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### Aims and Scope

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

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## After Singapore

Stephen Parker

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This issue of IFLA Journal, the first to be published after the World Library and Information Congress in Singapore, includes four papers dealing with a variety of topics.

The first paper, 'National digital content policies: a comparative study of Arab and other countries', by Ramy Abboud of Menofia University in Egypt, compares national policies pertaining to digital content in 10 countries, in addition to the European Union (EU), which were divided into Arab and non-Arab groups. A prototype of Policy Assessment Criteria (PAC), based on 56 variables, and including a model statistical indicator called Policies Quality Indicator (PQI) was developed to facilitate the comparison. The paper also sheds light on global strategic planning trends in the field of digital content through a comparison of Arab policies with those of selected developing and developed countries around the world.

The second paper deals with a country that has received little previous attention in these pages. In 'The teachers' role in fostering independent learning in high schools in Zanzibar', Abbas Mohamed Omar of Zanzibar reports on a study of the role of teachers in fostering students' independent learning through school library use in three public and two private high schools in Zanzibar. The study revealed that school libraries were confronted with library stocks containing outdated and outdated materials, limited library use by students and teachers, inefficient and untrained school library staff, lack of integration of information, curricula and classroom learning, and lack of cooperation between teaching and library staff. The paper makes a number of recommendations based on the findings.

The third paper, 'Connecting Aga Khan University's nine campus libraries across three continents through a shared library system', by Ashraf Sharif and Normand Demers, of Aga Khan University, describes

how the university selected and implemented a library management system to integrate its nine libraries, in four countries, using a single shared database. The paper aims to share the university's experience of implementing an industry standard-base state-of-the-art library system to serve eight of its libraries on three continents. The scattered geographical locations and multilingual collections of the libraries make this experience a unique occurrence in the field of library and information science.

The fourth paper in this issue is a reproduction of a recent SAGE report, 'Library Value in the Developing World', by Nell McCreadie, Group Marketing Manager, SAGE Publications Ltd. The report, which was launched at WLIC in Singapore, is a follow up to the 2012 study 'Working together: evolving value for academic libraries', which reported findings from eight case studies in the UK, US, and Scandinavia. 'Library Value in the Developing World' reports on findings of a 6-month project with 12 case studies from low-income and middle-income developing countries. Data were collected and triangulated via a series of surveys and interviews. Some comparison with developed-country libraries and examples of good practice are identified, from which other institutions could learn in respect of the support librarians provide for faculty, and the working relationship between academic libraries and their key stakeholders.

This issue also includes a first group of papers from WLIC Singapore: the Opening Address by IFLA President Ingrid Parent; a presentation of the IFLA Trend Report, also by the President; the text of the IFLA Statement on Libraries and Development, which was approved by the IFLA Governing Board in Singapore; and a series of interviews with the winners of the SAGE co-sponsored ARL (Association of Research Libraries) attendance grant for the Singapore conference.



# National digital content policies: A comparative study of Arab and other countries

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**Ramy Abboud**

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## Abstract

The paper highlights a comparative analysis of the national policies pertaining to digital content within 10 countries, in addition to the European Union (EU), that were divided into two groups: Arab and non-Arab (Global Group). A prototype model of Policy Assessment Criteria (PAC) was developed to help enhance the quality of the national digital content policies that are mainly under construction. Based on 56 variables included in the PAC, a prototype model of a statistical indicator called Policies Quality Indicator (PQI) was also developed in order to measure the quality of the policies themselves, or, in other words, to identify the quality level of the conceptual framework of digital content policies that may be used on a global scale. In addition to developing both the PQI and the PAC, this paper sheds light on the global strategic planning trends in the field of Digital Content, especially through the comparison of a number of Arab policies to those of a set of developing and developed countries around the world.

## Keywords

digital content policies, Policy Assessment Criteria, Policy Quality Indicator, Arab countries

## Introduction

Over the past two decades many countries around the world recognized the importance of being part of the global Information Society, given the conversion of human society towards different economic organization based on knowledge and services, not on production and goods. Consequently, numerous countries around the world headed towards the formulation of national policies and strategic plans to cover the major two components of the Information Society in sequence: 1: digital infrastructure; 2: digital content. Thus, the vast majority of national efforts were invested at the beginning – in the 1990s – in developing the digital infrastructure and then, at a later stage during the 21st century, efforts were redirected to Digital Content (DC) and the Digital Content Industry (DCI).

However, the national strategic planning in the field of DC, and in particular, the standardization of national policies through the adoption of certain criteria and the creation of adequate statistical indicators by which these policies can be measured and enhanced, were not adequately addressed by research on local, regional or global scales. Therefore, the

absence of these criteria and indicators justifies the significance of the current study.

Although the focus of this study falls within Arab and non-Arab countries, where the non-Arab countries serve as the model, this diverse mix of countries helps to shed light on the DCI strategic planning, not only within the context of these specific countries, but also on a global scale. It also helps to explore the nature of efforts that policy makers make in order to cope with the global information society.

Additionally, results of this study can be considered as a road map for the Arab countries in particular and the developing countries in general, in order to enhance their capabilities in tackling the global information society, and obtaining an active participation within the future of the global DCI.

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## Objectives

This study aims to develop Policy Assessment Criteria (PAC) for enhancing digital content policies that are under construction. The study also aims to develop a prototype model of a statistical indicator called Policies Quality Indicator (PQI) for evaluating existing policies. In addition to developing both the PAC and the PQI, this paper compares a number of Arab policies to those of a set of developing and developed countries around the world.

In addition, the PQI can be considered as a prototype statistical indicator which is expected to undergo more development in the future in order to help policy makers measure the conceptual quality of the national DC policies. Moreover, both the PAC and the PQI aim to assess the maturity and coverage of the policies themselves within their theoretical framework and do not assess the performance or implementation frameworks of the chosen countries with respect to these policies. Consequently, the ranking of each country according to the current method is not indicative of the country's performance with respect to the DCI.

## Methodology

The proposed Policy Assessment Criteria (PAC) and the Policy Quality Indicators (PQI) within this study are based on a thorough comparative analysis of corresponding policies of 10 countries around the world, in addition to the European Union (EU). These countries were divided into two groups: A – 7 Arab Countries (Arab Group); B – 3 Non-Arab Countries in addition to the EU (Global Group).

This comparative analysis is designed to extract constructive components of the policies in order to create both the PAC and then the PQI – as a prototype statistical indicator – depending on the variables of the PAC. Both the PAC and the PQI are designed in order to boost the DC in terms of the strategic planning process and the conceptual framework of the national policies.

Accordingly, this study comes under two levels: 1– The PAC for strategic planning purposes in the field of DCI, where policy makers can be guided towards the best practices and trends in the world and seek standardization and enhancement of the national DC policies; 2– The PQI for rating the DCI policies of each country under study, which will provide us with further comparative indications with respect to the Arab DC policies against the Global DC policies.

This study was conducted over a period of January – December 2011. It was intended at the beginning of this study to select all the 22 Arab countries, however,

this approach proved to have several difficulties that prevented access to information and data required in relation to many Arab countries. Eventually, it was decided to carry out the study according to only seven Arab countries as follows: Jordan, Saudi Arabia, Syria, Palestine, Lebanon, Egypt, and Morocco, which seem to be socially and economically diverse (see Annexure 1 for details regarding sources of information).

As opposed to the Arab Group, selecting countries within the Global Group proved to be quite a simple practice, given the online availability of the vast majority of the required information with respect to many countries around the world. In addition, the selection process was based on certain criteria that were agreed upon in advance, such as, but not limited to: the selected global countries should not have been the subject of intensive study and review previously in the Arabic literature, especially France, Ireland, Malaysia, Korea, India, Israel; these countries should be leading in the global information society according to their global reputation; they should occupy a distinctive ranking according to the latest Networked Readiness Index of the Global Information Technology Report <sup>(1)</sup>; they should reflect diverse economical and social conditions. Consequently, the following countries were selected: Japan, Brazil, and South Africa, in addition to the EU (see Annexure 2 for details regarding sources of information).

It is crucial to note that although the EU comprises 28 countries, the object of comparison is the policies of EU pertaining to digital content which are applied to each member country and not the performance of the EU as a whole. Hence, it is valid to compare these policies to policies of other countries based on the conceptual framework of the policies.

## Policy Assessment Criteria (PAC)

Although some guidelines and instructions in respect to the structure of strategic policies of the information society in general, do exist, it was confirmed by different experts that currently there are no similar assessment criteria or statistical indicators in the field of DCI, either on local, regional or global levels (personal communications, see Annexure 3).

Developing a set of assessment criteria within the PAC model, through conducting a comprehensive analytical comparison to digital content policies of countries under study, is necessary to do the following:

1. Improve the conceptual quality of strategic planning when these qualitative criteria are followed during the formulation process.

2. Develop the PQI as a relevant statistical indicator in order to measure the quality of the existing policies.
3. This criteria scheme model consists of 56 variables detailed below along with their description. These variables are divided into five main pillars according to their relation to each other and to the general framework of strategic planning in the field of DCI.

### *1st Pillar: Policy Formulation Features*

*1.1 Building on a comprehensive understanding of the current local status.* That the process of strategic planning is subsequent to an extensive study and analysis of the current situation, and a detailed collection of relevant data and information. The policies formulation comes in light of the results of those operations and the availability of an accurate understanding of the local background and requirements.

*1.2 Identifying constraints and opportunities.* Identifying existing constraints and opportunities, not only in the local context, but also in the regional and international contexts as well. This should be coupled with the creation of various mechanisms to overcome those obstacles and invest in those opportunities, within the framework of policies.

*1.3 Emphasizing the role of digital content in achieving sustainable development.* Having policy makers who are aware of the importance of the DCI in supporting sustainable development efforts in various sectors, especially economic and social development, should be ensured through the strategic framework of policies.

*1.4 Policy formulation in coordination with various stakeholders.* That the government institution in charge of policy development calls various local parties and other stakeholders to participate actively in the policy formulation process and the shaping of the components of the national strategic plan; particularly the private sector, civil society, regional institutions and international organizations.

*1.5 Integration with local policies in various sectors.* That the generated policies complement various other policies for different local sectors and are not isolated from them. Such as: education, health, corporate development, research, foreign affairs, or other sectors, as necessary.

*1.6 Linking with national objectives and/or national mega-projects.* That policy-makers might set comprehensive national goals and challenging elements for the local community and/or mega-projects, which would genuinely attract the attention of the local community, in the framework of the objectives of the digital content policy. This trend can mobilize all local resources available to achieve objectives and improve the current status, for example: 1– to follow success stories from a developed country in the information society sector and consider them as a prime competitor, as is the case in the policies of Japan that considered USA as a prime competitor, 2– to accelerate the dissemination of Information and Communication Technology (ICT) for the reception of a global event to be organized locally, as is the case in the policies of Brazil's organizing the prospective Football World Cup.

*1.7 Development of alternative unconventional solutions for the deployment of digital content.* Adopting ready-made solutions or initiatives is not a guaranteed successful approach in overcoming local obstacles. Instead, policy makers should work to find alternatives and creative solutions that stem from local conditions and available resources, for example; 1– the initiative of Computer Refurbishment in the case of Brazil; 2– the religious Fatwa that have been issued against digital piracy in the case of Saudi Arabia; 3– the computer leasing and loaning in the case of Syria.

*1.8 Looking towards the regional digital content market.* That policies target not only the local market but also the regional market, and strive to play a leading role in it, and achieve a competitive position, by taking into account the digital content needs of the surrounding states in order to increase the demand for local content and support local content developers.

*1.9 Looking towards the global digital content market.* Creating digital content products that exceed the needs of the local and regional markets and target the global market as well, and striving to establish a presence in the framework of global competitiveness, while highlighting the local agenda for DCI in the context of the global information society.

*1.10 Looking towards an active role in the future of the global DCI.* Policies that go beyond the present conditions associated with the DCI by seeking to influence the future and contribute in the formation of its prospective dimensions, future technologies, and dissemination of the ubiquitous networking and use of digital content in all aspects of life.

## 2nd Pillar: Policy Implementation Features

**2.11 Transparency in presenting policies.** There should be no reservations among policy makers regarding policy dissemination through various channels; policies should not be restricted, but shared at the local, regional and international levels, whether government or public. Periodical performance reports and actual progress data should also be publicized by the government relevant arms and made available to other parties within the local community.

**2.12 Seeking the involvement of various “local” stakeholders in the implementation process.** Implementation efforts must not be restricted to the official government institutions alone; the policy directions and strategic goals can be reached through the engagement of diverse groups of stakeholders, each as per the nature of the required task, especially the private sector.

**2.13 Seeking the participation of various “regional” stakeholders in the implementation process.** Making use of all possible regional channels to support local efforts to implement the policies, and move the focal point of cooperation outside the limited territorial scope, such as, but not limited to: the cooperation with companies and countries within the regional borders, and the cooperation with regional non-governmental institutions.

**2.14 Seeking the participation of various “international” stakeholders in the implementation process.** Making use of all available international channels in supporting local efforts to implement the policies. Such as, but not limited to: the cooperation with international software companies, and of exchange experiences with some other countries outside the regional limits.

**2.15 Providing an opportunity for civil society to monitor and redirect the operational performance.** The government should allow members of the local civil society to monitor policy implementation, and redirect performance according to the level of satisfaction of citizens with it, in an interactive framework between the government sector and the community. In addition to a bilateral symbiotic relationship among policy makers and members of the community, by communicating reports, changes in policies and new governing acts, and performance indications through websites, public media and other communication channels, aiming to explore the views of civil society around them and to receive feedback in order to act upon them.

**2.16 Raising community awareness of the strategic policies.** Policy-makers should consider the implementation of some activities and events aimed at raising awareness among community members and institutions, both of policy content and the importance of national involvement. Also the expected impact of policies should be highlighted in the aim of increasing the level of participation in the implementation process.

**2.17 Taking into account the safe disposal of digital waste (e-Waste).** Reducing the negative impact of digital content deployment and associated hardware on the local environment and decreasing the expected harm, and ensure the safe disposal of the communication and technological equipment that is deemed harmful to the environment, as per international standards.

## 3rd Pillar: Policy Implementation Requirements

**3.18 Establishing an effective governance body.** Policies should cover the development of local governance associated with them, in a way to ensure effective operational performance, clearly defined responsibilities and objectives, and a monitoring role. The supreme organizational structure of the governance body should consist of prominent figures and high level – well-regarded – government officials, such as having the head of state at the top of the organizational structure.

**3.19 Enhancing the capacity of the local digital workforce.** Take all possible measures to develop local human resources associated with every aspect of digital content and relevant sectors, through continuous training and follow-up according to new international trends. Also, it is necessary to develop specialized academic programs and the dissemination of education in the areas of math and science, as well as education in foreign languages, especially English because of its wide use in the global digital content.

**3.20 Improving the leadership resources (e-Leaders).** Policies should take into account the restructuring of executive bodies or sectors responsible for achieving their objectives, as well as developing the leadership skills within them. It is also crucial to improve leaders’ work environments, and to provide ongoing training for them according to the latest international developments in their related sectors, in addition to an ongoing follow up of the latest developments in the global information society. Given that those in leadership are the driving force and the starting point for all directions and initiatives, the improvement of their

performance increases the chances of achieving the desired objectives.

**3.21 Inclusion of the national expertise of the digital content currently in the diaspora.** Linking the local digital content workforce with national experts working in the DCI outside the country, and bridging them, and making use of all their potential to support the targets and orientations of local policies, in their local and international aspects. It is also important to encourage the national experts in the field to return home and play a role in the implementation of local policies.

**3.22 Engaging the local expertise in the digital content field in order not to emigrate.** Providing all possible resources to motivate national expertise not to emigrate, and creating an environment of local competitiveness to minimize the digital brain drain, is a crucial element of the enabling environment. Given that this is one of the major obstacles that is facing the developing countries, where local experts usually follow better opportunities in the developed countries.

**3.23 Attracting international digital content experts to the local market.** Bridging the deficiency in local capacity, whether quantitative or qualitative by attracting international experts in the field to contribute to support policy implementation.

**3.24 Attracting foreign investment to the local market.** Overcoming all the obstacles that prevent the flow of foreign investments and venture capitals to the domestic market and identifying the requirements of global investors, mainly large software companies, and making them available. Also, strengthening the elements of the enabling environment, in particular the review of investment organizing acts and the reduction of custom taxes, and facilitating the procedures for establishing businesses.

**3.25 Supporting Small and Medium Entities (SMEs) as well as Micro-entities.** Recognizing the importance of small, medium and micro companies in the promotion of DCI, and take the necessary measures to strengthen them and provide their needs in terms of finance, lower taxes, customs, sponsoring them in their early stages and supporting their innovative projects.

**3.26 Standardizing the industrial component of the digital content.** Continued development of standards of the DCI in consistency with international schemes is vital in order to cover all existing gaps and to support the

value chain and the competitiveness of the digital content products. Consequently, this will enhance the DCI potential not only in the local market, but also in both regional and global markets.

**3.27 Providing the necessary financial resources.** Ensuring the readiness of government institutions to spend in areas related to the DCI, and providing the necessary funding in different ways, such as the creation of local funding. In addition to seeking potential global funding resources, and promoting venture capital to support the digital content projects owned by the private sector.

**3.28 Supporting innovation and creativity within the local environment.** Recognizing the importance of local innovation and creativity in generating an added value to the content products and in genuinely enhancing the DCI. It is also important to enhance the provision of the DCI, embrace the local talents, incorporate innovation aspects in the local education, reduce the existing restrictions in relation to creativity and innovation, in addition to other associated procedures.

**3.29 Supporting academic research in the digital content field.** Linking DCI to academic research schemes, and making use of their potential in the promotion and the development of DCI, and strengthening the academic research on one hand and the private sector and services on the other

**3.30 Supporting the incubation of digital content projects.** Providing resources necessary to support technology incubators in the field of DCI, and developing the process of embracing small projects and creative ideas, and developing them according to certain measures and global standards.

**3.31 Supporting the hosting services for the local digital content.** Ensuring availability of hosting services and maintaining the local digital content through local Internet Service Providers (ISP) reduces the potential risks that threaten it and enhances the content's security level. This is also important in terms of tackling the extension of digital content hosting-service outside the national geographical boundaries, and the massive flow of the global digital content towards the developed world for hosting purposes, especially Europe and the United States, and increasing the financial returns of the DCI as well

**3.32 Deployment and continuous enhancement of Internet services.** Connecting isolated and remote areas



to the Internet and ensuring delivery to all members of the community, with a continuous expansion and improvement of its performance in line with international standards. Increasing the penetration rates of the Internet services might lead to higher rates of the digital content use and accessibility.

**3.33 Deployment of mobile phone services.** Connecting isolated and remote areas to mobile telephone networks with a continuous development in line with the latest standards available worldwide, which could increase the penetration rates of content services.

**3.34 Deployment of computers amongst citizens as well as institutions.** Recognizing the positive relationship between the availability of computers in the local community and the accessibility rates of digital content is vital. Policy makers should take into account a range of initiatives that provide certain facilities in order to make computers available to the vast majority of individuals and institutions, and making it easier to families in particular to obtain computers, in addition to building up the local capacity of manufacturing and assembling computers.

**3.35 Reducing the cost of access to digital content.** Policy makers should take into consideration reducing the cost of access to digital content, ICT tools and the digital infrastructure, especially the Internet and mobile networks, through competitive pricing regulations and reduction of local taxes. This initiative is necessary to enhance the local penetration rates of digital content and to increase the market demand of digital content.

**3.36 Deployment of skills to use digital content (e-skills) in the local society.** Raising computer literacy and awareness among various segments of the local society is also important, especially with a focus on skills to use the content effectively in order to generate an added value.

**3.37 Enhancing the level of digital security and digital confidence within the local society.** Policy makers should consider cyber crime and the deployment of digital security as well as building up confidence between both users and vendors, especially through binding digital acts and legislation, taking strict actions against digital piracy, reducing the level of cyber crime and in particular raising awareness of digital security in the local society. In addition to many other procedures that would build up an effective use of digital content and enhance its industry.

#### **4th Pillar: Digital Content Pathways**

**4.38 Digital content to satisfy the actual local needs.** Policy makers should link digital content and its industry to the needs of the local community, attempt to overcome the limitations and shortage of the locally available content to bridge the gap and take into consideration the distinctiveness of the local context, thereby not allowing the digital content production-lines to operate in isolation from market demands and aspirations.

**4.39 Ensuring equal accessibility to digital content across all social strata.** This comes within the framework of knowledge democratization, where digital content should be made available to all individuals regardless of socioeconomic, cultural, racial, religious, or geographic backgrounds, instead of being restricted to certain community groups.

**4.40 Ensuring freedom of access and use of digital content.** Lifting all restrictions that prevent the transmission of digital content, and its accessibility, according to governing laws set by the local authority.

**4.41 Highlighting the national and cultural identity in the context of local digital content.** Recognizing the role of digital content in the preservation of national and cultural identity by leading the production lines of digital content in this direction and also increasing the quantity and enhancing the quality of local digital content. This is in order to help reduce the negative impact of globalization on local identity.

**4.42 Addressing the linguistic challenges that hinder the use of local digital content on a large scale.** Taking into account the constraints associated with the local language/languages, and addressing solutions to overcome them, within the strategic framework of policies. These are mainly the constraints that hinder the use of local digital content: including, for example, 1– the multiplicity of local languages used, as is the case in South Africa; 2– the isolation of the local language, as is the case in Japan; 3– the minimal spread of foreign languages within the local society, as is the case in Brazil.

