursuing their own reading goals (Sweet et al., 1998). In addition, the amount of value a student places on reading will influence their attitudes about reading (Gambrell et al., 1996). "If [reading's] perceived value is low, the development of reading ability will be constrained and beliefs about the outcomes of reading (namely, that the result is frustration) will tend to confirm a belief that reading has little value to begin with" (McKenna et al., 1995: 939).

Reading is a social activity, and discussing reading with friends, classmates, and family will positively influence reading attitudes (Ivey and Broaddus, 2001). Teenagers are influenced by the perceptions their friends and relatives have about reading. The opinions of their family, social, ethnic, and gender groups, made either through direct recommendations or informal discussions, influence teenagers' perceptions of reading (Pitcher et al., 2007).

Several studies have shown a link between the amount students read and their reading achievement (Anderson et al., 1988; Guthrie et al., 2006; Mol and Bus, 2011; Wigfield and Guthrie, 1997). The amount students read – reading frequency – is consistently related to interest. Interest "influences attention and persistence and, in the long run, acquisition of knowledge by students" (Alderman, 2004: 240–241). Alderman (2004) identified two different kinds of interest: individual interest and situational interest. Individual interest is stable and developed over a period of time, and is usually associated with a positive emotional feeling that can help a reader persevere through challenging texts. Situational interest is evoked or stimulated by an activity or some environmental influence. It may not have long-term effects on

learning, but can lead to individual interest. A teacher can define learning tasks that create situational interest, for example, by creating thematic learning units that build off students' real-world experiences.

Arguing from a student-driven perspective, Csikzenmihalyi (1990) suggested that educators should provide students with realistic motives to read, and that those motives would lead to lifelong learning if they were intrinsically rewarding. His concept of "flow," in which a participant is fully immersed in the action being done, requires tasks balanced to individual students' abilities and intentions. If a task is too difficult, a student will get frustrated. If it is too easy, a student will get bored. A student also needs to set appropriate goals and receive feedback on their actions. If a student does not feel that she is making progress, or that her goal is attainable, she will become anxious and overwhelmed by the task. Thus, Csikzenmihalyi (1990: 126) calls for a "[focus] on the rewards intrinsic to literacy" rather than "treating literacy as a tool."

Students' sense of self-efficacy is another reading motivator. Self-efficacy is a motivational construct that involves students' beliefs about their ability to perform a task, but it differs from self-esteem in that it is based on actual successes and failures. While self-esteem is a general belief of self-worth, self-efficacy is domain-specific. Self-efficacy has been positively related to achievement, cognitive engagement, and effort levels across age, gender, and ethnicity (Linninbrink and Pintrich, 2002). Ivey and Broaddus (2001: 361) found that 42% of the participants in their middle school reading study said "they were motivated by finding good materials to read and having choice in the selection of these reading materials." Reading motivation increases when students are given reading choices and responsibility for their own learning (Skinner et al., 2005; Sweet et al., 1998).

It follows, then, that several factors may play a role in student performance on reading assessments such as that administered by PISA: amount of reading previously done, individual interest, situational interest, and students' sense of self-efficacy. The PISA exam provides controls for some of those factors (reading engagement, sense of autonomy, types of reading done, availability of books at home), but does not provide controls for topical or informational interest, or experience of flow while reading.

Reading performance, 2000 to 2012

Reading performance has been assessed with every administration of PISA. The overall trends in reading scores from 2000 to 2012 have been slight but

Table 1. Differences between 2000 and 2012 PISA reading scores, for countries with statistically significant differences in reading scores.

Country	OECD Member	2000 Score	2012 Score	Difference
Albania	N	349	394	45
Australia	Y	529	512	−16
Brazil	Y	396	410	14
Chile	Y	410	441	32
Finland	Y	546	524	−22
Germany	Y	484	508	24
Hong Kong-China	N	525	545	19
Iceland	Y	507	483	−24
Indonesia	N	371	396	26
Israel	Y	452	486	34
Latvia	N	458	498	31
Liechtenstein	N	483	516	33
New Zealand	Y	528	512	−17
Peru	N	327	384	57
Poland	Y	479	518	39
Portugal	Y	470	488	18
Sweden	Y	516	483	−33

positive for OECD countries. In 2000 the average reading score was 496; in 2012, the average reading score was 498 (National Center for Educational Statistics, n.d.)

Forty countries participated in the PISA exam in both 2000 and 2012. Table 1 shows some differences between countries' 2000 and 2012 reading scores. OECD countries whose scores decreased over time tended to be Scandinavian and Anglophone. Canada and the United States also experienced declining scores, but those declines were not statistically significant. OECD countries with increasing scores included Central and Eastern European and South American countries. However, the countries with the biggest increases were non-OECD countries.

2012 Reading performance

In general, countries that are more developed tend to have higher reading scores than less-developed countries. The strongest reading performers in 2012 were China's Shanghai region, Hong Kong, Japan, Singapore, and Korea. Of these countries, only China is considered "developing," and the Shanghai region is one of the most developed regions of China. New Zealand, Canada, and France fall in the top 20 ranked countries, while Australia, the United Kingdom, and the United States occupy places 23, 24, and 25 respectively. The only developing country other than China to fall in the top 25 was Vietnam.

The weakest performers were Peru, Qatar, Kazakhstan, Jordan, Albania, Indonesia, Brazil, Malaysia, Argentina, and Tunisia. Of these, Qatar is the only nation that is not considered a developing country by the World Bank. Uruguay, the United Arab Emirates, Chile, Slovenia, the Slovak Republic, and the Russian Federation were the only developed nations in the bottom 25 reading scores.

Since PISA is testing educational systems rather than students, it seems clear that reading instruction has had large positive effects in some countries, and primarily those countries where reading scores were initially low. At the same time, countries that initially had very high reading scores have seen declines in those scores. This suggests either that reading instruction programs in those countries might be less effective in 2012 than they were in 2000, or that teenagers in those countries are less excited about reading and less motivated to read than they were in 2000.

International reading enjoyment

Questions on the 2009 administration of the PISA exam asked students about their informational reading strategies, their leisure reading habits, and their reasons for library use. Questions about leisure reading included how much students enjoyed reading, how long they spent engaged in non-required reading, whether they enjoyed visiting libraries and bookstores, whether they appreciated receiving books as gifts, and whether they talked about reading with peers and adults. Other questions asked about whether students liked reading various types of materials: fiction, nonfiction, newspapers, magazines, and comic books.

By calculating average responses to questions about whether students appreciate books as gifts, exchange books with friends, read "only if they have to," or find it hard to finish books, PISA provides a general estimate of each student's overall enjoyment of reading. When these scores are averaged, they provide a look at how well or poorly reading is appreciated in each of the countries listed (see Table 2). PISA's Reading Enjoyment scale was normed so that a score of zero is the average reading enjoyment for all students in OECD countries. The Reading Enjoyment Scale had a mean of 0.1112, standard deviation of 0.92714, and ranged between -3.23 at the lowest level to 3.50 at the highest level. Countries with mean negative scores are those where more students indicated they did not enjoy reading than indicated that they did enjoy reading. Countries with positive scores had more students that enjoyed reading than did not. Within-country standard deviations tell us how much

Table 2. Countries' ratings on PISA's enjoyment/liking of reading scale.

Country	OECD Member	Mean Score	N	Standard Deviation
Albania	N	.6779	4526	.71221
Australia	Y	−.0262	13,737	1.10555
Brazil	Y	.3086	19,639	.77267
Canada	Y	.1083	22,298	1.15183
Chile	Y	−.0511	5523	.82873
Finland	Y	.0245	5627	1.03284
Germany	Y	.0594	4543	1.18165
Hong Kong-China	N	.3298	4760	.72959
Iceland	Y	−.0669	3532	1.02682
Indonesia	N	.4398	5094	.50420
Israel	Y	.0553	5500	1.01703
Latvia	N	−.0340	4436	.78657
Liechtenstein	N	−.2200	318	1.14616
New Zealand	Y	.1369	4516	.99417
Peru	N	.3526	5826	.65991
Poland	Y	.0442	4806	1.09601
Portugal	Y	.2129	6203	.90406
Sweden	Y	−.1048	4348	.97520
United Kingdom	Y	−.1504	11,809	.99076
United States	Y	−.0449	5126	1.05293

variance in reading enjoyment there is among students in the same country. The sizes of within-country standard deviations are consistent with standard deviation between all countries, with most individual students falling within or close to one unit beyond the mean.

Reading enjoyment scores suggest that students in the United States (mean -0.0449, SD 1.05293) and the United Kingdom (mean -0.1504, SD 0.99076) are getting less enjoyment overall from reading than students in Russia (mean 0.0745, SD 0.70957), Canada (mean 0.1083, SD 1.15183), Japan (mean 0.2014, SD 1.06482), or Turkey (mean 0.6438, SD 0.86133). South and Central American countries show a mix of reading enjoyment (Brazil, Peru) and lack of reading enjoyment (Uruguay, mean -0.1253, SD 0.85648; Argentina, mean -0.1565, SD 0.73299; Costa Rica, mean -0.2009, SD 0.79186). Within-country standard deviations demonstrate that even though a country may have a positive or negative average, there is still quite a bit of deviation among individual students in the country. Larger standard deviations may indicate more competition for teens' time and attention.

Looking internationally at all student respondents, it seems that pleasure reading tends to be limited (see Table 3). Almost two-thirds of the teenagers surveyed reported being engaged in pleasure reading for less than 30 minutes a day. Only 6% identified as heavy readers.

Table 3. Time spent reading for enjoyment.

Country	I don't read for enjoyment	30 minutes or less a day	Between 30 and 60 minutes	1 to 2 hours a day	More than 2 hours a day	Total
Albania	7.3%	22.6%	25.6%	31.1%	13.3%	100%
Australia	37.5%	30.6%	17.5%	8.8%	5.5%	100%
Brazil	19.5%	40.4%	20.7%	13.8%	5.6%	100%
Canada	33.7%	29.6%	18.0%	12.8%	5.9%	100%
Chile	39.6%	35.7%	15.5%	6.6%	2.5%	100%
Finland	32.7%	33.9%	18.7%	11.8%	2.9%	100%
Germany	41.5%	24.8%	16.7%	11.3%	5.7%	100%
Hong Kong-China	19.3%	35.9%	23.6%	13.8%	7.3%	100%
Iceland	38.1%	32.5%	16.6%	9.5%	3.3%	100%
Indonesia	11.7%	37.1%	27.0%	16.0%	8.1%	100%
Israel	34.4%	26.3%	16.5%	15.9%	6.9%	100%
Latvia	28.7%	26.7%	21.7%	16.3%	6.6%	100%
Liechtenstein	52.5%	24.8%	13.2%	7.1%	2.5%	100%
New Zealand	31.2%	33.0%	19.9%	10.3%	5.6%	100%
Peru	13.6%	41.2%	23.0%	16.8%	5.4%	100%
Poland	31.2%	30.4%	18.0%	13.0%	7.4%	100%
Portugal	35.5%	32.0%	19.2%	10.0%	3.4%	100%
Sweden	37.3%	34.0%	17.4%	8.2%	3.1%	100%
United Kingdom	41.2%	29.7%	15.6%	9.9%	3.6%	100%
United States	41.9%	29.3%	15.0%	8.8%	5.0%	100%

Teens in developing countries have lower reading scores than teens in developed countries. However, they seem to have more positive attitudes toward reading. Teenagers in developing countries spend more time in reading than teenagers in developed countries. Teens in developing countries are slightly more likely to be heavy readers and much less likely to say that they do not read for enjoyment.

Time spent reading does not seem to be related to reading ability. Students with above average reading scores were more likely to say they did not read for enjoyment than students with below average reading scores, and students with below average reading scores were more likely to report reading more than two hours per day than those with above average reading scores.

The PISA exam asked two questions that may indicate teens' use of reading as a social activity: whether students liked talking about books, and whether they exchanged books with friends. Students indicated their agreement with these statements using a four-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree."

Students in Indonesia, Albania, Peru, Hong Kong-China, and Brazil most enjoy talking about books with friends and family, while students in Liechtenstein, Germany, Iceland, and the United Kingdom least enjoy talking about books (see Table 4).

The same response is evident in looking at whether students enjoy exchanging books with friends.

Students in Albania, Indonesia, Peru, Hong Kong-China, and Portugal most enjoy exchanging books with friends, while students in Liechtenstein, Finland, Sweden, Iceland, and the United Kingdom least enjoyed exchanging books (see Table 5).

Student responses by country tend to display where test score differences are seen: countries whose scores have gone up, as shown in Table 1, are more likely to have students who enjoy talking about and exchanging books. Countries whose test scores have gone down are less likely to have students who enjoy talking about and exchanging books.

International library use

Some aspects of students' reading engagement may be suggested through their library use. PISA asked students about their library use frequency for various topics, including borrowing for pleasure and reading for fun (see Table 6). PISA used a five-point ordinal scale for frequency of use that ranged from "Never" to "Several times per week." Grouped medians are reported below, rather than means, due to the ordinal nature of the variable, with higher numbers signifying more library use.

Teens in Albania and Indonesia seem most likely to use the library for their entertainment, either by borrowing books for fun or by reading for fun. They were also the most likely to demonstrate intrinsic and extrinsic motivation through using the library to

Table 4. Student response to whether they enjoy talking about books with friends and family.

Country	Strongly disagree	Disagree	Agree	Strongly agree
Albania	7.2%	20.2%	56.5%	16.1%
Australia	27.3%	34.9%	30.2%	7.6%
Brazil	11.4%	34.9%	43.9%	9.7%
Canada	25.2%	31.7%	33.5%	9.6%
Chile	20.3%	31.7%	37.8%	10.2%
Finland	31.8%	34.8%	27.6%	5.9%
Germany	39.7%	28.5%	21.7%	10.1%
Hong Kong-China	5.3%	34.1%	51.3%	9.4%
Iceland	36.5%	30.6%	25.9%	7.0%
Indonesia	2.7%	23.4%	63.4%	10.5%
Israel	27.6%	31.2%	32.9%	8.3%
Latvia	18.4%	41.8%	34.0%	5.8%
Liechtenstein	50.2%	29.4%	15.3%	5.2%
New Zealand	21.0%	36.2%	35.1%	7.7%
Peru	9.2%	26.9%	49.8%	14.1%
Poland	26.2%	33.9%	25.8%	14.1%
Portugal	15.1%	36.1%	40.6%	8.2%
Sweden	33.0%	33.5%	27.3%	6.2%
United Kingdom	27.7%	38.9%	27.7%	5.6%
United States	24.3%	35.1%	32.8%	7.8%

Table 5. Student response to whether they enjoy exchanging books with friends.

Country	Strongly disagree	Disagree	Agree	Strongly agree
Albania	5.5%	10.1%	45.3%	39.1%
Australia	31.9%	36.8%	24.3%	7.0%
Brazil	16.1%	37.1%	33.3%	13.5%
Canada	28.4%	31.2%	28.6%	11.8%
Chile	29.4%	37.5%	24.7%	8.5%
Finland	37.9%	36.5%	21.1%	4.5%
Germany	45.0%	21.7%	18.9%	14.3%
Hong Kong-China	8.1%	36.6%	44.7%	10.7%
Iceland	39.2%	33.7%	20.8%	6.3%
Indonesia	2.7%	15.9%	64.0%	17.4%
Israel	29.0%	28.7%	29.7%	12.7%
Latvia	25.0%	40.6%	26.4%	7.9%
Liechtenstein	56.7%	20.9%	14.7%	7.7%
New Zealand	26.3%	35.3%	30.2%	8.2%
Peru	9.6%	27.8%	43.9%	18.7%
Poland	32.8%	29.5%	22.8%	14.9%
Portugal	16.9%	32.6%	38.1%	12.4%
Sweden	39.2%	35.0%	20.6%	5.2%
United Kingdom	34.6%	37.6%	21.6%	6.2%
United States	27.6%	38.0%	24.9%	9.6%

support their homework and to learn things. Teens were least likely to read for fun at the library in Iceland, Germany, and Liechtenstein.

International reading preferences

The PISA exam asked students how often they read various types of materials for pleasure (see Table 7). Across all countries surveyed, students read newspapers and magazines for pleasure most frequently, while they were unlikely to read nonfiction or comics for pleasure.

Fiction reading habits were most similar between students in developed and developing countries. For all other formats, students in developing countries were more eager consumers of reading material than developed countries. The case is particularly notable for comic books, where 41% of teens in developed countries said they never read them, while only 26% of teens in developing countries said they never read comic books.

Globally, newspapers are the format most frequently read by 15-year-olds, both in developed and developing countries. Magazines are most frequently read in Croatia, Hungary, Latvia Spain, Costa Rica, Mauritius, Tunisia, and Turkey. Comics are most frequently read in Italy, Japan, Slovenia, United Arab Emirates, Mexico, and Brazil. Since magazines, newspapers, and comic books all require less time to read than fiction or nonfiction books, these results are not surprising. They also indicate a potential role for librarians seeking to find materials that teenagers enjoy, and that may help them cultivate a reading habit.

Students responding to PISA also did quite a bit of online reading (see Table 8), though this was not included in the aggregate Enjoyment of Reading measure nor in the list of potential formats a student might read. Students in developed countries have more knowledge of and access to online reading opportunities. Among all students, though, there is a strong orientation toward using these technologies for communications rather than explicitly for information acquisition or study.

Discussion and conclusion

Testing students at the age of 15 is not testing one educational system, but rather, the collective educational systems they have experienced prior to the exam. Since reading patterns develop fairly early in a child's life, PISA could be considered to be a longitudinal study examining the effectiveness of primary school reading instruction that occurs five to ten years prior to the exam.

What is reading for?

PISA suggests that literacy has both individual and societal benefits. "The non-economic returns from

Table 6. Type of library use, frequency by grouped median.

Country	Borrow for pleasure	Borrow for work	Work on homework	Read magazines	Read for fun	Learn things	Use Internet
Albania	2.94	2.94	3.51	3.29	3.48	3.51	3.39
Australia	1.76	2.02	2.18	1.62	1.64	1.78	3.01
Brazil	2.13	2.89	3.05	2.45	2.58	2.56	2.78
Canada	1.80	1.94	2.07	1.54	1.65	1.72	2.34
Chile	1.48	2.17	2.31	1.72	1.56	1.83	2.51
Finland	1.92	1.75	1.40	1.60	1.55	1.70	1.73
Germany	1.44	1.39	1.37	1.32	1.40	1.50	1.45
Hong Kong-China	2.92	2.66	2.48	2.09	2.81	2.73	2.20
Iceland	1.66	1.80	1.29	1.36	1.28	1.31	1.27
Indonesia	3.09	3.84	4.21	3.56	3.76	3.60	1.97
Israel	1.70	1.95	1.90	1.51	1.62	1.61	1.79
Latvia	1.87	2.31	2.02	1.96	1.76	1.97	2.79
Liechtenstein	1.54	1.69	1.46	1.42	1.41	1.55	1.73
New Zealand	2.25	2.30	2.27	1.87	2.02	2.21	2.68
Peru	2.06	2.90	3.35	3.30	2.65	3.25	3.23
Poland	1.99	2.55	1.70	1.55	1.56	1.77	1.80
Portugal	1.64	2.01	2.37	1.95	1.68	2.14	2.88
Sweden	1.66	2.02	1.62	1.38	1.44	1.46	1.65
United Kingdom	1.48	1.60	1.72	1.45	1.42	1.55	1.95
United States	1.81	2.11	2.30	1.66	1.72	1.98	2.94

Table 7. PISA 2009 students' frequency of reading various formats in developed or developing countries.

Format		Never or almost never	A few times a year	About once a month	Several times a month	Several times a week
Fiction	Developed	22.1%	24.4%	20.4%	19%	14.1%
	Developing	14.1%	21.2%	20.7%	25%	18.9%
Comic books	Developed	41.1%	22.6%	14.1%	12.6%	9.6%
	Developing	26%	21.8%	17.6%	20%	14.7%
Magazines	Developed	8.6%	13.2%	20.7%	32.2%	25.4%
	Developing	9.3%	17.8%	19.7%	30%	23.1%
Nonfiction	Developed	33.7%	27.9%	19%	13.4%	5.9%
	Developing	27.3%	25.1%	20.5%	17.6%	9.5%
Newspapers	Developed	13.2%	11.6%	13.8%	23.9%	37.5%
	Developing	13.3%	12.0%	13.4%	23%	38.4%

Table 8. PISA 2009 students' frequency of selected online reading and literacy activities.

Format		Don't know what it is	Never or almost never	Several times a month	Several times a week	Several times a day	Total
Reading emails	Developed	1.9%	14.7%	20.1%	36.9%	26.4%	100%
	Developing	9.2%	28.7%	23.8%	23.3%	15.1%	100%
Chat online	Developed	1.8%	14.8%	9.9%	25.1%	48.4%	100%
	Developing	9.1%	26.1%	16.3%	22.0%	26.5%	100%
Reading news	Developed	2.5%	27.8%	22.8%	26.6%	20.3%	100%
	Developing	7.1%	38.8%	23.1%	23.7%	16.9%	100%
Group discussions	Developed	9.3%	53.8%	15.2%	11.9%	9.8%	100%
	Developing	11.7%	54.6%	14.7%	10.5%	8.3%	100%

literacy in the form of enhanced personal well-being and greater social cohesion are as important as the economic and labour-market returns'' (OECD, 2009: 21).

Reading has been a contested topic for some time. Lee (1969: 405) noted two different schools of thought on reading: the first being decoding and the other involving the interaction between the reader and the text. "Often, in the books children are assigned to read, there is no meaning beyond the most superficial recounting of events. So how can there be any significant interaction with the thoughts and feelings of the author?" Lee acknowledged that both mechanics and interest were essential and interdependent.

Many authors note the potential disconnect between students' reading interest and schools' required reading, and cite this as a factor that leads adolescents to develop a dislike for reading. "When these youth find the school's institutionalized practices of reading and writing irrelevant and at odds with their motivation to learn, they typically look for ways to avoid such practices" (Alvermann, 2001: 684). Teens often view reading as primarily an academic activity, with little utility in their daily lives (Pitcher et al., 2007). The texts that are privileged by teachers and schools may not be those that strike interest or inspiration in teens. Students who spent many outside-of-school hours reading non-book materials such as magazines, email, instant messages, or Internet articles still identified themselves as non-readers in Pitcher's study.

The experiences that students have with literacy in and out of school will help create their sense of reading self-efficacy. Students who believe they have control over their own learning and understanding of school work achieve more success in their academic work (Bandura et al., 1996). The more self-efficacy a student has, the more they will be engaged in learning. The more they learn, the more they achieve, which in turn leads to higher self-efficacy. By the same token, the more a student struggles with learning, the less they believe they can learn, which leads to disengagement, poor performance, and a sense of low self-efficacy.

What is the library for?

The library has different purposes for different audiences. Lewis (1998: 192) states that libraries' function had been "to make the artifacts that contain information . . . easily available to individuals in organizations and communities," and by providing that information, libraries "[enhance] the quality of life in communities." The IFLA/UNESCO School Library Guidelines (2002: 3) also support the library as an information provider, focusing on "information and ideas that are fundamental to functioning successfully in our increasingly information- and knowledge-based present day society."

As libraries and society change, Lewis (1998: 192) asks us to consider "the societal good provided by libraries . . . and how that good will be provided" in the future. Information provision remains a key and critical role for libraries, especially for a teenaged audience. However, that is not the only societal good provided by libraries to teenaged patrons. The IFLA/UNESCO Public Library Manifesto (1994) touches on some of the other roles that the library can play for teens, including "personal creative development; stimulating the imagination and creativity . . . ; promoting awareness of cultural heritage . . . ; fostering intercultural dialogue." Libraries provide more than just information to their teenaged patrons.

Psychologically and developmentally, the library is in an ideal place to create reading motivation, supplement schooling, and allow students to pursue individual interests and abilities. The same students who find little of interest in their coursework may find a topic that does interest them at the library. As they pursue that interest, they may find that they enjoy the process or the end results of learning on their own.

The library serves teenagers not just as an information repository but also a social space. Students use the library for a variety of reasons, including as a study space, a space for quiet thought and reflection, and a place to socialize with friends. The library aims to provide a space where everyone feels welcome, regardless of class or status. Carla Hayden (2003: 5), past president of the American Library Association, called libraries "a calming sanctuary in tumultuous times." The library gives teens a place to talk about what they are reading and how they are feeling about that reading.

How can libraries support reading motivation?

Teenagers in developing countries seem to be more eager to read than teenagers in developed countries, and teenagers with poorer reading skills are spending more time reading than teenagers with better reading skills. This might be because the strong readers spend less time struggling with reading. There are many reasons why teenagers would not be heavy readers. Their non-school time might be devoted to work or family care. They may be heavily involved in other academic and extra-curricular activities that limit their time for leisure reading.

Globally, most teenagers reported reading magazines and newspapers most often. This may be due to magazines' and newspapers' frequent publication schedule and relative ubiquity. Students might not see books or comic books quite as frequently. If magazines and newspapers are frequently read, librarians should make sure these formats are available for students in their libraries, and include these familiar sources in information literacy and creative writing projects. This also implies that fiction and nonfiction are not commonly used, and librarians may benefit from teaching students how and when to use nonfiction and recommending appealing fiction.

Comic books were also very popular with teenagers in countries other than the United States. Research supports the role of comic books in developing reading skills and vocabulary (Krashen, 2004). Librarians can encourage students to read by providing comics and encouraging students to build social interactions around those comics.

School librarians recognize the vital role of reading motivation in encouraging young people to improve their reading skills and by doing so, improve their reading performance as measured on tests such as PISA. Herdelin (2014) recommends such tools as literature circles implemented by the school library. She notes that library-led literature circles have some potential benefits that classroom-led literature circles may not have, including the ability to offer multiple formats of the same title, using e-books and e-readers that provide reading supports, selecting texts with broad student appeal, and encouraging students to interact with each other both in person and through electronic media. Getrost and Lanci (2014) discuss the effects of a library collection refreshment and book discussion clubs for their high school library. Constantino (2008) points out the increase in reading that comes with something as simple as refurbishing a library to include more, and more popular, literature. Warren-Gross (2009) described a plan of developing core reading collections for each classroom, an author visit, and intensive co-teaching. Findlay (2007) and her colleagues implemented a middle school Big Read program, tying books to activities, social events, role models, and peer interaction through blogging.

Reading is a foundational skill that supports other learning activities (Krashen, 2004). Increasing students' access to reading materials, allowing free choice of interesting topics to read about, and providing social support for reading are all roles that libraries can play. Looking at reading preferences and library use internationally permits a more comprehensive focus on similarities in students' reading and reading motivations across the globe, as well as identifying some differences that may be critical to providing the most appropriate and responsive services to young people.

Funding

Note

Some parts of this paper were presented at the 2014 IFLA Conference in Lyon, France.

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The case for international collaboration in academic library management, human resources and staff development

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Abstract
The internationalization of higher education and the continuing expansion of technology as a means for learning and sharing information have radically changed the way in which academic and research libraries offer services and perform outreach. New skills, retooling, re-visioning, and hiring for a rapidly changing environment are essential to maintaining a vibrant and responsive workforce. Library associations offer opportunities for training, sharing expertise, engaging in joint ventures and collaborating to innovate and remain relevant. While international collaborative efforts between library associations are becoming more frequent, these have largely focused on user services. An exploratory study of library associations globally was conducted to determine the level of past efforts and the desirability for greater international exchange between library associations in the areas of management, human resources and staff development. The results of this study indicate a strong desire for greater dialogue especially regarding staff development and library management.

Keywords
Global perspectives on libraries and information, academic libraries, administration and management, personnel, library associations

Introduction

Institutions of higher education worldwide are deliberately focusing on internationalization to meet the needs of an increasingly global environment, which now functions across both physical and virtual borders. According to the International Association of Universities (IAU):

> Irrespective of contextual differences within and between countries, nearly all higher education institutions worldwide are engaged in international activities and are seeking to expand them. Engaging with the world is now considered part of the very definition of quality in education and research. (IAU, 2012: 2)

The charge for internationalization has affected all aspects of the university mission and values. Developing and implementing strategies to address internationalization include expanding collaboration and research agendas, deepening international outreach, integrating new technologies, strengthening study abroad programs, broadening student and faculty recruitment practices, and creating strategic curricula for an increasingly diverse population.

Academic libraries are at the nexus of the university's internationalization due to their quintessential role of supporting the mission and vision of the university, including research excellence and student achievement. They have a rich history of engaging in international activities that span cultures, philosophies, ideologies, geopolitical lines and historical perspectives, including: support for international branch campuses, expansion of foreign language and special and area studies collections, nurturing international partnerships, supporting and engaging in research, and serving international students and study abroad

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programs. The 21st century ushered in a rapidly evolving environment with shifting user behaviors, expectations and needs of libraries. Dewey (2010: 4) summarizes the impact of this new environment where the library

> must, in a global way, create, collaborate and connect scholarship for and with users at a level never seen before to ensure lifelong learning and the ability to solve the world's continuing challenges inclusive of all cultures, time periods, and approaches.

The response to this sentiment is evidenced by the increasing number of shared national, regional and international academic library projects, services and programs as well as networks and joint ventures such as the Confederation of Open Access Repositories (COAR), development of the SHared Access Research Ecosystem (SHARE) in North America, the Southeast Asian Consortium for Access and Preservation (SEA-CAP), and the Matariki Network of Universities (MNU) Library Benchmarking Project. Open access, digitization, shared collections, shared storage, preservation, scholarly communication, cataloging and many other key services of the academic library are expanding their outreach beyond local and regional borders into international collaborative efforts.

The internationalization of higher education and the continuing expansion of technology as a means for learning and sharing information have radically changed the way in which academic libraries offer services and perform outreach. These realities suggest the need for new and vital competencies, reinvigorated visions, flexible management styles and creative recruitment strategies. Envisioning, learning, creating, and implementing systems, procedures and skills to respond to the rapidly changing academic environment are crucial for maintaining the integrity of the academic library. Library directors and human resources and organizational development professionals recognize the need to cultivate a new workforce through creative approaches to defining and organizing roles, hiring personnel and deploying and retraining existing staff who can conceive, build and implement changes to ensure the most effective engagement of the library in the academy. The challenges for human resources in recruiting and retaining qualified faculty and staff cannot be underestimated. Staff development is equally important to the profession. Best practices and environmental scans are effectively shared among regional and national libraries through longstanding consortia and association relationships such as the Association of European Research Libraries (LIBER) Working Group on Leadership and Workforce Development and the

Association of College and Research Libraries (ACRL) Personnel Administrators & Staff Development Discussion Group. A natural outcome of the growing number of international partnerships and projects within academic libraries is an increase in related research, publications, conference proceedings, and webinars. The subjects of international collaboration and sharing of best practices in the areas of academic library management, human resources and professional development, however, are less well represented in the literature and at conferences.

To create a better understanding of current and past international collaborative efforts, and to gauge interest in increased dialogue between library associations in the areas of management, human resources and professional development in the academic library, the researcher conducted an international exploratory study. Two methods of data collection were utilized: a survey and focus group to assess not only the level of engagement of library associations but also the perceived benefits and challenges in addressing the internationalizing of academic library management, human resources and staff development functions.

Literature review
Internationalization of higher education

According to the American Council on Education (ACE) Center for Internationalization and Global Engagement (CIGE) Report of the Blue Ribbon Panel on Global Engagement, 'In the 21st century, higher education is explicitly, and fundamentally, a global enterprise' (ACE-CIGE, 2011: 5). The focus on internationalization is due in part to the proliferation of global challenges, rapid advances in information and communications technologies, as well as an increasingly linked global economy. These realities require expertise beyond the traditional frameworks and boundaries within which we live and work, strong collaboration skills, language and cultural aptitudes, and robust leadership skills for students who will be entering the workforce. A full review of the literature pertaining to the internationalization of higher education globally is beyond the scope of this article. In order to understand the magnitude of the changes occurring it is, however, useful to note large-scale efforts to broaden the scope of higher education in educating for international citizenry.

In 2013 IAU conducted its 4th Global Survey. The *Internationalization of Higher Education: Growing Expectations, Fundamental Values Report* (Egron-Polak and Hudson, 2014), which draws on the results of this survey of more than 1300 higher education institutions in 131 countries, confirms that universities

worldwide are actively internationalizing their operations. The report considers the biggest risks and benefits of internationalization and highlights important considerations and best strategies. The ACE report on *Mapping Internationalization on US Campuses* (ACE, 2012) is the result of a survey of 3357 institutions. The report recognizes that educating for global citizenry requires a pervasive and comprehensive approach and for this reason the survey assesses many aspects of campus internationalization including: articulated institutional commitment; administrative structure and staffing; curriculum, co-curriculum and learning outcomes; faculty policies and practices; student mobility; collaboration and partnerships. The results of the survey indicate that internationalization has accelerated on campuses in recent years especially in the areas of internationalizing the curriculum, engaging in strategic partnerships with overseas institutions and expanding international student recruitment and staff (ACE, 2012: 6).

On 11 July 2013, the European Commission, the European Union's executive body, launched a new strategy for the internationalization of higher education (European Commission, 2013) in an effort to address the challenges of globalization through changes in higher education. Immediately preceding the announcement and in anticipation of this new strategy, the European University Association (EUA) conducted a membership survey dedicated to the issue of internationalization which 'demonstrated that 99% of institutions surveyed either have an internationalization strategy in place (56%), intend to develop one (13%), or have considered internationalization in other strategies (30%)' (EUA, 2013: 7). *Internationalization of Higher Education in East Asia: Trends of Student Mobility and Impact on Education Governance* (Mok and Yu, 2013) examines the strategies of seven countries and universities responding to globalization and the unique challenges of establishing education hubs and transnational collaboration in East Asia. In 2008 the African Network for Internationalization of Education (ANIE) was developed with the aim of 'enhancing the understanding and development of the international dimension of higher education in Africa by expanding both knowledge and building, strengthening and sustaining a cohort of competent professionals in this field' (ANIE, n.d.). The first Latin American and Caribbean Higher Education Conference (LACHEC) for the internationalization of higher education took place in 2009 in recognition that the process of internationalization is a key element to ensure quality of education. Equally important is the *European Association for International Education* (EAIE) *Barometer:*

Internationalisation in Europe study conducted in the spring of 2014. The study was conducted in recognition that 'internationalization of higher education has become increasingly complex and far reaching over the past years, challenging the skills and knowledge of all involved' (EAIE, 2015). Though the results are not yet available publicly it is noteworthy that one of the aims of the survey is to reveal trends and challenges of the internationalization of higher education in Europe in order to inform daily practice and direct the implementation of strategies and procedures.

This is only a sample of the many efforts being made to understand, collect and share information regarding the demand to educate global citizens who can navigate an increasingly complex and connected world.

Internationalization of academic libraries and the increase in international collaboration

The factors that are propelling the transformative and evolving internationalization of higher education are also at work in the academic library. The literature portrays a rich tapestry of themes related to internationalization, including deep organizational transformation and critical collaborative ventures. For the purposes of this study we consider 'internationalization' of the academic library broadly as referring to efforts within the field to respond to the demand for education, research and services that are increasingly global.

In 'Mapping academic library contributions to campus internationalization' (Witt et al., 2014), an article based on the results of a study of the contributions of academic libraries across the US to campus internationalization, the authors found that 'although internationalization activity has increased in responding libraries, explicit articulation of it in planning documents often has not occurred' (Witt et al., 2014: 21). The internationalization of the academic library is taking place largely through collaborative efforts undertaken to create 'an open symposium for facilitating exploration and exchange within an academic community, a meta-library ecosystem for powerful collaborative capacity, and a knowledge trust for providing enduring, barrier-free access for all research inquiry' (Neal, 2014a: 613–614). This effort has largely been a practical and entrepreneurial venture. We witness the creation of 'barrier-free access' and an 'open symposium' through the emergence of many large-scale collaborative efforts. This is exemplified by the global shift towards open access and the proliferation of institutional repositories with such collaborative efforts as Scholarly Publishing and Academic

Resources Coalition (SPARC), an international alliance of over 800 academic and research libraries from Australia, China, Europe, Japan and North America; the Confederation of Open Access Repositories (COAR) with institutions from 35 countries and four continents founded in 2009 'to facilitate the global repository community of practice and a world-wide virtual repository network' (COAR, 2012); and LAReferencia, a network of repositories including nearly 100 institutions from nine countries in Latin America.

The internationalization of academic libraries can also be seen in the acceleration of cooperative digitization projects such as the Digital Library of the Caribbean (dLOC). This cooperative provides users with access to Caribbean cultural, historical and research materials held in archives, libraries and private collections. Through dLOC 38 partners from 'educational, research, governmental and non-governmental institutions aligned for the purpose of facilitating efficient access to electronic collections about the Caribbean' (dLOC, n.d.). We also see growth in the number of national and international collaborative digital portal projects, which aim to provide seamless access to archival resources on a certain topic or concerning a certain region. In Europe, the establishment of the Archives Portal Europe (APEnet) network (2009–2012) in which 19 European national archives contributed was expanded and enhanced as the Archives Portal Europe network of excellence (APEx) in 2012. APEx is the single online access point to an ever-growing network of European archives with over 800 contributing institutions (APEnet, 2014).

We witness the drive to collaborate in meaningful ways to represent the global mandate in professional gatherings and partnerships such as the establishment of the International Association of Scientific and Technological University Libraries (IATUL) Library Twinning Initiative in 2011. The purpose of this initiative is to create 'urgently required synergies' by forming 'close and long term bonds of mutual cooperation and support, by joint ventures and by setting up an efficient communication infrastructure for the exchange of experience through electronic means and personal meetings' (IATUL, 2015). Another example of strategic international collaboration is the Benchmarking Project of the Matariki Network. This project is comprised of seven universities from seven countries working together to assess and compare library effectiveness. Amos and Hart (2013: 11) express the benefits of such collaborative efforts clearly by stating that:

> Collaborating at an international level offers this project the benefit of more scope to assess measures that could

perhaps be achieved at a local or regional level. It expands the potential to identify best practice and the range of what each partner could learn from one other.

James G. Neal addressed the topic of 'Radical Collaboration' in his Academic and Research Libraries Hot Topics presentation at the 2014 International Federation of Library Associations (IFLA) General Conference and Assembly (Neal, 2014b). As a follow-up to his presentation the IFLA Academic and Research Libraries Section Blog is asking for contributions from readers regarding 'big questions'. This virtual discussion in itself is an example of the growing emphasis and importance of a global academic library dialogue.

Internationalization in the areas of academic and research library management, human resources and staff development

The talent, expertise, dedication, vision, and innovation of academic library personnel have created this vibrant and flexible global culture through which we have evolved and continue to grow as part of the broader internationalization of the academy. As such, the continuing success and strength of the academic library are critically tied to key internal efforts to strengthen and enhance staff competencies and training programs, recruitment practices and strategic planning. These areas lie at the core of the academic library and encompass the areas of management, human resources and staff development. We see the importance of such topics reflected in library leadership training programs such as the 2012 ARL/ACRL Human Resources Symposium (ARL, 2012). Library leadership programs are abundant, local as well as large-scale such as the University of Hong Kong Libraries Leadership Institute, and the ACRL/Harvard Advanced Leadership Institute for Senior Academic Librarians. In response to the urgent need to evolve a new type of leadership for academic libraries, LIBER launched the International Leadership Development Programme in 2011. This two-year program is aimed at the next generation of senior leaders in European Research libraries and focuses on developing more internationally oriented directors (Roche, 2011).

While a substantive body of literature addresses large and small-scale global collaborative efforts in such areas as direct services, policy advocacy, resource sharing, licensing, and archiving, only a small proportion directly relates to management, human resources and staff development. This is surprising given 'that we have moved from an era of equilibrium to a new normal that is an era of constant

dis-equilibrium' (Brown, 2012) in which transformative change takes place routinely in academic libraries and the need for new skills and ways of working require greater and greater flexibility and innovation. A few notable international collaborative projects are worth mentioning however. The Joint Task Force on Librarians' Competencies in Support of E-Research and Scholarly Communication is a collaborative effort between the Association of Research Libraries (ARL), the Canadian Association of Research Libraries (CARL), COAR, and LIBER. The purpose is to create a toolkit:

> that will help to build capacity in libraries for supporting new roles in the area of scholarly communication and e-research. The toolkit will allow library managers to identify skill gaps in their institution, form the basis of job descriptions, enable professionals to carry out self-assessments, and act as a foundation for the development of training programs for librarians and library professionals. (LIBER, 2013)

Many other studies have been conducted on library competencies but seldom do they compare competencies across countries or outside traditional boundaries. An exception to this is a recent survey of reference service competencies with over 2400 respondents across 13 countries (Saunders et al., 2013). The results of this study highlight some important similarities and differences that 'could help reference librarians to manage and meet the expectations of their international patrons' (Saunders et al., 2013: 34). It also provides an opportunity for building a joint curriculum of reference competencies that span cultural boundaries.

There are many yet untapped opportunities for international collaboration and sharing of best practices in the areas of management, human resources and staff training. The ARL Position Description Bank (ARL PD Bank) launched in February 2013, is an example of a large collaborative project that could be expanded more globally as a shared resource. The ARL PD Bank is a collection of position descriptions (PDs) from major academic and research libraries in the US and Canada. The purpose of the ARL PD Bank, which currently includes nearly 1500 records and 108 registered institutions, is to foster the sharing of information through a browseable and searchable collection of PDs (ARL, n.d.). This type of project, if expanded internationally, would assist in tracking the evolution of positions in academic libraries, and create greater opportunities for dialogue among participating institutions informing them of recruitment and retention practices globally. In recent years there has been an increase in the number of scenario

projects championed by library associations such as the Society of College, National and University Libraries (SCONUL) Libraries of the Future project. SCONUL represents all university libraries in the UK and Ireland and the Libraries of the Future project was established to help those running academic libraries plan for the future by creating three scenarios that can be used to inform long-term strategic decisions. In June 2010, ACRL released *Futures Thinking for Academic Libraries: Higher Education in 2025* (ACRL, 2010) to prompt academic libraries to consider what might affect the future of higher education. Similarly IFLA's Trend Report, started in 2012, is designed to help identify high-level societal trends which will affect our future information environment (IFLA, 2013). These types of strategic planning and library management tools would benefit from a more connected international dialogue to expand the scope and create broader synergies.

Research design and methodology

The Academic Library Management, Human Resources, and Staff Development Study of International Collaboration was conducted as an exploratory study of library associations and their affiliates serving academic and research libraries worldwide. The research team consisted of one academic library human resources and staff development manager from the United States and one research assistant from Spain with experience in several European academic libraries. Two librarians, one from Canada and one from the West Indies, agreed to be part of the research team but were then unable to participate. The study focused specifically on committees, discussion groups, roundtables, sections, and other groups/units within library associations serving academic and research library management, human resources and professional development functions. The goal of this study was to explore three research areas: (1) past international collaborative initiatives; (2) the level of interest in increased collaboration and/or sharing of best practices internationally; and (3) perceived rewards and barriers to engaging internationally.

The research employed a mixed-method design in which both quantitative and qualitative approaches were used to collect data. An online survey, conducted in June 2014, targeting associations, sections, committees, roundtables, discussion groups, and other groups/units focused on academic library management, human resources and staff development within library associations was used as the primary research method. In addition, a focus group took place at the

IFLA General Conference and Assembly in Lyon, France in August 2014.

The survey questionnaire consisted of 20 items divided into the following categories: (1) Past Collaboration; (2) Desirability for Future Collaborative Efforts; and (3) General Information. The Qualtrics online survey software was used to create the survey, which included both closed and open-ended questions. Six questions addressed past collaborative efforts, their rewards and challenges. Ten questions focused on the desirability for future collaborative efforts, including one question on perceived disincentives to and one question on perceived rewards of international collaboration. General information on participant library association affiliation, contact information, and interest in participating in the focus group completed the survey. Prior to distribution, the questionnaire was reviewed by a number of colleagues and approved by the Internal Review Board (IRB) office of the author's institution.

Study population and response rate

Considerable effort was made to identify leaders of library associations and their interest groups (sections, committees, roundtables, discussion groups, and other groups/units) worldwide focused on academic and research library management, human resources and/or staff development. Representation was sought from all 10 IFLA Congress regions and international association groups. IFLA has identified five general regions (Africa, Asia and Oceania, Europe, Latin America and the Caribbean, and North America) which are further divided into10 sub-regions (Region 1: South, Central and East Africa; Region 2: North and West Africa; Region 3: West and Central Asia; Region 4: South and East Asia; Region 5: South East Asia and Oceania; Region 6: North and East Europe; Region 7: West, South Europe and Balkans; Region 8: Caribbean and Central America; Region 9: South America; and Region 10: North America) (IFLA, 2006).

Through online searches, and the use of Google Translate, a list of 84 target groups representing all 10 IFLA regions, illustrated in Figure 1, were sent a preliminary email to gauge interest in participating and identify the most appropriate person within the association. The email was sent in English and Spanish explaining that the survey itself would be in English only.

Of these 84 identified contacts 43 responded positively with a confirmed contact and were sent the survey link on 9 June 2014. Most contacts were the association group's key representative such as the
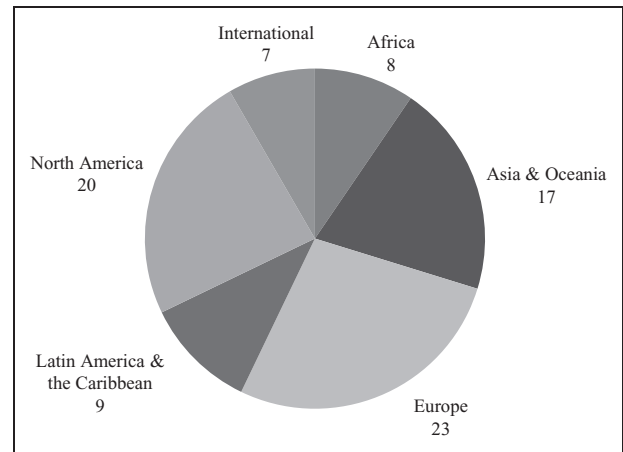
Figure 1. Number of invitations to complete survey by region.
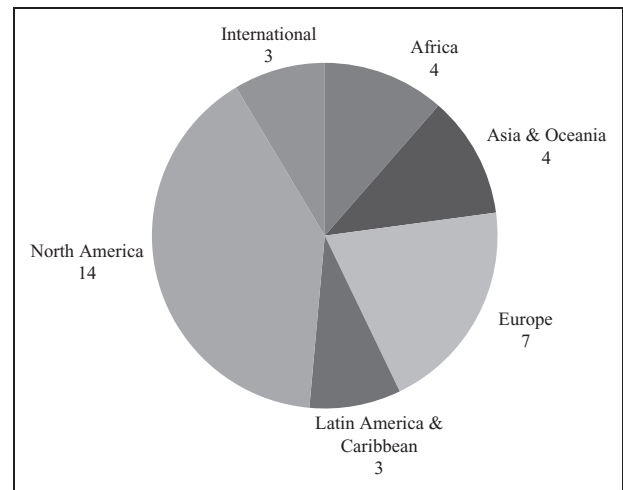
Figure 2. Number of survey respondents by region.

chair, co-chair, president, vice-president, convener, or co-convener. All 10 IFLA regions were represented in the 43 positive responses. The survey was open for three weeks and closed on 30 June 2014.