**4.43 Taking into account the linguistic and cultural diversity in the local digital content.** Diversity mainly aims at not only producing content in the local language/languages, but also at targeting international users by producing content in other languages, especially English being a universal language. For example: the wide spread of foreign languages and cultures in the

cases of Jordan and Lebanon, should be respected and taken into consideration in the DCI policies.

**4.44 Supporting the efforts to overcome the local social problems.** Exploiting the potential of digital content in overcoming some of the social problems, including for example: 1– avoiding conflicts and supporting the national structure, as is the case in the Lebanese policies; 2– overcoming the problem of geographical divide and isolation, as is the case in Palestinian politics; 3– supporting the housewives that have limited work opportunities to work from home, as is the case in the Saudi policies; 4– supporting elderly people, as is the case in the Japanese policies.

**4.45 Supporting the efforts to overcome global environmental problems.** Recognizing the importance of digital content and also information and communication technology in overcoming environmental problems, as is the case of the reduction of energy consumption and global warming in the European union's policies.

#### **5th Pillar: Digital Content Scope**

**5.46 Developing software to address the automation problems of the local language.** Supporting efforts of finding solutions to the technical problems associated with the production of digital content in local language, for example the problems of Automatic Translation Software, Automatic Speech Recognition (ASR), Text to Speech (TTS), and Optical Character Recognition (OCR).

**5.47 Supporting translation efforts of digital content from and to the local language.** Supporting efforts of the local enrichment of digital content through translation into other languages, and translation of the content of foreign languages into the local language, to meet the deficiencies and shortage in the local digital content.

**5.48 Diversification of the local digital content applications.** Supporting efforts of producing digital content application in several fields including: health, culture, learning, agriculture, science, and other areas.

**5.49 Production of free digital knowledge.** Supporting efforts of producing free digital content, thereby covering domestic needs in general and needs of groups with limited purchasing power in particular, leading to the use of content on a larger scale. For example, through enhancing the public domains that contain free content in terms of quality and quantity, launching different initiatives to release free of

charge information, music, movies, encyclopedias, wikis, educational materials, digital libraries and other sources of knowledge.

**5.50 Production and dissemination of digital heritage.** Supporting efforts of digitization of the local heritage whether cultural or natural, and also publishing it through multiple channels. The digitization of heritage includes but is not limited to: collections of national libraries, museums, national archives, natural reserves, archaeological areas, art works and other heritage resources

**5.51 Supporting e-government and online public services.** Policy makers should take into consideration enhancing the accessibility of governmental and public services over the Internet in particular, automating the governmental processes and minimizing the digital divide between both citizens and government institutions.

**5.52 Deployment of mobile-content services.** Making use of the existing high penetration rates of mobile phone subscriptions in disseminating mobile-content services, such as: mobile banking service, mobile TV and others.

**5.53 Integration of traditional content production in an effort to reinforce digital content.** Seeking the support of the traditional content production to promote digital content, such as, but not limited to: paper publishers to release online summaries and bibliographic records for their publication, and scholars to release digital copies or at least abstracts of their scientific researches, and encouraging publishers to migrate to the digital environment instead of the print environment.

**5.54 Deployment of Open Source Software (OSS).** Ensuring the required support for the provision of OSS, and the development of free local software that meets local needs.

**5.55 Supporting the outsourcing industry.** Providing the necessary elements to support the outsourcing sector and call centre services. In particular, improving the required digital infrastructure, and reducing the implementation cost and providing the required workforces in this sector and enhancing their capacity in terms of quality and quantity.

**5.56 Transition to digital broadcasting.** Encouraging the transition to digital radio and digital TV, instead of

analogue broadcasting. In addition to reducing the service cost and raising the awareness of it.

### The Policy Quality Indicator (PQI)

The PQI as a statistical indicator comes in light of the PAC's variables, which can be considered, in turn, as qualitative assessment variables. Thus, the following PQI statistical rating of countries under study reflects the extent to which policies are consistent with the variables of PAC.

Moreover, the PQI helps achieve several key objectives in relation to the national policies as follows:

1. Recognize the major trends and processes are followed by policy makers during the policy formulation.
2. Pinpoint weaknesses in the planning, as well as strengths.
3. Identify the common factors between these policies, and their presence or absence in each country.
4. Compare the Arab policies to their global counterparts.

The main results related to the above comparative rating according to the PQI can indicate that the policies of the Global Group compared to the Arab Group came on top, as South Africa ranked first, followed by Japan in the second rank, the EU came in third, and Brazil came fourth. While Saudi Arabia, Lebanon and Jordan followed in the fifth, sixth and seventh place respectively. Egypt came in the eighth rank, followed by Palestine in the ninth rank, and Syria in the tenth rank, while Morocco occupied the last rank (see Figure 1).

In the context of variables of the 1st Pillar (Policy Formulation Features), the most common variables that were covered in the policies of both country groups, were each of the following<sup>(2)</sup>: Identifying constraints and opportunities; Emphasizing the role of digital content in achieving sustainable development; Integration with local policies in various sectors; Looking towards the regional digital content market.

Within the context of variables of the 2nd Pillar (Policy Implementation Features), the most common variables among both groups were the following: Seeking the participation of various regional and international stakeholders in the implementation process of the policies.

Within the 3rd Pillar (Policy Implementation Requirements), the variables most commonly addressed in the national policies were the following:

Enhancing the capacity of the local digital workforce; Supporting Small and Medium Entities (SMEs) as well as micro-entities; Providing the necessary financial resources; Supporting innovation and creativity within the local environment; Supporting innovation and creativity within the local environment; Deployment and continuous enhancement of Internet services; Deployment of mobile phone services; Reducing the cost of access to digital content; Deployment of skills to use digital content (e-skills) in the local society.

Within the 4th Pillar (Digital Content Pathways), the variables most commonly addressed in the national policies were the following: Digital content to satisfy the actual local needs; Ensuring equal accessibility to digital content across all social strata; Supporting the efforts to overcome the local social problems.

Within the 5th Pillar (Digital Content Scope), the variable most commonly addressed in the national policies were the following: Diversification of the local digital content applications; Supporting e-government and online public services.

As for the most significant shortcomings in national policies of the Arab Group, in particular, in comparison to the Global Group, it seems that the Arab Group did not look toward an active role in the future of the global DCI. The results showed an interest in this issue by developed countries, in particular EU and Japan, while the Arab Group and developing countries within the Global Group seemed not to look forward to being part of the global DCI in the future.

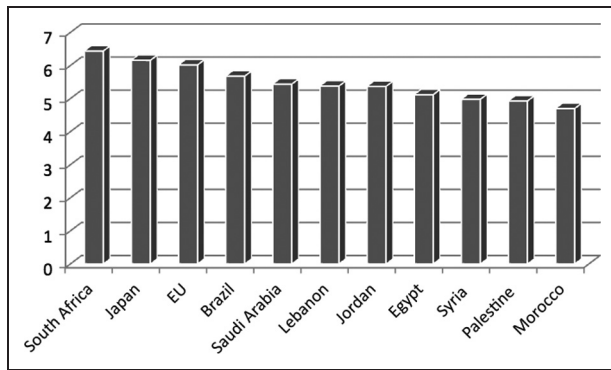
Also, countries of the Arab Group did not provide the civil society with an opportunity to monitor the performance of the policies and redirecting it accordingly, which is an issue that was addressed by both Brazil and South Africa in particular and led to a quite satisfactory performance that put both of them amongst the leading countries in the global market of DCI.

The Arab Group, comparing to the Global Group, did not take the environmental issues into consideration, especially the safe disposal of e-waste, with the exception of Jordan within the Arab group, while the Global group showed significant commitment to this issue within their national policies. This might reduce the market potential of the Arab DCI in the future, due to the increasing awareness of the impact of related equipments on the environment, especially in the developed countries. Therefore, Arab governments should give it a priority in order to obtain a competitive role in the global DCI.

It seems also that the Arab Group did not focus on the creation of an effective policy governance body in the cases of Saudi Arabia, Syria and Palestine, while

Table 1. PQI comparative rating for countries of both Arab and Global Groups <sup>(3)</sup>.

Variable Code	Consistency of the strategic policies with the variables													
	Arab Group							Global Group						
	Jordan	Saudi Arabia	Syria	Palestine	Lebanon	Egypt	Morocco	EU	Japan	Brazil	South Africa	Arab Group Average	Global Group Average	
1st Pillar Score: Policy Formulation Features on a 1-7 scale	5.2	5.8	5.2	6.4	5.8	5.8	4	7	6.4	6.4	6.4	5.46	6.55	
2nd Pillar Score: Policy Implementation Features on a 1-7 scale	5.3	4.4	4.4	5.3	5.3	5.3	4.4	6.1	6.1	7.0	4.92	6.36		
3rd Pillar Score: Policy Implementation Requirements on a 1-7 scale	6.4	6.1	5.5	5.8	6.4	5.5	5.5	4.6	6.1	5.2	5.89	5.50		
4th Pillar Score: Digital Content Pathways on a 1-7 scale	6.3	5.5	5.5	4.0	6.3	4.8	4.8	7.0	6.3	4.8	5.29	6.06		
5th Pillar Score: Digital Content Scope on a 1-7 scale	3.7	5.4	4.3	3.2	3.2	4.3	4.8	5.4	5.9	5.9	4.12	5.91		
Score PQI Policy Quality Indicator (PQI) Score (1 = ? 7 = (1 = low, 7 = high)	5.37	5.44	4.98	4.93	5.38	5.12	4.70	6.02	6.16	5.68	5.13	6.08		
Ranking of the countries according to PQI	7	5	9	10	6	8	11	3	2	4	1			



**Figure 1.** A descending order of countries according to the PQI score.

this was not the case for the rest of both Arab and Global groups. Undoubtedly, a well-structured governance body leads to successful policies where responsibilities are accurately specified and a regular monitoring takes place in order to improve performance accordingly.

Policies of the Arab group, with the exception of Saudi Arabia, seem to be not keen on attracting international experts and non-local digital workforces to fill the gap in some local aspects. However, in the Global Group, both Japan and South Africa were keen on this issue, which might be considered as one of the successful approaches that puts them in the top rank within both groups in terms of performance.

The Arab Group did not also focus on providing hosting services to the local digital content, with the exception of both Saudi Arabia and Egypt, while local hosting could boost the local DCI and should be taken into consideration by Arab policy makers in the near future, in order to ensure a maximum security level for the local DC assets.

Moreover, the Arab Group did not take into consideration, while creating policies, the support of DC to overcome environmental problems, like controlling global warming and reducing energy consumption. This was the case in both the Arab Group and the developing countries in the Global Group as well, while Japan and the EU seemed to be keener on this issue. The reason behind this tendency is related to the variation in priorities of local governments being developed or developing due to many other social and economic problems that are faced. It is also because of the high level of awareness of environmental and social responsibility issues in the developed countries compared to the developing countries.

The policies of the Arab Group did not support the efforts of translating digital content from and to the Arabic language, with the exception of national

policies of Saudi Arabia, which seemed to be more cautious on this issue as it seeks to deploy Arab and Islamic culture on a global scale. It might be important to mention that translation could be a significant aspect in order to increase the local content and to highlight the local identity and culture in the global knowledge society. However, Arab efforts in this regard are still below expectations, given a lack of accurate auto-translation tools in addition to major challenges in sophisticated linguistic digitization that needs massive development in order to be resolved.

In addition, the Arab Group did not support the efforts of deploying Open Source Software (OSS) in the local society, with the exception of Saudi Arabia and Syria, that were as interested in this issue as all countries of the Global Group. Given the fact that the vast majority of software users in the Arab countries lack the financial resources to purchase costly content of the international giant developers in addition to the relatively high piracy rates, OSS should be given more concern by policy makers. Thus, giving a free of charge alternative content/software to a certain layer of the society with low purchasing power will protect the local DCI, increase its income and enhance its potential to address the global market.

Finally, enhancing the mobile-content services and the digital broadcasting services for audio and visual content, were not of interest to the Arab policies, with the exception of Jordan, while they were addressed in the Global policies. Moving towards mobile-content services and digital broadcasting is one step closer to a ubiquitous networked society, which is the core of the information society. Therefore, Arab policy makers should consider incorporating both issues in current policies and spend more efforts in order to make these digital content services available to the vast majority of citizens.

## Conclusion

It is believed that the Arab world in particular is more involved in the consumption of global digital content rather than its production, however, it is also believed that this part of the world has a great potential to tackle the global DCI. Mainly, this is because of the large size of the market with a population of over 300,000,000, in addition to the unification of the Arabic language of this massive population.

Consequently, the Arab countries have to focus on developing more integrated national plans in the field of DCI in particular, instead of general policies and digital strategies with a too broad focus. At a later stage, it is believed that Arab countries have to develop a regional strategic plan in order to group all the local

efforts in one area rather than scattering them and also to benefit from the massive market population, geographical position and unification of language.

Thus, the prospective Arabic regional strategic plan should not only take into consideration the massive leaps in the structure of the information society, but also to actively contribute to its future development. The vision of this regional plan is expected to be based on a comprehensive survey of the actual local needs, and consider the local, regional and global mutual cooperation. It should also be expected to enhance the local public awareness and skills of digital content, inject creativity and innovation in the local community, support the local Research and Development (R&D) initiatives, reconstruct and unify the digital acts and legislations, and develop more academic programs in relation to the DCI. Moreover, it should reduce the cost of access to the digital content, focus on the outsourcing and off-shoring industry, respect the cultural diversity in the local societies, share resources through a structured joint work, give better opportunities to SMEs and civil society in particular in the early planning stages, bypass governmental bureaucracy, and start from where others have stopped without duplicating previous efforts and learn from the mistakes of the past.

Additionally, building up confidence in the local workforce and expertise, especially the young e-leaders is also a vital element, as local expertise is often more familiar with the local capabilities, resources and needs. It is worth that developing competitive standards for the digital content industry and ensure compliance with international standards.

The international society and the giant digital content developers should enhance their efforts to support individual end-users in developing countries in particular. No doubt, this approach will have a positive impact, not only on the local communities but also on the developers themselves, especially in terms of reducing piracy rates and increasing awareness of DC which, in turn, will increase its use.

Also, developing countries in general, and Arab countries in particular, should exploit the existing high level of penetration of mobile services in reinforcing the local DCI, taking into consideration the relatively high cost of obtaining computers or other devices that provide accessibility to DC.

It is important to stress the fact that policy makers should not adopt other policies without tailoring them to the local context. Furthermore, policies that proved

to be successful do not necessarily meet the requirements of other countries.

Finally, this study extends an invitation to the concerned national and international bodies in order to consider both the PAC and the PQI, for adoption and further development.

### Notes

1. Soumirta Dutta and Irene Mia (2010) *The Global Information Technology Report 2009 – 2010: ICT for Sustainability*, World Economic Forum and INSEAD (The Business – School of the World), Geneva, 2010, 416p.
2. The most common variables reflect the criteria that are found in the policies of most countries under study.
3. For the detailed table, please refer to Annexure (4) and for further details on the statistical methods used, please refer to Annexure (5).

### About the author

**Dr. Ramy Abboud** holds BA, MA and PhD in Library and Information Science. His PhD thesis was mainly to create a detailed strategy model that focuses on the Arab digital content industry in particular, and then to reach consensus on the model through Delphi method in cooperation with experts from several Arab and international organizations, such as but, not limited to: UN-ESCWA, Arab League, John Kennedy School of Government – Harvard University, Wisconsin University, Ministries of ICT in Egypt and Jordan. Dr. Abboud is currently a Lecturer in the Library and Information Science Department, Menofia University, Egypt, in addition to being a consultant in the field of Arab digital content. He worked previously in various positions in local and international entities such as, but not limited to: Centre for Documentation of Cultural and Natural Heritage (CULTNAT) – Bibliotheca Alexandrina and the American University in Cairo. He is also a member of the Board of Trustees of the Arab Cultural Trust (al-hakawati.net). Dr. Abboud is a published author with a number of books, peer-reviewed papers and articles within the field of information science, digital content and related areas. He published the first complete reference in the Arab world on e-books (2008), the first Arabic peer-reviewed paper in the applications of radio frequency identification (RFID) technology in libraries (2003), and the first Arabic peer-reviewed paper on e-paper technology (2004). In addition, he has two recently published books in both Cairo and Beirut in the field of Arab digital content. Contact: Dr Ramy Abboud, PO Box 334008, Dubai, UAE. Telephone (Mobile): +971 501553600, Email: ramyabboud@yahoo.com

## Annexure (1): Sources of Information of the Arab Group

Country	Sources of Information
Jordan	Information Technology Association Int@j and Ministry of ICT Jordan (2007) National ICT Strategy of Jordan 2007 – 2011. 59 p. Available at: <a href="http://www.intaj.net/sites/default/files/National-ICT-Strategy-of-Jordan-2007-2011_0.pdf">http://www.intaj.net/sites/default/files/National-ICT-Strategy-of-Jordan-2007-2011_0.pdf</a> (accessed Jan. 2011). Ministry of ICT Jordan (2007) Wathiqat Al Seyasa Al A'mmah Lelhokoma fi Qita'at Al Etisalat wa Technolojia Al Ma'lomat wa Al Barid 2007, (In Arabic), Jordan, 2008, 48 p. Ministry of ICT Jordan (2008) Al Khotah Al Estrategiyah Lewazarat Al Etisalat wa Technolojia Al Ma'lomat 2008 – 2001, (In Arabic), Amman, Jordan, 2008, 18 p.
Saudi Arabia	Ministry of ICT Saudi Arabia (2006) Al Khotah Al Wataneyah Leletisalat wa Technolojia Al Ma'lomat 1426 H [2006]: Al Ro'ia Lebena' Mojtama' Al Ma'lomat, (In Arabic), Saudi Arabia, 2006, 111 p. Available at: <a href="http://www.mcit.gov.sa/NR/rdonlyres/4622EB71-2937-48D3-B30E-CA738CAD0374/0/NICTP.pdf">http://www.mcit.gov.sa/NR/rdonlyres/4622EB71-2937-48D3-B30E-CA738CAD0374/0/NICTP.pdf</a> (accessed Jan. 2011)
Syria	Ministry of Communication and Technology Syria (2004) Istrategeyat Teqanat Al Etisalat wa Al Ma'lomat Leltanmeya Al Eqtisadeya wa Al Egtina'eya fi Soreya [2004 – 2013]: Al Montataqat Al 'Amah wa Al Siyosat (In Arabic), Damascus, 2004, 15 p. Ministry of Communication and Technology Syria (2004) Istrategeyat Teqanat Al Etisalat wa Al Ma'lomat Leltanmeya Al Eqtisadeya wa Al Egtina'eya fi Soreya [2004 – 2013]: Al Tawajohat Al Istrategeyah (In Arabic), Damascus, 2004, 40 p. Ministry of Communication and Technology Syria (2004) Istrategeyat Teqanat Al Etisalat wa Al Ma'lomat Leltanmeya Al Eqtisadeya wa Al Egtina'eya fi Soreya [2004 – 2013]: Baramaj Al 'Amal wa Al Khotat Al Tanfizyah, (In Arabic), Damascus, 2004, 11 p.
Palestine	Ministry of Telecom & Information Technology (0211) Al Istrategiyah Al Wataneyah Letoknolojia Al M'alomat wa Al Etisalat wa Al Baried fi Falasteen 2011 – 2013: Al Mosawadah Al Ola, (In Arabic), Palestinian National Authority, Ramallah, 2011, 27 p. Available at: <a href="http://www.pmtit.ps/ar/cp/plugins/spaw/uploads/files/strategy%20final.pdf">http://www.pmtit.ps/ar/cp/plugins/spaw/uploads/files/strategy%20final.pdf</a> (accessed Jan. 2011).
Lebanon	Ministry of State for Administrative Reform Lebanon (2003) The National e-Strategy for Lebanon: Document 1: Executive Summary, Prepared by Akram Najjar, Salam Yamout and Kamal Siblini, 8 p. Available at: <a href="http://www.omsar.gov.lb/">http://www.omsar.gov.lb/</a> (accessed Jan. 2011). Ministry of State for Administrative Reform Lebanon (2003) The National e-Strategy for Lebanon: Document 2: The National e-Strategy for Lebanon, Prepared by Akram Najjar, Salam Yamout and Kamal Siblini, 44 p. Available at: <a href="http://www.omsar.gov.lb/">http://www.omsar.gov.lb/</a> (accessed Jan. 2011). Ministry of State for Administrative Reform Lebanon (2003) The National e-Strategy for Lebanon: The Cover Document, Prepared by Akram Najjar, Salam Yamout and Kamal Siblini, Oct. 2003, 8 p. Available at: <a href="http://www.omsar.gov.lb/">http://www.omsar.gov.lb/</a> (accessed Jan. 2011). Ministry of State for Administrative Reform Lebanon (2003) The National e-Strategy for Lebanon: Document 4: ICT Policies, Prepared by Akram Najjar, Salam Yamout and Kamal Siblini, Oct. 2003, 28 p. Available at: <a href="http://www.omsar.gov.lb/">http://www.omsar.gov.lb/</a> (accessed Jan. 2011).
Egypt	Ministry of Communications and Information Technology Egypt (2007) Egypt's ICT Strategy 2007 – 2010, May 2007, 50 p. Available at: <a href="http://www.mcit.gov.eg/Upcont/Documents/Egypt-ICT-Strategy.pdf">http://www.mcit.gov.eg/Upcont/Documents/Egypt-ICT-Strategy.pdf</a> (accessed Jan. 2011).
Morocco	Ministry of Industry, Trade and New Technologies Morocco (2009) Digital Morocco 2013: the National Strategy for Information Society and Digital Economy [2009 – 2013], Morocco, 2009, 102 P.