Responses to the survey were received from 36 leaders of library associations and their affiliated sub-groups. Of these one was eliminated as a duplicate entry. Overall, 35 entries were considered valid, equating to over 81% of the 43 confirmed contacts who were sent the survey link.

As Figure 2 demonstrates, all five large IFLA regions were represented by survey respondents. The only sub-region not represented was Region 9, South America.

Survey results

The heart of this exploratory study is to better understand the extent and nature of past efforts and the
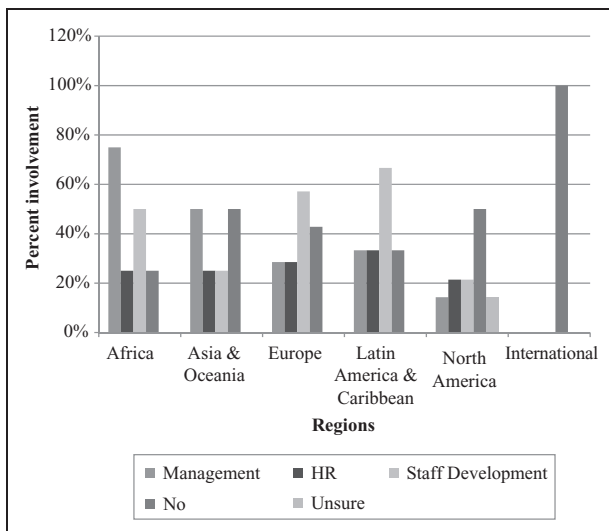
Figure 3. Percent involvement in past five years by region.

desirability for continued and future efforts that enable international sharing of best practices, discussion of policy frameworks and strategies, and collaboration in the areas of management, human resources and staff development within the academic library. Throughout the survey the word 'group' was used to reflect the respondent's specific association committee or other affiliated interest group. Respondents were asked to respond to questions based on their role as leader within their association rather than on behalf of their respective library or as a venue for their individual perceptions.

Category 1: Past collaboration

Category 1 includes six questions regarding collaborative efforts in the past five years including greatest rewards and challenges.

The first question asked: 'To your knowledge, in the past 5 years, has your group collaborated or shared best practices with library associations or affiliates serving academic libraries from other countries or regions, in any of the following areas? Library management; Human resources (HR); Staff development; Unsure; No.'

The aggregate results are as follows: Library management 29%; Human resources (HR) 23%; Staff development 34%; Unsure or No 55%.

When analyzing the data by region as demonstrated in Figure 3, we notice that human resources was among the least common except in North America where it ranked second along with staff development. We also notice that all three international organizations responded 'no' to this question indicating that there had been no collaborative efforts or sharing of best practices in the areas indicated in the past five years.

When asked what types of activities were involved, 81% of respondents selected conference/symposium and 56% selected speakers. Other options were consultation, presentation, project, publication, research, and library fellowships. All of these were selected between 31 and 38% of the time. Research was the least common response with 19%. The option to add other efforts included discussion group, webinars and staff attachment program. Of the 16 respondents who had indicated activities in these areas 79% agreed or strongly agreed that the goals of these joint activities were met.

The top three greatest rewards identified by respondents (Figure 4) were the exchange of practices (69%), sharing of expertise (69%), and developing an international network (50%). A close runner-up was discussions with 44%. The greatest challenges identified were the cost (50%), technology (25%), and socio-cultural challenges (25%).

Category 2: Desirability for future collaborative efforts

Category 2 includes 10 questions regarding interest in future collaboration and sharing of information with library managers, and human resources and staff development professionals from other countries or parts of the world including potential rewards and disincentives.

Of the survey participants 91% responded to the general question: 'Members of my group would be interested in learning of the work of academic library managers and/or human resources and staff development professionals from other countries or parts of the world.' Of these 75% either strongly agreed (41%) or agreed (34%) with this statement. Another 19% selected 'neither agree nor disagree' and 6% disagreed. No participants selected 'strongly disagree'. Comments to this question included:

> Formal and informal interaction with field experts and colleagues always remained helpful in learning and innovation.
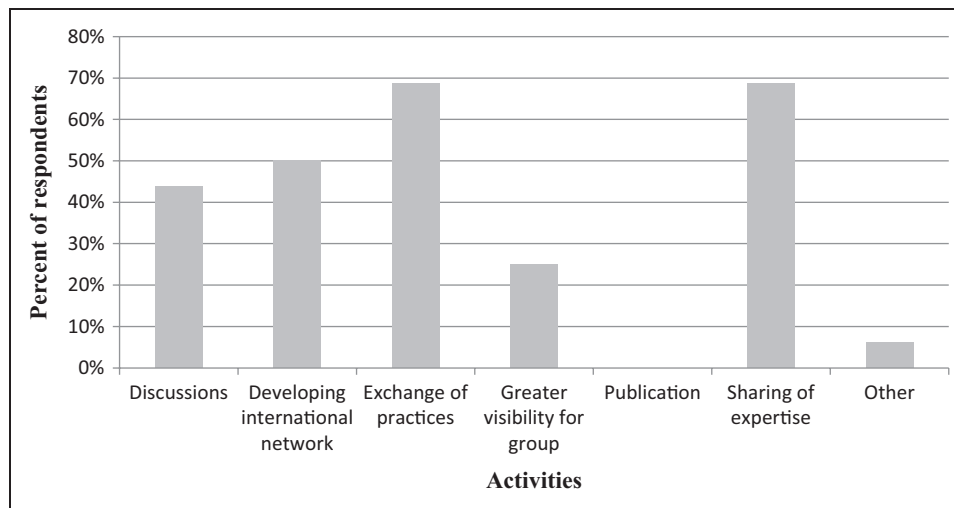
> It's always beneficial to learn about best practices from other countries. We seem to have similar problems.
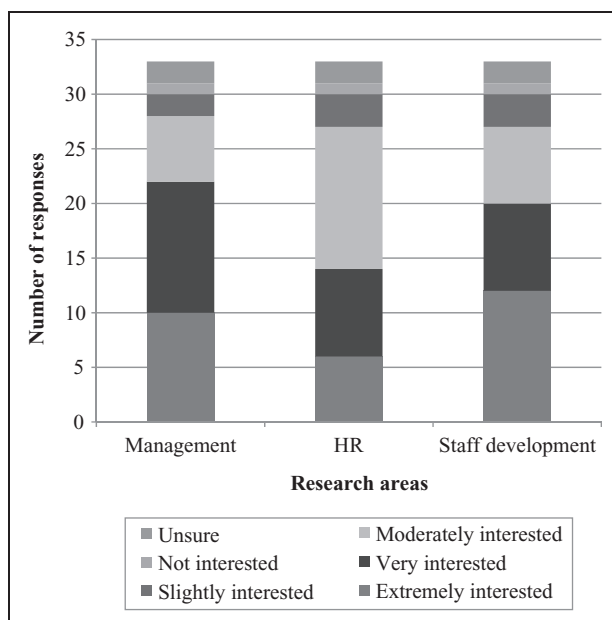
But also:

> We are … focused on more local issues.

And:

> The focus of our group is so US centered that we have not thought to further explore extra-national perspectives on our important questions. But it is probably something to consider.

Figure 4. Rewards of international activities by percent of responses.

Figure 5. Level of interest by research area.

The next four survey questions explore more deeply specific areas of interest. First a general question asks participants to select a level of interest for collaboration in the three foci of this study: (1) management; (2) human resources; and, (3) staff development.

The data demonstrates (Figure 5) that there is interest in connecting with colleagues internationally in all three areas but that the greatest interest ('extremely interested' and 'very interested') lies in collaborating on staff development and management.

Only one respondent indicated a lack of interest in all three areas.

Delving deeper into the content of each focus area, the survey asked participants to indicate specific topics of interest. It presented 12 topics: four in the area of

management (strategic planning, change management, organizational structure, succession planning); five in the area of human resources (competencies, compensation management, recruitment, employee relations, benefit package); and three in the training area (training practices, training resources, staff development). The topics selected by 20 respondents or more, were 'competencies', with 24 positive responses; 'training practices'; 'strategic planning'; 'training resources'; and 'staff development'. Topics selected by 10 respondents or fewer were 'employee relations'; 'compensation management'; and 'benefit package', with only five positive responses. The findings for these last three topics as the least popular were expected because these areas of human resources are governed by country, regional, area, and organizational specific rules and regulations and are consequently largely inflexible and though interesting, may have little practical application to other groups.

Additional topics of interest were 'leadership skills', 'marketing of library services', 'policy development', and 'project management'.

Overall the area of human resources was of least interest, except for the topic of competencies. One might argue that the topic of competencies is higher because it is so closely related to staff development, which is the area that held the most interest.

The numbers of positive responses to each topic were aggregated into their respective focus areas (management, human resources, staff development) and the percentage for each IFLA region calculated (Figure 6).

In this graph we notice that 'staff development' held the highest ranking in all five IFLA regions except for North America where management topics took the lead. In Europe 'management' and 'staff development' topics received equal standing. Also
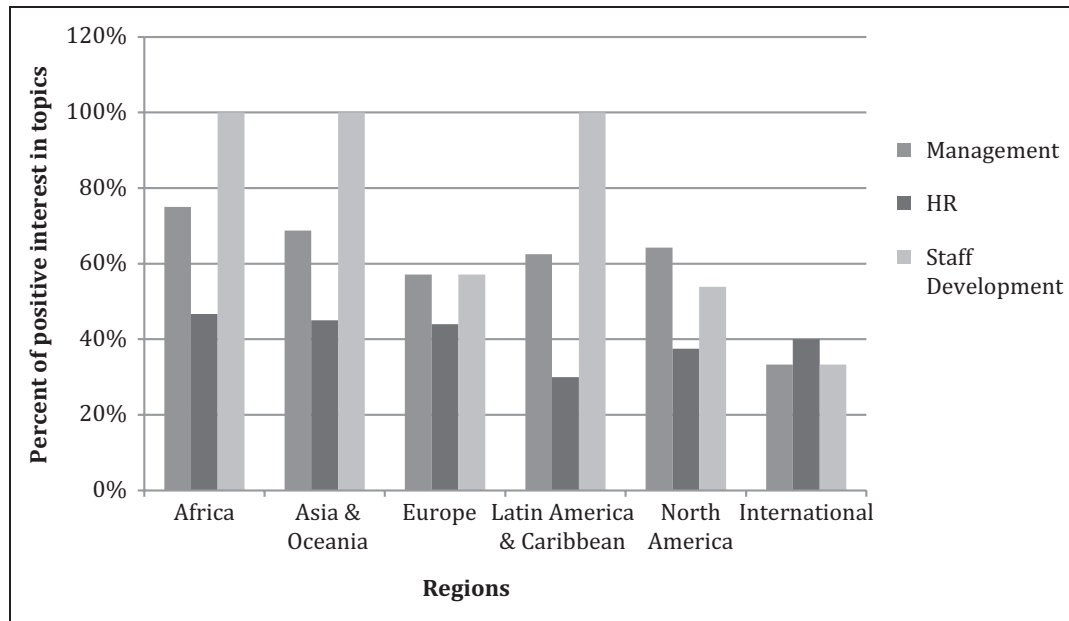
Figure 6. Percent of positive responses by focus area and region.

of interest is the fact that 'human resources' topics received the lowest percentage of positive interest in all five IFLA regions even with the high ratings of 'competencies' noted above. International groups reflect a different pattern, being the only group where 'human resources' topics received the highest number of positive responses.

When asked to share additional examples of collaborative efforts participants felt could be applied at an international level for library managers, and/or staff development and human resources professionals, five forms of hosting were mentioned: fellowship (three times), staff exchange (twice), visiting librarian (once), internship (once), and job attachment (once). Mentoring was mentioned twice. In addition various types of collaborative international training schemes were indicated: 'short and intensive courses'; 'collaborative workshops'; 'international courses and programmes'; 'doing webinars together'; 'online courses'; and 'accreditation of continuing professional development activities, perhaps leading to international qualifications'. These examples fall within the area of 'professional development'.

Two survey questions addressed the disincentives and rewards to international collaboration. The cost of international collaboration was indicated as a disincentive by over 76% of the 33 respondents to this question, with 'complicated logistics' and 'lack of transferability of practices' as the second most commonly selected disincentive with a 48% response rate for each. 'Time commitment' was fourth with 10 responses (30%), where 'socio-cultural differences',

'increase of complexity of project management', and 'lack of sufficient technology' were all under 20%. It is interesting to note that 'cost' was also selected as the greatest challenge for international collaborative projects that took place over the past five years, with 50% of respondents selecting this option.

Eight options were given to indicate what participants felt would be rewards to international collaboration and/or sharing of best practices for their group (Figure 7).

All of the provided choices were selected over 40% of the time indicating a strong emphasis on the benefits of working with academic libraries globally. Over 77% of respondents felt that by engaging with other associations and their affiliates internationally the most significant benefit would be greater innovation in the academic library. Respondents felt that by engaging more internationally, managers, and human resources and staff development professions would be better able to support the scholarly activities of the academic library, have greater insights into ways of improving internal processes, and strengthen their competence for providing responsive training opportunities.

Benchmarking was the only other reward noted by respondents.

Category 3: General information

This category included voluntary contact information and library association affiliation. Also included was an opportunity to explore the topic further by participating in a focus group at the IFLA General
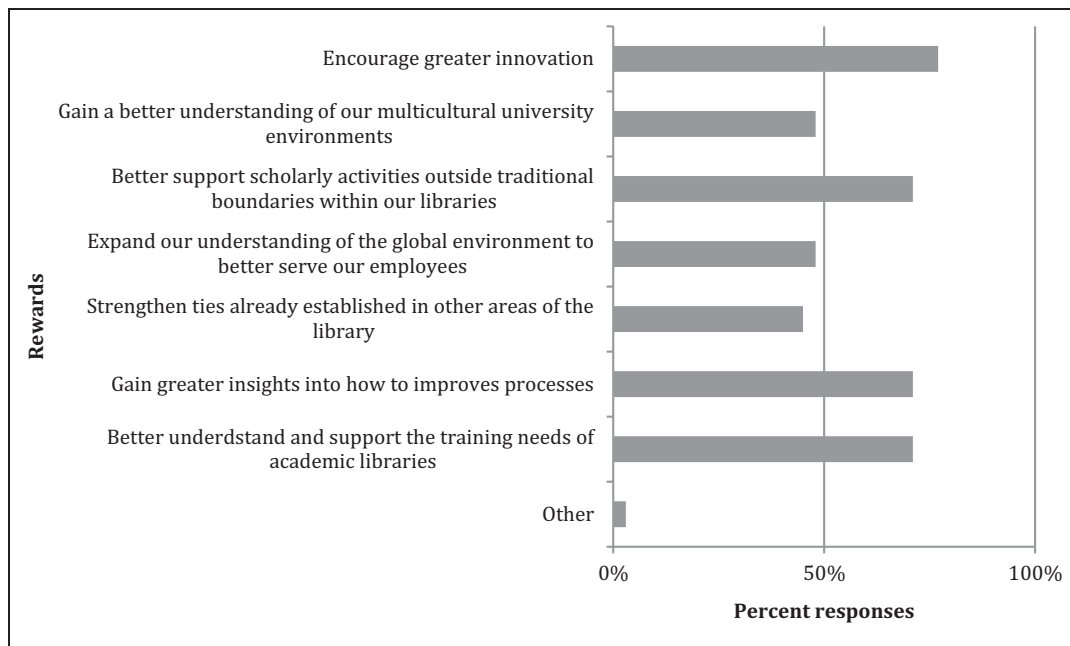
Figure 7. Rewards of international collaboration and/or sharing of best practices by percent of responses.

Conference and Assembly in Lyon, France in August 2014. Twelve respondents indicated interest in participating in the focus group.

Focus group results

On 18 August 2014, a focus group was held to present in person preliminary results of the survey and discuss further the desirability for greater engagement of library associations and their affiliates in international collaboration and sharing of library management, human resources and staff development practices. Seven people representing four library associations (ARL, the LIBER Leadership and Workforce Development Working Group, the Council on Library and Information Resources (CLIR), and the American Library Association (ALA) International Relations Roundtable) attended the session.

Participants acknowledged the need to internationalize the management structure of the academic library in order to remain current and vibrant in the pervading internationalization of the academic institutions served. The open discussion indicated a clear and strong desire to increase opportunities for dialogue by creating stronger links internationally, collaborating and learning from each other. Ideas included opening and encouraging applications from international participants to leadership training programs such as the LIBER Library Leadership Development Programme (LIBER), the ARL Leadership Fellows program (ARL), and the Leading Change Institute programs. Participants also felt there would be great benefits to sharing curriculum design

concepts. While this discussion included the areas of academic library management and staff development, human resource concepts such as compensation management, recruitment and benefits were conspicuously absent from the conversation.

When asked about the ways in which greater collaboration might be undertaken, participants opined that starting on a small scale outside of any specific library association structure would be most productive. They speculated that this looser structure would make for a more dynamic interchange, exploration and innovation while creating strong international partnerships. Participants felt that the annual IFLA Conference and General Assembly could provide an opportunity for meeting in person, discussing collaborative efforts and opening the opportunity to a greater number of library association leaders.

Findings and discussion

This exploratory study provides an empirical snapshot of the extent of past initiatives and desirability for greater international dialogue among library associations in the areas of management, human resources and staff development as they pertain to the academic library. The author considered the research successful from the perspective of establishing a baseline of information and foundation for context for generating further dialogue and exploring opportunities for collaboration and international engagement.

Findings related to past collaborative efforts revealed that 55% of respondents were unsure or not aware of any international collaborative efforts or

sharing of best practices by their group in the past five years. For the remaining 15 respondents, staff development (34%) and library management (29%) projects were more common than efforts related to human resources topics (23%). Although 55% indicated that they were unsure or not aware of international efforts in the past five years, 75% indicated that members of their group would be interested in networking with professionals from other countries or parts of the world. This signals a strong disposition for increasing international dialogue. The areas of greatest interest were 'staff development' with 36% extremely interested, and 'library management' with 30% extremely interested where 'human resources' was only selected 18% of the time at the extremely interested level. This correlates with past efforts in favoring staff development and management over human resources operations.

Twelve collaboration topic choices were provided to participants within the three study areas. The highest level of interest was in 'competencies', 'training practices', 'strategic planning', 'training resources', and 'staff development'. This again affirms the strong interest in topics that pertain to retooling, rethinking and cultivating a workforce that is agile and responsive to rapidly changing priorities. When the 12 topic choices were aggregated into the three study areas (management, human resources, staff development), 100% of respondents from Africa, Asia and Oceania, and Latin America and the Caribbean rated staff development as the highest priority for international collaboration. The topics with the least interest were 'employee relations', 'compensation management', and 'benefit package', all within the area of human resources.

The focus group also affirmed a fundamental desire and need to share curricular agendas and programs and begin collaborating on developing leaders and staff with a vision for reshaping the role of the library in the academy and the way it offers services. During the focus group discussions the areas of interest for international collaboration all applied to leadership development, training and curricular design.

Questions regarding the rewards and challenges of international collaboration and dialogue were included in both sections of the survey, past collaboration and desirability of future collaborative efforts. 'Exchange of practices' and 'sharing of expertise' were rated the highest rewards for past activities. Participants felt that by working together, sharing expertise, and building partnerships and alliances their members would gain insights to improve processes and be better equipped to support the training needs and scholarly activities of academic libraries.

It was 'fostering greater innovation' that was selected the most often as an outcome of working together internationally. This indicates the recognition among library association leaders, that innovation is indeed needed as the academic library continues to undergo radical transformative change and becomes increasingly global and cross-disciplinary.

Library associations recognize the challenges of creating and nurturing an international dialogue regarding key support functions to the academic library: management, human resources and training. Barriers to international collaboration cannot be minimized. Learning, working and collaborating across cultures require additional resources, time commitment, cross cultural skills, and creative use of technology. According to survey respondents, 'cost' was the greatest challenge for past activities (50% of respondents) and is anticipated to continue to be a challenge (76% of participants). 'Complicated logistics' and 'lack of transferability of practices' were selected by nearly 50% of participants. While 'technology' was selected as a challenge by 25% of participants who had collaborated internationally in the past, only 18% thought a lack of sufficient technology would be a disincentive in future efforts.

In summary, participants in both the survey and focus group expressed an overwhelming interest in establishing greater synergy between library associations globally in the areas of staff development and management applications.

Conclusion

Overall, the author found that library associations and interest groups addressing academic library staff development, human resources and training realize the importance of building partnerships internationally to more effectively inform practices and meet new challenges. It is evident from the literature and the deep discussions taking place in academic libraries regarding radical change and shifting roles that retooling and developing new competencies are essential. Innovation is required and innovation is spurred by investigating, discovering, learning and thinking in different ways, expanding perspectives, and experimenting with models and ideas outside traditional boundaries. Participants in this study realize that sharing knowledge and experience, cooperating on complex projects cross-culturally, and engaging with professionals who have looked at the same issues and come up with different answers, could inform and add value to the development of responsive training and management solutions. It is much less evident whether traditional human resources questions would

benefit from such exchange given the lack of transferability of many practices.

This exploratory study offers a baseline of information regarding the desire for greater international collaboration between library associations and interest groups serving academic library management, human resources and staff development professionals. It presents opportunities for further research and creative dialogue regarding appropriate venues for increasing collaboration internationally.

Funding

Acknowledgment

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Author biography

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Mobile information-seeking behavior: A comparative study

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Abstract

The rapid growth of mobile device ownership among college students has greatly challenged academic libraries to reconsider their service profiles. In a recent research project conducted at the University of Illinois, mobile device ownership among college students was surprisingly high. While such a rapid adoption of mobile devices is a worldwide phenomenon, the authors sought to investigate similarities and differences of mobile information-seeking behavior of college students in diverse regions. The authors conducted a series of surveys at the University of Illinois in the United States and Kyungsung University in South Korea. Understanding mobile information-seeking behavior of college students at different locations will offer valuable insights as many academic libraries are creating new initiatives and service profiles for mobile library users.

Introduction

The rapid growth of mobile device ownership among college students has greatly challenged academic libraries to reconsider their service profiles. In a recent research project conducted at the University of Illinois, mobile device ownership among international students was surprisingly higher than that among domestic students (Song and Lee, 2012). The result suggests that perhaps the digital divide between international and domestic students on US university campuses may no longer exist, as mobile devices are being widely adopted around the world. Furthermore, an increasing number of students use their smartphones as their primary tool to access information in addition to making voice calls. This trend is paving a way to the development of the truly ubiquitous library. While such a rapid adoption of mobile devices is a worldwide phenomenon, the authors sought to investigate similarities and differences of mobile information-seeking behavior of college students in diverse regions. As Huwe (2013) strongly asserted in his article, understanding new information-seeking

behavior with mobile devices is critically essential for academic libraries to stay relevant to their users.

In this article, the authors conducted a series of surveys at the University of Illinois at Urbana-Champaign (UIUC) in the United States and Kyungsung University (KU) in South Korea. Understanding mobile information-seeking behavior of college students at two different locations will offer valuable insights as many academic libraries are creating new initiatives and service profiles for mobile library users.

Students are still restricted by location and Internet access methods when using desktops and laptops to search and retrieve information; however, mobile devices remove such barriers as they are easy to carry and also access both Wi-Fi and telecommunications service providers' wireless networks. At the same time, mobile devices also have some limitations in

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their use as information-searching tools. Most notably, their small screen sizes and compatibility issues in using different software packages have often been identified as major weaknesses of mobile devices.

The goal of this article is to explore both similar and different mobile information-seeking patterns of college students in two countries. It must be clearly noted to the reader, however, that this article is not intended to provide any country-level generalization of mobile information-seeking behaviors in the United States and Korea. This comparative study is designed to capture a snapshot of mobile information-seeking behaviors in different environments. The purpose of this study is to provide insights and ideas for developing further research agendas and actual service profiles.

Literature review

A growing number of articles in the literature have recently examined college students' adoption of smartphones and its implications for academic libraries. In a recent study (Kim et al., 2014), college students are found to be greatly impacted by social influence and value perceptions when making purchasing decisions. In other words, smartphone ownership strengthens their social ties with the larger student population on campus and also helps them appear to be technology-savvy and stay current with the latest technological developments. This study also confirms the findings of a case study which reported surprisingly high mobile device ownership among students at UIUC (Song and Lee, 2012).

In order for librarians to meet the challenges and opportunities brought by the rapid adoption of mobile technology, Murphy (2010) at Yale University strongly advocated mobile literacy. Mobile literacy would help librarians to stay current with the latest mobile technology advancement and to create appropriate services profiles using mobile devices and technologies. Walsh (2012) carefully elaborated mobile literacy further in his article. He compared mobile literacy with traditional information literacy, and he especially emphasized the ubiquity of mobile devices, which would greatly influence mobile information-seeking behavior. He correctly argued that traditional information-searching methods by students were no longer applicable to mobile information-seeking behavior. According to his assessment, mobile information searching would demand quick information with a relatively short time spent on searching.

The literature review also reveals that a rapidly growing number of library practitioners are reporting on their initiatives on creating mobile applications, commonly referred to as ''apps,'' for their libraries.

Especially active is the healthcare community, and there are excellent case studies where mobile apps offer quick health and drug information to users (Ardito, 2011; Chiarella, 2013; Hasman, 2011). The healthcare community has introduced mobile apps to provide information on specific diseases, drugs, and locations of physicians. The contents that are offered by those mobile apps are targeted at those who do not wish to be engaged in lengthy research but demand quick reference information.

In addition, librarians are now evaluating and recommending a variety of mobile apps that help practitioners as well as users in specific disciplines. Ryan (2011) carefully illustrated the steps for developing library sites optimized for mobile devices and asserted that mobile technology would enable libraries to assist users where and when they needed information, which is the underlying theme of the ubiquitous library. Power (2013) suggested several mobile apps that would help librarians in managing their everyday tasks, including cloud storage, online bibliography management, and multimedia file management. Besara (2012) recommended mobile apps especially useful for library assessment, and she discussed various mobile apps that could help conduct both qualitative and quantitative research. It is amazing to learn how specific and also diverse mobile apps have become in such a short time, and, as Huwe (2013) wrote, libraries can certainly establish themselves as trusted collaborators for researchers by helping them manage the overload of mobile apps with relevant and timely updates of those appropriate for researchers in specific fields.

Hahn (2011) reported an interesting case study where mobile devices were used as navigation tools to locate materials in the library book stacks. He discussed how location-based services could be used at libraries especially with a large book collection, and he successfully incorporated a ubiquity feature of mobile devices into a particular library service. Specifically, the ubiquitous nature of smartphones enables users to carry their devices easily, and smartphones can function as a positioning system tool to locate desired materials, which often present challenges to users especially at libraries with complex floor plans and building layouts. Once students find call numbers, then they can use smartphones to locate the materials for which they are searching. Students can follow the navigation to the correct location of the materials that they wish to retrieve, which is very similar to how a global positioning system (GPS) in automobiles works. At Nanyang Polytechnic Library in Singapore, a 3D interactive map was recently introduced as a way-finding tool (Chia, 2014). This

innovative tool is an advance on the traditional picture-based location service app. Users can easily find not only library books but also study spaces, librarian offices, and other facilities in the library building.

The growing body of the literature on mobile technology and its implications for libraries demonstrate the critical needs for library administrators and practitioners to understand the information-seeking behavior and needs of mobile users. This comparative study will contribute to the academic library community's efforts to identify the needs and expectations of students who are increasingly using their mobile devices as research tools.

Methodology

The authors designed a survey questionnaire to compare mobile information-seeking behavior of students at two universities: the University of Illinois at Urbana-Champaign (UIUC) in the United States and Kyungsung University (KU) in Korea. This study focused on undergraduate students with business as their major field of study. Only the responses from those who identified themselves as undergraduate students enrolled in business programs were counted as valid. In previous research (Song and Lee, 2012), business students showed a high rate of smartphone ownership, which exceeded 90%, and the authors sought to compare business students in two different countries in their information-seeking behavior using smartphones.

Survey design

The survey consisted of three parts: mobile device ownership, activities using mobile devices, and library mobile services. The questions in the first part asked the types and models of mobile devices owned by the respondents. In the second part, the respondents were asked what types of information they would typically search for using their mobile devices. The purpose of this section was to learn if the respondents at UIUC and KU would show similar or different information-seeking patterns in terms of categories of information. The respondents were then asked to answer questions that would describe their experiences and perceptions of library services using mobile devices.

Data collection and analysis

At UIUC, an email was sent out to invite undergraduate business students to participate in the online survey, followed by two additional email invitations. A total of 115 valid responses were collected. At KU, the same method was used, and a total of 125 valid responses were collected.

The authors determined that descriptive statistics would be appropriate to compare the results of this study. The purpose of the study was not to discover any cause-and-effect issues in mobile information-seeking behavior, and such inferential statistical analysis tools as t-tests and regression were not necessary or applicable. Descriptive statistical analysis helps the reader compare the responses from the two universities to the same questions, and the results are presented in percentages and actual numbers as shown in the next section.

Results

All of the respondents at both UIUC and KU were enrolled at one of the undergraduate business programs at the time of the survey. The respondents from UIUC identified themselves as business majors in one of the following: accounting, finance, management information systems, marketing, operations research, organizational behavior, and technology management. At KU, all respondents were enrolled at the School of Business Administration and International Commerce.

Demographics

Table 1 shows the summary of the respondents' demographic information. The respondents at both UIUC and KU were fairly distributed in gender, and those that were not enrolled as full-time students at business programs were not included.

Mobile device ownership

The respondents on both campuses showed a very high rate of smartphone ownership (Table 2). This is not too surprising, as South Korea has reportedly been one of the leading countries in terms of mobile device ownership. A previous research study (Song and Lee, 2012) had already discovered rapidly increasing mobile device ownership among business students at UIUC as well. All respondents at KU reported that they owned smartphones, and over 90% of UIUC students owned smartphones at the time of this survey. In terms of tablet PC ownership, however, a sharp difference emerged. Of the respondents at UIUC 69% owned tablet PCs, compared to only 12% at KU. The percentage of students who owned both smartphones and tablet PCs was 66% at UIUC and 12% at KU.

Table 1. What is your gender and field of study?

	UIUC		KU	
	Number	Percentage	Number	Percentage
Male	45	39.1	45	36.0
Female	70	60.9	80	64.0
Total	115	100.0	125	100.0

Table 2. What mobile devices do you currently own? Check all that apply.

	UIUC		KU	
	Number	Percentage	Number	Percentage
Smartphone	108	93.9	125	100.0
Tablet PC	69	60.0	15	12.0

Table 3. What type of smartphone do you currently own?

	UIUC		KU	
	Number	Percentage	Number	Percentage
iPhone	61	56.5	11	8.8
Android	42	38.9	114	91.2
Other	5	4.6	0	0.0
Total	108	100.0	125	100.0

Smartphone types

As Table 3 shows, UIUC and KU students showed some significant differences in the type of smartphones that they owned. Almost 90% of KU students owned Android-based smartphones, while the majority of UIUC students had iPhones from Apple. It is understandable since Samsung, the leading manufacturer of Android-based smartphones worldwide, is based in South Korea and offers a variety of models that work well with local mobile service providers. Interestingly, UIUC students' ownership is no longer dominated by iPhones, contrary to the result of a previous research conducted two years ago (Song and Lee, 2012).

Favorite activities

Table 4 illustrates favorite activities using smartphones. The respondents were asked to state favorite activities using their smartphones, and making voice calls was not counted. The respondents were allowed to select multiple items, as smartphone devices offered a variety of features to the users. The authors were primarily interested in understanding similarities and differences in the use of mobile apps.

The most striking difference between UIUC and KU students was the use of email and messaging services using their smartphones. Almost all UIUC students responded that email was the most frequently used mobile app, compared to only 37% of KU students. In contrast, online messaging was selected by all KU students as the favorite mobile activity, while a high number of UIUC students also used online messaging frequently. Online messaging clearly seemed to be the preferred method of communication for KU students, and this would have significant implications for libraries seeking to support research needs of these students. For instance, developing reference services via online messaging might be considered as a new service offering, which students with smartphones would find convenient and effective. Online messaging makes real-time interactive communications possible between students and reference librarians. When used with real-time video, innovative reference services may be created.

Social networking sites (SNS) also seemed to be heavily used by both UIUC and KU students. A higher number of KU students than UIUC students indicated that using SNS was one of their favorite activities with smartphones. About half of UIUC and KU students indicated that the favorite information they sought via their smartphones was weather and current news. The percentage of students who read e-books or other digital contents using smartphones was similarly low at both campuses – 29% at UIUC and 25% at KU.

Smartphones were being used for other purposes as well. The results of this survey showed that there were interesting differences in the use of smartphones as devices for various activities. Smartphones were widely used as digital cameras by KU students, although the percentage of UIUC students using smartphones in this way was relatively low. On the other hand, more UIUC students used smartphones as their digital schedule organizers than did KU students. Using smartphones as navigation systems was also more popular among UIUC students than among KU students. Online shopping using smartphones was more popular among KU students than among UIUC students; in addition, a considerably higher percentage of KU students enjoyed online gaming with their smartphones than did UIUC students.

Smartphones and library services

The last part of the survey was designed to discover the respondents' experiences of using library services with their smartphones. The authors were especially interested in finding out limitations of

Table 4. What is your favorite activity using smartphones? Check all that apply.

	UIUC			KU		
	Number	Percentage of responses	Percentage of cases	Number	Percentage of responses	Percentage of cases
Camera	38	5.4	35.2	70	9.2	56.0
Email	107	15.1	99.1	46	6.1	36.8
Games	8	1.1	7.4	46	6.1	36.8
Messaging	91	12.9	84.3	125	16.5	100.0
Music	53	7.5	49.1	50	6.6	40.0
Navigation	61	8.6	56.5	23	3.0	18.4
News	50	7.1	46.3	64	8.4	51.2
Reading*	31	4.4	28.7	34	4.5	27.2
Scheduling/Calendaring	47	6.6	43.5	35	4.6	28.0
Shopping	24	3.4	22.2	54	7.1	43.2
SNS**	69	9.8	63.9	98	12.9	78.4
Videos	28	4.0	25.9	63	8.3	50.4
Weather	57	8.1	52.8	61	8.0	48.8
Other***	11	1.6	10.2	28	3.7	22.4
	675	95.5	587.0	797	105.1	606.4

*Includes: e-books, magazines, journals, and other digital publications.
**SNS: social networking sites.
***Includes: online banking, sports updates, traffic updates, calculator.

Table 5. What is your experience with your library services using a smartphone?

1. Have you used library services using your smartphone in the last 12 months?

	UIUC		KU	
	Count	Percentage	Count	Percentage
Yes	31	27.0	76	60.8
No	82	71.3	49	39.2
Didn't answer	2	1.7	0	0.0
Total	115	100.0	125	100.0

2. What was your primary reason for accessing library services with your smartphone?

	UIUC		KU	
	Count	Percentage	Count	Percentage
To browse library collection	9	29.0	26	42.6
To check my library account	17	54.8	24	39.3
Other*	5	16.1	11	18.0
Total	31	100.0	61	100.0

*Includes: checking library hours, librarian contact information, and library location.

smartphones for using library services. As Table 5 shows, the number of UIUC and KU students who had used online library services with their smartphones differed greatly. A surprisingly high number of UIUC students had never accessed library services in this way, whereas the majority of KU students had used library services via their smartphones in the last 12 months.

Primary reasons for accessing online library services at both UIUC and KU were similar – to browse library collections and to check individual library accounts. Smartphones did not seem to be actively used yet as a means of communicating with librarians for reference services. If online messaging were the dominant use of smartphones for Korean students, then the option of offering reference services

Table 6. What do you think is the main limitation of smartphones as information-searching tools? Check all that apply.

	UIUC			KU		
	Number	Percentage of responses	Percentage of cases	Number	Percentage of responses	Percentage of cases
Screen size	84	27.4	73.0	70	40.7	56.0
Speed	58	18.9	50.4	5	2.9	4.0
Wireless access	57	18.6	49.6	20	11.6	16.0
Compatibility with other software	43	14.0	37.4	63	36.6	50.4
Keyboarding	36	11.7	31.3	10	5.8	8.0
Compatibility with other computer devices	29	9.4	25.2	4	2.3	3.2
Total	307	100.0	267.0	172	100.0	137.6

Table 7. What is your primary device when conducting research?

	UIUC		KU	
	Number	Percentage	Number	Percentage
Desktop	37	32.2	71	56.8
Laptop	58	50.4	45	36.0
Smartphones	0	0.0	5	4.0
Tablet PCs	17	14.8	0	0.0
Didn't answer	3	2.6	4	3.2
Total	115	100.0	125	100.0

via online messaging would need to be seriously explored.

The respondents provided interesting responses for what they perceived as limitations of smartphones as their information-searching devices (Table 6). For both UIUC and KU students, the screen size was the most prominent factor that limited their use of smartphones in this way. In addition, the compatibility issues with other productivity software programs (such as word processing, spreadsheets, and presentations) were considered to be another significant factor that would limit the use of smartphones as their information-searching tools, especially for KU students. On the other hand, accessibility issues (Internet speed and Wi-Fi availability) did not seem to be a significant problem for KU students, while the majority of UIUC students found network accessibility to be an obstacle.

Smartphones and research

Both UIUC and KU students indicated that desktop and laptop computers were still their primary tools for their research activities (Table 7). An interesting difference emerged in the use of tablet PCs between UIUC and KU students. No KU respondent indicated that they considered tablet PCs as their primary

device for research, but 15% of UIUC students selected them as their primary research equipment. Although mobile device ownership among college students has dramatically increased in only a very short time, the result suggests that college students at both UIUC and KU still do not consider smartphones as their primary device when conducting research.

Discussion

As noted earlier, the purpose of this study was to explore and compare mobile information-seeking behavior of college students in the United States and South Korea. In so doing, the authors sought to provide researchers with insightful suggestions for further research, while library practitioners could gain some understanding of how current college students were using their smartphones as information-searching devices. The United States has consistently attracted a large number of international students over the past few decades; therefore, comparing the behavior of US students with students in foreign countries would help create new service models for libraries serving large international student populations as well.

The respondents at UIUC and KU revealed some profound differences in their use of smartphones. Such differences may be attributed to multiple factors, including culture, language, and economy. Also, the mobile telecommunications infrastructure differs widely between the two countries, which undoubtedly has great influence in mobile device users' information-seeking patterns. For example, KU students did not find the speed and accessibility of Wi-Fi as a hindrance to using smartphones, whereas half of the UIUC students found the network to be a major issue. South Korea is one of the leading countries in terms of national mobile infrastructure, which makes it relatively easy for Korean mobile users to connect to either the mobile network of

telecommunications service providers or Wi-Fi access points, regardless of their current locations.

In addition, the results of the survey clearly show that Korean students strongly prefer using online messaging to email with their smartphones. There are currently many mobile apps available for online messaging, and those messaging services can become valuable channels for libraries to communicate with students. Online messaging services are different from traditional texting services offered by telecommunications service providers. Online messaging services help users create individual or group chat sessions, organize user profiles, and communicate with multimedia content. At UIUC, virtual reference service via the library's home page is rapidly gaining popularity among students and faculty, and making this service available via mobile devices will greatly strengthen its library services, especially since UIUC has a large number of Asian students enrolled. As mobile device ownership is reaching close to the entire student population, the ubiquity of library services must be central to any library's service profile.

The results of this study also show that students still heavily rely on their desktop and laptop computers for their research. Due to some obvious limitations such as screen size and software compatibility issues, students at both UIUC and KU prefer desktop and laptop computers to smartphones when conducting research for their course assignments and projects. Reading journal articles and e-books with smartphones is challenging due to screen size; moreover, many library databases are not available in mobile-friendly formats. Unless database interfaces are re-directed to mobile-friendly formats, students will find it very difficult to navigate those databases based on web interfaces. Also, smartphones are not optimal devices for multi-tasking. Students are typically engaged in multiple activities when conducting research, such as browsing online resources, reading, and writing. Desktop and laptop computers provide adequate computing power and screen size to help students engage in multi-tasking activities.

Smartphones have some clear advantages over the other computer types, including portability, convenience, and Internet accessibility (i.e. ability to access the Web via both telecommunication services and Wi-Fi networks). Smartphones can be effective tools when students need immediate and fast assistance for their research; for example, library practitioners have already begun offering location-based services to help students find books in stacks with complex floor plans and layouts (Hahn, 2011). Also, smartphones enable students to access their favorite social networking sites more frequently than desktops or laptops. Libraries will need to consider increasing their services via social networking sites, as they are essential marketing and outreach tools to update students on the latest developments and news on libraries.

Library instruction is likely to be another important area that can take advantage of high mobile device ownership. In anticipation of a rapid increase in mobile device ownership among college students, Murphy (2010) emphasized the need for librarians to incorporate their expertise into mobile learning. The availability of electronic resources has greatly changed the landscape of library instruction, and now, the amazingly fast advancement of mobile technology is presenting both challenges and opportunities to library instruction. Creating mobile apps which are specific to courses and topics will greatly enhance library instruction, as mobile users typically look for quick and specific information.

Library practitioners around the world have been reporting best practices for libraries using mobile devices. For example, Walsh (2010) experimented incorporating the Quick Response (QR) code functionality into library instruction at the University of Huddersfield. He reported that it was too early to make meaningful conclusion on the applicability of the QR to library instruction, mainly due to the low mobile device ownership at the time of the experiment. However, with a high mobile device ownership now, libraries may revisit such initiatives and attempt to develop mobile apps that can potentially benefit instruction and mobile learning.

A high number of both UIUC and KU students indicated that compatibility with other software programs was a serious issue. Hence, library instructors may need to address how to create bibliographic databases with their smartphones and also how to create and manage files in different formats and devices when conducting research. Moreover, a high ownership in smartphones among college students may help library instruction to be more interactive than before. Instructors can quickly conduct a survey or assessment, and they can also develop mobile apps that may help them teach and also test students simultaneously. Case studies and best practices on the use of mobile devices for library instruction and learning will make a great contribution to the library community.

Conclusion and suggestions for further research

While it is always difficult to generalize the behaviors of different cultural groups with a small sample population, case studies such as this offer some valuable

insights into understanding similarities and differences. The number of international students at universities in the United States has consistently been high, and libraries need to understand how their information-seeking behavior has been shaped and influenced in their home countries. This comparative study explored some fundamental aspects of mobile information-seeking behavior among US and Korean students, and the results will help researchers and practitioners to develop hypotheses for conducting further research and creating new service profiles for mobile users.

The authors have some suggestions for further research after this explorative study. The result of this study shows that reading daily news was the primary information-searching activity of students with their smartphones. Do students still use the same resources from home countries for their research even after they begin their studies in other foreign countries? Studying what mobile apps they have downloaded recently will reveal interesting insights into understanding their information-seeking behavior. For example, Korean international students in the United States may still use Korean news sources and also access Korean portal sites to obtain information for their research.

The results also show that a surprisingly high number of KU students are using online messaging while the use of email has significantly dropped. Is this phenomenon similar among college students in other countries? If so, what service models can libraries create to accommodate this changing behavior? Case studies on this topic will confirm the result of this study and help libraries adopt appropriate service strategies. Furthermore, additional studies on college students' use of online messaging in relation to their studies will offer great insights for libraries developing strategies using messaging services.

Finally, assessment of university-created mobile apps or mobile-friendly information sites will provide important insights into understanding students' information-seeking behavior. What categories of information do students most frequently access using their smartphones? For example, do universities offer mobile apps which help students with the job search process? What information do students search for most often using their smartphones? The results of this assessment study will help libraries develop their marketing strategies as well as creating potential collaborative partnership with other student services on campus.

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Open access repositories in the Asia–Oceania region: Experiences and guidelines from three academic institutions

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Abstract

In recent years open access models have transcended traditional modes of publishing, thus enabling freer access to research. This paper takes a trans-regional approach to open access publishing in the Asia and Oceania region focussing on individual institutions in three countries – Charles Darwin University (Australia), University of Hong Kong and the University of Malaya, reflecting on how each one is rising, in its own individual way, to meet the range of challenges that its research communities are facing. Specifically, it focuses on open access and institutional repository development, and traces their development at each of the aforementioned institutions. This paper is based on interviews conducted with staff involved with the development of the repository, and the open access collection in particular, at each of the three institutions. It synthesises open access developments and reviews the role the library has played in each institution in the development of open access across the academic and research community; and the success that has been achieved to date. It highlights any common factors between the approaches taken by each institution, as well as any significant differences of note. The findings reveal that each of the three institutions is at a different stage of development with the University of Hong Kong repository ranked at the top within Asia. Each has used a slightly different approach toward open access, and used different software to develop their repository. The authors have collated the overall experiences of each institution in open access publishing and repository development. They have highlighted the successes and failures that each has experienced and formulated a set of guidelines that may help those embarking on establishing an open access repository.

Introduction

Open access (OA) has grown rapidly over the past few years. As at 30 June 2014, the total number of articles in the Directory of Open Access Journals (DOAJ) exceeded 1.6 million, PubMed Central had over 3 million articles, and the Electronic Library had a total of over 45,000 free journals. The growth has been in many counts – number of articles, number of journals, number of repositories, and number of countries represented (Morrison, 2014). Today it has become an important part of the publishing scene, serving the traditional need for scholars to disseminate their works while making these works freely available for public good.