## Annexure (2): Sources of Information of the Global Group

Country	Sources of Information
European Union	<p>European Commission (2010) EU Digital Agenda, Directorate-General for the Information Society and Media, Brussels, Aug. 2010, 41 p. Available at: <a href="http://ec.europa.eu/information_society/digital-agenda/index_en.htm">http://ec.europa.eu/information_society/digital-agenda/index_en.htm</a> (accessed Jan. 2011).</p> <p>European Commission (2009) Revising Europe's ICT Strategy, ISTAG's Report on Revising Europe's ICT Strategy, Final Version, Information Society Technology Advisory Group ISTAG, Feb. 2009, 34 P.</p> <p>Mario Monti (2010) A New Strategy for the Single Market: at the service of Europe's economy and society: Report to the President of the European Commission, European Commission, Brussels, May. 2010, 107 p.</p> <p>Lucilla Sioli (2011) Interview with Lucilla Sioli, Head of Unit – Economic and Statistical Analysis – Directorate General of Information Society DG INFSO. Available at: <a href="http://www.weforum.org/videos/global-information-technology-report-2011-Lucilla-Sioli">http://www.weforum.org/videos/global-information-technology-report-2011-Lucilla-Sioli</a> (accessed Jan. 2011).</p>
Japan	<p>Teruyasu Murakami (2005) Japan's National IT Strategy and the Ubiquitous Network. Nomura Research Institute, NRI Papers, No. 97, Nov. 1, 2005, 22p.</p> <p>Prime Minister of Japan and His Cabinet Japan (2001) e-Japan Strategy, IT Strategy Headquarters, Jan. 22, 2001. Available at: <a href="http://www.kantei.go.jp/foreign/it/network/0122full_e.html">http://www.kantei.go.jp/foreign/it/network/0122full_e.html</a> (accessed Jan. 2011).</p> <p>Toshiaki Ikoma (2003) Ubiquitous e-Japan: Industrial &amp; Technological Foresight in the Information &amp; Communication Area, The 2nd International Conference on Technology Foresight, Tokyo, Feb 2003.</p> <p>Ministry of Internal Affairs and Communications Japan (2010) Information and Communications in Japan 2010 (summary), Economic Research Office, ICT Strategy Policy Division, Global ICT Strategy Bureau, Tokyo. 67p. Available at: <a href="http://www.soumu.go.jp/johotsusintokei/whitepaper/eng/WVP2010/2010-index.html">http://www.soumu.go.jp/johotsusintokei/whitepaper/eng/WVP2010/2010-index.html</a> (accessed Jan. 2011).</p> <p>Ministry of Internal Affairs and Communications Japan (2010) Contributing to Future Development of e-Japan Strategies. Available at: <a href="http://www.soumu.go.jp/menu_seisaku/ict/u-japan_en/new_outline01.html">http://www.soumu.go.jp/menu_seisaku/ict/u-japan_en/new_outline01.html</a> (accessed Jan. 2011).</p> <p>Ministry of Internal Affairs and Communications Japan (2010) Structure of the "u-Japan Policy Package". Available at: <a href="http://www.soumu.go.jp/menu_seisaku/ict/u-japan_en/new_plcy_pckg.html">http://www.soumu.go.jp/menu_seisaku/ict/u-japan_en/new_plcy_pckg.html</a> (accessed Jan. 2011).</p> <p>Ministry of Internal Affairs and Communications Japan (2010) The National ICT Strategies in Japan are Evolving from "e" (electronic) towards "u" (ubiquitous) Available at: <a href="http://www.soumu.go.jp/menu_seisaku/ict/u-japan_en/new_outline01b.html">http://www.soumu.go.jp/menu_seisaku/ict/u-japan_en/new_outline01b.html</a> (accessed Jan. 2011).</p> <p>Ministry of Internal Affairs and Communications Japan (2010) The u-Japan Concept. Available at: <a href="http://www.soumu.go.jp/menu_seisaku/ict/u-japan_en/new_outline03.html">http://www.soumu.go.jp/menu_seisaku/ict/u-japan_en/new_outline03.html</a> (accessed Jan. 2011).</p> <p>Ministry of Internal Affairs and Communications Japan (2011) what life will be like when u-Japan becomes a reality: u-Japan in our everyday life. Available at: <a href="http://www.soumu.go.jp/menu_seisaku/ict/u-japan_en/j_r-menu_u.html">http://www.soumu.go.jp/menu_seisaku/ict/u-japan_en/j_r-menu_u.html</a> (accessed Jan. 2011).</p>
Brazil	<p>Gisele Craveiro (2010) Brazil, GISW 2010 Report: ICTs and Environmental Sustainability, Research Group on Public Policies for Access to Information – University of São Paulo. Global Information Society Watch GISW. pp. 99–100. Available at: <a href="http://www.giswatch.org/sites/default/files/gisw2010_en.pdf">http://www.giswatch.org/sites/default/files/gisw2010_en.pdf</a> (accessed Jan. 2011).</p> <p>Pablo Ortellado (2009) Brazil, GISW 2009 Report: Access to Online Information and Knowledge, Research Group on Public Policies for Access to Information – University of São Paulo. Global Information Society Watch GISW. pp. 95–97. Available at: <a href="http://www.giswatch.org/sites/default/files/GISW2009.pdf">http://www.giswatch.org/sites/default/files/GISW2009.pdf</a> (accessed Jan. 2011).</p> <p>Pablo Ortellado (2008) Brazil, GISW 2008 Report: Access to Infrastructure, Research Group on Public Policies for Access to Information – University of São Paulo. Global Information Society Watch GISW. pp. 89–91. Available at: <a href="http://www.giswatch.org/sites/default/files/gisw2008.pdf">http://www.giswatch.org/sites/default/files/gisw2008.pdf</a> (accessed Jan. 2011).</p> <p>Carlos Afonso (2007) Brazil, GISW 2007 Report: Focus on Participation, Rede de Informações para o Terceiro Sector (RITS) – Núcleo de Pesquisas, Estudos e Formação (NUPEF). Global Information Society Watch GISW. pp. 119–125. Available at: <a href="http://www.giswatch.org/sites/default/files/gisw_2007.pdf">http://www.giswatch.org/sites/default/files/gisw_2007.pdf</a> (accessed Jan. 2011).</p> <p>Frederick S. Tipson and Claudia Frittelli (2003) Global Digital Opportunities: National Strategies of "ICT for Development", Markle Foundation, Dec. 2003. 57 p. Available at: <a href="http://www.policyarchive.org/handle/10207/bitstreams/15542.pdf">http://www.policyarchive.org/handle/10207/bitstreams/15542.pdf</a> (accessed Jan. 2011).</p> <p>Darcilene Magalhães, Peter Knight and Eduardo Moreira Da Costa (2009) Will the Soccer World Cup of 2014 Help Bridge the Social Gap through the Promotion of ICT and E-government in Brazil?. The Global Information Technology Report 2008–2009, World Economic Forum and INSEAD (The Business School of the World), Geneva, 2009 pp. 133–143.</p> <p>Instituto Brasileiro De Geografia e Estatística – IBGE (2009) O Setor de Tecnologia da Informação e Comunicação no Brasil 2003–2006, estudos and pesquisas, informação económica, Rio de Janeiro, 2009. 82 p.</p>
South Africa	<p>Lebogang Marishane and Sally-Jean Shackleton (2009) South Africa, GISW 2009 Report: Access to Online Information and Knowledge, Women's Net. Global Information Society Watch GISW. pp. 197–200. Available at: <a href="http://www.giswatch.org/sites/default/files/GISW2009.pdf">http://www.giswatch.org/sites/default/files/GISW2009.pdf</a> (accessed Jan. 2011).</p> <p>David Barnard and Jan Moolman (2008) South Africa, GISW 2008 Report: Access to Infrastructure. Global Information Society Watch GISW. pp. 175–177. Available at: <a href="http://www.giswatch.org/sites/default/files/gisw2008.pdf">http://www.giswatch.org/sites/default/files/gisw2008.pdf</a> (accessed Jan. 2011).</p> <p>Department of Communication South Africa (2011) Strategic Plan 2011 – 2014, Pretoria, Mr. Radhakrishna L. Padayachie (Minister of Communications), Mr. Obed Bapela (Deputy Minister of Communications) and Dr. Harrold Wesso (Acting Director-General). 74 p. Available at: <a href="http://www.info.gov.za/view/DownloadFileAction?id=144159">www.info.gov.za/view/DownloadFileAction?id=144159</a> (accessed Jan. 2011).</p> <p>Department of Communication South Africa (2010) Annual Report 2009–2010: Making South Africa a Global Leader in Harnessing ICT's for Socio-economic Development, Dr. Harold Wesso, Pretoria, South Africa, 31 August 2010. 232 p. Available at: <a href="http://www.info.gov.za/view/DownloadFileAction?id=137236">http://www.info.gov.za/view/DownloadFileAction?id=137236</a> (accessed Jan. 2011).</p>



*Annexure (3): Personal Communications*

1. Abed Shamlawi, 2011, email communications with Mr. Abed Shamlawi, Chief Executive Officer, Information Technology Association Int@j, Amman, Jordan.
2. Ahmed Alhefnawy, 2011, Skype meeting with Mr. Ahmed Alhefnawy, Senior Advisor for Arab States, International Telecommunication Union (ITU), Cairo, Egypt, Nov. 20, 2011.
3. Alexander Felsenberg, 2011, Skype meeting with Mr. Alexander Felsenberg, Board Member of the UN-World Summit Award (WSA), Chairman of the national pre-selection WSA-Germany, Dusseldorf, Germany, Nov. 15, 2011.
4. Nibal Idlibi, 2011, email communications with Dr. Nibal Idlibi, Head of ICT Applications, UN Economic and Social Commission of Western Asia (ESCWA), Beirut, Lebanon.
5. Susan Teltscher, 2011, email communication with Dr. Susan Teltscher, Head of ICT Data and Statistics Division, Telecommunication Development Bureau, International Telecommunication Union ITU, Geneva, Switzerland, Nov. 23, 2011.
6. Vincenzo Spiezia, 2011, email communications with Mr. Vincenzo Spiezia, Senior Economist, Directorate for Science, Technology and Industry, Economic Analysis and Statistics, Organization of Economic Co-operation and Development OECD, Paris, France, Nov. 21, 2011.

## Consistency of the strategic policies with the variables

Variable Code	PQI	Arab Group										Global Group						
		Jordan	Saudi Arabia	Syria	Palestine	Lebanon	Egypt	Morocco	EU	Japan	Brazil	South Africa						
		1st Pillar: Policy Formulation Features																
1.1	Building on a comprehensive understanding of the current local status.	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
1.2	Identifying constraints and opportunities.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.3	Emphasizing the role of digital content in achieving sustainable development.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.4	Policy formulation in coordination with various stakeholders.	1	1	0	1	1	1	0	1	1	1	0	1	1	1	1	1	1
1.5	Integration with local policies in various sectors.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.6	Linking with national objectives and/or national mega-projects.	0	0	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1
1.7	Development of alternative unconventional solutions for the deployment of digital content.	0	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1
1.8	Looking towards the regional digital content market.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.9	Looking towards the global digital content market.	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.1	Looking towards an active role in the future of the global DCI.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total Points Score	7	8	7	9	8	7	8	9	8	5	10	9	9	9	9	9	9
	1st Pillar Score: Policy Formulation Features on a 1–7 scale	5.2	5.8	5.2	6.4	5.8	5.8	5.8	6.4	5.8	4	7	6.4	6.4	6.4	6.4	6.4	6.4
		2nd Pillar: Policy Implementation Features																
2.1	Transparency in presenting policies.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.1	Seeking the involvement of various "local" stakeholders in the implementation process.	0	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
2.1	Seeking the participation of various "regional" stakeholders in the implementation process.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.1	Seeking the participation of various "international" stakeholders in the implementation process.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.2	Providing an opportunity for civil society to monitor and redirect the operational performance.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.2	Raising community awareness of the strategic policies.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.2	e-Waste. Taking into account the safe disposal of digital waste (e-Waste).	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	Total Points Score	5	4	4	5	5	5	5	5	5	4	6	6	6	6	6	6	7
	2nd Pillar Score: Policy Implementation Features on a 1–7 scale	5.3	4.4	4.4	5.3	5.3	5.3	5.3	5.3	5.3	4.4	6.1	6.1	6.1	6.1	6.1	6.1	7.0
		3rd Pillar: Policy Implementation Requirements																
3.2	Governance. Establishing an effective governance body.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.2	Digital Workforce. Enhancing the capacity of the local digital workforce.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.2	e-Leaders. Improving the leadership resources (e-Leaders).	1	1	0	0	1	1	0	0	1	0	0	1	1	0	0	0	0
3.2	Inclusion of the national expertise of the digital content currently in the diaspora.	1	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
3.2	Engaging the local expertise in the digital content field in order not to emigrate.	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1
3.2	Attracting international digital content experts to the local market.	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1
3.2	Attracting foreign investment to the local market.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1
3.3	SMEs Micro. Supporting Small and Medium Entities (SMEs) as well as micro-entities.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.3	Standardizing the industrial component of the digital content.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.3	Providing the necessary financial resources.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.3	Supporting innovation and creativity within the local environment.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.3	Supporting academic research in the digital content field.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

(continued)

## ANNEX (4) (continued)

## Consistency of the strategic policies with the variables

Variable Code	PQI	Arab Group										Global Group				
		Jordan	Saudi Arabia	Syria	Palestine	Lebanon	Egypt	Morocco	EU	Japan	Brazil	South Africa				
3.3	Supporting the incubation of digital content projects.	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0
3.3	Supporting the hosting services for the local digital content.	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
3.3	Deployment and continuous enhancement of Internet services.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.3	Deployment of mobile phone services.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.3	Deployment of computers amongst citizens as well as institutions.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1
3.4	Reducing the cost of access to digital content.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.4	e-Skills. Deployment of skills to use digital content (e-Skills) in the local society.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.4	Enhancing the level of digital security and digital confidence within the local society.	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
Total Points Score		18	17	15	16	18	15	15	5.8	6.4	5.5	5.5	4.6	6.1	5.2	6.1
3rd Pillar Score: Policy Implementation Requirements on a 1–7 scale		6.4	6.1	5.5	5.8	6.4	5.5	5.5								
4.4	Digital content to satisfy the actual local needs.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.4	Ensuring equal accessibility to digital content across all social strata.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.4	Ensuring freedom of access and use of digital content.	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1
4.4	Highlighting the national and cultural identity in the context of local digital content.	1	0	1	0	1	0	0	0	1	0	0	1	1	0	1
4.4	Addressing the linguistic challenges that hinder the use of local digital content on a large scale.	1	1	1	0	1	0	0	0	1	0	0	1	1	1	1
4.4	Taking into account the linguistic and cultural diversity in the local digital content.	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
4.4	Supporting the efforts to overcome the local social problems.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.5	Supporting the efforts to overcome global environmental problems.	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
Total Points Score		7	6	6	4	7	5	5	4	7	4.8	4.8	8	7	5	7
4th Pillar Score: Digital Content Pathways on a 1–7 scale		6.3	5.5	5.5	4.0	6.3	4.8	4.8					7.0	6.3	4.8	6.3
5.5	Developing software to address the automation problems of the local language.	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1
5.5	Supporting translation efforts of digital content from and to the local language.	0	1	0	0	0	0	1	0	0	0	1	1	1	0	1
5.5	Diversification of the local digital content applications.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5.5	Production of free digital knowledge.	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5.5	Production and dissemination of digital heritage.	0	1	0	1	1	1	1	1	1	1	1	1	0	1	1
5.5	Supporting e-government and online public services.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5.5	Deployment of mobile-content services.	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1
5.5	Integration of traditional content production in an effort to reinforce digital content.	0	1	1	0	0	1	0	0	0	0	0	1	0	1	0
5.5	Open Source Software. Deployment of Open Source Software (OSS).	0	1	1	0	0	0	0	0	0	0	0	1	1	1	1
5.6	Outsourcing. Supporting the outsourcing industry.	1	0	0	0	0	1	1	0	0	1	1	0	1	1	1
5.6	Transition to digital broadcasting.	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1
Total Points Score		5	8	6	4	4	6	4	7	4	6	7	8	9	9	10
5th Pillar Score: Digital Content Scope on a 1–7 scale		3.7	5.4	4.3	3.2	3.2	4.3	4.8					5.4	5.9	5.9	6.5
Total Score points for each country		42	43	38	38	42	39	36	44	48	43	44	48	48	43	50
Score PQI Policy Quality Indicator (PQI) Score ([]) (1 = low, 7 = high)		5.37	5.44	4.98	4.93	5.38	5.12	4.70	6.02	6.16	5.68	6.02	6.16	5.68	6.44	
Ranking of the countries according to PQI		7	5	9	10	6	8	11	3	2	4	3	2	4	1	

### Annexure (5): The method used for the calculation of the PQI

In light of the variables/criteria devised for the PAC, a matrix was created where a national policy would be awarded one point in the event of its consistency with a certain variable, thereby setting the maximum score at 56 (the total number of variables used). On the other hand, the value of zero is accorded to a country in two cases: the lack of consistency with an evaluation criteria or the lack of information regarding it (= -). These variables or individual indicators were then grouped into five pillars/sub-indicators composites according to the expected relationship between them.

To obtain the calculated score for the pillars/sub-indicators, the points of the variables within the sub-indicators were summed and converted to a 7-point scale (minimum = 1, maximum = 7) using a similar formula to that used in the Global Information Technology Report of the World Economic Forum (WEF) (see Figure 2).

$$6x \left\{ \frac{(\text{Sum of Points achieved by country "x" for sub-indicator "y"}) - (\text{minimum possible score within sub-indicator})}{(\text{maximum possible score within sub-indicator "y"}) - (\text{minimum possible score within sub-indicator "y"})} \right\} + 1$$

**Figure 2.** The equation used for the conversion of the score of country "x" on sub-indicator "y" to a 7-point scale.

Finally, the value for the PQI was obtained through the computation of the mean of scores for all 5 sub-indicators after their conversion to the 7-point scale (see Figure 3).

$$PQI \text{ score}_x = \frac{\sum 1^5 \text{ sub-indicators scores}_x}{5}$$

**Figure 3.** The formula for calculating the PQI value for each country "x".



# The teachers' role in fostering independent learning in high schools in Zanzibar

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## Abstract

The aim of this paper is to examine the role of teachers in fostering students' independent learning through school library use by looking at the availability of school library materials; the patterns of school library use by students and teachers; cooperation between teachers and library staff and the different ways used by high school teachers in fostering high school students to become independent learners. The study was conducted in Zanzibar and it involved three public and two private high schools. By using survey method, a total of 95 respondents were given questionnaires. Interviews were conducted with 35 respondents including students, teachers, library staff, heads of schools and the Director of the Public Library. Observation method was used in all the schools. The main finding of this study which is based on the author's MA dissertation revealed that school libraries were confronted with limited library stock which contains outdated and few current materials, lack of library education and limited library use habits among students and teachers, inefficient and untrained school library staff, lack of integration of information, curricula and classroom learning and lack of cooperation between teaching and library staff. A number of recommendations were made based on the findings.

## Keywords

role of teachers, independent learning, school libraries, high schools, Zanzibar

## Background

The lack of independent learning habits is a common problem among school and college students (Kawatra, 1994). The reading habit provides opportunities for independent learning, seeking information, and developing curious minds and research skills. This behaviour can be created in students at an early stage by training and encouraging them in the use of the school library. More than 20 years ago, Kumar (1987) recommended that a school library should be considered as the training ground for the growth and development of reading habits in each student.

Several studies have noted the lack of library use habits for most secondary school students, some of whom, as a result, proceed to universities and colleges where they fail to make effective use of this important resource. Referring to India, Kumar (1997) claimed that neither schools nor colleges train students in the use of reference books, not to speak of the general use of the library. Alemna (1990) noted that the lack of adequate provision for secondary school libraries is

a serious issue for secondary education in Africa. Many African secondary schools are confronted with critical challenges including lack of trained school librarians, poor library stock and lack of understanding by both teachers and students on the role and functions of a school library. This fact was also noted by the World Bank report (2008) which states that in many schools the concept of a school library no longer exists because for many teachers and students a library is seen as simply the place where school textbooks are stored. The same problems were pointed out by Zanzibar Library Services report (2006) which noted that most schools in Zanzibar have neither enough classes nor school libraries... even the few schools that have libraries suffer from serious lack of library education, its functions and operation.

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**Table 1.** Demographic Information of Respondents N = 100.

Respondents	High Schools					Total	%
	LSS	BSS	HSS	SOS	SMS		
1 Heads of School	1	1	1	1	1	5	5.0
2 Subject Teachers	6	6	6	6	6	30	30.0
3 High School Students	12	12	12	12	12	60	60.0
4 School Library Staff	1	1	1	1	1	5	5.0
Total	20	20	20	20	20	100	100.0

Source: Field Data, 2011.

## Methodology

This study used the survey research design whereby both quantitative and qualitative research approaches were applied. The study was conducted in Zanzibar, Urban West Region. Three out of ten public high schools and two private schools were selected for this study. The selected public high schools were Lumumba Secondary School (LSS), Ben Bella Secondary School (BSS) and Hamamni Secondary School (HSS). Private schools were Sunni Madressa School (SMS) and Hermann Gmeiner School (Save Our Souls Village (SOS)). Also, the public library was involved, as it has the responsibility of providing services to the entire community including teachers and students. The sample of this study involved 35 teachers, including heads of schools, 60 students and five school library staff. The study also involved two administrators from the public library and the Zanzibar Ministry of Education. A standard self-administered questionnaire with open-ended and closed questions was administered to high school students, teachers and library staff. Face-to-face interviews were conducted with some high school students and teachers, library staff and administrators. The direct observation method was also employed to validate some of the information obtained through the questionnaire and the interviews.

## Historical context

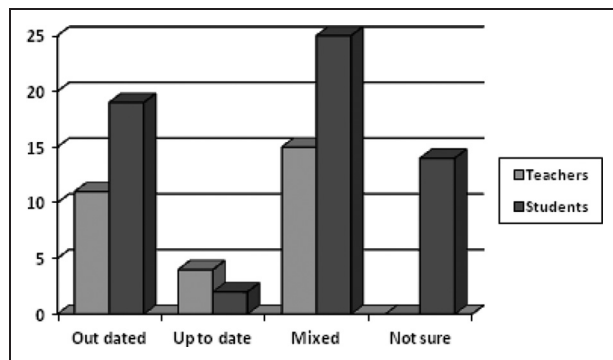
Zanzibar forms part of the United Republic of Tanzania. It comprises two main islands, Unguja (covers an area of approximately 1650 sq km) and Pemba (has an area of approximately 984 sq km) with a number of smaller islets along the western rim of the Indian Ocean. The islands lie about 40 kilometers off the coast of mainland Tanzania. According to the Zanzibar Institute of Financial Administration (ZIFA) (2011) most Zanzibaris depend predominantly on services and agriculture for their livelihood. The history of library services in Zanzibar cannot be well narrated unless it is related to political changes took place from the colonial period up to the

present day. The history shows that a few libraries, privately owned by communities, religious organizations and others, existed in Zanzibar during colonial times (Ngozani, 1998). After the Revolution of Zanzibar in 1964, the government declared the provision of free education to all native children but it did not put emphasis on library development, the crucial resource that could motivate these youths to learn. In 1988, the first public library of Zanzibar was established and acted as the headquarters for the development of library services in colleges as well as in secondary and primary schools. However, despite these efforts, nearly 60 percent of primary schools in Zanzibar have no school library in any form, while secondary schools seem to have some kind of library (Zanzibar Library Service, 2006). School libraries in Zanzibar differ greatly in terms of form and functionality. A few of them are at present able to provide basic services to students. Currently, the development of school libraries in Zanzibar gets support from a number of external organizations such as Africa Muslim Agency, the British Council, Book Aid International, Books for Africa, Books Abroad, International House Japan and Munadhamat El-Dawat Islamia.

## Availability of school library materials

There is no doubt that students can be easily attracted to use the library if it has up-to-date materials. For this study, students and teachers were requested to describe the materials available in their school libraries. Figure 1 summarizes the findings.

Forty (42 percent) of the respondents described library materials as mixed (old and current), while 30 (32 percent) said that libraries contained outdated materials. Observation revealed that in all the surveyed school libraries, both current and outdated books were available. The problem of outdated school library stock was mentioned by many researchers. Research by the Zanzibar Library Service (2006) pointed out that library stock in schools with any kind of library is largely outdated, inappropriate in terms of



**Figure 1.** Availability of Library Materials.

content and level, and irrelevant to the school curricula and cultural environment. Dike (1998) noted that African libraries are stocked with foreign literature that is not only out of date but also irrelevant to the information needs and interests of both teachers and students. All of these challenges may put off students from visiting libraries, and later lead to their lack of the habit of independent learning and information seeking behaviour. Rosenberg (2002) demonstrated amply that filling libraries with stock that is outdated or irrelevant to user needs is likely to discourage library usage, developing inquisitive minds, critical thinking and research skills.

Most school libraries are unable to buy stock for the library, relying instead on books supplied by external donors. This observation has been supported by the World Bank report (2008) which stated that in public school libraries 'weeding' does not take place because the school never knows when it will next get a chance to buy new stock. When head teachers were asked about school library budgets, it was noted that only one private school reported allocating TZS 4,000,000 (currently approximately US\$ 2,500) as an annual budget to support its library services, including Internet services. The rest of the schools, especially public schools, said they spent only TZS. 300,000 to 400,000 (currently less than US\$ 300) per year as the library budget and the funds are sometimes used as an emergency source of funding for overhead and operational expenses.

It was observed that some heads of schools do not give much priority to the development of their school library collection, to the extent that school library development was not in their plans. A Zanzibar Library Service survey (2006) reported that head teachers are required to collect textbooks which are distributed to their schools by the Central Library. Strangely, the books remain in the library store for more than 2 years, while few heads of schools collect them. Teachers who participated in Ajegbomogun's study (1999) disclosed that the

issue of school library development was not in their plans at all and they could not be blamed for this lapse, as the Ministry of Education had no budget allocation for such.

According to Ali (2004) several efforts have been taken to develop school library collections in Zanzibar. For instance, The Africa Education Initiative (AEI) project under the US Agency for International Development (USAID) with the cooperation of the Ministry of Education and Vocational Training (MoEVT) and South Carolina State University, focused on challenges relating to the lack of textbooks and other learning materials. Despite the fact that the Ministry of Education expressed commitment to support the revitalization and development of school libraries through its Education Policy (2006), which states that "every school will have a library or resource centre, supply of books, funds and trained librarians", there is still little evidence of this commitment at school level, since most of the head teachers are not even aware of schemes operated by the Ministry. The World Bank (2008) observed that in Tanzania a functioning school library is required by every private school applying for certification and registration, but the requirement appears to have no teeth; so long as a school has a sign on a classroom door that identifies it as the library, no other inspection is undertaken.

### Patterns of library use by students and teachers

Teachers and students were asked to say whether or not they use school libraries regularly. The results found that 18 (60 percent) teachers and 35 (58 percent) students visited libraries, while 12 (40 percent) teachers and 25 (42 percent) students did not. The habit of regular library use is not well nurtured among students, since even those who use school libraries said that they attend only once a week and not every day. Dent (2006) revealed that secondary students do not visit school libraries, probably because they are not encouraged to do so. In the present study, students pointed out the following reasons when asked to explain why they did not use the school library regularly: a few of them had their own books and read them at home; a lack of library knowledge among students; limited number of books available in the library and very tight school timetable to the extent that they did not get enough time to visit the library.

Asked about library membership, 28 (47 percent) students were members of the Zanzibar Public Library, 12 (20 percent) had no membership in any library, 11 (18 percent) had school library

**Table 2.** Students library membership.

No.	Membership	No. Of Stud.	%	Total
1	Public library	28	46.7	28
2	School library	11	18.3	11
3	Both	12	20	12
4	None	9	15	9
	Total		100%	60

Source: Field data, 2011.

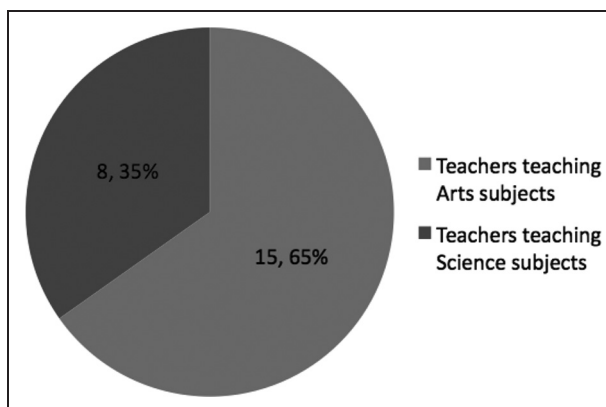
membership and 9 (15 percent) had membership in both the school and the public library (Table 2).

The reality is that many students had membership in the public library rather than the school library. The question remains: “does the fact that a good number of students use the public library reflect well developed independent learning and a life-long reading habit?” Research shows that students who frequently visit the public library seemed to have special reasons for doing so. Sometimes they use the library for reviewing notes from their teachers or reading the recommended Kiswahili and English literature books. A study by Ngozani (1998) on the provision of urban library services revealed that some students used the public library as a place where they could rest, chat with friends or just pass the time. Using the library without utilization of its resources is not considered proper use. Another important point noted by Ngozani (1998) is that many students do not renew their library membership once they finish their national final examinations.

### Teaching in a way that encourages library use

A good teacher is expected to play a major role in developing the habit of independent learning through library use among students. Thus, teachers were asked to say whether they teach in a way that encourages library use among students. Figure 2 shows that teachers teaching Arts subjects encourage students to use the library more than teachers of Science subjects. The reason provided was that Science subjects need more practice than theory.

When five library staff were asked about this matter, none of them agreed that teachers teach in ways that encourage the use of the library. One library staff member stated that teachers do not encourage students to use the library because they still use the “chalk and talk” approach and produce ready-made notes for students. This supports the observation by Ndaki (2006) who stated that “great dependence by almost all students is on teachers’ notes in locating references for assignments or preparation for examinations, and many

**Figure 2.** Percentage of teachers who encourage the use of library.

Source: Field Data, 2011.

students seek information from tuition to supplement teachers’ notes and lectures”. Not only students’ but also teachers’ interest in the library was noticeably low. Ruzegeza (2002) observed that teachers themselves do not use the library so they lack creativity to stir up a sense of love for reading in students. Moreover, teachers concentrated on teaching how to answer examination questions rather than teaching to make students understand the subject (Ndaki, 2006). The reasons behind this mentioned by respondents are: lack of understanding by both teachers and students of the role and function of a school library; large numbers of students per class; very loaded school timetable; and the secondary school examinations set-up, which requires students to reproduce memorized class notes rather than show an understanding of the subject.

None of the library staff had any regular training program for students and teachers. They normally assist students to access library materials when they visit the library rather than moving around the classrooms to market their services. This indicates that little or no instructions on library use were provided to higher secondary school students. Thus most of the students have no idea on library education.

### Cooperation between teachers and library staff

The success of a school library depends a great deal upon cooperation between teaching staff and library staff. The International Federation of Library Associations and Institutions (IFLA) published a School Library Manifesto (IFLA, 2000) which emphasizes this point by stating, in part, that when teachers and librarians work together, students achieve higher levels of literacy, reading, learning, problem-solving and information and communication technology skills.



**Table 3.** Cooperation between Teachers and Library Staff  
N = 35.

Responses	Respondents					
	Teachers		Library staffs		Total	%
	Freq	%	Freq	%		
1 Yes	6	20.0	1	20.0	7	10.2
2 No	24	80.0	4	80.0	28	89.8
TOTAL	30	100.0	5	100.0	35	100.0

Source: Field Data, 2011.

Teachers and library staff were asked whether or not they cooperate in fostering students' independent learning through library use. Responses to the question are summarized in Table 3.

The findings in Table 3 show that 24 (80 percent) of the 30 teachers stated that they did not cooperate with school library staff and only 6 (20 percent) did so. On the side of the library staff, four (80 percent) stated they did not cooperate with teachers and only one (20 percent) did so. The overall response shows that 28 or 80 percent of the 35 respondents do not cooperate with one another, while only 7 (20 percent) do so.

Cooperation between teachers and library staff is indispensable in fostering students' independent learning. These responses reveal that there is little or no cooperation between teachers and school library staff. Further discussion showed that the matter has so far not been given any priority. As noted by Omar (2011), if teachers themselves show little respect for or interest in developing the school library, how likely are they to encourage students to develop an interest in library use? This study shows that school libraries have not yet been given the attention they deserve from various stakeholders.

Staffing of school libraries is also one of the problems hindering the effective use of the library in both primary and secondary schools in Zanzibar. Many African studies related to school libraries have mentioned this challenge. For instance, Alemna (1990) observed that most schools have untrained teacher librarians who work as full-time teachers in their various fields and as part-time librarians. The Zanzibar Library Service (2006) noted that responsibility for the school library usually rests with one or two library staff who have not had training to run a school library effectively. Concurring with this, one teacher disclosed that he was asked to take care of the library because there was no one else to do so. It can be concluded that the absence of qualified library staff and lack of cooperation can be major obstacles in

fostering students' independent learning through the use of the school library.

### Methods used in fostering student independent learning

Teachers and students were asked to mention the methods used in their schools in fostering students' independent learning through library use. The following methods were mentioned: encouraging students to use the library; giving students individual assignments; class presentations; taking notes from library books; and giving students group exercises. It was expected that respondents, especially teachers, would point out the specific methods they used in fostering students' independent learning through library use, but their answers revealed that they encourage students to use the library only by lip-service, not in the practical sense. The following methods recommended by Babauta (2007) were expected to be mentioned: designing a special programme in fostering students' independent learning; encouraging students to use the school and public library regularly; conducting library orientation /tours for new comers; regular library visits; organizing essay competitions; discussion and debates; and giving more critical assignments which require students to find information from library materials.

The study by Omar (2011) revealed that most of the time, teachers give students assignments which do not require them to write even a minimum of two references. It was unfortunate that most of the methods suggested above were not mentioned by the teachers. That means the teaching methodology used in the schools is a factor that contributes to non-library use and poor independent learning among students.

### Measures to be taken to make teachers instrumental in fostering library use among students

Various studies reveal that, globally, primary and secondary school teachers play a vital role in the development of children. Kumar (1997) observed that what pupils learn and experience during their early years can shape their views and affect their later success or failure in school, work, and their personal lives. This observation has been further extended by Mwashiga (2005) who noted that teachers can help students take responsibility for their learning by providing opportunities and strategies for learning independently and by encouraging them to use the school library effectively. That means that teachers have a great responsibility in the formation of

independent learning and life-long reading habits. In this study, all respondents were asked to provide their opinions on what should be done to make teachers instrumental in fostering library use among students. The following were their suggestions, which complement the researcher's recommendations:

- School library services should be improved in terms of manpower and library resources.
- The education policy should put emphasis on the use of school libraries, and heads of schools should be in the frontline to encourage the implementation of the policy.
- Teachers should be trained on the importance of using libraries. This can be through seminars and workshops. This training will help them to be in a better position to encourage students in the use of the library.
- Teachers should be trained to change their methods of teaching. This is necessary because in most secondary schools teaching is examination-oriented, based on the teacher-classroom approach.
- To foster commitment and cooperation between heads of schools, teaching staff and library staff. This will facilitate the success of students in their academic programmes.

These are the general suggestions provided by all the respondents in this study. However, for all these suggestions to be implemented, a strong commitment is needed by the Ministry of Education, heads of schools, teaching staff and library staff.

### **Measures to be taken to improve students' library use**

Library use is a habit needed by learners to understand all subjects. It is also considered by many researchers to be as fundamental as the right to education. Usoro and Usanga (2007) stated that primary and secondary school students must develop library use habits that will encourage literacy and lifelong education. This statement is also appreciated by Stewart, who stated: "I do know that if we can keep pupils going to the library and developing a lifelong reading habit, what a wonderful world this would be" (Stewart, 2009). When respondents were asked to provide their opinions on what should be done to improve students' library use, the following suggestions were provided: schools should organize special programmes in fostering students' habits of library use; library periods must be shown in the school time table; and school library services should be improved in terms of library staff and library

materials. It was also suggested that students should be motivated to use the library by giving them rewards so that they develop interest in library use.

### **Conclusion**

There is no doubt that fostering students' independent learning through school library use is a powerful vehicle for the success of academic programmes. However, this study observed the following challenges confronting the libraries; inadequate library funds, lack of library education and library use habit among students and teachers, inefficient and untrained library staff, lack of integration of curricula and classroom learning and limited cooperation between teaching and library staff and lack of commitment between the Ministry of Education and Vocational Training and heads of schools. As the result of this combination of challenges, very few secondary schools in Zanzibar put emphasis on fostering students' independent learning through library use. This has one serious consequence: that secondary school graduates complete their studies with no idea on library use, and when they proceed to universities or higher education they have no skills or previous background in information or library skills.

### **Recommendations**

Various problems have been discussed as barriers in fostering students' independent learning through library use in the selected high schools in Zanzibar. If all the problems are not solved the underutilization of the school libraries and their resources will continue. Also, high school students will complete their advanced level studies as semi-literates. This being the case, there is a need for the problems to be addressed thoroughly. Based on the study's findings and conclusions, the following recommendations are made:

#### *Improvement of school library collections and services*

Special attention should be given to the development of basic library facilities with emphasis on audiovisual materials such as CDs, VCDs, DVDs, computers, journals, and related sources, plus, wherever possible, access to the Internet.

#### *Encouragement of the use of school library*

The Ministry of Education and Vocational Training, with the cooperation of Zanzibar Library Service, should sketch and distribute a brochure to all schools outlining the value of school libraries in the educational process and clearly stating the range of school library services expected to be offered to students, to boost the library development initiatives outlined

in the policy. Zanzibar Library Service, with the support of the Ministry, should organize workshops for both teachers and library staff to increase staff capacity to manage libraries and encourage proper library use among teachers and students.

### *Establishment of library programmes in high schools*

High schools must have an obligation of establishing and offering interactive reading programmes and library use sessions to students. Therefore, teachers need to be trained in reading promotion activities. At the same time, Students must be strongly encouraged to use the school library regularly.

### *Recruitment of qualified library staff*

Due attention must also be paid to the recruitment of qualified librarians or well-trained library staff to manage the library, to help with selection, searching, cataloguing and classification of library materials and other related tasks. Library staff must also cooperate with teachers in establishing a variety of library programmes, plus fostering in all students the use of the library and developing independent learning habits.

### *Shifting teaching approach*

The teaching approach in high schools should be changed from teacher-centred to student centred. This will require students to find information from the library independently; hence the habit of library use will be easily nurtured. Likewise, at least elementary library courses should be provided to university graduates who are specializing in education (BA Education).

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### **References**

- Ajebomogun FO and Salaam MO (2011) The state of school libraries in Nigeria. *PNLA Quarterly* 75(3): 112–118.
- Alemna AA (1990) The school library in Ghanaian education: an analysis of issues and problems. *Nigerian Library and Information Science Review* 8(3): 1–9.
- Ali ZM (2004) An evaluation of the capacity of secondary school library in providing services to teachers and students. Unpublished Research Paper of Nkrumah Teachers Training College, Zanzibar.
- Babauta L (2007) 14 ways to cultivate a life time reading habit. Available at <http://www.lifehack.org/articles/lifestyle/14-ways-to-cultivate-a-life-time-reading-habit.html> Accessed 20 July 2009.
- Dent VF (2006) Observation of school library impact at two rural Ugandan schools. *New Library World* 107(1228/1229): 403–421.
- Dike VW (1998) Reading promotion in Nigeria: the role of school libraries. *Nigerian School Librarianship* 9(3): 173–188.
- IFLA (2000) *IFLA/UNESCO School Library Manifesto*. Available at <http://archive.ifla.org/VII/s11/pubs/manifest.htm> Accessed January 10, 2013.
- Kawatra PS (1994) *The library and information studies handbook*. Vikas, New Delhi.
- Kumar K (1987) *Library organization*. Vikas, New Delhi.
- Kumar S (1997) Problems of school libraries in present day education: some observation and solutions. *Annals of Library Science and Documentation* 44(4): 140–152.
- Ministry of Education and Vocational Training (2006) *Zanzibar Education Policy*. Zanzibar.
- Mwashiga GC (2005) Assessment of the role and current status of school library in selected military secondary schools in Tanzania Mainland and Zanzibar: Prospects and constraints. Unpublished MA dissertation of the University of Dar es Salaam.
- Ndaki JM (2006) Factors contributing to poor reading habits and ineffective use of library services among secondary school students. A case study of secondary school students in Tabora Municipality. Unpublished MA dissertation of the University of Dar es Salaam, Tanzania.
- Ngozani AN (1998) The provision of urban library services: case study of Zanzibar Central Library. Unpublished Report of the School of Library, Archives and Documentation Studies. Bagamoyo.
- Omar AM (2011) The role of teachers in fostering students independent learning through school library use. Case studies of selected high schools in Zanzibar. Unpublished MA dissertation of the University of Dar es Salaam, Tanzania.
- Rosenberg D (2005) School library services: Ghana and Tanzania. Available at: [http://www.cd3wd.com/cd3wd\\_40/HDLHTML/EDUCRES/DEP26E/EN/CH07.HTM](http://www.cd3wd.com/cd3wd_40/HDLHTML/EDUCRES/DEP26E/EN/CH07.HTM) Accessed July 22, 2012.
- Ruzagea MA (2002) Information seeking behaviour and library use of secondary school students. The case of Dar es Salaam Region. Unpublished MA dissertation of the University of Dar es Salaam.
- Stewart DL (2009) Library reading habit puts the nice to vice. *Dayton Daily News*. Retrieved Tuesday, July 14, 2009. Available at <http://www.Daytondailynews.com/lifestyle/library-reading-habit-puts-nice-to-vice.html>
- Usoro Ima MP and Usanga EE (2007) The role of Nigerian primary school libraries in literacy and lifelong learning. *Library Philosophy and Practice* 23(3): 87–91.
- World Bank (2008) Textbooks and school library provision in secondary education in Sub-Saharan Africa. Africa

Human Development Series. *World Bank Working Paper* 126. Washington DC. pp. 71–80.