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The Budapest Open Access Initiative (2002) recommended two ways of achieving OA status: by publishing a journal article in an OA journal; or by self-archiving the article in an OA archive or repository. The ultimate aim is to make access to peer-reviewed journal literature more freely and easily available. The development of international metadata tagging standards has meant that these archives or repositories can be easily searched and the content harvested (Harnard, 2001). This in turn will increase its discoverability through search engines and hence content visibility and impact worldwide, open and interoperable.

Institutional repositories are online archives for collecting, organising and making available electronic versions of scholarly materials (Harnad, 2005). Many universities and research institutions are developing institutional repositories with scholarly materials. At the same time, research funding bodies and universities worldwide are keen to maximise the impact of any research that they fund. In order to achieve this, they are increasingly requiring that the results of the research be made available on OA. Institutions with established institutional repositories play a key role in implementing this requirement.

OA repositories have also grown massively over the past few years, increasing faster in some regions of the world than in others (Pinfield et al., 2014). Many of the lists which record the OA repositories – such as the Directory of Open Access Repositories (DOAR), Registry of Open Access Repositories (ROAR), Confederation of Open Access Repositories (COAR) – all show growth over the years.

The OA movement and institutional repositories have also grown rapidly in the Asia–Oceania region. The economies of many Asia–Oceania countries are strong, which leads to growth in research and its outputs. Even among developing and less affluent countries, there is greater emphasis on research and publishing. According to the National Science Foundation's *Science and Engineering Indicators 2014 Digest*, the number of articles published by researchers in Asian countries increased from 89,000 in 1997 to 212,000 in 2011 (quoted from Marwaha, 2014). While the Asia–Oceania region contributed approximately 17% of the OA repositories in DOAR in 2009, the percentage is increasing (Wani et al., 2009). Similarly, while the repositories may not have been very visible in the past, that too is changing (Abrizah et al., 2010).

This series of developments have, in recent years, transformed the role the library and the librarian play in the scholarly communication process. At most universities in developed countries, it is the library that manages the institutional repository.

This paper examines the recent developments of OA institutional repositories in the Asia–Oceania region through an examination of OA development in three regional research universities in Australia, Hong Kong and Malaysia. Through this case study, the paper recommends best practices from each of the universities.

Australia, Hong Kong and Malaysia present excellent cases within this region because developments of the higher education and research infrastructure have been explored by previous researchers, establishing not only the new emphasis placed on research and development in these societies but also the context for developments of OA repositories (Chen and Su 2014; McBurnie and Ziguras 2001; Mok 2008).

Open access and scholarship in Australia, Hong Kong and Malaysia

Despite the different pathways and incentives in the establishment of the three repositories, the outcomes of each project were similar. At the onset of research, the repositories and the OA collections at each of the three selected institutions were at different stages of development, and each had used different approaches, allowing an investigation and comparison of each repository to reveal differences and commonalities and practices that may prove of value to others at an earlier stage of development.

Australia: An overview

In Australia, the Federal Government has played a major role in supporting the establishment of institutional repositories in academic institutions. More than 10 years ago, the Government began the first of a series of initiatives, which led to the establishment of OA institutional repositories. This included funding for a number of projects, but three of note that focussed on the establishment of OA repositories between 2003 and 2008 were: the Australian Partnership for Sustainable Repositories (APSR); Australian Research Repositories Online to the World (ARROW) and the Regional Universities Building Research Infrastructure Collaboratively (RUBRIC) (Kennan and Kingsley, 2009; Shipp, 2006).

During this same period, the Australian Government introduced the Research Quality Framework (RQF), an exercise to measure the quality and impact of Australian research. Soon afterwards the Government provided funding to enable universities to implement the RQF. One such specific initiative was the Australian Scheme for Higher Education Repositories (ASHER) through which A$25.5m was provided to universities between 2005 and 2007 in

order 'to assist institutions to establish and maintain digital repositories', and to 'allow institutions to place their research outputs, including journal articles and less traditional outputs … in an accessible digital store …' (Department of Industry, Innovation, Science, Research, and Tertiary Education (DIISRTE), 2010). A further A\$16.4m was also provided from 2007 to 2010 as part of the Implementation Assistance Program (IAP) 'to assist institutions to develop and implement data gathering and reporting systems for bibliometric and other data' (DIISRTE, 2010). These initiatives demonstrate the Australian Government's 'commitment to making publicly funded research more readily available' (DIISRTE, 2010).

A change in Government at the end of 2007 saw the RQF evolve into the ERA (Excellence for Research in Australia) exercise, a method of assessing quality and impact using metrics and expert review (Carr, 2008; ERA, 2014). The new Government continued to honour the funding previously committed to universities.

Australian university repositories

A study carried out in 2003 by the Council of Australian University Librarians (CAUL) revealed that just six Australian universities had developed eprint repositories with a further 10 institutions planning to do so. By 2008, this figure jumped to 37, or 95% of academic institutions that had, or would have established, a repository by the end of 2009, as revealed by a survey carried out by Kennan and Kingsley (2009).

Libraries and librarians run the majority of Australian repositories, so it follows that CAUL plays a major role in their development. CAUL's mission is 'to influence information policies and practices in Australian higher education, and to support and enhance the value of university libraries', and one of its key objectives is 'maximising the information resources available to researchers, and the facilitation of their access' (CAUL, 2014). In 2009, CAUL established the CAUL Australian Institutional Repository Support (CAIRSS) 'to provide support for all institutional repositories in Australian universities' (CAUL, 2013), and followed this, in 2010, by setting up the CAUL Open Access Scholarship Initiative Advisory Committee to 'promote the benefits of open scholarship'. Both programmes played a key role in the extending development of open scholarship and OA institutional repositories in Australia and, when the time was right, ceased in 2012, with many of the functions of the two programmes taken on by CAUL itself as part of its regular activities.

At about the same time, the Australian Open Access Support Group (AOASG, 2013) was created with a view to providing advice and support for OA to the wider community. It was launched during Open Access Week 2012 by six Australian universities with OA policies: the Australian National University, Charles Sturt University, Macquarie University, University of Newcastle, Queensland University of Technology and Victoria University. The policies ensure that each institution's research outputs are made freely available. Three new members have joined since: Curtin University, Griffith University and the University of Western Australia. AOASG develops resources, maintains a blog and has an active discussion list (AOASG, 2013) and is proving to be a valuable resource for academic institutions.

Mandates and policies

By the end of 2013, 75% of the 39 Australian universities had either introduced an OA mandate, or had a statement supporting OA.

Australia's two major funding bodies have also introduced mandates in the last two years. In July 2012, the National Health and Medical Research Council (NHMRC) became the first funding body to introduce an OA policy. This meant that the findings of any research it has funded would need to be made available to the wider public as soon as possible but at least within 12 months from the date of publication. NHMRC's policy applies to peer-reviewed journal articles only, whereas the Australian Research Council's Policy (ARC, 2013) applies to books and book chapters as well as journal articles.

Both mandates are based on the premise that the Australian Government makes a major investment in research to support its essential role in improving the wellbeing of society. Publications resulting from research activities must be disseminated as broadly as possible to allow access by other researchers and the wider community. Both bodies require that a post-print or final publisher's version of a publication be made available; metadata must be deposited into an institutional repository as soon as possible after the date of acceptance.

The Australian Government has clearly made a significant contribution to the development of OA institutional repositories. In addition, organisations such as ALIA (the Australian Library and Information Association) (2014), CAUL, and AOASG (2013) are all supporting OA initiatives in a number of different ways. As of 2014, 100% of all Australian universities have established an institutional repository, and are committed to OA. Both major Australian funding bodies have mandated OA for any research that they fund. So while the infrastructure is in place, policies

written, and the repositories are being filled up with content, there is still much work remaining to be done within institutions, and with researchers themselves, in order to ensure full compliance. This is being undertaken with a mixture of promotional activities, training and consultation, led primarily by library staff working within their own institutions. A good example (see below) of this is Charles Darwin University (CDU).

Hong Kong: An overview

Hong Kong is a Special Administrative Region (SAR) of China. The region has eight universities funded by the University Grants Committee (UGC) of the Hong Kong SAR Government, the research funding body for tertiary education in Hong Kong.

The University Grants Committee (UGC) is the non-statutory body which advises the Government of the SAR on the funding and strategic development of higher education in Hong Kong. The Research Grants Council (RGC) is a non-statutory advisory council operating under the aegis of the UGC responsible for the distribution of funding for academic research projects undertaken by academic staff of those UGC-funded institutions (UGC, 2014a). The majority of academic research projects are funded by its General Research Fund (GRE).

During 2012–2013, there were 25,064 items of research output produced by the UGC-funded universities. The total expenditure on UGC-funded institutions was HK$27,044m, of which 28% (HK$7,576m) was spent on research (UGC Statistics, 2014b).

Open access movement

OA in Hong Kong started with the first institutional repository (IR) in 2003. By 2007, IR or digital initiatives were initiated at the eight universities (Chan, 2007). In 2007, Hong Kong IR and OA action principles were proposed setting out the goals and policy changes with the purpose of promoting OA and the use of IRs in Hong Kong (Ferguson, 2007) and the Hong Kong Open Access Committee (HKOAC) was formed with an aim to promote the concept, the reasons for, and the practice of OA in all Hong Kong academic, governmental and philanthropic institutions.

At the same time, UGC set up a knowledge transfer working group, and in 2009, it charged and funded all of its eight tertiary education institutions to begin programmes for knowledge transfer (KT). The UGC has committed to provide an annual special allocation for KT to UGC-funded institutions for the 2009–2012 and 2012–2015 trienniums to enable them to build up their capacity and broaden their endeavour in

KT. The new directive and fund resources stimulated the development of many new initiatives, including IR and other OA projects.

Institutional repositories

The first institutional repository was brought to life in 2003 by the Hong Kong University of Science and Technology (HKUST) Library. Since then, each UGC-funded university library has developed its own institutional repository or digital archive to collect, showcase, preserve, and disseminate the research output of each institution. The eight institutional repositories and digital archives are harvested and can be cross-searched at Hong Kong Institutional Repositories (HKIR, 2014). There were 338,930 items in HKIR as of 30 May 2014. Journal articles, conference papers and these form the major content. Six IRs use DSpace and its related software and the other two use Digital Commons (BePress) (Palmer, 2014).

Mandates and policies

In Hong Kong, multiple funding agencies require researchers to deposit a version of their papers in their institutional repository when the publisher's version is not available on OA: These include the *GC Early Career Scheme*, *General Research Fund*, and the *Specialized Research Fund for the Doctoral Program of Higher Education* (SRFDP) and *Research Grants Council Earmarked Research Grants* (RGC ERG) *Joint Research Scheme*.

There is no institutional OA mandate at the local universities except for the Hong Kong Polytechnic University (PolyU) (2010). In September 2010, PolyU started to require its academic and researchers to deposit electronic copies of their peer-reviewed journal articles and conference proceedings in PolyU IR for OA. As discussed in more detail in subsequent sections of this paper, the University Libraries at HKU adopted a mandatory OA policy for its staff. Masters and doctoral level students are also required to deposit theses in the institutional repository for OA.

Malaysia: An overview

As at the end of 2013, Malaysia had 20 public universities, 7 foreign university branch campuses, 37 private universities, 20 private university-colleges, and 414 private colleges (Ministry of Education, 2013). Many of these are involved in research and development (R&D) activities.

Among these universities, there is an awareness to make valued research outputs openly available to enhance their visibility and provide access to the

global academic community. Abrizah (2009) reported that 55.7% of researchers had deposited articles into OA repositories. The OA movement in Malaysia had a direct impact on the development of IR services and collaboration between scholars. By June of 2014, there were 21 Malaysian IRs listed in Open DOAR, all of which were functional.

However, challenges remain. A recent study by Singeh et al. (2013) indicated that while most academics endorse the principle of OA and are willing to contribute content to an IR, they do so only if an opportunity arises or if mandated by their funding institutions. However, they had little knowledge or experience of IRs and were unfamiliar with self-archiving opportunities. Those who agreed to self-archiving saw it as being beneficial to themselves by enhancing visibility and recognition of their work. The main problem encountered, however, was the fact that researchers felt it was time consuming. The major barrier to self-archiving is fear of plagiarism.

Methodology

Interviews were used to collect data for this study from a small population of library staff directly involved in the IR and/or OA initiatives. This methodology allowed the interviewers to follow up on open-ended questions and discuss issues in more depth as they arose within the interviews.

A series of common interview protocols and questions were devised by the authors and used at each of the three institutions. Once an appointment was made, the questions were sent to the relevant staff before face-to-face, semi-structured interviews took place during the month of May 2014. A face-to-face interview of one hour duration, with one or more staff was carried out with three staff at CDU and one at the University of Hong Kong. The interviews were not recorded but notes were taken and additional data was obtained by phone, email or text message. At the University of Malaya, two senior librarians who were directly involved with the repository development were interviewed via email because of their unavailability for a face-to-face interview. The questions were predominantly related to policy and procedural matters, technical aspects of the repository, along with any issues and challenges faced by the individual institution. Their responses were recorded and analysed manually looking for keywords, which were then organised into categories. These categories were then used to attempt to identify patterns and connections.

Open access and scholarship at Charles Darwin University

The university

CDU is a young regional university based in northern Australia that services more than 23,000 students on and off campus. In 2014, the University featured in the Times Higher Education's (THE, 2013–2014) annual listing of the world's top 100 universities under the age of 50, for the third year running. This listing uses 13 performance indicators to determine rankings for this list, including: research volume, income and reputation; citations; the learning environment; and international outlook (CDU, 2014).

Its geographical location ensures that CDU has close links with its near neighbours in Asia, and forms the heart of the wider Australasian region with East and South East Asia to its north, and Australia, to its south. Darwin, the capital city where the main campus of the University is situated, is equidistant from Singapore and Melbourne, both of which are four hours' flying time away.

The repository

At CDU, CDU eSpace, its institutional repository, was set up by the Library in 2009, with support from ASHER funding, the Australian Government initiative mentioned above.

The software used is Fez-Fedora, with Fez being a PHP/MySQL front end to the Fedora repository software. Fez was developed by the University of Queensland Library (UQL) as an open source web-based digital repository that allows the integration of metadata for all research outputs including theses and images. UQL continues to support CDU.

The APSR Government-funded project had investigated and supported the adoption of two repository software applications, DSpace and Fedora, for the management of digital resources in universities in the mid-2000s. Its aim was to directly assist universities to establish institutional repositories primarily for the purpose of reporting their research publications; this ensured that universities had the technical means for making their scholarly outputs OA to the world. The Government's RUBRIC initiative, as part of their focus on working with regional universities, tested a range of repository solutions and confirmed that Fez-Fedora, with sound technical management, met the requirements. This led to CDU opting to use Fedora with the open source Fez interface, supported and developed by UQ. The Fez interface allows Fedora content to be harvested by Trove, the National

Library of Australia's database, by Research Data Australia, as well as by the worldwide OAister (Open Archives Initiative) OA catalogue. Furthermore, Fez allows users to be given differing levels of permissions, which means that academics can self-submit records into a repository, and Library staff can go in and review and publish them. CDU is part of a small Australian community of Fez-Fedora users – partners that share scripts and experiences.

Self-submission prototypes for uploading research materials into the IR are being developed and will be made available with a new repository interface in coming months.

Collections

The Open Access Collection of research materials at CDU was established much more recently, in 2011, with the groundwork laid prior to that in consultation with the CDU Office of Research and Innovation (ORI). ORI provided support by initially sharing HERDC (Higher Education Research Data Collection), and ERA records, which were used as a basis for planned OA development.

In 2012, a special short-term position within the Digital Collections team was created to establish a critical mass of OA materials in CDU eSpace. At the same time, the software management tool for managing the eReserve collection was changed from Greenstone to the eSpace repository. By 2013, the team's responsibilities and workflows were restructured so that focus was on OA rather than eReserve management as had previously been the case. More recently, a permanent part-time member of staff has been able to take on the responsibility for the OA collection and focus on its development.

The responsibility for spreading the OA message to the wider research community at the University is shared between a number of Library staff: the Library Director, who is a member of the University's Research and Research Training Committee (RRTC); the Digital Collections Coordinator, who is overall responsible for the repository and who works with his staff on developing digital collections including the OA collection; the Library's Research Services Coordinator, who works in a consultation and support role primarily with the research staff and research students of the University; and the team of Liaison Librarians who work with the wider academic community.

The promotion of OA scholarship, its benefits, and the process of making research available freely at CDU, is done in a number of different ways. Firstly, CDU Library marks Open Access Week in October by organising an annual seminar, which consists of a series of presentations targeting the research and academic community. An OA award was launched two years ago and is presented at this annual event to the researcher with the most OA publications in the repository in any given year. In addition, Library staff carry out presentations to various research committees and at research school meetings to promote the project. For example, when the NHMRC (National Health and Medical Research Council) and the ARC (Australian Research Council) funding bodies introduced new OA requirements in 2012 and 2013 respectively, the Library created awareness of this significant development in the University research community. In addition, the library created a new OA subject guide.

Whilst the Library has taken overall responsibility for the management and coordination of the OA collections and the repository, it receives strong support from ORI as well as the internationally renowned Menzies School of Health Research (MSHR), an independent institution until 2004, but now merged with CDU. Both ORI and MSHR contribute data to the repository, both NHMRC- and ARC-funded data, as well as HERDC data. All Australian universities are required annually to collect data about research output and income for the Commonwealth Department of Innovation, Industry, Science and Research, and this is then fed into the Library. Where full-text data is available, the Library follows up with data checks for OA.

The CDU repository, with a total of 21,317 records, is made up of a series of collections: Research Publications including the Open Access Collection; Theses; the Arafura Digital Archive Collection; eReadings, Photograph Collections; CDU Press Publications and the Living Archive of Aboriginal Languages (LAAL). The LAAL collection deserves special note: it is a unique project arising out of an ARC grant awarded to researchers at CDU. The Library has worked with Project staff in developing a space for books in Aboriginal languages, scanned and made available on OA. The collections reflect the University's research strengths and interests. Each repository record includes download and access statistics, grant numbers, project information for special collections; bibliometric and altmetric data are soon to be made available.

At the end of 2013, a Researcher Identifiers Project was set up with a project officer employed by the Library to work with the RSC in rolling out ResearcherIDs and ORCIDs to all researchers at CDU. Within three months, 50% of the community had set up a ResearcherID account, with a lesser number following

on with an ORCID account. The plan is to link them to records in the IR. This project has now been taken over by the Research Office.

The Digital Collections team is made up of 1.5 staff, who spend most of their time on OA development. Their greatest achievement has been the restructuring of Digital Collections from being primarily tasked with managing eReadings to being primarily engaged with research collections. Support is provided by the Library's Technical Support Officers when required.

Policies and strategic support

The implementation of the IR demonstrates the commitment of the University to the OA movement; and that it regards this development as a strategic priority.

At this early stage of the development of OA collections at CDU, a dedicated working group has not yet been established; however, a Library eSpace Working Group meets periodically to discuss any issues or areas of development relating to the IR and includes any issues relating to OA. Also the Library meets with its relevant partners to coordinate particular contributions to the IR. Specifically, the introduction of the NHMRC and ARC mandates has propelled additional interest in the IR at the University and, in particular, the research community has enthusiastically welcomed the Library's facilitating role in compliance with the mandates. The challenge now is to extend compliance to all the other research being carried out at CDU but not funded by the two major funding bodies.

The Library formulated a new IR policy together with a set of procedures. More broadly known as the IR Policy, it has been approved by University authorities and was released in September 2014. The policy will play a big part in helping consolidate the CDU OA collection. To quote the policy, CDU eSpace will provide a platform to:

- Archive, preserve and showcase the University's intellectual outputs and special collections entrusted to the University;
- Assist with the University's research data management and to adhere to requirements from ARC and NHMRC for research outputs to be available on OA wherever possible;
- Enhance awareness, use and impact of the University's research outputs; and
- Contribute to the growing international body of refereed and other research outputs that are available on OA.

Challenges and issues

There are two challenges ahead: in the short term the team is working on enabling Google to pick up CDU publications though the web; and more long term, the aim is to change the culture of academics at CDU to encourage greater participation. This will be a gradual process and continual promotion of the benefits will be required.

Generally, feedback from academics and researchers to OA at CDU is very positive with the majority supporting the concept; there are comparatively few scholars who appear to be opposed to it. What is becoming increasingly apparent though, is that researchers do not always retain correct versions of published papers to submit to the IR. Follow-up emails are sent to individuals; however post-print versions are not always available. Continual and regular promotion to academics and researchers will be required to ensure that correct versions of publications are retained in order to be compliant with Government policies.

Open access and scholarship at the University of Hong Kong

The university

Established in 1912, the University of Hong Kong (HKU) is the oldest university in Hong Kong and one of Asia's finest, attracting highly qualified students and distinguished academics from all over the world. It was ranked as 1st in Hong Kong, 3rd in Asia and 43rd in the world according to Times Higher Education World University Rankings (THE, 2013–2014). There were 27,440 students and 7000 academic and non-academic staff in 2013.

The repository

The institutional repository known as Scholars Hub was set up by HKU Libraries in 2005 (University of Hong Kong, 2014). The Hub is managed by a team consisting of the Digital Strategies and Technical Services Librarian and two library staff. The team also gets assistance from other library teams. It started as the traditional institutional repository but gradually evolved into the Current Research Information System (CRIS) which includes not only HKU authors' publications but also diversified research information. Table 1 shows the comparison between IR and CRIS.

The IR held about 152,309 items by 2012–2013. Journal articles, conference papers and theses constitute 87% of the entire content.

ResearcherPages (RPs) includes a range of information on a researcher such as a profile, publications, network of collaborations, external relations, patents,

Table 1. Comparison between IR and CRIS.

	IR	CRIS
Content	Publications	Research information (e.g. publications, people, projects, organisations, results, facilities, equipment, etc.
Software	DSpace	DSpace-CRIS (Palmer et al., 2014)
Purpose	• Provide Open Access • Create global visibility • Collect content in a single location • Preservation	• Measurement & analysis of research activity • Optimisation of the funding process • For the media & public: easy access to research results → Open Access

Source: Palmer (2014).

university responsibilities, grants, and bibliometrics. These pages allow one to find an expert for collaborative or contract research, a professor for thesis supervision or a spokesperson for the media. After initial creation by Hub administrators, researchers can further sustain and enhance their own RPs. Recently, ORCID accounts were created for all HKU professorial staff and linked to their RPs.

Separate pages were created for theses, grants, patents, and community services. In June 2014, HKU developed pages for faculties, departments and centres, cumulating research, and statistics.

The Knowledge Exchange Office and HKU Libraries have made agreements with several publishers that allow HKU authors in some cases to publish free in OA journals, and in other cases at a discount. HKU authors are encouraged to make use of the benefits of OA publishing such as increased readership and citations and possible offers of collaboration. The publishers include: *Open Sage*, *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*, *BioMed Central* (BMC), *Springer Open, Betham Science Publishers* and the *Directory of Open Access Journals* (University of Hong Kong, n.d.).