Zanzibar Institute of Financial Administration (2011) Zanzibar Economic: An overview. *Zanzibar Economic Bulletin* 4(1): 1.

Zanzibar Library Services (2006) Unpublished report of school library survey. Unguja, Zanzibar.

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# Connecting Aga Khan University's nine campus libraries across three continents through a shared library system

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## Abstract

The Aga Khan University (AKU) is the only university in the developing world that is serving through its eleven campuses spread across eight countries and three continents. It has a network of nine libraries, although small in size, in four developing countries in two regions (South Asia and East Africa). The university has recently implemented a library management system to integrate all nine libraries in four countries using a single shared database. The purpose of this paper is to share our experience of implementing an industry standard-base state-of-the-art library system. The geographical location of AKU libraries and multilingual collections makes this experience more significant. Keeping in view the complexity of geographical locations, multilingual collections, different time zones, and diversity of staff involved, one can consider it a unique occurrence in the field of library and information science.

## Keywords

integrated library systems, library management systems, multi-site libraries, multilingual library collections, university library networks

## Introduction

Aga Khan University (AKU) received its charter from the Government of Pakistan in 1983. It is a private and autonomous university that promotes human welfare through research, teaching and community service. Based on the principles of quality, access, impact and relevance, the university has campuses and programs in Afghanistan, East Africa, Egypt, Pakistan, Syria and the United Kingdom. Its facilities include teaching hospitals, nursing schools and medical colleges, the Institutes for Educational Development, the Examination Board and the Institute for the Study of Muslim Civilizations. Faculties of Arts and Sciences are in Karachi, Pakistan and in Arusha, Tanzania are in the planning phase.

AKU is perhaps the only university in the developing world that is providing education, health and social services through its eleven campuses spread

across eight countries and three continents. It has a network of nine libraries, although small in size, in five countries of South Asia, East Africa, and the UK. The university has recently implemented a library management system to integrate all libraries using a single shared database.

The purpose of this study is to share Aga Khan University Libraries' experience in an integrated library automation (ILS) project from the feasibility study to data conversion and system migration, including system selection, system and client configuration, functional testing and problem reporting, training and

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**Table 1.** AKU Libraries.

SN	Name	Location
1	Faculty of Health Science (FHS)	Karachi, Pakistan
2	Institute for Educational Development (IED)	Karachi, Pakistan
3	IED Professional Development Centre (IED-PDCN)	Gilgit, Pakistan
4	IED Professional Development Centre (IED-PDCC)	Chitral, Pakistan
5	Faculty of Health Science (FHS)	Nairobi, Kenya
6	Faculty of Health Science (FHS)	Dar es Salaam, Tanzania
7	Institute for Educational Development (IED)	Dar es Salaam, Tanzania
8	Faculty of Health Science (FHS)	Kampala, Uganda
9	Institute for the Study of Muslim Civilization (ISMC)	London, UK

lessons learned. Following a one-year selection effort, Symphony was chosen as the new system for AKU libraries. This study also discusses the challenges faced by the project team in system migration.

After successful implementation of the system, nine AKU libraries are sharing their resources from different geographical locations in Pakistan, Kenya, Tanzania, Uganda and the UK. There is a single search interface to see the library holdings of each or all AKU libraries, which is very helpful for resource sharing and interlibrary loan. Users of AKU are very happy to see a new user-friendly interface. They are enjoying the power to renew and hold their books remotely through web-based secured login. Also they are able to receive alerts for overdue and new arrivals in their respective fields. With the implementation of this new system, the internal processing activities of libraries are improved and library staff across all libraries are following the same processes and helping each other. They are also learning the new standards supported by this system, including RFID, Unicode, EDI, and several others.

### Aga Khan University Library Network

On the recommendation of Dr. Ernie Ingles, who was hired as consultant to AKU in 2004, the Office of the University Librarian was established in 2008 (Ingles, 2005). This office is responsible for the overall

management and development of libraries and learning resources throughout the university's international campuses. The objective of the Office of the University Librarian is to facilitate the creation of a network of AKU libraries which, while maintaining their individuality, can share resources and services with all libraries in the network.

Aga Khan University Libraries provide strong support to students, faculty and researchers for their study, teaching and research through a network of nine libraries. Table 1 lists the AKU libraries.

The library collections include books, current journals, back files of print journals, educational reports, audiovisual aids, theses and dissertations and digital media. AKU libraries also provide access to online journals, books and other electronic resources. The total print collection comes to 135,000 titles, including archives of print journals. AKU libraries have access to 12,000 e-journals and 60,000 e-books from 30 subscribed databases.

### Library automation project

The Aga Khan University Libraries wanted to replace their legacy systems with the state-of-the-art integrated library system in order to enhance library services as well as to facilitate internal processing activities. They were looking for an ILS that offered more flexibility and functionalities than the older systems. The AKU libraries were using a variety of standalone systems, including some using in-house developed software built on Informix and FoxBASE. Table 2 shows the various software used by AKU libraries.

Also, libraries were cataloging their materials according to their own understanding, without following any cataloging standards. For example, libraries in East Africa were using some local format that was not MARC-compliant. There was no comprehensive integrated online public access catalog (OPAC) of AKU libraries.

In 2009, the university decided to acquire an ILS and to migrate all AKU libraries to this new system. A project charter was written and got approved from the concerned authorities for the whole process, from planning to selection to implementation and go-live (AKU, ILS Steering Committee, 2009).

### Project Objectives

The following were major objectives of the project:

- Integrate libraries into a network using a shared library system.
- Provide user access to library resources of all satellite libraries in the network.

- Follow standard practices in library operations, and services. This required preparing policies procedures to be followed uniformly by the users.
- Ensure compliance with international library standards.
- Empower the users to be able to interact with the system through secure login.
- Use add-on systems. such as RFID system, ERMS, discovery platforms, and others.

The project was divided into two phases:

- project planning
- project implementation

Since one of the AKU libraries (ISMC library, London) was using an older version of Symphony, it was agreed that this library would not be part of the implementation project until it upgraded to the latest version of Symphony. Only after that would their data be allowed to be imported into the central catalog for searching.

### Project planning

This phase was started in September 2009 and was completed in December 2010. In this phase, initial planning and background work was carried out. A comprehensive 32-page Request For Proposal (RFP) was prepared and sent to the following ILS vendors (AKU, ILS Working Committee, 2009):

1. Ex Libris for ALEPH
2. Innovative Interfaces Inc. for Millennium
3. SirsiDynix for Symphony
4. VTLS for Virtua

A project charter was written and got approved from the concerned authorities to supervise the project. A list of major stakeholders, project technical and functional scope, project deliverables, dependencies, deadliness, critical success factors, potential issues and risks, and acceptance criteria were defined in the project charter. Project committees and teams were constituted and a project manager was appointed for the smooth running of the project, from planning to selection to implementation and go-live of the project.

“One of the most important decisions for the library manager is the selection of a library management system” (Calvert, 2006). Keeping in mind this experience, the ILS Working Committee selected Symphony, a product of SirsiDynix, as ILS for AKU libraries, as this system closely matched the needs of AKU libraries. The price of this system was also within the AKU budgetary provisions. After negotiation with the sales representatives of SirsiDynix, and

**Table 2.** Systems previously used in AKU Libraries.

Sr.	Name of AKU Library	Type of system	System in use
1	Faculty of Health Science (FHS), Karachi-Pakistan	In-house developed	Informix-based
2	Institute for Educational Development (IED), Karachi-Pakistan	In-house developed	Informix-based
3	IED Professional Development Centre, Gilgit, Pakistan	In-house developed	FoxBASE-based
4	IED Professional Development Centre, Chitral, Pakistan	In-house developed	FoxBASE-based
5	Faculty of Health Science (FHS), Nairobi-Kenya	Off-the-shelf	Libsoft
6	Faculty of Health Science (FHS), Dar es Salaam-Tanzania	Off-the-shelf	Libsoft
7	Institute for Educational Development (IED), Dar es Salaam-Tanzania	Off-the-shelf	Libsoft
8	Faculty of Health Science (FHS), Kampala-Uganda	Off-the-shelf	Libsoft
9	Institute for the Study of Muslim Civilization, London-UK	Off-the-shelf	Liberty2

vetting from AKU legal department, the project was granted to Arabic Advanced Systems (AAS) in December 2010. AKU nominated its systems librarian as project manager, while AAS appointed its technical manager as project manager.

The selection of the system was carried out after a careful evaluation of responses to the Request for Proposals from the vendors. The reasons for dropping other systems varied. One vendor didn't respond to the Request for Proposals. One declined, stating that they didn't have any representation to meet the administrative requirements, whereas another vendor was not meeting AKU system and budgetary requirements.

### Project implementation

Once the licensing agreement was signed with the vendor, a project implementation plan (AKU ILS Implementation Plan, 2010) was agreed and signed

**Table 3.** AKU libraries-Pakistan - data migrated.

AKU - Pakistan	Total Collection	Copycatted data	Mapped data	%age copycat MARC records
FHS, Karachi	22,000	9,595	12,405	43.61
IED, Karachi	24,291	8,534	15,757	35.13
PDCN, Gilgit	15,690	6,312	9,378	40.23
PDCC, Chitral	8,372	425	7,947	5.08
TOTAL AKU-Pakistan	70,353	24,866	45,487	31.01

off between project managers of AKU and AAS. An online kick-off meeting was held in the first week of January 2011 and the project implementation was formally started.

### *Training site preparation*

According to the project plan, the AKU technical team had to prepare a site and hand it over to the vendor for remote installation of the system. Required hardware was set up and configured by the AKU technical team within one week. Microsoft Windows was installed as a system platform and Microsoft SQL was installed as a database. The IT infrastructure implementation used state-of-the-art failover clustering and virtualization technologies. A two-node failover database cluster was formed and application server was installed in a virtual environment with failover support. The virtual environment was created inside this cluster for efficient utilization of IT resources. A secure remote session was created for vendor interactions and the application website was published for access over the Internet. The hardware was commissioned at the central data centre of AKU's principal campus in Karachi, Pakistan. After this setup, the servers were handed over to the vendor for remote installation of Symphony. Libraries always prefer to migrate to the latest version/release of a system (Khurshid, 2010), so the vendor was asked to install the latest version of Symphony, which was then version 3.4.0.

### *Remote installation of the system*

Once hardware was handed over to the vendor, they started remote installation on the servers and got the job done within the timeline of 30 days. That included installation and configuration of Symphony database, Symphony application and customization, and Symphony e-library installation and customization. AAS provided Symphony client to AKU project manager for installation on client machines at AKU libraries. Also a sample set of data was provided by the vendor for testing purposes. AKU installed the client in the all AKU libraries in Pakistan and East

Africa and tested the sample data and found the functions of the system satisfactory.

### *Data conversion and migration*

One of the most critical tasks was providing the AKU data to the vendor for uploading into the new system. The required format for metadata was MARC21. But since no AKU library was using the full MARC format, this could become the major bottleneck. A timely strategy was designed to handle this problem in the project initiation phase. According to this strategy, AKU libraries were requested to download full MARC data of existing records from libraries around the world using Z39.50 gateways of the Library of Congress, the National Library of Medicine, the University of Alberta, Harvard University and Oxford University, and some regional libraries were benchmarked for record downloading through Copycat. MarcEdit, a free software, developed by Terry Reese, was used for this purpose. This tool searches and extracts MARC data from selected libraries using Z39.50 protocol. This is really a wonderful tool, but it does not search multiple libraries simultaneously. To overcome this limitation, another tool, Copycat, was used. Initially the trial version of this tool was used for evaluation, and later this tool was purchased from a US-based company, Surpass.

Under this strategy for AKU Pakistan libraries, around 31 percent of MARC records were downloaded from different libraries around the world before the implementation started. This was an effective strategy and no problem was encountered at the stage of implementation. The remaining 69 percent of records were mapped to MARC tags so that each book in the library would be searchable with major access points. Table 3 shows the bibliographic data for AKU-Pakistan libraries. It was decided that this mapped data will be cleaned and converted into full MARC data within 2 years.

For AKU East Africa libraries, since they had been using small library software Libsoft, all 17,798 records were extracted in MARC tags and imported in the new system. So no Copycat strategy was adopted for this data.



This data was handed over to the vendor in MARC files (\*.mrc). The vendor tested this data and found it perfect for uploading into the system. The data uploading was completed with the one month targeted timeline. AKU libraries tested this uploaded data for one week and found it satisfactory. So an acceptance message was sent to the vendor as a sign-off. After data uploading, the system was operational and ready to use.

### *Onsite training of library staff*

As agreed in the project implementation plan, the vendor was responsible to provide on-site training to AKU library staff. This was divided into two phases. In the first phase, the vendor had to send the trainer to Karachi to give training to AKU Pakistan staff. For this purpose, a training site was prepared at the Faculty of Health Sciences Library (FHSL) in Karachi, and library staff from other AKU-Pakistani libraries were invited to FHSL Karachi. Two library staff from IED-PDCN Gilgit, a small city in the northern part of Pakistan on the Karakoram Highway, some 1500 kilometres from Karachi and some 8000 feet above sea level, reached Karachi. Another library staff member from IED-PDCC Chitral, a small town at 8500 feet above sea level, travelled to Karachi to attend this training session. This was a 5-days intensive training of the purchased modules of the system. After this training in Karachi, AKU libraries Pakistan started a pilot run in the presence of the trainer. Being a part of the agreement, the vendor had to send the trainer to Karachi for training, plus 5 days post-training fine tuning of the system. So during this pilot run, the trainer (who was also a key person for implementation from vendor side) did the necessary post-data uploading fine-tuning of the newly installed system.

In the second phase of training, the vendor sent a trainer to FHS Nairobi, Kenya to provide training to AKU-East Africa library staff. Library heads from FHS and IED in Dar es Salaam, Tanzania, and from FHS Kampala, Uganda were invited to come to Nairobi for this training. This was another 5 days intensive training for AKU-East Africa library staff.

Once the onsite training and test run was over for both Pakistan and East Africa, project acceptance was granted to the vendor for completion of a successful project within the given timelines.

### *Go-live and post go-live scenario*

In the project charter, the go-live date was estimated to be 30 May 2011. All the project deliverables were in by 15 April 2011, so the project was completed before its deadline. This time margin was used for

further critical testing of the system to avoid and foresee any unseen problems. However, no critical problem was encountered during this period. The libraries (from both Pakistan and East Africa) found the system quite stable and showed their satisfaction. In the third week of May, all library heads gave a sign-off and system went live on 30 May 2011. The Online Public Access Catalog of AKU was launched on the same day as 'SAFARI' (Search Access Find And Retrieve Information). This is a single platform for all AKU libraries and accessible at <http://safari.aku.edu>.

As a precautionary measure, a 7-day period was fixed for post go-live monitoring. The technical staff was held on standby and alerted for any unseen situations. This test run was successful; no discrepancies were seen in this testing phase and the project was signed off.

### **Major challenges and mitigations**

At the stage of planning and initiation, some potential issues and challenges were identified. After discussions with technical and functional teams, a mitigation strategy formulated to address these issues.

#### *Geographical diversification*

This was a big issue that was discussed while planning for this project, as AKU libraries are spread over five countries in three continents, and in three different time zones. Since ISMC library London was technically out of this project, there were no more questions about this library. The difference between Pakistan and East Africa was still there. The recommended mitigation for this issue was that the system would be implemented in two phases. At the time of implementation, it was felt that since the database for Pakistan and East Africa libraries was the same, we could avoid dividing the various tasks into phases. Taking all stakeholders on board, it was decided that the system would be implemented simultaneously in both regions.

Since all libraries would be sharing one database, and hardware would be commissioned in the main campus at Karachi, what if the server went down or the Internet outage between two regions was interrupted for a long time? In this case, libraries in Pakistan would not suffer, but libraries in East Africa would suffer badly. The circulation module would not work until the transactions were performed. Also the OPAC would not be available to end-users. The vendor explained that the system provides a facility for offline transactions, so this utility would cover the short time service outage between the two regions. After discussions with technical teams and with

**Table 4.** Multi-lingual material.

AKU - Pakistan	Urdu	Other	Total
FHS, Karachi	210	31	241
IED, Karachi	2,741	235	2,976
PDCN, Gilgit	1,950	65	1,970
PDCC, Chitral	750	36	750
TOTAL	5,651	367	6,018

AKU-IT department, it was decided to have a backup server at AKU-Nairobi campus to avoid taking any risks. The matter was discussed with the vendor and there was an agreement to have a read-only backup server in Nairobi. That server would not be a live server, but serve as a passive backup server. The cataloging data would be exported to this server through a script so that the end-users of East Africa would be able to use OPAC.

### *Change management*

One of the most significant aspects of the ILS implementation has been the change in the library's policies, procedures and services (Feng, 1983). Keeping in view this potential bottleneck, a strategy was designed and it was made sure that all library staff was mentally prepared to adapt themselves to this change. So they were involved in every policy and procedure change. This strategy worked very well and all library staff participated in changing policies and procedures and they felt ownership and responsibility and became part of this change process happily.

### *Multilingual materials*

Since AKU is operating in different countries, the libraries also have materials in languages other than English. In AKU Pakistan libraries, a significant number of items were in Urdu and some local languages. Table 4 provides detail of non-English material.

To catalog non-English books, AKU libraries planned to provide training of cataloging in dual script (English and local languages) to its staff. The Library of Congress (LOC) office Islamabad was contacted and requested to provide training to AKU staff for this purpose. The LOC office accepted our request and four librarians went for this training. Now staff are doing romanization according to the ALA-LC Romanization Tables, and making dual script entries in the catalog. Figure 1 shows the OPAC display of dual script entries.

### **Lesson learned**

Although this project was started after a careful review of available resources, the following lessons were learned from the various phases of project implementation:

- Required hardware should be available on hand before signing the licensing agreement with the vendor. This helps to avoid any delays in timelines.
- The contract agreement (between the institution and the vendor) should be submitted to the legal office for vetting well in time due to certain technicalities involved.
- The finance department should be taken on board, as payment plans, including tax issues, are part of the agreement. All this should be part of the planning phase.
- Institutions should avoid 100 percent advance payment to the vendor. Breakup of the total payment into four equal instalments in accordance with some agreed deliverables has been a good experience.
- Taking all libraries on board well before time and keeping them involved in every step of the project has been a great success. This works well as a change management tool.
- Proper documentation of each and every step is very important to keep track of all activities involved.

### **Conclusion**

Aga Khan University is perhaps the first university in the developing world that is serving eight countries and has a network of eight libraries in four developing countries in two regions (South Asia and East Africa). It was really a difficult task to integrate these libraries using a single shared database, keeping in view the geographical locations and multilingual collections.

The project implementation was started in the first week of January and the system went live on 30 May 2011. Symphony was chosen after a comprehensive review of major international library systems. Symphony is a product of SirsiDynix (<http://www.sirsidynix.com>), one of the world leaders in the library automation industry, and has presence in thousands of libraries all over the world. The implementation vendor for this project was Arabian Advanced System (AAS), Beirut office.

The AKU libraries online catalog, SAFARI (Search Access Find And Retrieve Information), is accessible at <http://safari.aku.edu>. The new system provides

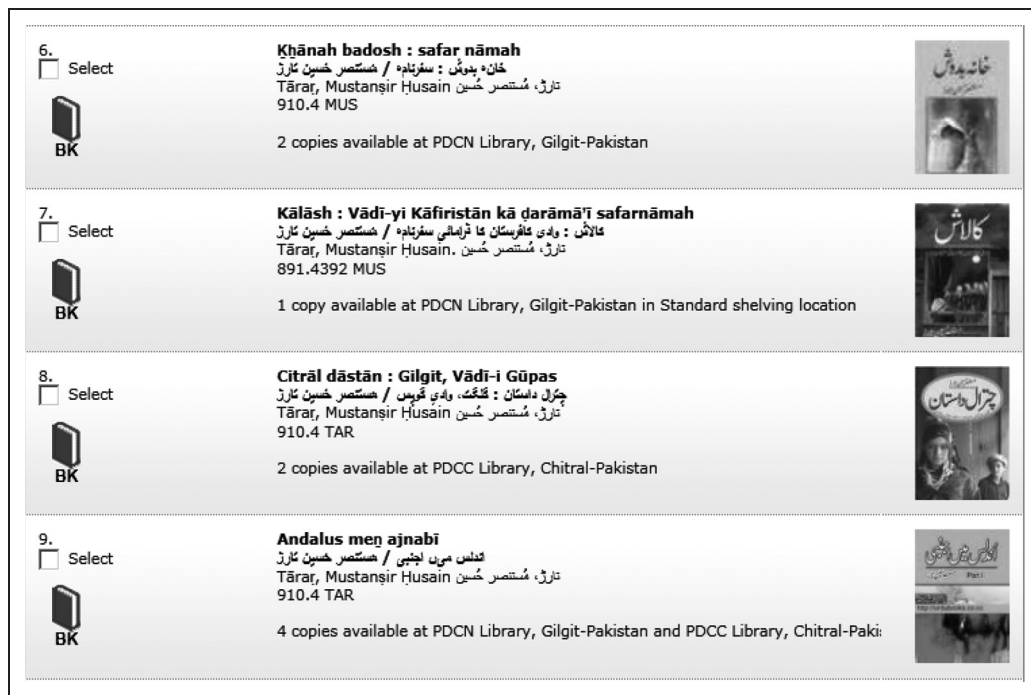


Figure 1. Dual-Script OPAC Display.

access to the holdings of all AKU libraries with a single search term. Symphony is an open system and operable with any system using any platform.

A lot of hard work went on to get the project implemented within the given timelines. The project was accomplished successfully and on time due to the teamwork of both professional librarians and non-librarians.

### References and additional readings

- Aga Khan University. <http://www.aku.edu>
- Aga Khan University. ILS Steering Committee (2010) Integrated library system migration: Project charter. Karachi.
- Aga Khan University. ILS Working Committee (2009) Request for proposal for integrated library system. Karachi.
- Aga Khan University Libraries' Catalog. <http://safari.aku.edu>
- ALA-LC Romanization Tables. <http://www.loc.gov/catdir/cpso/roman.html>
- Audrone G (2004) Project management: Tools and techniques for today's ILS professional. *Journal of Documentation* 60(6): 694–697.
- Cyril CHF, Gary F and Patricia CK (1983) Implementation of the integrated library system: University of Maryland Health Sciences Library. *Bulletin of Medical Library Association* 71(3): 312–316.
- Ernie I (2005) Aga Khan University: Review of library services. (Unpublished Report) Karachi: Aga Khan University.
- Frank C (2007) ILS migration in the 21st century: some new things to think about this time around. *Computers in Libraries* 27(7): 60–62.
- Jason V (2004) Library's integrated online library system: Assessment and new hardware implementation. *Information Technology and Libraries* 23(2): 50–57.
- MarcEdit. <http://people.oregonstate.edu/~reaset/marcedit/html/downloads.html>
- Philip C and Marion R (2006) RFPs: a necessary evil or indispensable tool? *The Electronic Library* 24(5): 649–661.
- Shelley N and Ed R (2004) Standards: Perspectives of an integrated library systems vendor. *Serials Review* 30(1): 10–14.
- Suzanne J, Donna H and Brian T (2003) A case study of ILS migration: Aleph500 at the University of Iowa. *Library Hi Tech* 21(1): 44–55.
- William CD (2009) Integrated library systems: Where are they going? Where are we going? *Journal of Academic Librarianship* 35(5): 482–485.
- Zahiruddin K and Saleh AA (2010) System migration from Horizon to Symphony at King Fahd University of Petroleum and Minerals. *IFLA Journal* 36(3): 251–258.
- Zhonghong W (2009) Integrated library system (ILS) challenges and opportunities: A survey of U.S. academic libraries with migration projects. *The Journal of Academic Librarianship* 35(3): 207–220.

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Working together:  
evolving value for academic libraries



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# Library value in the developing world

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## 2. Executive Summary

Demonstrating value for institutional stakeholders has become an increasingly important activity in academic libraries around the world. The concept of library value can be defined in several ways: value for users in the level of support and services provided; value for the parent institution in contribution to institutional missions and goals; or economic value for return on investment. This study investigates the value, and perceptions of value, of academic libraries for teaching and research faculty in developing countries.

**Library Value in the Developing World** is a follow up to the 2012 study *Working together: evolving value for academic libraries* (hereafter known as **Working Together**) which reported findings from eight case studies in the UK, US, and Scandinavia. **Library Value in the Developing World** reports on findings of a six-month project with twelve case studies from developing countries classified as low-income and middle-income economies with a GNI (Gross National Income) less than \$4,035 (The World Bank, 2012). Data were collected and triangulated via a series of surveys and interviews. Some comparison with developed-country libraries and examples of good practice are identified, from which other institutions could learn in respect of the support librarians provide for faculty, and the working relationship between academic libraries and their key stakeholders.

Faculty across developing country universities have access to a large range of high-quality material which offers great potential for both research and teaching. Internet connectivity is an ongoing issue but steadily beginning to improve. Providing access is not enough however and libraries, in order to affect the library's value for those stakeholders, also need to influence the behaviour and perceptions of their faculty.

The study showed that developing country libraries are beginning to recognize the importance of evaluating the level of support and service they provide. The drivers for collecting this evidence are primarily internal, and primarily measured through the value of their resource collection. Developing country libraries are

starting to explore additional services they can offer to their faculty patrons, but these additional services are not offered widely.

Findings from our surveys and case studies suggest that, overall, the library is well perceived by faculty, although there are barriers to overcome. Communication, and building the relationship between the library and the academic departments, is key to changing behaviour and perceptions of value to gain faculty support. Raising the visibility and awareness of what the library can do to support teaching and research faculty is a key component of demonstrating this value.

Key findings include:

- Access initiatives in developing countries have resulted in substantial availability of scholarly information; yet e-resources are not always being accessed and used. A fifth of faculty surveyed do not use or are not aware of their electronic resource collection
- Internet connectivity issues remain prevalent for many developing world libraries
- The physical library building remains important to faculty in the developing world
- The majority (two-thirds) of developing country librarians believe perceptions of the library for both faculty and university management is measured via their resource collection
- The majority (three-quarters) of developing country faculty measure the value of their library via the quality and accessibility of the resource collection
- Faculty are not always aware of services offered by their library beyond access to resources – half of faculty surveyed are not aware of or use any additional services
- There is some evidence of teaching support offered by developing country libraries, but research support was not as well developed
- Communication between the library, the departments and the individual faculty members is not always effective or transparent. A sixth of faculty in case study universities do not know who to contact within their library
- There is a need for an increased level of investment in marketing the library. There is some disconnect between what the librarians perceive to be effective marketing and what resonates with faculty
- Robust library websites are critical to providing access to electronic resources and are the most important means of communication between the library and its users

These findings highlight several areas that may be of interest for the following groups to consider:

#### **For developing country librarians**

- Going beyond content provision and availability to address usage and awareness of available resources
- Engaging with faculty to find new ways of delivering support, training and advice
- Creating campus advocates by cultivating relationships with those willing to support the library
- Ensuring the library is up to date with the digital environment and tools
- Endeavouring to obtain more developing country voices in international debates on availability, access and use of research
- Promoting advocacy of the library through strong relationships with senior managers, participation in joint research projects, and getting a voice for the library 'at the top table', to ensure the library's concerns and needs are echoed within university strategy documents
- Measuring and demonstrating the value of the library's collection and services
- Using publisher support to create awareness and usage of services and resources
- Utilizing the library website as a tool to engage and provide information to faculty

#### **For developing country universities**

- Investing in libraries to ensure the sustainability of research and learning
- Investing in the professional development of librarians to ensure that the university makes the greatest use of the potential offered by information and technology
- Encouraging faculty doing research to make better use of the resources and technologies available to them through the library
- Raising the status and recognition of librarians and the value they add to the work of academic colleagues and campus administrators

#### **For publishers**

- Understanding the needs and specifics of developing country libraries and their work
- Adapting online resource sites to enable greater access in developing countries
- Undertaking further research into different marketing channels to create awareness and usage of accessible products

- Working with individual libraries to create bespoke materials to satisfy needs
- Creating a full marketing toolbox for librarians to market their resources and services

### **3. Introduction**

**Library Value in the Developing World** was a six-month research project that took place from January to June 2013 to investigate the value of academic libraries for teaching and research faculty. The findings presented here apply specifically to twelve developing country universities, and will not be applicable to the territories as a whole. Nevertheless, we expect that many of the lessons learned and the considerations derived from these will have wider application and be of potential interest.

The focus of the **Library Value in the Developing World** research was to explore:

- Evidence and perception of library value
- Evidence and perception of availability and use of library services
- Communication and visibility of the library and library services

A finding of **Working Together** (Creaser and Spezi, 2012) was that general marketing of the library raises its profile amongst teaching and research faculty. This is seen as an increasingly essential activity as a reaction to the changes in dissemination of information brought about by digital technologies (ibid). To this end, **Library Value in the Developing World** includes a marketing case study to assess how publishers can contribute to libraries beyond making their resources available. The twelve participant universities received access to SAGE product platforms (Appendix 1) as part of their participant agreement. Six out of twelve developing country libraries were offered additional marketing support to drive awareness and usage of these resources. Usage statistics are being monitored across all twelve participant libraries and the results of this marketing case study will be reported in spring 2014. Early indications are that supported universities appear to record higher usage of the three SAGE resources than unsupported ones.

### **4. Study methodology**

The research was based on twelve case study universities from countries with a GNI of less than \$4,035. Seventy-five registrations of interest were received from potential librarian participants. Case study volunteers were selected from this group based on the following criteria:

- a. Geographical location and spread
- b. Stage of development of institution / country
- c. Size of institution
- d. Support of the Library Director to participate and the capacity to do so in the time available

Successful participants received institution-wide access to *SAGE Journals*, *SAGE Research Methods*, and *SAGE Knowledge*. The research was conducted as follows:

- a. Quantitative survey of library staff within twelve case study institutions (eighty-five respondents)
- b. Quantitative survey of faculty within case study institutions (two hundred and ninety-seven respondents – this survey was incentivized by means of a prize draw for an iPad)
- c. Qualitative telephone interview with nominated case study librarians (ten respondents)
- d. Qualitative open-ended questions emailed to faculty at twelve case study institutions (twenty respondents)
- e. Collection of usage data to measure effectiveness of marketing techniques used to influence perception, usage and awareness

The survey data was analysed using the SPSS<sup>®</sup> software package.

## 5. Background: libraries, information access and connectivity

For many developing countries, insufficient investment in higher education by national governments and international donors during periods of economic crisis in the 1980s and 1990s created inadequate libraries, laboratories and ICT facilities (Browse, 2013). While experiences varied by country, there were some general trends: a loss of talent, insufficient numbers of teaching staff (as student enrolments were also increasing), and a fall in the standard of research undertaken at post-graduate level (ibid). Insufficient budgets, coupled with the rising cost of books and journal subscriptions, made it difficult for libraries to maintain adequate collections (Harle, 2010).

From the late 1990s, attention began to return to higher education. New funding emerged and universities rebuilt, but this is a slow process requiring co-operation, long-term strategies and investment by governments and agencies (Browse, 2013). New investment has been partly driven by recognition that academic research is a principal source of the information and knowledge needed for the social, economic and political well-being of countries (Harle, 2010). Attempts by international donors to invigorate

locally relevant research have been cautious not to limit the re-emergence of academic autonomy (Lebeau & Mills, 2008).

The emergence of electronic journals in the late 1990s offered the potential to begin to improve the situation, bolstered by increased numbers of titles and the parallel development of a number of initiatives offering access to these at reduced or no cost. This means that the issue of availability has been widely and successfully addressed over several years (Harle, 2010). Appendix 2 lists the major support initiatives and organizations that have focused on providing access to scholarly information, particularly academic journals.

### 5.1 Information access

Librarians in developing country institutions have secured access to a wide range of resources, but unfortunately, availability does not necessarily equate to access and use (Burnett, 2012). Requirements now point to considering the ways in which available resources are (or are not) being accessed and used (Harle, 2010).

Faculty in developing country universities commonly complain of poor access to journals and that this is a serious hindrance to their academic work. Awareness of the materials available among faculty is low. This is related partly to insufficient promotion and communication of what is available, and partly due to the complexities of online access and multiple entry routes (Harle, 2010).

### 5.2 Research output in developing countries

Libraries are critically important to help research (RIN and RLUK, 2011). The purpose of making online resources available is fundamentally to support and stimulate research and teaching. The extent to which they are used therefore depends on the level of research activity taking place (Harle, 2010).

Relatively low levels of scholarly research activity might partially explain low levels of online content and journal use. The **Global Research Reports** (Adams et al., 2010; 2011; 2013) are a series of reports launched by Thomson Reuters to inform policymakers and others about the landscape and dynamics of the global research base. Their findings show that the BRICK Nations (Brazil, Russia, India, China, and South Korea) represent the most significant growing influence in the global economy and research landscape (Adams et al., 2013). The Arabian, Persian and Turkish Middle East, who produce only four percent of the world's scientific literature, report growth in the rate of research output that significantly



exceeds that seen in Asia and Latin America (Adams et al., 2011). However, more than half the African nations are off-track or regressing on objectives to achieve universal education by 2015. The issue is highlighted by the fact that the total annual research output of the African continent is at 27,000 papers per year, equivalent to that of the Netherlands (Adams et al., 2010).

## AUTHORAID

AuthorAID [www.authoraid.info](http://www.authoraid.info) is a global research community for researchers which, as of July 2012, included more than five thousand researchers and others from more than one hundred and fifty countries (Browse, 2013). AuthorAID was developed to help support developing country researchers in getting their work published, with the intention of increasing the inclusion of developing country research in journals globally. *'Being an AuthorAID mentor goes beyond a conventional teacher-student relationship - it is a really stimulating and worthwhile learning process for both mentee and mentor'* (Korbel, 2011, p.2).

### 5.3 The technology challenge

The advent of electronic journals generated new problems, specifically the need to upgrade information and communications technology (ICT) facilities and infrastructure, to secure good internet access, and to invest in training and familiarization. Internet connectivity is steadily improving, notably with recent installation of high-speed undersea fibre-optic cables in Africa (Harle, 2010). Challenges remain in ensuring broadband connectivity and internet bandwidth reaches beyond major cities and from coastal countries to landlocked neighbours. Universities' investment in e-resources has secured significant content, but this needs to be matched by associated investment in ICT facilities and training. Without this, the money spent on journals risks being wasted (ibid).



INASP (the International Network for the Availability of Scientific Publications) has developed activities at institutional and national levels to help universities improve their management of internet bandwidth. The Bandwidth management and optimisation (BMO) programme supports the formation of National Research and Education networks – dedicated high speed

broadband networks for academic and research institutions (INASP: <http://www.inasp.info/bmo>)

Three out of twelve librarians and five out of twenty faculty in the developing country universities reported issues with providing adequate service levels due to connectivity issues:

'We believe a faster internet connection would help (our users) to be better at their work as currently their internet connection is not stable' (librarian: Indonesian Research Institute)

'Having a faster internet connection is the foremost issue we are addressing' (librarian: University of Philippines Visayas)

'We need improved availability of high bandwidth for students to be able to access appropriate and relevant information' (faculty: University of Cape Coast)

### 5.4 The role of publishers in supporting developing country libraries

**Publishers for Development (Pfd)** was established as a result of the complementary work **INASP** and the **ACU** (Association for Commonwealth Universities) undertake with institutions in developing countries and international publishers. Publishers and librarians need to work together to let developing country researchers know what is available to them by building their awareness of existing routes to international journals and books. Navigating the complexity of multiple access routes can be challenging, so INASP works with other access initiatives such as **Research4Life** and **EIFL** (Electronic Information for Libraries) to avoid duplication and strengthen the impact of collective activities.

Publishers can adapt their sites to enable greater access. The **Pfd** Bandwidth Challenge encourages publishers to speed-test their sites and work with their technical teams to identify ways in which their sites could be speeded up. For example Cambridge University Press have used their mobile platform to provide an alternative low-bandwidth interface (Publishers for Development, 2011), while Springer's work to improve their site speed was part of their overall online strategy (Bishop, 2012).

Despite improvements in availability, a challenge remains in that awareness, access and use of the resources available is lower than expected. Harle's 2010 study of four African universities identified significant barriers to accessing and using resources and the need to continue raising awareness of what is available to researchers and academics was shown to be important.

## 6. Evolving value – evidence and perceptions of value

Libraries are a physical manifestation of the values of the academy and scholarship (RIN and RLUK, 2011), but libraries are changing. Whereas librarians were once closely associated with their library building, this is no longer necessarily the case. As we move toward a more online world, and become more successful in providing seamless remote access to resources and services, there is a growing disconnection between librarians and academics (RIN and RLUK, 2011). Many users who do take advantage of access to e-resources may not be aware that the service is actually delivered by their library (Burnett, 2012), and this may result in a risk of the fundamental value of libraries not being recognized.

Libraries are increasingly called upon to document and articulate their value and their contribution to institutional missions and goals. The **Value of Academic Libraries Initiative** was prepared by the Association of College and Research Libraries (ACRL) in 2010 to help academic librarians identify resources to support them in demonstrating their value in clear, measurable ways (Oakleaf, 2010).

Universities appear to have more difficulty in quantifying their value to teaching and research faculty, than to students (ibid). Therefore **Library Value in the Developing World** focuses on the value of academic libraries to academic departments and faculty, and collates findings from both librarians and faculty at the twelve participant developing country universities to explore evidence and perception of value.

### 6.1 Evidence and perception of value - librarians

Librarians can no longer rely on their stakeholders' belief in their importance; rather, they must demonstrate their value (Oakleaf, 2010). Drivers for collecting evidence of value in the developing world can be twofold. Firstly, libraries genuinely want to do well and serve their community of users (Creaser and Spezi, 2012). Secondly, they may need to show value to senior management of the university. One developing country librarian commented that through *'the value the library contributes to teaching and learning, they are fulfilling the mission of the university and the whole business of our university.'*

Findings show that there is no systemic evidence collected by the developing country libraries to show the value of their library for faculty. Eight out of twelve librarians reported that the value their library provides is measured through their resource collection, and that they provide analysis of their collection via

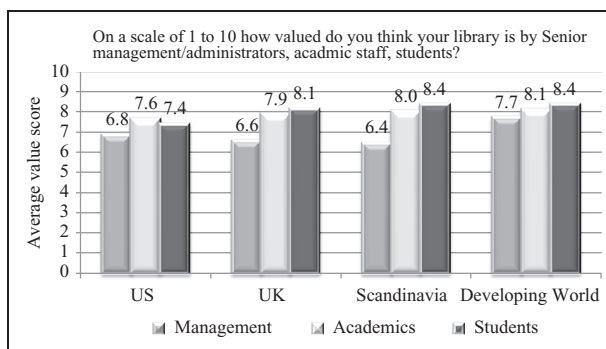


Fig. 1. Librarians' perception of value.

NB: 'management' was open to interpretation of campus management or university personnel.

usage statistics. Five out of twelve librarians reported that they are starting to monitor value through other methods such as testimonials, faculty questionnaires, traffic to the library website and library attendance rates:

'I think we are starting now to measure our value. We are proposing to distribute a questionnaire to students and academics and look at if we produce results' (University of Zimbabwe)

'The library's value is connected with library's popularity in eyes of faculty and students. The evidence of this is measured by visit statistics to the library, visit statistics to intranet, and e-Resources usage statistics' (National University, Ukraine)

'The library can measure its value to the academic staff through conduction of regular interactive sessions and get valued feedback from the academic staff. The library can make use of instruments like questionnaires, interviews, and forums to inquire how the academic staff perceive their services thereby serving as a means of measuring the value of their services' (Covenant University)

We asked developing country librarians how highly valued they thought their library was by management, faculty, and students on a scale from one to ten. The average responses are shown and compared to **Working Together** (Creaser and Spezi, 2012) in Fig. 1.

Of note is the variation in average score of value perceived by management. This could be associated with developing country librarians reporting few justification requests from their management. This might result in greater librarian perception of value, and in turn lesser motivation for collecting evidence of value/use. Drivers from the developed world are more apparent, to answer research quality assessment audits, institutional league tables, student recruitment, budget allocation support, for example, as well as user satisfaction (Creaser & Spezi, 2012).

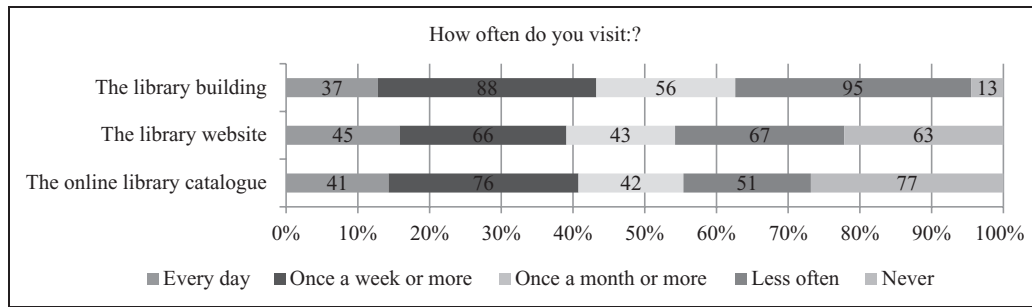


Fig. 2. Faculty use of library.

### 6.2 Evidence and perception of value – faculty

**Working Together** (Creaser and Spezi, 2012) reported that many of their case study librarians were reluctant to comment on the value placed on their library by users, and suggested asking the users. **Library Value in the Developing World** therefore included a survey to faculty at the twelve institutions (297 responses received) as well as a series of open ended questions around their perception and use of their library’s services (twenty responses received).

Faculty were asked what was the best thing about their library. The majority (fourteen out of twenty) reported that they placed the highest value on the academic resources their library provides:

‘The best thing about my library is that I am able to access e-journals anywhere’ (Maseno University)

‘My library has a lot of online journals that it subscribes to which are beneficial to my research and teaching’ (University of Zimbabwe)

‘What I like most about my Library is that I can access all research materials and publications online’ (Makerere University)

‘The best thing about my University Library is the ease of location of resources with the OPAC system’ (Covenant University)

However, seven out of twenty reported they were not aware of all the services their library offered. We asked faculty what they would like to do to improve their library. Eleven out of twenty faculty members were critical about the physical aspects of their library indicating the importance they place on the library building, with fifteen percent of faculty visiting the library building every day (Fig. 2).