The Hub is undoubtedly by far the greatest OA achievement at HKU. The Hub team won the HKU Knowledge Exchange Award (Non-Faculty Unit) in 2012. It was also ranked by Cybermetrics in February 2014 as the number one IR in Asia and number 57 in the world (Cybermetrics Lab, 2014).

Policies and strategic support

OA is recognised as a part of Knowledge Exchange (KE), which is one of the university's strategic themes. There is a well-defined internal structure to support and enhance KE activities across campus. OA projects are funded by UGC's annual special KE allocations to eight local institutions. The institutional OA policy is in place and HKU Libraries has its mandatory OA policy for its staff (University of Hong Kong, 2010). OA achievements at HKU are evidenced by the growth of its IR and OA publishing. OA has provided an opportunity for HKU Libraries to reposition itself and plays a greater role in fulfilling the university's strategic goals. The success of IR and OA publishing is a collaborative effort from all stakeholders.

When the Hub was introduced in 2005, it was not attractive to the faculties (Palmer, 2011). In 2009, HKU incorporated KE into its mission statement. The new five-year strategic plan for the years 2009–2014 includes several strategic initiatives and operational priorities to accomplish KE (University of Hong Kong, 2009). The Hub was recognised as the university exchange hub and HKU Libraries was positioned as an organ of KE to be strengthened. Since the advent of KE, the organisational, monetary and administrative support has been established to facilitate OA development. KE has spurred fresh interest and changed the old landscape of OA development at HKU.

To support and enhance KE activities, the University defined an administrative structure with the Knowledge Exchange Office (KEO) as a core unit. Directed by the Pro Vice-Chancellor for Research, the KEO supports the development of a long-term strategy for KE at the institutional level; liaises with faculties, other academic units, and administrative offices in promoting KE; and coordinates the University's communication with the UGC on KE matters including KE funding.

Recognising the value of KE and OA as one of the KE key indicators has increased the incentive for researchers to deposit more items in OA. The KE fund and new KE organisations have ensured the sustainability of OA development.

OA has helped reposition HKU Libraries in a role of high strategic importance at the University. While HKU Libraries play the leading role, the OA development largely replies on the collective efforts across

campus. It is important to involve some high-profile academics and administrators in the OA advocacy. They are the OA activists and can exercise significant influence on their peers.

The UGC committed to provide an annual special allocation for KE to UGC-funded institutions for the 2009–2012 and 2012–2015 trienniums to build capacity and broaden the KE endeavour. At HKU, the UGC's annual special allocation was awarded to KE proposals through the KE Funding Exercise for Faculty Capacity Building, Impact Projects, and Student KE Projects (University of Hong Kong, 2012). The OA projects including the Hub and OA publishing were funded under Impact Projects which aimed to create impact that can be recognised and acknowledged by both non-academic sectors and the general public.

HKU has a theses mandate which requires postgraduate students to deposit an e-copy of their thesis into the Hong Kong University Theses Online (HKUTO) created by HKU Libraries for OA which is now a part of the Hub collections (University of Hong Kong, 2008). By 2014, there were more than 22,000 full-text theses online.

The University is a signatory to the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (2014), as of 22 October 2003. Signatories to this declaration are asked to implement an OA depository policy and to encourage OA publishing at their institutions. As a response, HKU Libraries issued a mandatory OA policy in February 2010 which requires each staff member to grant HKU non-exclusive permission to make their scholarly articles publicly available as part of the Hub (University of Hong Kong, 2010).

Although the University does not have an OA mandate at the institutional level, the University Intellectual Property Rights (IPR) Policy approved in June 2011 (University of Hong Kong, 2011) requires staff to procure rights from the publisher for the University to re-use scholarly work, including posting the work on the Hub and encouraging staff to submit prior versions of published work (author's manuscript) to the Hub to facilitate knowledge sharing.

Challenges and issues

Most of the faculties initially did not appreciate OA. They did not believe the general public could understand their research, and insisted they would prefer sending their publications personally to other researchers whose organisations could not afford access. This belief resulted in a relatively low deposit rate for the IR. Motivating and educating researchers to participate in the repository has been a considerable challenge.

There are difficulties in obtaining the repository content from different sources including individuals, university and external publishers. When it has been obtained, the data may be erroneous and inaccurate and need constant verification and corrections.

After years of advocacy and development, while OA is widely accepted as an alternative scholarly publishing model, there are still doubts about the quality of OA journals due to the lack of a sophisticated peer-review process and scholarly impact compared with the traditional subscription-based academic journals. It is not uncommon that academics tend to search and read OA journals but feel reluctant to have their articles published in them.

Studies have shown that OA mandates can accelerate OA compliance (Poynder, 2011). OA development may be impeded by the lack of OA mandates from research funders or individual institutions in Hong Kong.

Open access and scholarship at the University of Malaysia

The university

The University of Malaya (UM) is the oldest and leading university in Malaysia. It was established in Kuala Lumpur in 1962, although its roots go back to the establishment of King Edward VII College of Medicine in Singapore in 1905. It is a multidisciplinary research university today with more than 27,000 students (of which about 4000 are international students) and 1700 academic staff.

The repository

At UM, the IR came about as one of the new initiatives of the Library influenced by developments in other countries. It started when the UM Library had a workshop on eprints attended by systems librarians from various local academic libraries, which led to the establishment of the IR in 2007. The repository has developed over the years, and now has approximately 30,000 items. It is placed under the Information Systems Division in the University Library.

There are four staff members involved with the IR, but they also have to handle other tasks, e.g. IT acquisitions, and other day-to-day tasks, and serve on various committees. They are responsible for the release of documents into the IR, after they have been deposited by staff or students.

The users of the IR fall into two categories:

● academic staff and researchers who are keen on self-archiving, especially those who are doing intensive research;

- students who are doing research (especially postgraduates) and are keen on self-archiving, although many do not have the products of research to deposit as yet.

Unfortunately, there are some who are reluctant to use the facility and they have adopted a wait-and-see attitude.

Collections

The repository has a number of sub-repositories, with collections (as at mid-2014) being approximately as follows:

- The key section is the UM Research Repository, which has 7097 research-based items. These items include full-text articles, posters and slide presentations. This is growing rapidly in view of UM's emphasis on research and publishing.
- The overall collection is also growing, despite there being no specific mandate by the University. This increase is due to promotion activities by the UM Library, including roadshows, encouragement during information skills sessions, and by researchers doing self-archiving.

Policies and strategic support

While UM does not have a policy in place, the repository is given support by the university top management, even though it is not listed as a strategic priority. Funds are made available, but they have be budgeted for well in advance and competitively bid for.

In reflecting upon the development of the IR, one factor that can enhance its growth is the need for a top-down approach, where a specific mandate should be made to ensure all academic staff contribute to IR.

Challenges and issues

In the development of the IR, there have of course been many challenges. The main hurdle has been academics who feel that depositing their work in the IR increases their workload, as they already have to submit to another university database, the UM Expert, which basically lists the expertise and publications of the staff for outsiders to view. Efforts are being made to link the two databases, but the issue of intellectual property rights remains to be overcome.

Future plans call for increasing the visibility of the repositories and improving the repository ranking among public universities in the country as well as internationally. Among the challenges are the technical aspects and increasing the copyright clearance of some items.

Discussion of findings

The survey findings reveal that OA collections have been established and developed at the three institutions with remarkable progress.

The IR is the focus and represents the major achievement of OA development at each institution. Each IR is at its own developmental stage and differs in content, size, software and approach. While they share a basic purpose to collect, showcase the institutional research output and make it more visible to the general public, HKU's Hub has gradually evolved into a Current Research Information System, including Researcher Pages (RPs) and links to staff ORCID accounts, serving as a vehicle to increase research collaboration. CDU's eSpace is taking a similar course by rolling out Research IDs and ORCIDs to its researchers. While one IR archives all publications at HKU and CDU, UM has three IRs, each with a distinct collection. The IR is encouraged at three institutions with different degrees of policy, funding, staffing and organisational support. OA at CDU is blessed with the ARC & NHMRC mandates and the IR Policy, while at HKU, the KE, the IPR policy and the well-defined OA organisation have provided a solid foundation for its OA growth.

In all cases, the library initiated the IR and is responsible for its development, management, promotion and coordination. An IR team (HKU) or library staff (CDU and UM) are dedicated to IR projects with additional support from other relevant library staff. Although the library plays a leading role, the success of the IR relies largely on the collaboration between all stakeholders such as internal and external data sources, administrators, individual researchers and software partners.

In addition to uploading to the IR, HKU staff are also encouraged and subsidised to publish their articles in OA journals from several publishers.

The challenges facing OA development are common to all three institutions. There is usually a process of change in perceptions about OA from indifference, even active disapproval or suspicion to acceptance and appreciation. The library's proactive promotion has contributed or will contribute greatly to this shift. But still, there are barriers that impede OA progress. Typically, they include researchers' concerns about the extra workload resulting from depositing their publications in IR (UM) and the quality of OA journals (HKU), and lack of OA mandates from research funders or institutions, etc. While the IR is supported

by various data sources (HKU, CDU), the accuracy and consistency of the data received needs to be regularly verified and corrected (HKU).

Conclusion and guidelines

While the future of the IR at all three institutions has a slightly different focus in line with their own state of development and targets, each one aims to encourage greater participation, foster an OA culture, and eventually increase the institutional visibility.

This research has shown that best practices can be derived from the experiences of three institutions despite differences in the context and scope of each project. The following guidelines may be of value to institutions in the region at various levels of repository development:

1. Talk to your institutional administrators about the need, value and benefits of OA to get their support.

It is of utmost importance that institutional administrators understand the need for, value of and benefits to the institution of effective OA. Having their support is critical as they control the budget and set priorities for its allocation. This has been evident at both HKU and UM where management has provided a lifeline to the IRs in the form of financial support.

At CDU, although financial support was provided by the Government to establish the repository, the University management has recently approved the IR policy, a development that will go a long way in growing the OA collection.

2. Develop a good IR team equipped with the required expertise and skills.

The first critical element is that the library – or rather, a team within the library – has the capacity and staffing levels to set up, develop and manage the IR. Therefore a good team of skilled staff is invaluable to the success of the repository. This includes having the technical capacity to manipulate the software application of choice, even if this is achieved initially through short-term positions. There may be circumstances where you need to start small either by utilising existing resources or taking advantage of any grants available to hire special staff as was the case at all three institutions.

Whilst at UM, there is no team dedicated to working with the OA collection, at HKU and CDU, the IR team has sole responsibility but is required to call on other teams for support.

3. Make your IR easy for academics to deposit publications and flexible for them to edit information and choose what to show or hide.

The easier it is for academics and researchers to be able to deposit material, the better the uptake is likely to be. It is important to give them the option of self-submitting or self-archiving their publications and in this way they have control over when to upload the item and the level of detail they wish to include.

There are several things to consider in this section: the software used and the processes and procedures for submission. Ideally IR software, such as the Fez-Fedora software used for CDU eSpace, needs to allow differing levels of permissions so that academics can self-submit their materials and library staff can edit records as required. The self-submission process and the submission form need to be clear and straightforward to use.

4. Position your library at the frontline of responsibility for the OA development, administration, coordination and publicity.

The development of IRs and the promotion of OA have been led by the library at all three institutions, but it is notable that the more the library is involved, no matter the level, the more successful the venture. The library is naturally enough involved in the development stage, and in the subsequent administration of the working system; but to be more effective, the library also has to take the lead in promoting and advocating for OA.

It is a good start for the library to set up an IR, but it can do a lot more to progress it. Critically, the Library can take the next step of generating interest in and promoting the IR to the wider community. At CDU, the Library spreads the message about OA through various activities including presentations and workshops. The establishment of an OA Award and the Library's management of OA Week are also ways in which the Library creates publicity. At UM, Library staff carry out promotional activities in similar ways including as part of roadshows and of information skills sessions.

5. Reach out to academics via different communication channels such as seminars, emails and phones to cultivate a broad understanding of OA.

Once the IR is in place and procedures for establishing collections set up, you are only half way to having a complete and comprehensive OA collection set up within your repository. The work of spreading

the OA message to your community will need to begin, and it will not be a one-off process, rather it will be an ongoing task of educating and informing your clientele. This can be done in any number of ways, formally or informally. At all three institutions, Library staff play a key role in taking every opportunity to promote OA. At CDU and UM, formal presentations are held in the form of seminars and road shows to create awareness of OA. HKU has taken this a step further and involves high-profile academics, that is, academics with established careers and high visibility, in advocating OA throughout the University community. This brings us to the next guideline.

6. Develop a circle of OA advocates including administrators, librarians and academics to exercise the positive influence on their peers.

Successful advocacy is best done peer to peer, that is by OA champions talking to peers in their respective communities – administrators to administrators, librarians to librarians and academics to academics. The latter community is best served by well-established and recognised academics extolling the benefits of OA, and by demonstrating their support for OA and uploading their publications into the repository. This has been successfully adopted at HKU, and is in the process of being implemented at CDU.

7. Recognise and award outstanding OA achievements and their contributors.

Another way of putting OA on the agenda is by recognising and awarding OA achievements at your institution as an incentive to other staff, academic and non-academic. At HKU, the Hub team won the HKU Knowledge Exchange Award (Non-Faculty Unit) in 2012 for their outstanding achievement. Similarly, at CDU the Digitisation Team won the internal 2014 Chief Operations Office's Award for doubling the number of OA records in the repository within 12 months.

The above awards recognise the teams responsible for IRs, and the publicity this generates can be useful promotion for OA. On the other hand, at CDU, the Open Access Award is presented annually to a researcher for the highest number of OA contributions to the repository. This also generates publicity and can serve as an incentive to other members of the research community to submit their publications.

8. Develop an institutional OA policy or mandate to encourage and enforce OA compliance.

As Poynder (2011) has demonstrated, institutional OA policies or mandates play a significant role in OA compliance. At CDU, a policy for OA became a reality in 2014 when the University authorities approved the Institutional Repository policy. This will provide greater leverage for the Library with the research community. In addition, Australian universities are fortunate to have its two primary funding bodies, the ARC and the NHMRC both introducing OA mandates for any research that they fund. At HKU, the Intellectual Property Rights (IPR) Policy approved in June 2011, requires staff to procure a right from the publisher for the University to re-use the scholarly work including posting the work on the Hub to facilitate knowledge sharing. The University also has a theses mandate and as well, HKU Libraries have a mandatory OA policy for Library staff to make their publications available on OA through the Hub.

9. Find a strategic position for OA at your institution that may help justify its funding, staffing and organisational support.

OA can play a big part in repositioning libraries strategically within universities. It is almost always the library that sets up the IR; it is equally common that the leading advocate for OA within an institution is also the library. Up until this point, IRs and OA can be considered 'traditional' library activities, in that it they are an extension of the library's teaching, learning and research role, making available the written evidence of research through books and journal articles.

For OA development to be truly effective, a library will have to rely on the collective efforts of a number of departments across the institution, and in particular those that are part of the research community. Since one of the core functions of research is to discover new knowledge, and to share this in written as well and other innovative ways, this collaboration can be leveraged into something more, positioning the library beyond its traditional role.

A good example of this new position is the development of the HKU Scholar Hub from an IR into a CRIS (Current Research Information System); from a publications repository into one that includes additional vital information about researchers and the research community. This also enhances the image of the institution professionally and keeps the institution in the public eye. This is good strategically, and can enhance funding opportunities. The library thus becomes a key gatekeeper to the whole university.

10. Work with other regional, national or international institutions, libraries, research funders,

and publishers to develop OA initiatives, policies and practice guidelines.

For institutions in the early stages of establishing a repository, reaching out to other institutions, libraries or other bodies such as national, regional or international consortia, is a way to learn and benefit from their experience.

It is not necessary for every individual institution to forge its own path; collaboration across institutions can provide support and better outcomes. In Australia, CAIRSS and AOASG are good examples of initiatives to support and provide advice to academic institutions. CDU has benefitted enormously from this support.

The University of Malaya is member of the ASEAN University Network (AUN) Inter-Library Online (AUNILO) and this arrangement benefits the dissemination of information among AUN members by encouraging the repositories to work more closely. Similarly, the UGC-funded universities in Hong Kong have collaborated to form the Hong Kong Institutional Repositories initiative that allows searching across all member IRs.

Another example is the collaboration of the HKU Knowledge Exchange Office and HKU Libraries with publishers to make it easier for their academics to publish in OA journals.

Final word

This research shows that OA collections have helped reposition the library into a role of high strategic importance at each of the three institutions regardless of the level of support provided by University management. While the primary effort has been towards developing IRs and OA, the libraries are also seizing the opportunity to consolidate this strategic role and take on new functions to better support the researchers and overarching institutional and regional research and development objectives.

Funding

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Author biographies

Jayshree Mamtora is the Research Services Coordinator at Charles Darwin University Library. She has extensive professional experience of working in academic libraries in the UK, the South Pacific and Australia. In her current role, she is passionate about serving the research community at CDU and has worked on a number of collaborative research projects. Jayshree is also the ALIA (Australian Library and Information Association) Manager for the Northern Territory, and a committee member of the IFLA Regional Standing Committee on Asia and Oceania. Jayshree has a Bachelor and Honours degree from the University of Wales in the UK, a Masters by Research from Charles Sturt University in Australia and a Graduate Certificate in Education from CDU. She is an ALIA Distinguished Certified Practitioner (DCP). Her research interests include bibliometrics, altmetrics, social media, information literacy and open access.

Tina Yang is currently the Social Sciences Faculty Librarian of the University of Hong Kong Libraries, providing a wide range of services including collection development, information literacy training, research consultation and information services to support the faculty teaching, learning and research. Tina is active in library research and has published articles focusing on user-centred library services, knowledge exchange and community engagement, and library leadership skills through learning. She has also presented extensively at professional conferences in both librarianship and social sciences. She is a member of Hong Kong Library Association and served on the IFLA Regional Standing Committee for Asia and Oceania during 2011–2015. Tina received her BA and MA from Peking University, Master of Information Management-Librarianship from the University of New South Wales, Australia and a Diploma in Legal Studies from the School of Professional and Continuing Education of the University of Hong Kong.

Diljit Singh recently retired from the Department of Library and Information Science at the University of Malaya, Kuala Lumpur, Malaysia where he taught a variety of LIS courses and supervised Masters and doctoral students. He had served the university for 19+ years, and was also previously Deputy Dean (Postgraduate) at the Faculty. Diljit holds a BSc from the University of Malaya, and an MS and PhD from Florida State University, USA. His professional and research interests include information literacy, management of libraries and information services, use and user studies, school libraries, and library and information science education. He has published widely and has presented at many conferences, locally and internationally. Diljit is active in library associations at the local and international levels, and is currently the President of the International Association of School Librarianship (IASL). He is also a Standing Committee member for Asia and Oceania in IFLA.

Abstracts

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قتطفات

الاحتفال بالمكتبات، عشرون عامًا من الديمقراطية: نظرة عامة على خدمات المكتبات والمعلومات في جنوب أفريقيا

Ujala Satgoor

العدد رقم 41.2 من مجلة الإفلا: 97-111

لقد شكّل مشهد خدمات المكتبات والمعلومات، منذ تأسيس أول مكتبة عام في جنوب أفريقيا عام 1818، انعكاسًا للوضع الاجتماعي والسياسي للدولة، يُلقي هذا المقال نظرة على مكتبات جنوب أفريقيا من منظور تاريخي، منذ عام 1994، ويُركز على الأطر التي تعمل فيها المكتبات؛ إدارية، وتشريعية، إلى جانب التمويل الحكومي، من أجل الإصلاح، وتطبيق التكنولوجيا، وتعليم علوم المكتبات، وتنمية المُجتمع المهني, يوضح المقال أيضًا أهمية المكتبات في الوصول إلى أهداف التنمية القومية، وترسيخ الديمقراطية، وأمة مُتعلمة، ومُثقفة.

هل من حدود لحرية التعبير؟ قضية القوانين التكفيرية:

Paul Sturges

العدد رقم 41.2 من مجلة الإفلا: 112-119

تُطرح فكرة وجود حدود لحرية التعبير، في ظل اغتيالات شارلي إبدو، ومن ثم يُنقح المقال البيانات الرسمية، مثل: الإعلان العالمي لحقوق الإنسان (المادة 19)، وقوانين التكفير، وازدراء الأديان، والخطاب المُفعم بالكراهية، والحركات التي ظهرت مؤخرًا؛ للقضاء على القوانين التكفيرية. ويتوصل المقال إلى الأهمية البالغة لحرية التعبير، وأنها أهم من تقييدها بسبب حساسيات دينية.

معرفة الطلاب النيجيريين بالقرصنة الفكرية ومفهومها وسلوكهم تجاهها: دراسة حالة:

Ijeoma J. Ibegbulam, Jacintha Ukamaka Eze

العدد رقم 41.2 من مجلة الإفلا: 120-128

تتناول هذه الدراسة معرفة الطلاب النيجيريين بالقرصنة الفكرية ومفهومها وسلوكهم تجاهها، لجأ الباحثون إلى عمل استقصاء بأنفسهم، وأجروه على 282 طالب من كلية إدارة الأعمال، بمجمع إينوغو في جامعة نيجيريا، وأظهرت النتائج أن معرفة الطلاب عن هذا الموضوع

قبل دراسته ضعيفة للغاية، ولكن بعد الاطلاع عليه من خلال الدراسة زادتهم معرفتهم بشكل ملحوظ، ويُرجع بعضهم القرصنة الفكرية إلى أسباب؛ كالخوف من عدم الحصول على درجات جيدة في الامتحانات والعلم بأن الطلاب الآخرين يفعلون ذلك بلا مُشكلة، والعروض التي يوفرها الإنترنت لتحميل المواد، وغياب المُحاسبة على القرصنة. كما أوضح البحث أن لدى الطلاب رغبة في اتباع معايير للحد من القرصنة على أن تكون تصحيحية أكثر منها عقوبات، تُختتم الدراسة بالتوصل إلى وجوب أن تنتبه إدارة الجامعة إلى هذه المُشكلة جيدًا، بوضع غستراتيجيات مُناسبة.

المكتبات والتشجيع على القراءة: استعراض برنامج التقييم الدولي للطلبة:

Denice Adkins, Beth M. Brendler

العدد رقم 41،2 من مجلة الإفلا: 129-139

يُقبل الشباب على القراءة عند تشجيعهم عليها، يُقيم برنامج التقييم الدولي للطلبة (PISA)، مدى إلمام الشباب ممن هم في سن الخامسة عشرة بالقراءة في أكثر من 70 دولة حول العالم، كما سألوهم أسئلة لمعرفة مدى ارتباط عادة القراءة بالتشجيع عليها، وأظهرت النتائج انخفاض مُعدلات القراءة في الدول النامية عنها في الدول المُتقدمة، ولكنها أظهرت أيضًا حرص بعض الطلاب في الدول النامية أكثر على القراءة ويقضون أوقات أطول يقرأون أكثر من أقرانهم في الدول المُتقدمة. وتوضح نتائج البحث أن أفضل دور تقوم به المكتبات هو التأكد من تحفيز الطلاب على القراءة؛ من خلال تقديم مواد متنوعة وبيئة مُلائمة وغرس الاستقلالية فيهم في اختيار ما يقرأون.