‘The thing I would change about my library would be the seating arrangement and space. Indeed space is limited and thus there is observable overcrowding’ (Maseno University)

‘(I would) make the library environment more conducive for reading. At time the library environment is not conducive to sit down and read ... faculty

should have their reading room separate from the students’ (Covenant University)

‘The library air conditioning system does not work, thus the atmosphere to sit and read is not there’ (University of Cape Coast)

**Working Together** (Creaser and Spezi, 2012) reported that the role of the physical library in the developed world is changing and increasingly geared to meeting the needs of the students with cafes and social spaces provided alongside information resources. The University of Utah ran a survey that showed many faculty regard the library as a ‘large undergraduate study hall’. With material available online and document delivery being made directly to offices, many faculty never visited the library building (Creaser and Spezi, 2012).

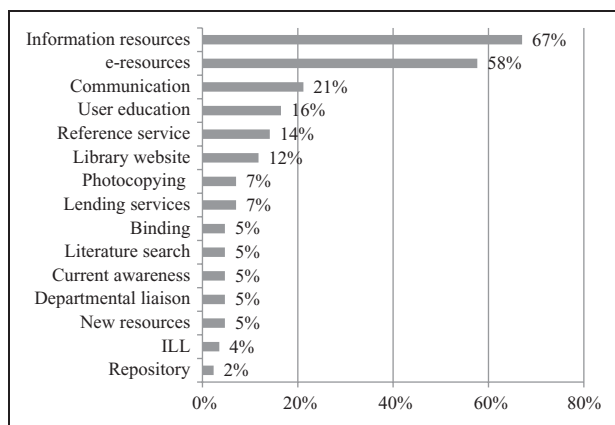
The faculty survey asked how often respondents used the library building, website, and online catalogue. The proportions of responses in each category are shown in Fig. 2:

Ninety-six percent of faculty use the library building with just thirty-seven percent using less than once a month. Thirty-nine percent visit their library website at least once a week, yet twenty-two percent report never using. Twenty-seven percent of all respondents never use the online library catalogue. This could be associated with reported technology difficulties where library websites infrequently crash, resulting in lower reliability and faculty use.

## 7. Evolving services – evidence and perception of services

### 7.1 Evidence and perception of services - librarians

**Working Together** (Creaser and Spezi, 2012) reported that developed world librarians see a process of reinvention in order to reinforce their support for faculty in their teaching and research roles. These include literacy instruction, integrated teaching and research services, and research partnerships. Several of the case study developing country libraries mirror these



**Fig. 3.** Which of the services provided by your library do you think is most valued by research staff?

NB: 85 free text responses, which could be coded into more than one category.

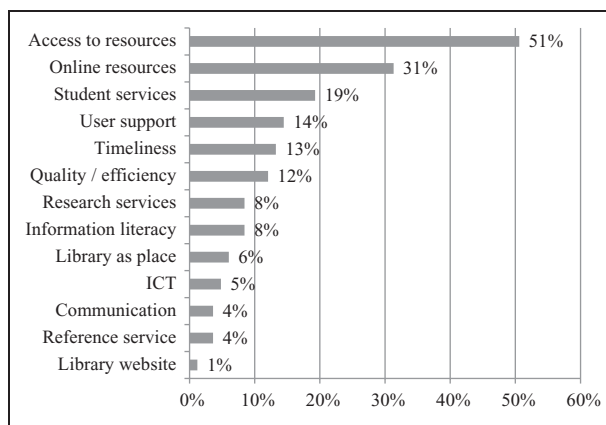
findings. For example, the University of Maseno help their faculty and IT staff to store and retrieve information; provide faculty with services where they least expect it e.g. content delivery to mobile devices; and help students in developing digital media literacy skills.

However the majority of surveyed developing country librarians indicated that they were not cohesive in offering services in addition to traditional roles of collection development and information skills. The librarians' survey distinguishes between the perception of services they offered to both faculty (Fig. 3) and the university management (Fig. 4).

Although not directly comparable - as the **Working Together** (Creaser and Spezi, 2012) survey prompted to select from options relating to new and innovative services, whilst the developing world had a free text box - it is noticeable that the developing world respondents mentioned few of the services which were thought to be valued in the developed-world. Whether this is because there is less availability of such services in the developing world, or whether core services would have been more highly valued in the developed world had they been included, is not clear from the survey data.

Based on eighty-five respondents in total, the most frequent service mentioned was the library's information resources (by fifty-seven respondents), of which forty-nine (fifty-eight percent of all respondents) specifically noted e-resources, and six (seven percent of all respondents) referred to lending and circulation services. Four respondents (five percent of the total) mentioned promotion and trials of new e-resources, which was one of the top four services thought to be most valued by research staff in the developed-world.

The second most commonly mentioned area was issues to do with communication, mentioned by



**Fig.4.** What do you think the university values most about the services provided by your library?

NB: 85 free text responses, which could be coded into more than one category.

eighteen respondents (twenty-one percent of the total). Four of these specifically mentioned liaison work with departments. Four respondents mentioned current awareness services, and ten mentioned the library website, although it was not always clear whether this was as a means of access to resources, or as a means of communication.

Fourteen respondents (sixteen percent) referred to user training, with one specifically mentioning their one-to-one service. This had also been one of the top four services thought to be most valued by research faculty by librarians in **Working Together** (Creaser and Spezi, 2012). Twelve respondents noted reference and enquiry services; no other service was named by more than ten respondents. Of the other services thought to be most valued by research staff in the developed-world, help with literature searching was mentioned by four respondents in the developing world (five percent of the total), whilst none mentioned support from subject specialist librarians.

As above, the most common area mentioned was provision of information resources – forty-one librarians (fifty-one percent) mentioned this, with twenty-six of these (thirty-one percent of the total) specifically mentioning the electronic collection. Sixteen (nineteen percent) mentioned services for students or teaching, including three mentioning information literacy, and seven (eight percent) mentioned support for research, while twelve (fourteen percent) mentioned support for users in general terms. Eleven respondents (thirteen percent) mentioned currency of resources and timeliness of service delivery, while ten (twelve percent) mentioned the quality, effectiveness or efficiency of the service. Only one percent of respondents mentioned the library website as being of most value as a service to the university.

**Case study highlight: example of good practice for collection evaluation and support National Technical University, Ukraine**

Faculty at NTU use the electronic resource collections for their research and teaching, and library staff ask faculty to make recommendations and evaluations. NTU library creates information documents recommending search strategies that are bookmarked to assess and track what is effective.

Students also need to know how to use e-resources and academic publications. NTU has a one week embedded course for first-year students (that is required for their study), and offer refreshment courses in succeeding years. NTU Library prepares recommended lists of references which are published on the intranet so accessible for all student and faculty communities.

NTU library evaluates their collection by looking at statistical data for use of resources, using cost per download to measure economic effectiveness. Faculty are surveyed twice a year, with students occasionally invited to focus groups. NTU library tries to understand why there might be low use of certain resources e.g. information support, difficulty of interfaces.

was for librarians to work together with faculty. However, it is recognized that partnership building with faculty may present some difficulties as a result of different perceptions and understanding of the role of librarians. Although there is evidence that faculty value information literacy skills (Saunders, 2012), faculty tend to have a fragmented approach to information literacy instruction, calling upon the librarian for ad hoc sessions (Saunders, 2012).

Faculty are reportedly hard to reach, requiring a time consuming one-to-one approach for e-resource training. The librarian interviews highlighted that three out of twelve developing country libraries offer some basic ad-hoc information literacy training for undergraduates. This involves how to use and retrieve materials from the University OPAC (Online Public Access Catalogue). The librarians liaise with the faculties and departments to acquire materials relating to the programmes that the University is offering. These libraries offer orientation services, references service, electronic support service, inter-library lending, bibliographic search assistance and document delivery services. Some degree of training is available with varying degrees of success. Faculty are reported to insist frequently on one-to-one training by librarians making the face-to-face approach particularly time-consuming. Therefore, there is a clear need to approach training and information dissemination in different ways.

Sixty-five of faculty surveyed said they did not work with library staff to provide information literacy instruction. Summarizing information literacy options in the faculty survey above (Fig. 5), forty respondents, thirty-four percent of the total, responded 'Don't know about' to all three services (library offers, one-to-one training, group training). **Working Together** (Creaser and Spezi, 2012) found that library teaching embedded in departmental courses was felt to be the most highly valued service offered by the library by teaching faculty. Some US institutions have taken embedded information further to include co-teaching where the librarians are fully involved in the design and teaching of the course (Creaser and Spezi, 2012).

### 7.2 Evidence and perception of services - faculty

Case study interviews highlight there is concern from developing world librarians that faculty do not understand or appreciate all that the library can offer. Eighty-five percent of faculty surveyed are aware of and use the library print collection, with eighty-two percent aware of and using the electronic collection. However, fifty-one percent of faculty surveyed did not know about or use any services beyond either the print or electronic collections.

### 7.3 Integrated teaching services - information literacy

If universities are to improve the use of e-resources amongst their teaching faculty, it will depend on the skills, expertise and creativity of their librarians. The success of this depends on the understanding, value and perception of what teaching support - specifically information literacy - can be offered. Embedded information literacy instruction is far from being the norm in higher education institutions globally, and is often perceived as confined to certain disciplines, such as health and medical sciences (Mounce, 2010).

Hardesty (1991) advocated that the best way to provide information literacy instruction to students

### 7.4 Integrated research services

Access to high quality content remains crucial to research, and its value is recognized by researchers, senior managers, and librarians alike. Yet there is recent evidence to suggest that libraries and librarians are not recognized as information resource support and providers in the research context, as they strive to make access to those resources as seamless as possible for individual researchers (RIN & RLUK, 2011).

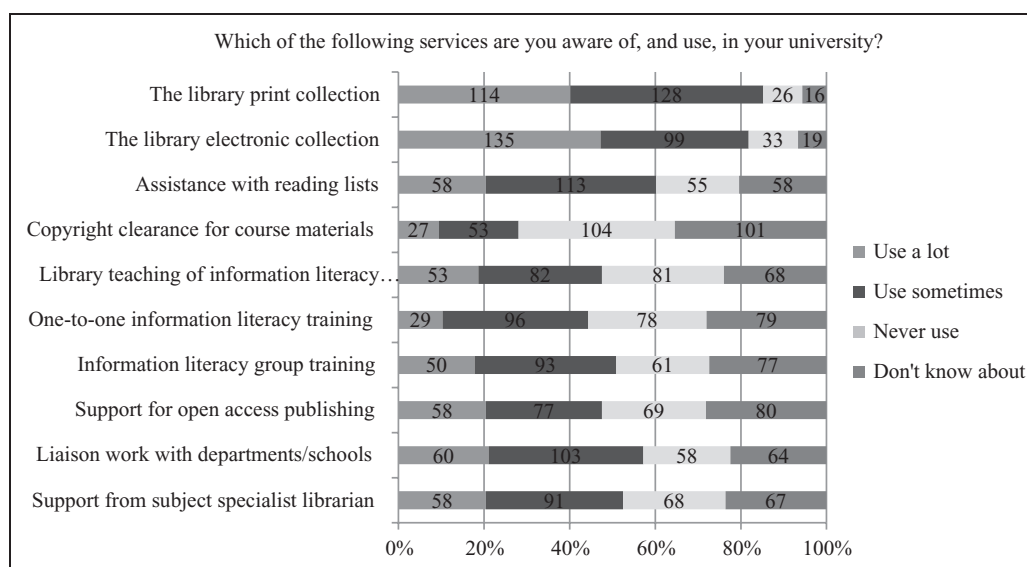


Fig. 5. Faculty awareness of services offered.

### Case study highlight: example of good practice of research service

#### UNAH, Honduras

UNAH, Honduras has an information literacy programme directed to researchers, academic teachers and both undergraduate and postgraduate students. This programme includes a basic workshop on using the Internet; tools and strategies for searching and retrieval of online information; specialist databases; retrieving information from specialist databases; use of bibliographic managers as a tool to support the writing of academic documents; and using and managing online databases. They also help undergraduate students improve their writing skills - both citations and bibliographic information that meet writing style standards.

Since 2010, Honduras has been helping researchers create their citations for article submission in international journals. They run an editorial processes course which includes how to evaluate articles, how to meet international standards for key words, abstracts in Spanish and English, and publishers' article submission instructions. Honduras library also works with undergraduate students who are required to do a six-month research project for their degree. They have one person assigned to work with these students, helping them find relevant information as well as final report writing.

The library at Honduras support research fellows mainly from the microbiology school but also engineering and other programmes. For a recent research project the library helped with information retrieval. They support Masters Degree programmes, for example with the economic faculty, and are also supporting a Canadian research fellow working on AIDS and malaria.

Libraries could play a great role if researchers knew that this support was available.

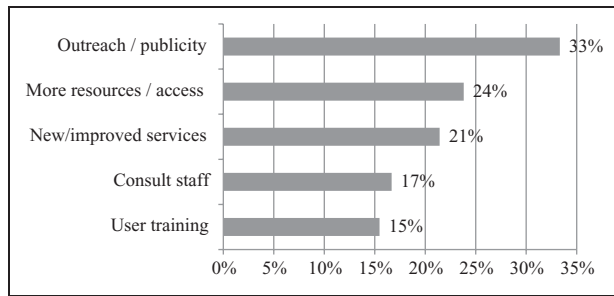
Findings for the developing country case studies indicate emphasis on the provision of their collection as their primary research service (as shown above with teaching services). The librarians report working with research faculty by training them in how to access electronic resources and to talk to them about reference management.

When asked how they perceive research faculty value their services, only twelve librarians noted reference and enquiry services and help with literature searching was only mentioned by four respondents

in the developing world (five percent of the total), whilst none mentioned support from subject specialist librarians. Research support activities that are more prominently available in the developed world include open access publishing, self-archiving (institutional repositories), bibliometrics, and literature searching.

### 8. Raising the visibility of the library and library services

In developing country universities there is a clear need for better promotion of resources, awareness



**Fig. 6.** What one thing do you think the library could do to increase the perceived value for academic staff?

raising and skills development (Harle, 2010). **Working Together** (Creaser and Spezi, 2012) reported general marketing of the library raises its profile amongst teaching and research faculty. Raising the visibility and awareness of what the library can do to support faculty is a key component of demonstrating value. When asked to rate the services they provide to their faculty the developing world librarians rated communication as the second most commonly important service. Fig. 6 supports this with a third of librarians feeling that marketing, publicity and outreach could improve their perceived value. To make use of (and in turn value) the library’s e-resource collection, faculty and students need to be aware that they exist and appreciate their scholarly value.

**8.1 Communication**

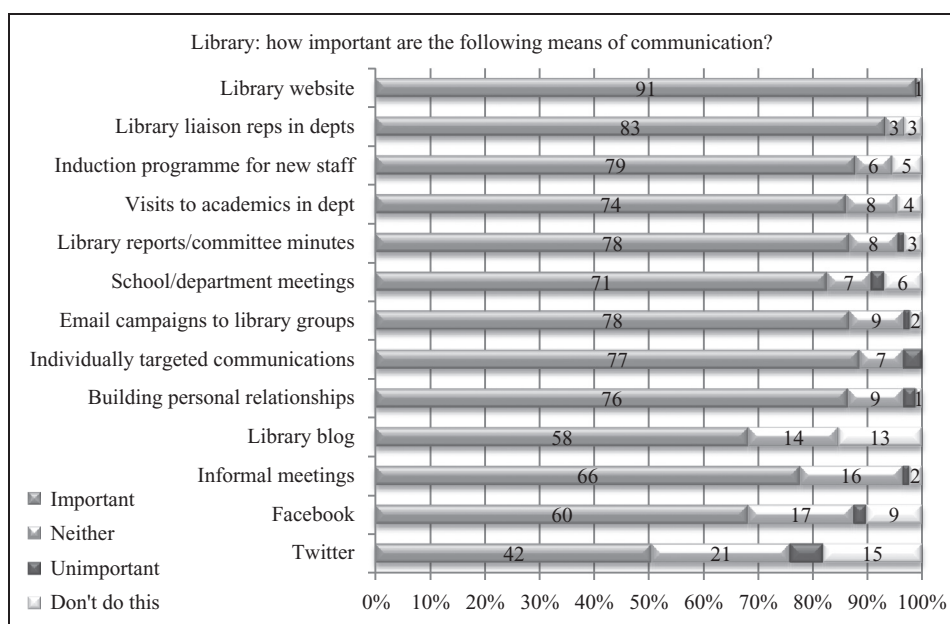
Fig. 6 indicates that developing world librarians feel they should do more marketing and publicity to improve the perception of the library to faculty, yet

this is sometimes met by resistance according to interview discussions. A lack of engagement is experienced which deflects motivation to be innovative or proactive in pushing new communication methods forward.

One of the aims of this research was to provide the academic library community in developing world territories with a better understanding of the connections between academic libraries and academic departments, and to identify practical ways to enhance their working relationship. The faculty survey showed there was an established link in the relationship with fifty-nine percent of respondents knowing the named individuals to contact within their library. The surveys measured how both faculty and library staff rate how effective a variety of communication methods are in different situations.

The librarian survey showed the importance placed on more traditional channels such as the library website, targeted communication, and library liaison representatives in departments (Fig. 7). Less importance and activity was placed on developments in social media such as a library blog, Facebook and Twitter. Faculty also place importance on the library website, library liaison, and targeted communication (fifth) with many faculty reporting no communication received by social media channels (Fig. 8).

Fig. 9 compares faculty responses on frequency of contact with the library with librarian responses on the importance of various means of communication. The librarian question was scored as ‘important’ = two; ‘neither important nor unimportant’ = one; unimportant’ and ‘the library doesn’t do this’ = zero. ‘Don’t



**Fig. 7.** Librarian perception of communication.

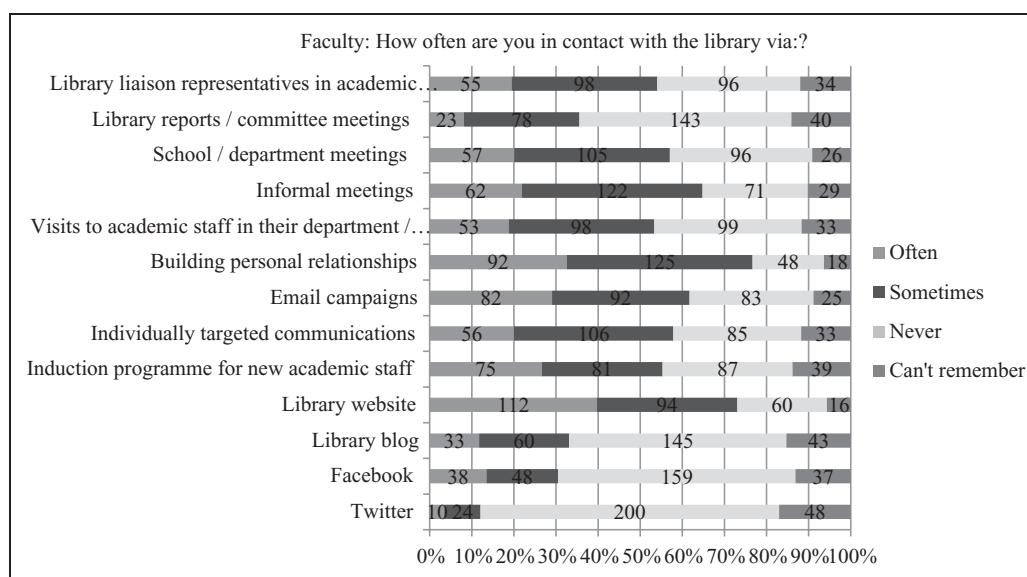


Fig. 8. Faculty perception of communication with library.

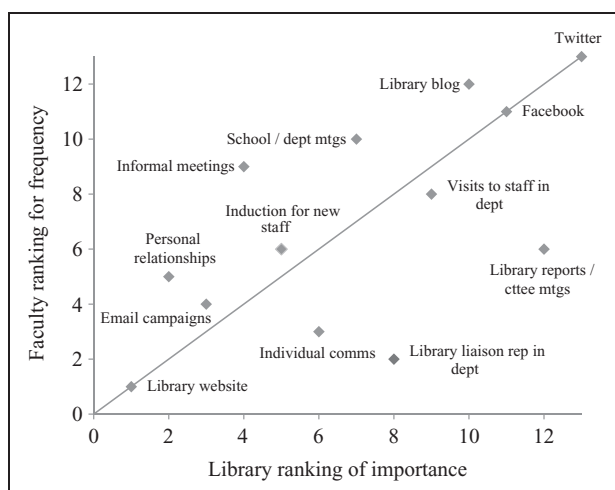


Fig. 9. Comparison of ranks for means of communication.

know' was omitted from the analyses. The average score across all respondents was calculated for each line. These were then ranked, with one being the highest average score (i.e. the most important) and thirteen the lowest. The faculty question was scored as 'often' = two; 'sometimes' = one, 'never' and 'can't remember' = zero; and the average score across all respondents calculated for each line. These were then ranked, with one being the highest average score (i.e. the most frequent contact) and thirteen the lowest.