التعاون الدولي في إدارة المكتبات والموارد البشرية وتنمية قدرات العاملين:

Bonnie Jean Smith

العدد رقم 41،2 من مجلة الإفلا: 140-152

لقد غير تدويل التعليم التعالي والتوسع الدائم في استخدام التكنولوجيا كوسيلة؛ للتعلّم ومُشاركة المعلومات، الطريقة التي تُجري بها المكتبات الأكاديمية والبحثية خدماتها وتقوم بالتوعية بها، يجب الحفاظ على الاستمرار في اكتساب مهارات وأدوات ووضع رؤى جديدة؛ ليظل العاملون في المكتبات على القدر المطلوب من الحيوية، والتفاعل. تُقدم

كوريا الجنوبية. إن معرفة السلوكيات المُختلفة للبحث عن المعلومات بالأجهزة النقالة في مُختلف المناطق، تُقدم الورقة البحثية رؤية هامة تعود بالنفع على المكتبات الأكاديمية في عمل مُبادرات وخدمات جديدة للمُستخدمين.

المستودعات المفتوحة في آسيا والمناطق المُطلة على المُحيطات: خبرات وإرشادات من ثلاث مؤسسات أكاديمية:

Jayshree Mamtora, Tina Yang, Diljit Singh

العدد رقم 41،2 من مجلة الإفلا: 162-176

يتبع هذا البحث منهجًا عبر الأقاليم فيما يتعلق بالنشر المفتوح في آسيا والمناطق المُطلة على المُحيطات، ويُركز على المؤسسات الفردية في ثلاثة بلاد؛ جامعة شارلز داروين (أستراليا)، وجامعة هونج كونج، وجامعة مالايا. ويتناول كيفية تعامل كل منها مع مُختلف التحديات التي يواجهها مُجتمعها البحثي، ويُركز دراسة الحالة على التداول الحر وتنمية المستودعات المؤسسية وتُسجل تطورها.

تقوم هذه الورقة البحثية على لقاءات تمت مع العاملين على تنمية هذه المستودعات وخاصة المجموعة الخاضعة للتداول الحر، في المؤسسات الثلاثة، كما تُحلل تطور دور المكتبة في كل مؤسسة، بناءً على خبرات المؤسسات، وتُختتم بإرشادات؛ لمُساعدة المؤسسات الأخرى على تنمية مستودعاتها.

جمعيات المكتبات فرضًا؛ للتدريب ومُشاركة الخبرات والتعاون من أجل الابتكار ومواكبة التغيرات، ويُركز التعاون بين جمعيات المكتبات والذي أصبح شيئًا مُعتادًا على الخدمات المُقدمة للمُستخدم. تم إجراء دراسة استكشافية حول جمعيات المكتبات حول العالم؛ لتحديد مستوى الجهود السابقة، والرغبة في قدر أكبر من التبادل الدولي بينها في مجالات الإدارة، والموارد البشرية، وتنمية قدرات الموظف وتطوير أداءه، وبذلك تُشير النتيجة النهائية للدراسة إلى الحاجة والرغبة الشديدتين إلى الحوار، خاصةً، فيما يتعلق بتنمية قدرات الموظف وإدارة المكتبة.

البحث عن المعلومات بالأجهزة النقالة: دراسة مُقارنة:

Jong-Moon Lee, Yoo-Seong Song

العدد رقم 41،2 من مجلة الإفلا: 153-161

لقد وضعت زيادة انتشار الأجهزة النقالة بين الطلاب، المكتبات الأكاديمية أمام تحديًا كبيرًا، يجعلها تُعيد النظر في خدماتها؛ حيث أظهرت دراسة أجريت في جامعة إلينوي مؤخرًا، زيادة نسبة استخدام الطلاب للأجهزة النقالة. وبينما يُعد هذا الانتشار ظاهرة عالمية، سعى أصحاب البحث إلى الوصول إلى اوجه التشابه والاختلاف بين أسلوب الطلاب في الحصول على المعلومات من خلال هذه الأجهزة، في مُختلف الاقاليم؛ لذا أجروا سلسلة من استطلاعات الرأي في جامعة إلينوي بالولايات المُتحدة الأمريكية، وجامعة كيونج سونج بجامعة

摘要

庆祝20年民主下的图书馆：南非图书馆和信息服务概述

Ujala Satgoor

IFLA Journal, 41-2, 97-111

自1818年第一家公共图书馆成立之日起，南非图书馆及信息服务领域的发展面貌始终反映着该国的社会政治秩序与发展。本文从历史角度纵览1994年以来的南非各图书馆。文章重点关注图书馆发挥职能的环境、图书馆管理与法律框架、政府资金补贴、图书馆技术、图书馆信息服务教育以及专业协会。本文进一步强调了图书馆对于实现巩固民主、打造教育和信息完备国度这一国家发展议程目标的重要性。

言论自由受限？亵渎神明问题

Paul Sturges

IFLA Journal, 41-2, 112-119

本文在《查理周刊》袭击事件背景下，探究言论自由或许有限制这一观点。文章重新审视了包括《世界人权宣言》(第十九条)在内的权威声明，探讨了亵渎神明法律、反对宗教诋毁决议、仇恨言论法律，以及近来终止亵渎神明法律的行动。结论是，言论自由非常重要，不能因为宗教信徒的敏感而给予限制。

尼日利亚学生对剽窃行为的了解、感知和态度：个案研究

Ijeoma J. Ibegbulam, Jacintha Ukamaka Eze
IFLA Journal, 41-2, 120-128

本研究考察尼日利亚学生对剽窃行为的了解、感知和态度。数据搜集工具是一个结构式问卷，由研究人员自行管理和维护，对受访者进行调查。受访者为尼日利亚大学埃努古校区工商管理学院的282名大一新生。研究人员对收集到的数据做了频率计数和百分比分析。主要调查结果表明，原先学生们对剽窃行为的了解非常少。然而，通

过学习接触到这一话题后，学生对其了解显著提高。受访者认为学生剽窃有几个重要原因，包括害怕得分低，意识到其他同学在剽窃，网络提供的剽窃机会，以及缺乏对剽窃相关不良行为的惩罚。受访者对遏制剽窃措施的态度表明，比起惩罚性措施，他们更喜欢纠正性措施。本研究的结论是，大学管理部门应密切关注这一问题，通过制定策略核查剽窃行为。

图书馆和阅读动机：国际学生评估项目阅读结果回顾

Denice Adkins, Beth M. Brendler

IFLA Journal, 41-2, 129-139

青少年有阅读动机时阅读效果更好。国际学生评估项目(PISA)评估了全球70多个国家15岁人群的阅读素养，也探究了诸如动机和阅读之关系的问题。各国的结果显示，发展中国家阅读评估得分低于发达国家。与此同时，结果也表明发展中国家的学生比发达国家的学生阅读动机更强，阅读时间更长。这些结果表明，图书馆的理想角色就是通过提供各式各样的材料、良好的读写和阅读对话环境、鼓励学生自主选择阅读材料，以确保学生的阅读动机。

学术图书馆管理、人力资源及员工发展的国际合作案例

Bonnie Jean Smith

IFLA Journal, 41-2, 140-152

随着高等教育的国际化和知识学习与分享技术的不断扩张，学术和研究型图书馆在提供服务和宣传推广方式上发生了根本性变化。为了适应发生巨变的环境而发展新技能、资源重组、重新设计以及根据快速变化的外部环境招聘员工，对保持劳动力的活跃性与积极性是至关重要的。图书馆协会为参与培训、分享专业知识、参与合作项目提供了机会。虽然图书馆协会之间的国际合作变得更为频繁，但这些合作却主要集中于用户服务。研究人员在全球范围内对图书馆协会做了探索性研究，以确定过去国际合作的程度，以及图书馆协会在管理、人力资源及员工发展领域内进一步加强国际合作的意愿情况。该研究结果表明图书馆协会强烈渴望增强对话，尤其是在员工发展和图书馆管理方面的对话。

移动信息寻求行为：对比研究

Jong-Moon Lee, Yoo-Seong Song

IFLA Journal, 41-2, 153-161

大学生移动设备拥有率的快速增长，极大地挑战了学术图书馆的服务配置，需要其重新考虑。伊利诺伊大学新近开展的一项研究项目发现，大学生移动设备的拥有率高得惊人。在移动设备迅速普及成为一种全球现象的背景下，作者试图探究不同地区大学生移动信息寻求行为的异同。作者在美国伊利诺伊大学和韩国庆星大学做了系列调查。了解不同地区大学生移动信息寻求行为，可以为移动图书馆正在进行的创新举措和服务侧重提供有价值的参考意见。

亚洲-大洋洲地区的开放获取知识库：三家学术机构的经验和指导方针

Jayshree Mamtora, Tina Yang, Diljit Singh

IFLA Journal, 41-2, 162-176

本文采用跨地区的方法研究亚洲和大洋洲地区的开放获取出版，重点关注三个国家的个体机构：查尔斯达尔文大学(澳大利亚)、香港大学和马来亚大学。通过回顾各家机构如何迎接和应对其研究团体面临的各种挑战，文章个案研究重点关注开放获取和机构知识库的开发，并对它们的发展进行跟踪调查。本文基于采访各家机构参与知识库开发、特别是参与开放获取信息的人员。文章综述了开放获取的发展，回顾了图书馆在各家机构所发挥的作用。基于各机构的发展经历，文章总结了指导方针，以期对其他机构开发知识库有所帮助。

Sommaires

Academic libraries: A soft analysis, a warning and the road ahead

[Bibliothèques universitaires : analyse fonctionnelle, avertissement et voie à suivre]

James M. Matarazzo, Toby Pearlstein

IFLA Journal, 41-2, 97-111

L'accès via des réseaux à des bases de données en texte intégral a écarté les bibliothèques universitaires et bibliothèques d'entreprise des procédures de recherche. L'environnement à but lucratif, où les bibliothèques ne sont pas protégées par un statut prestigieux et une tradition historique, en a ressenti l'impact plus directement. L'évolution des bibliothèques d'entreprise ainsi que leurs efforts pour rester adaptées peuvent donner des idées aux bibliothèques universitaires pour les aider à faire face aux nouveaux défis. Les bibliothèques universitaires devront mettre en place de nouvelles stratégies afin de conserver leur relation avec les étudiants, le corps enseignant et l'université et garantir ainsi leur viabilité.

Expanding the Personal-Name-Authority-Record under RDA: Current status and quality considerations

[Étendre l'enregistrement Personnel-Nom-Autorité sous RDA : situation actuelle et considérations sur la qualité]

Heather Lea Moulaison

IFLA Journal, 41-2, 112-119

Les individus sont complexes et leur description dans les notices d'autorité des bibliothèques est rendue de plus en plus sophistiquée par l'ajout d'attributs, conformément au code de catalogage RDA. Cette étude de cas faite selon une approche longitudinale examine les attributs des notices d'autorité du groupement de bibliothèques universitaires « Merlin cluster » au bout de six mois (c'est-à-dire en septembre 2013) et d'un an (c'est-à-dire en avril 2014) après l'adoption officielle du code de catalogage RDA, afin de distinguer les tendances dans l'utilisation des champs d'attribut. Cette étude examine l'indice de complétude des métadonnées au bout d'un an de catalogage RDA. Globalement, l'indication d'attributs est plutôt rare : 87,58 % des notices d'autorité ne comportaient aucun attribut ; cependant, le nombre de notices ayant un contenu avait augmenté au cours des six mois précédents. Près de 8 % des notices d'autorité comportaient au moins un attribut au bout d'un an et près de 5 % comportaient alors au moins deux attributs.

Sharing science: the state of research institutional repositories in Ghana

[Partage des données scientifiques : la situation des dépôts institutionnels de recherche au Ghana]

Jenny Bossaller, Kodjo Atiso
IFLA Journal, 41-2, 120-128

Les scientifiques du monde entier profitent du partage de données scientifiques, notes de laboratoire et études préliminaires ainsi que de documents scientifiques formels traditionnels. Les dépôts institutionnels (DI) sont des espaces ouverts où les scientifiques peuvent déposer leurs travaux. Procéder ainsi peut faire naître de nouvelles collaborations et permettre aux scientifiques et universitaires de développer des compétences inter-institutionnelles. Cependant, les scientifiques doivent pouvoir avoir confiance dans la sécurité du dépôt et bien comprendre la législation et les mesures de protection en matière de copyright. De nombreux pays africains sont à la croisée des chemins : sur le point de résoudre des problèmes majeurs grâce à des scientifiques bien formés, ils se voient barrer la route par des technologies d'information et de communication coûteuses et imprévisibles. De nombreux scientifiques africains se méfient également d'Internet en raison des escroqueries et des fraudes possibles. Cet article décrit la situation africaine actuelle en matière de TIC, évoque les conclusions d'une étude sur les TIC, les bases de données et les dépôts institutionnels au Ghana, et conclut en faisant des recommandations sur le développement de l'usage des DI.

The library in the research culture of the university: a case study of Victoria University Library

[La bibliothèque dans la culture de la recherche universitaire : une étude de cas de la bibliothèque de l'Université de Victoria]

Ralph Kiel, Frances O'Neil, Adrian Gallagher, Cindy Mohammed

IFLA Journal, 41-2, 129-139

Cet article présente une étude de cas réalisée à la bibliothèque de l'Université de Victoria, une bibliothèque universitaire relativement jeune qui s'emploie à développer une toute nouvelle culture de recherche

au sein d'une institution. L'article s'intéresse à divers projets et initiatives savants de communication et plus particulièrement dépôts numériques, cultures numériques et nouveaux rôles des bibliothèques. Les préoccupations, défis et succès de la bibliothèque peuvent fournir des informations pour planifier et mettre en œuvre des initiatives et des projets dans des bibliothèques universitaires similaires.

The role of rural libraries on Ugandan adolescents' reading habits

[Le rôle des bibliothèques rurales dans le comportement de lecture des adolescents ougandais]

Valeda Frances Dent, Geoffrey David Goodman

IFLA Journal, 41-2, 140-152

Cette étude basée sur des méthodes mixtes examine l'impact d'une bibliothèque de village rural sur les élèves de l'enseignement secondaire de la communauté. Des données quantitatives ont été analysées afin d'étudier quatre facteurs en rapport avec les étudiants et leur environnement à l'école, à la bibliothèque et à la maison. L'étude a été effectuée à la bibliothèque communautaire de Kitengesa en Ouganda. Les facteurs examinés dans le cadre de cette étude ont été choisis parce qu'ils donnent un aperçu de la vie des élèves de l'enseignement secondaire dans leur environnement en fonction de trois aspects déterminants. Les questions posées par l'étude et les hypothèses relatives ont été explorées en comparant deux groupes d'élèves – un groupe ayant accès à la bibliothèque rurale, l'autre pas.

Conservation of library collections: Research in library collections conservation and its practical application at the Scientific Library of Tomsk State University

[Conservation des collections bibliothécaires : recherche sur la conservation des collections bibliothécaires et son application pratique à la bibliothèque scientifique de l'Université d'État de Tomsk]

Olga Manernova

IFLA Journal, 41-2, 153-161

Les moyens limités de conservation des collections bibliothécaires ont entraîné la destruction de nombreux documents précieux, y compris des livres et manuscrits rares, dont il n'avait pas été suffisamment

tenu compte jusqu'à une période récente. Bien que des approches scientifiques de la conservation des documents aient été mises au point, leur mise en œuvre avec succès a été entravée par des contraintes importantes sur le plan de l'application pratique. La bibliothèque scientifique de l'Université d'État de Tomsk est l'une des principales bibliothèques de Russie ; elle abrite 3,8 millions d'objets environ, y compris des manuscrits et livres rares. Cependant, les défis rencontrés pour conserver la collection de la bibliothèque et restaurer des documents endommagés ont été considérables. Sachant que ce « trésor d'information livresque de Sibérie » risquait de continuer à se dégrader et même dans certains cas, d'être définitivement perdu en raison de diverses causes de décomposition, les autorités russes ont accordé plus d'importance à la conservation, y compris en mettant des fonds supplémentaires à disposition. Grâce à ces efforts accrus, les recherches menées ont permis de redéfinir l'approche de la préservation et de la conservation, notamment en contrôlant mieux les équipements de stockage et les collections et en instaurant de meilleures pratiques de conservation et de restauration. De plus, l'équipe a entrepris la numérisation de la collection de la bibliothèque afin de réduire l'accès physique et par conséquent d'éviter des dégâts supplémentaires. Cet article décrit les méthodes de conservation dans la pratique en prenant pour exemple la bibliothèque scientifique de l'Université d'État de Tomsk pour montrer les résultats positifs d'une meilleure approche. Bien que les conditions environnementales de la bibliothèque soient spécifiques à ce seul site, cette approche devrait pouvoir être appliquée avec une même efficacité à des efforts de conservation plus larges. Cependant, un financement supplémentaire sera nécessaire pour mener à bien ces pratiques améliorées, le budget actuellement alloué à cette étude spécifique étant insuffisant.

Scholarly productivity of Arab librarians in LIS journals from 1981 to 2010: An analytical study

[La contribution savante des bibliothécaires arabes aux revues de sciences de l'information et des bibliothèques de 1981 à 2010 : une étude analytique]

Mahmoud Sh. Zakaria

IFLA Journal, 41-2, 162-176

Diverses études se sont intéressées aux caractéristiques des auteurs ayant publié dans des revues de sciences de l'information et des bibliothèques (SIB). Bien qu'aucune n'ait été consacrée spécifiquement aux bibliothécaires arabes en tant qu'auteurs, cette étude tente de mettre en lumière les contributions

savantes de bibliothécaires arabes. L'étude décrit et analyse les publications scientifiques faites par des bibliothécaires professionnels dans des revues de SIB de 1981 à 2010. Les articles rédigés par un seul auteur sont les plus fréquents, suivis des articles rédigés par deux ou trois auteurs. Le taux moyen de collaboration entre auteurs dans des revues de SIB est de 9,64 % (seuls 19 articles de revue sont rédigés par deux ou trois auteurs au moins). En conclusion, l'étude fait des recommandations aux bibliothécaires arabes, les encourageant à s'engager d'avantage dans la recherche sur les disciplines du SIB.

Zusammenfassungen

Academic libraries: A soft analysis, a warning and the road ahead

(Wissenschaftliche Bibliotheken: Eine weiche Analyse, eine Warnung und der Weg in die Zukunft)

James M. Matarazzo, Toby Pearlstein

IFLA-Journal, 41-2, 97-111

Der Netzzugriff auf Volltext-Datenbanken wirkt sich störend auf die Forschungstätigkeiten wissenschaftlicher Bibliotheken sowie Firmenbibliotheken aus. Die Umgebung in Organisationen mit Erwerbscharakter, wo die Bibliotheken weniger durch organisatorisches Ansehen und historische Traditionen isoliert sind, wird davon unmittelbarer beeinflusst. Den Veränderungen bei den Firmenbibliotheken sowie ihren Bemühungen zum Erhalt der Relevanz können die wissenschaftlichen Bibliotheken wertvolle Hinweise für den Umgang mit der neuen Realität entnehmen. Die wissenschaftlichen Bibliotheken benötigen neue Strategien für ihre Beziehungen zu den Studenten, dem Lehrkörper und der Wissenschaft sowie zur Gewährleistung der Nachhaltigkeit.

Expanding the Personal-Name-Authority-Record under RDA: Current status and quality considerations

(Erweiterung der persönlichen Normdateien (Personal-Name-Authority-Record) unter RDA: Die heutige Situation mit entsprechenden Qualitätsbetrachtungen)

Heather Lea Moulaison

IFLA-Journal, 41-2, 112-119

Menschen sind komplex und ihre Darstellung in den Normdateien der Bibliotheken wird immer komplizierter, da gemäß den RDA-Regeln immer mehr Attribute hinzugefügt werden. Die vorliegende Fallstudie untersucht die Attribute in den Normdateien aus dem Merlin-Cluster wissenschaftlicher Bibliotheken nach sechs Monaten (im September 2013) beziehungsweise einem Jahr (im April 2014) nach der offiziellen Implementierung des RDA-Systems im Rahmen einer Längsschnittuntersuchung, um eventuell vorhandene Trends bezüglich der Anwendung der Attribute vor Ort feststellen zu können. Nach einjähriger RDA-Katalogisierung misst diese Studie die Vollständigkeit als Metadatenqualitätsindikator. Insgesamt waren nicht allzu viele Attribute bereitgestellt worden; 87,58 Prozent der Normdateien besaßen überhaupt keine Attribute, allerdings war die Zahl der Dateien mit entsprechenden Inhalten in den vorangegangenen 6 Monaten gestiegen. Fast 8 Prozent der Normdateien hatten nach einem Jahr mindestens ein Attribut; und fast 5 Prozent besaßen zwei oder mehr Attribute.

Sharing science: the state of research institutional repositories in Ghana

(Wissenschaftlicher Austausch: der Zustand der institutionellen Repositorien in Ghana)

Jenny Bossaller, Kodjo Atiso
IFLA-Journal, 41-1, 120-128

Die Wissenschaftler in der ganzen Welt profitieren vom Austausch wissenschaftlicher Daten, Laborberichte und vorläufiger Arbeitspapiere sowie traditioneller formeller wissenschaftlicher Artikel. Institutionelle Repositorien (IR) sind Freiräume, in denen die Wissenschaftler ihre Arbeiten ablegen können. Dadurch können möglicherweise neue Kollaborationen entstehen, so dass Wissenschaftler und Gelehrte institutsübergreifende Kapazitäten entwickeln können. Allerdings müssen sich die Wissenschaftler in diesem Fall darauf verlassen können, dass die Repositorien gut geschützt sind, und sie müssen sich mit dem Urheberrechtsgesetz und dem Urheberrechtsschutz auskennen. Viele Länder in Afrika stehen hier am Scheideweg: Einerseits können mit gut ausgebildeten Wissenschaftlern eingreifende Probleme gelöst werden; andererseits werden diese Bemühungen durch kostspielige, unvorhersehbare ICT gebremst. Zudem stehen viele Wissenschaftler in Afrika

dem Internet aufgrund der vielen Scams und Betrugs- fälle skeptisch gegenüber. Der vorliegende Beitrag beschreibt die aktuellen ICT-Entwicklungen in Afrika, er beschreibt Befunde aus einer ICT-Studie, Datenban- ken und IRs in Ghana und schließt mit entsprechenden Empfehlungen zur erweiterten Nutzung der IRs ab.

The library in the research culture of the university: a case study of Victoria University Library

(Die Bibliothek in der Forschungskultur der Universität: eine Fallstudie der Victoria University Library)

Ralph Kiel, Frances O'Neil, Adrian Gallagher, Cindy Mohammed

IFLA-Journal, 41-2, 129-139

Der vorliegende Artikel beschreibt eine Fallstudie der Victoria University Library, einer relativ jungen Univer- sitätsbibliothek, die zur Entwicklung der aufkeimenden Forschungskultur an der Institution beiträgt. Dieser Beitrag präsentiert eine Reihe von wissenschaftlichen Kommunikationsprojekten und entsprechende Initiati- ven und befasst sich dabei schwerpunktmäßig mit digi- talen Repositorien, digitalen Kompetenzen und der Übernahme neuer Rollen durch die Bibliotheken. Die Anliegen, Herausforderungen und Erfolge der Biblio- thek können zur Planung und Implementierung solcher Initiativen und Projekte in ähnlichen wissenschaftlichen Bibliotheken beitragen.

The role of rural libraries on Ugandan adolescents' reading habits

(Der Einfluss ländlicher Bibliotheken auf die Lesegewohnheiten von Jugendlichen in Uganda)

Valeda Frances Dent, Geoffrey David Goodman

IFLA-Journal, 41-2, 140-152

Diese Studie, die sich auf gemischte Forschungsme- thoden stützt, befasst sich schwerpunktmäßig mit dem Einfluss einer ländlichen Dorfbibliothek auf Schüler der Sekundärstufe, die in dieser Gemeinschaft leben. Dabei wurden quantitative Daten analysiert, um bei den Schü- lern vier Einflussfaktoren im Zusammenhang mit der Schule, der Bibliothek und dem jeweiligen häuslichen Milieu zu klären. Die Studie wurde an der Kitengesa Community Library in Uganda durchgeführt. Die im Rahmen dieser Studie betrachteten Parameter wurden ausgewählt, weil sie eine Momentaufnahme aus dem Leben der Sekundarschüler in diesem Umfeld in Bezug auf diverse kritische Bereiche bieten. Die Fragestellun- gen im Rahmen dieses Forschungsprojekts und die ent- sprechenden Hypothesen wurden durch den Vergleich zweier Gruppen von Schülern untersucht, wobei eine Gruppe Zugang zu einer ländlichen Bibliothek hatte und die andere Gruppe nicht.

Conservation of library collections: Research in library collections conservation and its practical application at the Scientific Library of Tomsk State University

(Konservierung von Bibliotheksbeständen: Forschungsergebnisse zur Konservierung von Bibliotheksbeständen und ihr praktischer Einsatz in der Wissenschaftlichen Bibliothek der Staatsuniversität Tomsk)

Olga Manernova

IFLA-Journal, 41-2, 153-161

Durch eine Reihe von Schwierigkeiten mit der Aufbe- wahrung von Bibliotheksbeständen ist eine Vielzahl wichtiger Dokumente zerstört worden, einschließlich seltener Bücher und Manuskripte – ein Problem, das bis vor Kurzem nicht in hinreichendem Maß beachtet wurde. Obwohl wissenschaftliche Verfahren zur Auf- bewahrung von Dokumenten entwickelt worden sind, ist ihre erfolgreiche Anwendung in der Praxis auf erhebliche Schwierigkeiten gestoßen. Die Wissen- schaftliche Bibliothek der Staatsuniversität Tomsk ist eine der wichtigsten Bibliotheken Russlands mit einem Bestand von etwa 3,8 Millionen Stücken; dazu zählen auch Manuskripte und seltene Bücher. Aller- dings stellen der Erhalt der Bibliotheksbestände und die Wiederherstellung der beschädigten Dokumente eine erhebliche Herausforderung dar. Angesichts der Tatsache, dass dieser „Bücherschatz Sibiriens" in Gefahr war, weiterhin zu verfallen und in einigen Fällen aufgrund gefährlicher Zersetzungsprozesse sogar ganz verloren zu gehen, haben sich die russi- schen Behörden verstärkt mit der Aufbewahrung befasst und auch zusätzliche Finanzmittel bereitge- stellt. Aufgrund dieses erhöhten Interesses haben die Forscher die Aufbewahrungs- und Konservierungsver- fahren überdacht; was auch die verbesserte Überwa- chung der Lagereinrichtungen und Bestände und die Einführung besserer Methoden zur Aufbewahrung und Restaurierung beinhaltet. Außerdem hat das Team ein Verfahren zur Erstellung elektronischer Versionen der Bibliotheksbestände entwickelt, um den physischen Zugang zu verringern und somit weitere Schäden auf

ein Minimum zu reduzieren. Ziel dieses Artikels ist die Beschreibung der praktischen Anwendung der Konservierungsverfahren am Beispiel der Wissenschaftlichen Bibliothek der Staatsuniversität Tomsk als Fallstudie, um die Erfolge aufzuzeigen, die sich mit einem verbesserten Verfahren erzielen lassen. Obwohl die Umgebungsbedingungen in der Bibliothek ortstypisch waren, ist davon auszugehen, dass dieses Verfahren mit ähnlicher Effektivität auch im Rahmen von Konservierungsbemühungen auf einer breiteren Basis zur Anwendung gelangen kann. Allerdings werden weitere finanzielle Mittel benötigt, für die es zurzeit kein ausreichendes Budget in Bezug auf diese spezifische Studie gibt, um die verbesserten Methoden vollständig auszuarbeiten.

Scholarly productivity of Arab librarians in LIS journals from 1981 to 2010: An analytical study

(Wissenschaftliche Veröffentlichungen arabischer Bibliothekare in LIS-Zeitschriften von 1981 bis 2010: Eine analytische Studie)

Mahmoud Sh. Zakaria

IFLA-Journal, 41-2, 162-176

Diverse Studien haben sich mit den Eigenschaften von Autoren befasst, die in den Fachzeitschriften der Bibliotheks- und Informationswissenschaft (Library and Information Science, LIS) publiziert haben. Obwohl sich keiner dieser Autoren speziell auf die Rolle arabischer Bibliothekare als Autoren konzentriert hat, versucht die vorliegende Studie, die wissenschaftlichen Beiträge arabischer Bibliothekare zur bibliothekswissenschaftlichen Literatur aufzuzeigen. Die Studie beschreibt und analysiert die Forschungsberichte von professionellen Bibliothekaren in LIS-Fachzeitschriften zwischen 1981 und 2010. Am häufigsten kommen Artikel vor, die nur von einem Autor verfasst wurden, gefolgt von Artikeln von zwei beziehungsweise drei Autoren. Der durchschnittliche Kollaborationsgrad zwischen den Autoren in LIS-Zeitschriften liegt bei 9,64% (es fanden sich nur 19 Artikel in Fachzeitschriften, die von mindestens zwei oder drei Autoren verfasst wurden). Abschließend empfiehlt diese Studie den arabischen Bibliothekaren, die weitere Forschung im Fachbereich LIS zu stimulieren.

Рефераты статеи

Библиотеки учебных заведений: Мягкий анализ, предупреждение и перспективы

Джеймс М. Матараццо, Тоби Перлстейн

IFLA Journal, 41-2, 97-111

Наличие сетевого доступа к электронным базам данных, содержащим полные тексты документов, оказало пагубное воздействие на участие библиотек как учебных заведений, так и предприятий в научно-исследовательской деятельности. В условиях ориентации на получение прибыли, когда библиотеки более уязвимы при отсутствии престижа организации и исторических традиций, такое влияние проявилось особенно быстро. Перемены в библиотеках предприятий, а также их деятельность, направленная на сохранение собственной значимости, могут послужить подсказкой для библиотек учебных заведений, каким образом противостоять современным условиям. Для обеспечения собственной жизнестойкости библиотекам учебных заведений понадобятся новые приемы, направленные на поддержание взаимоотношений со студентами, преподавательским и научным составом.

Расширение записей в карточке "Имя-Допуск" согласно правилам RDA: Рассмотрение текущей ситуации и вопросов качества

Хезер Ли Мулезон

IFLA Journal, 41-2, 112-119

Каждый человек являются сложным субъектом, и составление его описания в библиотечной карточке допуска становится все более трудным в связи с добавлением характеристик согласно правилам Описания источника и доступа к нему (RDA). В рамках настоящего практического анализа с применением метода повторного исследования были изучены характеристики в карточках доступа библиотек учебных заведений группы MERLIN как через 6 месяцев (т.е. в сентябре 2013 г.), так и через 1 год (т.е. в апреле 2014 г.) после официального принятия RDA для оценки тенденций использования поля для внесения характеристик. В рамках настоящей работы после одного года каталогизации в соответствии с правилами RDA исследуется качественный показатель полноты метаданных. В целом наблюдается тенденция к редкому указанию характеристик: 87,58 процентов карточек доступа вообще не имеют характеристик, тем не менее, за предыдущие 6 месяцев увеличилось

количество карточек, имеющих соответствующие данные. Почти 8 процентов карточек доступа по истечении года имели как минимум одну характеристику; и почти 5 процентов имели две характеристики или более.

Делимся наукой: состояние хранилищ научных учреждений в Гане

Дженни Боссаллер, Коджо Атисо

IFLA Journal, 41-2, 120-128

Ученые по всему миру извлекают пользу из обмена научной информацией, записями о лабораторных исследованиях и предварительными документами, а также обычными формальными научными документами. Хранилища учреждений (IR) являются для научных работников открытым пространством, где они могут хранить свои работы. Следствием такой практики может стать возникновение совместных проектов, позволяющих ученым деятелям, а также научным сотрудникам формировать взаимодействие на уровне научных и учебных учреждений. Однако ученые должны верить в то, что хранилище защищено, они также должны понимать значение закона об авторском праве и защите авторского права. Многие государства Африки стоят на перепутье: они готовы решать первоочередные задачи силами высококвалифицированных ученых, при этом они поставлены в тупик дорогими и непредсказуемыми информационно-коммуникационными технологиями (ICT). Многие ученые Африки также настороженно относятся к сети Интернет в связи с большим количеством случаев мошенничества и обмана. В данной работе описан современный ход развития ICT в Африке, приводятся результаты исследования в области ICT, баз данных, а также хранилищ учреждений в Гане, а в завершение изложены рекомендации относительно расширения использования хранилищ учреждений.

Библиотека в культуре исследовательской работы университета: исследование на примере Библиотеки Университета Виктория

Ральф Киль, Франсе О'Неил, Эдриан Галлахер, Синди Мохаммед

IFLA Journal, 41-2, 129-139

В настоящей статье представлен анализ текущей ситуации в Библиотеке Университета Виктория как относительно молодой университетской библиотеке, которая вносит свой вклад в развитие зарождающейся культуры исследовательской работы учебного заведения. В ней показаны различные академические проекты и инициативы по развитию коммуникаций, при этом особое внимание уделено цифровым хранилищам, цифровой грамотности и новой роли библиотек. Проблемные вопросы, основные задачи и успехи Библиотеки могут стать информационным подспорьем при планировании и реализации инициатив и проектов в схожих библиотеках учебных заведений.

Роль сельских библиотек в формировании у подростков Уганды тяги к чтению

Валеда Франсе Дент, Джеффри Дэвид Гудман

IFLA Journal, 41-2, 140-152

В ходе данного исследования использовался смешанный метод, а предметом исследования являлось влияние сельской библиотеки на учеников средней школы соответствующего сообщества. Был выполнен анализ количественных данных с целью выявления четырех факторов, оказывающих влияние на учеников и относящихся к окружающей их среде в школе, в библиотеке и дома. Местом проведения исследования была Библиотека Сообщества Китенгеса в Уганде. Факторы, рассматриваемые в рамках настоящего исследования, были выбраны по той причине, что они позволяют получить быстрое представление о жизни учеников средней школы в данных условиях в разрезе критических вопросов. Рассмотрение вопросов исследования и соответствующих гипотез выполнялось путем сравнения двух групп студентов: одна группа имела доступ к сельской библиотеке, а вторая - не имела.

Консервация библиотечных фондов: Исследование в области консервации библиотечных фондов и его практическое применение в Научной библиотеке Томского государственного университета

Ольга Манернова

IFLA Journal, 41-2, 153-161

Ограничения в области сохранения библиотечных фондов привели к утере многих важных документов, включая редкие книги и рукописи, которым до недавнего времени не уделялось должного внимания. Несмотря на разработку научных подходов в области сохранения документов, их успешному использованию препятствовали факторы, существенно ограничивающие применение на практике. Научная библиотека Томского государственного

университета является одной из крупнейших библиотек России, в которой хранится около 3,8 миллиона томов, включая рукописи и редкие книги. Однако сохранение фонда библиотеки и восстановление поврежденных документов представляли поистине серьезную задачу. Сознавая, что это "Сибирское книжное сокровище" подвергается опасности продолжающегося разрушения и, в некоторых случаях, полного уничтожения вследствие воздействия различных источников разложения, российские власти сделали особый упор на его сохранение, включая дополнительное финансирование. Благодаря такому повышенному вниманию исследователи пересмотрели подход к сохранению и консервации, включая улучшение контроля над хранилищем и фондами, а также разработку более эффективных методов сохранения и реставрации. Кроме того, команда запустила процесс создания электронных версий находящихся в библиотеке документов с целью ограничения физического доступа к ним, чтобы минимизировать таким образом их дальнейшее разрушение. Целью настоящей статьи является описание практического применения консервации на реальном примере Научной библиотеки Томского государственного университета, который демонстрирует успешный результат усовершенствованного подхода. Несмотря на то, что окружающие условия в библиотеке были характерны для конкретного заданного места, считается, что указанный подход может применяться более широко и иметь схожую эффективностью в части усилий, направленных на консервацию. Тем не менее, для полного завершения указанных расширенных мероприятий потребуется дополнительное финансирование, для которого в настоящее время недостаточно средств, выделенных в связи с данным конкретным исследованием.

Научная производительность библиотекарей арабского происхождения в периодических изданиях, посвященных библиотековедению и науке об информации: Аналитическое исследование

Махмуд Ш. Закариа

В нескольких исследованиях обсуждались черты авторов, работы которых публиковались в периодических изданиях, связанных с библиотековедением и наукой об информации. Несмотря на то, что ни в одном из них особое внимание не уделялось авторам, являющимся библиотекарями арабского происхождения, в настоящей работе сделана попытка раскрыть академический вклад библиотекарей арабского происхождения в литературу, посвященную библиотековедению. В работе приводятся описание и анализ публикаций в научных периодических изданиях, посвященных библиотековедению и науке об информации, за период с 1981 по 2010 годы, авторами которых являются профессиональные библиотекари. Наиболее распространенными являются статьи, написанные одним автором, затем следуют статьи с двумя и тремя авторами. Средний уровень взаимодействия авторов периодических изданий, посвященных библиотековедению и науке об информации, составляет 9,64% (лишь 19 статей в периодических изданиях написаны двумя или тремя авторами). В заключение настоящей работы приводятся рекомендации для библиотекарей арабского происхождения, целью которых является поощрение более широкого участия в исследованиях, посвященных библиотековедению и науке об информации.

Resúmenes

Bibliotecas universitarias: análisis genérico, advertencias y retos futuros

James M. Matarazzo, Toby Pearlstein

El acceso en red a bases de datos de textos completos ha hecho que las bibliotecas, tanto universitarias como corporativas, desvíen su atención del proceso de investigación. Este efecto se ha dejado sentir de manera más inmediata en el ámbito de las entidades con ánimo de lucro, en el que la categorización de las bibliotecas en función de su prestigio como organización o su tradición histórica resulta menos importante. Los cambios experimentados por las bibliotecas corporativas, así como las iniciativas llevadas a cabo por estas con el fin de mantener su prestigio, pueden proporcionar ideas a las bibliotecas universitarias sobre cómo hacer frente a la nueva realidad. Para garantizar su sostenibilidad, las bibliotecas universitarias necesitarán adoptar nuevas estrategias que les permitan mantener su relación con los estudiantes y miembros de los cuerpos docente y académico.

Generalización del uso del Registro de Autoridad de Nombres de Persona en virtud de la norma de catalogación RDA: situación actual y reflexiones en materia de calidad

Heather Lea Moulaison

IFLA Journal, 41-2, 112-119

Las personas constituyen una realidad compleja, y su representación en los registros de autoridad de las bibliotecas está adquiriendo cada vez un mayor grado de sofisticación a raíz de la adición de atributos en virtud de la aplicación de la norma RDA. El presente estudio de caso, en el que se aplicó un enfoque longitudinal, analiza los atributos de los registros de autoridad existentes en la plataforma Merlin de las bibliotecas universitarias en dos momentos: seis meses después de la aprobación oficial de la norma RDA (es decir, en septiembre de 2013) y un año después de dicho acontecimiento (es decir, en abril de 2014), con el fin de valorar la evolución en el uso de los campos de atributos. Tras un año de utilización del sistema de catalogación RDA, este estudio examina el indicador de calidad basado en metadatos relativo a la integridad. En general, los atributos introducidos suelen ser escasos; el 87,58 % de los registros de autoridad no contaba con un solo atributo, pero el número de registros con algún tipo de contenido había aumentado a lo largo de los 6 meses anteriores. Casi el 8 % de los registros de autoridad contaba con al menos un atributo al cabo de un año, y prácticamente el 5 % contaba con dos o más atributos.

La divulgación de la ciencia: estado de los archivos institucionales de investigación en Ghana

Jenny Bossaller, Kodjo Atiso
IFLA Journal, 41-2, 120-128

Científicos de todo el mundo aprovechan las ventajas que les ofrece el intercambio de datos científicos, cuadernos de laboratorio y documentos preliminares, así como de documentos científicos oficiales en formato tradicional. Los archivos institucionales constituyen espacios de libre acceso en los que los científicos pueden depositar sus trabajos. Este procedimiento puede fomentar el surgimiento de nuevas experiencias de colaboración, lo que permite a los científicos y miembros de la comunidad académica desarrollar la capacidad interinstitucional. Sin embargo, los científicos deben confiar en la seguridad de dichos archivos y entender las leyes y los mecanismos de protección relativos a los derechos de autor. Muchos países africanos se encuentran en una encrucijada: por un lado, preparados para resolver problemas importantes con la ayuda de científicos debidamente formados pero, por otro, frenados por el alto coste y los resultados impredecibles del uso de las tecnologías de la información y las comunicaciones (TIC). Numerosos científicos africanos también desconfían de Internet debido al aumento incontrolado del número de casos de fraude y estafa. El presente artículo describe el desarrollo actual de las TIC en África, exponiendo los resultados de un estudio sobre las TIC, las bases de datos y los archivos institucionales en Ghana y formulando, por último, recomendaciones para generalizar el uso de dichos archivos.

El papel de la biblioteca dentro de la cultura investigadora de la universidad: estudio de caso sobre la Biblioteca de la Universidad de Victoria (Australia)

Ralph Kiel, Frances O'Neil, Adrian Gallagher, Cindy Mohammed

IFLA Journal, 41-2, 129-139

El presente artículo expone un estudio de caso sobre la Biblioteca de la Universidad de Victoria (Australia), en su calidad de biblioteca de fundación relativamente reciente que contribuye al desarrollo de la cultura investigadora emergente de la institución. El artículo destaca varios proyectos e iniciativas de comunicación académica, haciendo especial hincapié en los archivos digitales, los niveles de alfabetización digital y el nuevo papel otorgado a las bibliotecas. Los problemas, retos y éxitos de dicha Biblioteca pueden servir para diseñar la planificación y ejecución de diversas iniciativas y proyectos en otras bibliotecas universitarias similares.

El papel de las bibliotecas rurales en el desarrollo de hábitos de lectura entre los adolescentes ugandeses

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IFLA Journal, 41-2, 140-152

Este estudio, basado en una perspectiva multimetodológica, se centra en analizar la repercusión de la presencia de una biblioteca en una aldea rural sobre los alumnos de enseñanza secundaria de la comunidad. Se analizaron datos cuantitativos con el fin de estudiar cuatro factores referidos a los alumnos y relacionados con los entornos de su centro de enseñanza, la biblioteca y su hogar familiar. La Biblioteca Comunitaria de Kitengesa, en Uganda, sirvió como lugar de realización del estudio.

Los factores analizados en el presente estudio se seleccionaron en virtud de su capacidad para facilitar una imagen representativa de las vidas de los alumnos de enseñanza secundaria de dicho entorno en diversos ámbitos fundamentales. Las cuestiones planteadas por la investigación y las hipótesis vinculadas a aquellas se analizaron mediante la comparación de dos grupos de alumnos: un grupo con acceso a la biblioteca rural y otro grupo carente de dicho acceso.

Conservación de colecciones de bibliotecas: la investigación sobre conservación de colecciones de bibliotecas y su aplicación práctica en la Biblioteca Científica de la Universidad Estatal de Tomsk

Olga Manernova

Las limitaciones existentes en el campo de la conservación de colecciones de bibliotecas han llevado a la destrucción de muchos documentos importantes, entre ellos, libros y manuscritos valiosos a los que, hasta hace poco, no se había prestado suficiente atención. A pesar de haberse desarrollado diversos enfoques científicos en el ámbito de la conservación de documentos, su aplicación satisfactoria se topa con las limitaciones fundamentales que conlleva la aplicación práctica. La Biblioteca Científica de la Universidad Estatal de Tomsk es una de las principales bibliotecas de Rusia y alberga aproximadamente 3,8 millones de ejemplares, entre ellos, manuscritos y libros valiosos. Sin embargo, se han planteado importantes retos a la hora de conservar la colección de la biblioteca y restaurar los documentos deteriorados. Conscientes de que este "preciado tesoro bibliográfico de Siberia" se enfrentaba a un riesgo de deterioro continuo y, en algunos casos, a su pérdida absoluta debido a la presencia de diversos agentes de descomposición, las autoridades rusas han otorgado más importancia a la conservación destinando una mayor cantidad de recursos financieros, entre otras medidas. Gracias a este aumento de la atención prestada, los investigadores han podido revisar el enfoque de conservación y preservación y, entre otras medidas aplicadas, han mejorado la supervisión de las instalaciones de depósito y las colecciones, además de instaurar prácticas de conservación y restauración más eficaces.

Asimismo, el equipo ha puesto en marcha un proceso orientado a generar versiones electrónicas de la colección de la biblioteca para restringir la consulta de los ejemplares físicos y reducir al mínimo el posible deterioro adicional. El objetivo del presente artículo es describir las prácticas aplicadas en el ámbito de la conservación a través del estudio de caso de la Biblioteca Científica de la Universidad Estatal de Tomsk, con el fin de demostrar que la aplicación de un enfoque mejorado puede generar resultados positivos. Aunque las condiciones ambientales de la biblioteca eran características de su ubicación específica, cabe estimar que la aplicación de dicho enfoque podría generalizarse a otras iniciativas de conservación con una eficacia similar. No obstante, para poder desarrollar íntegramente estas prácticas mejoradas, se requiere financiación adicional, aspecto para el que actualmente no existe presupuesto suficiente de acuerdo con este estudio específico.

La productividad académica de los bibliotecarios árabes en las revistas de biblioteconomía y documentación entre 1981 y 2010: estudio analítico

Mahmoud Sh. Zakaria

Diversos estudios han examinado las características de los autores de artículos publicados en las revistas de biblioteconomía y documentación. No obstante, ninguno de ellos se ha centrado específicamente en la labor de los bibliotecarios árabes en su faceta de autores, por lo que el presente estudio intenta poner de relieve las aportaciones de estos profesionales a la bibliografía existente en dicho ámbito. El estudio reseña y analiza los artículos de investigación publicados en las revistas de biblioteconomía y documentación por bibliotecarios profesionales entre 1981 y 2010. Los artículos obra de un único autor son los más frecuentes, seguidos de aquellos redactados por dos o tres autores. El grado medio de colaboración entre autores en las revistas de biblioteconomía y documentación es del 9,64 % (únicamente 19 artículos de dichas revistas fueron escritos por al menos dos o tres autores). Por último, el presente estudio formula una serie de recomendaciones a los bibliotecarios árabes, con el fin de animarles a aumentar su participación en la investigación desarrollada en el ámbito de la biblioteconomía y documentación.