The correlation between the two sets of ranks was calculated, at 0.64. This indicates only a moderate level of agreement between them, suggesting some degree of disconnect between what the library perceives as important and what faculty remember. There was some agreement, for example, the library website was seen as most important by librarians and

was the most frequent means of contact reported by faculty. This contradicts the findings of the developing country faculty survey which reports that twenty-two percent of faculty never use their library website and twenty-seven percent never use the online library catalogue. A recent study evaluated two hundred university and college library websites from ten sub-Saharan countries with a view to evaluating not only e-access but other functionality and wider services provided (Burnett, 2012). Findings showed that library websites need to fulfil the role of 'virtual gateway' to the library and its services but the library websites in the countries surveyed are lagging behind in their exploitation of the full potential of the library portal or gateway (Burnett, 2012). The instability of library websites may result in less dependable use.

Twitter was least important to librarians, and least frequently reported as a means of contact by faculty. It is worth noting however that some developing country institutions may have limited social media activities in order to protect the university's bandwidth.

Those points above and to the left of the line are means of communication which were ranked more highly by the library for their importance than they were by the faculty for frequency of contact. For example 'informal meetings' were the fourth most important means of communication to librarians, but came ninth in the list of most frequent forms of contact according to faculty.

Those points below and to the right of the line are means of communication which were ranked more highly by the faculty for frequency of contact than they were by the library for their importance. For



example, a library liaison representative in the department was eight most important as a means of communication for librarians, but the second most frequent means of contact to faculty.

## 8.2 Current marketing and promotion of library resources and services

The librarian interviews asked how each library is promoting its resources and services to faculty with reported use of various marketing channels with varying degrees of effectiveness. This can include sending emails to announce new resources; library newsletters sent to faculty on a regular basis; library Facebook pages; brochures and posters or notice board announcements highlighting resources to faculty; and promotional events/open days/workshops/seminars run by the library.

Individual librarians came forward with innovative suggestions of how they could promote further such as outreach programmes, advertising on the campus radio station, etc. However, the majority of librarians felt that to market their library more effectively they needed more human, material and financial resources and greater motivation and pro-activity on the part of the individual librarians themselves.

This conflicts with the experience of seven out of twenty faculty who reported low awareness of their library's marketing efforts. Just because a marketing campaign is undertaken does not necessarily mean the users have absorbed the information and are now expert searchers and users (Gibendi, 2012).

'On improved communication, there is need for a direct email or electronic communication between the library and the department. This will hasten the communication processes' (faculty: Maseno University)

'Use of email instead of paper memos which one reads and forgets about' (faculty: University of Zimbabwe)

'The library could get email addresses of users as well as their areas of specialization so that information on new arrivals that are relevant to each person's area of interest can be mailed to them' (faculty: Covenant University)

'We have the internet services, but the linkage connecting flow of information between me and the library is lacking. The library does not even know that I have a University email address' (faculty: University of Cape Coast)

## 8.3 Building relationships

Many of the challenges to perceived value rest on the strength of the relationships which exist between libraries and other stakeholders within the university.

### Case study: example of good practice of marketing and promotion UNAH, Honduras

UNAH reports innovative and proactive approaches to promoting their resources and services. They have embarked on a project called the mobile library where the library goes to faculties to set up exhibitions of bibliographic material, with issues that capture the interest of students. They give directions about the use of the virtual library and resources, and explain how the students can get access to the services that the library offers. This has worked well because the library brings materials that students, teachers and researchers need in their faculties; they do not need to go to library building in order to get the information.

UNAH library promotes reading through different activities. In 2013 there is a campaign named 'The pleasure of Reading' where the library has invited national authors to speak about their experiences as a reader and how the library has contributed in their writing role.

Since 2011, UNAH Library has run a congress called "e-Library Congress" aimed for librarians, but there are also some speeches directed to end users (publishers, researchers, academics, and students) in order to promote new services that library is implementing.

Honduras believes that visits to the faculties are a great way to let researchers and academics know about the library's services and resources. They feel that the distribution of promotional material (especially brochures) works less well, with just a few percent of faculty and students reading and absorbing the content.

Close and supportive links need to be forged between the library and academic units (Harle, 2010). Faculty outreach relies on good personal relationships between faculty and librarians. When we asked librarians (Fig. 6) what one thing they thought the library could do to increase the perceived value for faculty, seventeen percent of respondents (fourteen out of eighty-five) felt that they should consult more with faculty about their needs.

Three of the twelve case study libraries have library representation on academic faculty boards as well as a library committee with department representatives. One librarian suggested that they would like to become more aggressive in targeting faculty by visiting and engaging them by offering to conduct awareness campaigns to students, for example. However,

that librarian reported there is a lack of resources to provide this.

The librarian interviews highlighted a struggle to create strong relationships with faculty - two specifically experienced a negative attitude towards the library as a whole. This lack of faculty engagement appears to prevent perseverance and incentive to try and improve the relationship. The librarians report that they would like to encourage more feedback on services, resources and library issues but endeavours to do so are met with resistance.

‘(Faculty) just don’t take it upon themselves to communicate what they want from the library. We try to engage them, but they are not forthcoming.’ (University of Zimbabwe)

‘When you talk to (faculty) in a meeting they really don’t know what is available for them and yet it is there on the website. We are trying to create awareness and keep trying to follow up on things requested but there is little feedback’ (Maseno University)

‘The (relationship) could be better if we are more proactive. The general perception is that most lecturers do take active interest in the library. Some efforts have been made by the librarian to appoint librarians to represent the library at the various faculties; however they are yet to be recognized’

‘Sensitization workshops have not been so successful because as soon as some academic staff complete the workshop they forget about the library at decision times when it is critical’ (Makerere University)

However, the faculty survey shows that seventy-five percent of faculty are in contact with their library via personal relationships: sixty-six percent report individual meetings and over fifty percent report either visits to faculty in their department or in school/department meetings (Fig. 8).

Faculty offered suggestions on ways to build this relationship further:

‘There should be direct link between the department and the library. The library should have staff dedicated to the need of each department and this should be well communicated to the department’ (Obafemi Awolowo University)

‘I would suggest that visiting different units to meet staff and students at a lower level at least once in a semester or academic year would add value and encourage mandatory Library users, access and utilize all the alternative services and information sources particularly for those preferring online services as against physical visits’ (Makerere University)

‘Create a triangular link that will service the library, department and me for current awareness

purposes and any other related matters’ (University of Cape Coast)

‘The library should ensure that it gets constant feedback from users via a suggestion box and other methods of gaining information from stakeholders’ (University of Zimbabwe)

Relationships also need to be built at senior levels. University managers are only likely to offer adequate support to the library if they properly understand its value, needs and the services it seeks to deliver (Harle, J. 2010).

## 9. Conclusions and further considerations

The focus of Library Value in the Developing World was to explore:

- Evidence and perception of library value
- Evidence and perception of library services
- Communication and visibility of the library and library services

The majority of developing world libraries measure the value they provide to their teaching and research faculty via their resource collection. There are no unified drivers for reporting this evidence and few librarians interviewed reported justification requests from senior management. Librarians and faculty in developing world institutions continue to experience issues with internet connectivity and low bandwidth, and this contributes to the perception and reliability that faculty place on their library. Developing world libraries don’t offer a consistent approach in offering services beyond their resource collection, and half of all faculty surveyed are not aware of any additional services provided. The research outcomes highlight areas of disconnect between the libraries and their faculty, most notably between what librarians see as important means of communication, and communication that the faculty report as being effective. Librarians recognise the need for more investment in the marketing of the library as a whole, but report their ability in limited due to constraints on human, material and financial resources.

These findings highlight areas that may be of interest for the following groups to consider.

### 9.1 For individual developing countries librarians

General marketing of the library raises its profile amongst teaching and research faculty, and raises the visibility and awareness of what the library can do to support faculty. This is a key component of demonstrating value. Identifying strategies to actively market the library to all its stakeholders could help

garner their support. This would result in improved networking and communication between the library and those who use the library's resources and services.

Librarians could consider how to develop and expand their skills and techniques to collect, record, interpret and report resource usage data. This may have an effect on usage of e-resources, and aid the measurement and demonstration of the value of the library's collection and services. These developed skills in managing e-resources might additionally be used to train others as faculty report preference for peer-training rather than library staff. To raise the visibility of the library to senior managers, librarians could address the promotion of advocacy of the library through encouraging strong relationships with senior managers, participation in joint research projects and getting a voice for the library 'at the top table'. This would help ensure the library's concerns and needs are echoed within university strategy documents.

### 9.2 For developing country universities

Libraries are a physical manifestation of the values of universities and scholarship. Further investment in libraries and in the professional development of librarians could be considered to ensure the university makes the greatest use of the potential offered by information and technology. Raising the status and recognition of librarians and the value they add to the work of faculty could be beneficial for the university as a whole.

### 9.3 For publishers

Publishers can contribute to developing world libraries beyond making their resources available freely or at greatly discounted rates. Understanding the ongoing needs and specifics of developing country libraries and their work is of value. The marketing case study (to be published 2014) will provide notable results for publishers to consider in providing support for developing world libraries.

## 10. References

- Adams J, King C and Hook D (2010). Global Research Report: Africa. Available at <http://sciencewatch.com/global-research-reports> (accessed 19/6/13).
- Adams J, King C, Pendlebury D, Hook D and Wilsdon J (2011). Global Research Report: Middle East. Available at <http://sciencewatch.com/global-research-reports> (accessed 19/6/13).
- Adams J, Pendlebury D and Sternbridge B (2013). Global Research Report: Building Bricks. Available at <http://sciencewatch.com/global-research-reports> (accessed 19/6/13).
- Browse L (2013). Co-operation and collaboration to strengthen the global research cycle <http://uksg.metapress.com/content/18kh06tv56245738/> (accessed 19/6/13).
- Bishop B (2012). Springer Presentation at 2012 PfD conference: <http://pubs-for-dev.info/wp-content/uploads/2012/06/2012-08-Springer-PfD.pdf> (accessed 19/6/13).
- Burnett P (2012). Gateway or Obstacle Course: A survey of selected Africa library websites <http://blog.inasp.info/wp-content/uploads/2012/09/Gateway-or-Obstacle-Course.pdf> (accessed 1/7/13).
- Creaser C and Spezi V (2012). Working together: evolving value for academic libraries. June 2012. Available to download [www.libraryvalue.wordpress.com](http://www.libraryvalue.wordpress.com) (accessed 19/6/13).
- Gibendi R, (2012). When Marketing E-Resources..., Practising Development blog: <http://blog.inasp.info/marketing-e-resources/> (accessed 19/6/13).
- Hardesty LL (1991). Faculty and the Library: The Undergraduate Experience. Norwood, NJ: Ablex Pub.
- Harle J (2010). Growing knowledge: access to research in east and southern African universities. The Association of Commonwealth Universities, 2010: <https://www.acu.ac.uk/focus-areas/arcadia-growing-knowledge> (accessed 11/6/13).
- Korbel D A (2011). Learning from Experience, The AuthorAID mentoring scheme in action: [http://www.inasp.info/uploads/filer\\_public/2013/04/08/learning\\_from\\_experience.pdf](http://www.inasp.info/uploads/filer_public/2013/04/08/learning_from_experience.pdf) (accessed 19/6/13).
- Lebeau Y and Mills D, (2008). From 'crisis' to 'transformation'? Shifting orthodoxies of African higher education policy and research, Learning and Teaching 2008, 1 (1): <http://www.ingentaconnect.com/content/berghahn/latiss/2008/00000001/00000001/art00005> (accessed 19/6/2013).
- Mounce M (2010). Working together: Academic librarians and faculty collaborating to improve students' information literacy skills: A literature review 2000–2009. *Reference Librarian* 51(3): 300–320.
- Oakleaf M (2010). The Value of Academic Libraries. A Comprehensive Research Review and Report. Available at: [http://www.ala.org/acrl/sites/ala.org.acrl/files/content/issues/value/val\\_report.pdf](http://www.ala.org/acrl/sites/ala.org.acrl/files/content/issues/value/val_report.pdf) (accessed 8/6/13).
- Publishers for Development* (2011). "Cambridge University Press' low bandwidth mobile access point – CJOM", PfD Newsletter, 1 (1): <http://www.pubs-for-dev.info/2011/03/research-in-the-palm-of-your-hand/> (accessed 19/6/13).
- RIN and RLUK* (2011). The Value of Libraries for Research and Researchers. Available at: <http://www.rin.ac.uk/our-work/using-and-accessing-information-resources/value-librariesresearch-and-researchers> (accessed 8/6/13).
- Saunders L (2012). Faculty perspectives on information literacy as a student learning outcome. *Journal of Academic Librarianship* 38(4): 226–236
- The World Bank* (2012). <http://data.worldbank.org/news/newest-country-classifications-released> (accessed 19/6/13)

## II. Appendices

### Appendix I: SAGE product platforms

The 12 participant universities received access to SAGE product platforms as part of their participant agreement. These platforms are:

**SAGE Journals** – electronic access to over 645 peer-reviewed, full-text journals, with content dating back to 1999

**SAGE Knowledge** – electronic access to more than 2,500 titles, including an expansive range of SAGE eBook and eReference content, including scholarly monographs, reference works, handbooks, series, professional development titles, and more

**SAGE Research Methods** – a research methods tool created to help researchers, faculty and students with their research projects. SAGE Research Methods links over 100,000 pages of SAGE's renowned book, journal and reference content with truly advanced search and discovery tools

### Appendix 2: Major support and access programmes

Major support and access programmes include (but are not limited to):

**Access to Global Research in Africa (AGORA)** [www.aginternetwork.org](http://www.aginternetwork.org)

The AGORA program, set up by the Food and Agriculture Organization of the UN (FAO) together with major publishers, enables developing countries to gain access to an outstanding digital library collection in the fields of food, agriculture, environmental science and related social sciences.

**Access to Research for Development and Innovation (ARDI)** <http://www.wipo.int/ardi>

The ARDI program is coordinated by the World Intellectual Property Organization together with its partners in the publishing industry with the aim to increase the availability of scientific and technical information in developing countries.

**Bookaid International** [www.bookaid.org](http://www.bookaid.org)

Bookaid's principal focus is on supporting reading at lower educational levels, but it also provides support to a number of university libraries, in the form of regular book donations.

**Electronic Information for Libraries (EIFL)** [www.eifl.net](http://www.eifl.net)

Established in 1999, eIFL works to increase access to electronic information in transition and developing countries. Its principal areas of activity include licensing negotiations, consortium building and development, open access, intellectual property, advocacy

on balanced copyright laws and access to knowledge, and free and open source software.

International Network for the Availability of Scientific Publications (INASP) [www.inasp.info](http://www.inasp.info)

Established in 1992, INASP is a development charity with the goal of contributing to sustainable social and economic development by strengthening research and knowledge systems. It helps address some of the challenges developing countries face around the availability of international online books and journals, the writing and publication of locally-produced work and the communication and uptake of research to inform policy and practice.

**HINARI Access to Research in Health Programme** [www.who.int/hinari](http://www.who.int/hinari)

The HINARI Programme, set up by the World Health Organization (WHO) together with major publishers, to enable developing countries to gain access to one of the world's largest collections of biomedical and health literature. Up to 11,400 journals (in 30 different languages), up to 18,500 e-books, up to 70 other information resources are now available to health institutions in more than 100 countries, areas and territories benefiting many thousands of health workers and researchers, and in turn, contributing to improve world health.

Information Training and Outreach Centre for Africa (ITOCA) [www.itoca.org](http://www.itoca.org)

ITOCA is a training hub and user support centre in Africa which supports the HINARI, AGORA, OARE and TEEAL access initiatives. Training is provided to librarians, researchers and students through workshops. ITOCA also supports the development of ICT programmes offering technical assistance.

**Online Access to Research in the Environment (OARE)** [www.oaresciences.org](http://www.oaresciences.org)

OARE, an international public-private consortium coordinated by the United Nations Environment Programme (UNEP), Yale University, and leading science and technology publishers, enables developing countries to gain access to one of the world's largest collections of environmental science research.

**Publishers for Development (Pfd)** [www.pubs-for-dev.info](http://www.pubs-for-dev.info)

A joint initiative of the Association of Commonwealth Universities (ACU) ([www.acu.ac.uk](http://www.acu.ac.uk)) and INASP, Pfd was launched in 2008 and is a forum for information and discussion aimed at exploring some of the challenges experienced by developing country libraries, researchers and publishers.

**Research4Life** <http://www.research4life.org>

Research4Life is the collective name for AGORA/HINARI/OARE/ARDI, a public partnership of the WHO, FAO, UNEP (United Nations Environment

Programme), WIPO (World Intellectual Property Organization), Cornell and Yale universities and the International Association of Scientific, Technical and Medical Publishers.

**The Essential Electronic Agricultural Library** (TEEAL) <http://teal.org/>

TEEAL is a digital collection of research journals for agriculture and related sciences. Researchers, students, faculty and librarians can discover and access thousands of full-text PDF articles without the use of the internet. TEEAL is available to institutions in income-eligible countries.



## Opening Address by IFLA President Ingrid Parent

Sunday, 18 August 2013

### Future Libraries: Infinite Possibilities

Minister Yaacob Ibrahim, Ambassador Chan Heng Chee, Mrs Elaine Ng, honoured guests, members of the national organizing committee, and Congress delegates – I join my colleagues in offering you the warmest of welcomes to IFLA’s annual World Library and Information Congress.

It is wonderful to be back in Singapore. As Dr. Ibrahim so eloquently noted in his welcome letter to this Congress, Singapore is a small nation where East meets West, where the traditional co-exists with the modern, and where people of different races and religions live together in harmony. That description is very apt when I think of my visits with IFLA members and librarians around the world who work with patrons from all walks of life, cultures and religions – providing them with efficient and empathetic access to information and expertise.

As you can imagine, as President of IFLA, I have given many keynote speeches – and have been interviewed by local media countless times. I have been referred to by many names – including the “Queen of Librarians” – and even as the “Pope of Librarians!”

Now – not even on my best days do I feel like a Queen or a Pope! But I can tell you I was secretly pleased when during my first visit to Singapore last March, The Straits Times referred to me as a “Library Crusader”. That’s a label I can live with!

Because that is how I have seen my role. To be a very visible and active promoter and champion for libraries and the work that they do so well in communities around the world.

To that end, this past year, I particularly focused my activities on the IFLA regions. I went to South Africa, Chile and Argentina, Australia, Malaysia and Singapore, and just last month I was in Brazil and China. All were excellent venues for exploring issues of mutual concern, and planning for future joint activities.

And of course I met with many library associations and colleagues in Europe and North America.

Being from Canada, I chose to have my Presidential Meetings in the Americas. This year, in Mexico City, the theme was Our Digital Futures. We addressed the impact of digital developments and how libraries might best serve their communities. Our discussions were far ranging and of course encompassed such key issues as equitable and comprehensive access to information and copyright exceptions and limitations.

Of course, two years is not a long time to achieve what I hoped might come to pass when I took on the job. When I chose my Presidential theme – Libraries: A Force For Change – with its principles of inclusion, transformation, collaboration and convergence, I had no idea how people would respond. I hoped and believed this was a theme that I would see play out across the global library stage in very real terms. But measuring success is difficult to quantify.

But I can tell you this – without fear of contradiction. While we can and should rejoice in our linguistic and cultural differences – we should equally rejoice in the similarities we share in the work we do in our chosen profession. It doesn’t matter the type or size of library, nor whether it is in a developing or developed country, we all embrace similar professional values and want to provide access to as much information as possible – to as many users as possible. These commonalities are the glue that binds us together.

The libraries I had the privilege to visit were so very different in their physical size and structure, but so similar in what they were trying to accomplish. Two examples come to mind.

In Brisbane, Australia there is a unique service provided by the State Library of Queensland. Called The Edge – its aim is to provide young people with the opportunity and inspiration to explore creativity across the spectrum of the arts and sciences. They use the latest technologies in innovative ways to get youth excited about possibilities for their futures.

Then, when I was in South Africa in September for The African Public Libraries Summit, there was a young librarian from Botswana who said her library

offers courses in crafts and other practical skills to the women in the community. And one of those women who took advantage of this service told that young librarian how her self-esteem had increased because of the program, and how she felt she could now make a positive contribution to her community.

It's interesting, isn't it? Two very different libraries: One ultra-modern, the other smaller and not so cutting edge when it comes to technology. And yet, the librarians in both had the same approach and similar results when it came to offering unique services to their users and their communities.

If I had to choose which of my visits most exemplified how IFLA and libraries can be an incredible catalytic force for change, it would be my recent visit to Qatar. I was there last November, meeting with the AFLI – the Arab Federation of Libraries and Information. Never before had a current IFLA President been invited to speak to them, and I was asked, “why IFLA had never had a conference there”. And I replied that we had never been asked! So together we decided to rectify the situation by having a regional IFLA conference in Doha.

And that is exactly what took place in June of this year. It was a pretty amazing session with excellent representation from the region. I am told there was passionate discussion and debate. It is just this sort of passion that IFLA events can generate, and that is incredibly satisfying because more often than not, that passion gets taken back to participants' home institutions.

The conference was followed by a two day Building Strong Library Associations workshop – attended by representatives from 15 countries in the region.

It was very gratifying to hear that there was great interest expressed in pursuing future projects together. The region is so large, diverse, and important and we are absolutely delighted to have them as partners, sharing information about global library issues that affect us all.

As I reflect on the AFLI experience, and when I think of one of the supporting principles to my theme – convergence – it is evident that it is so much more than sharing of converging technologies. There is the convergence of ideas, of exchanging views and pooling collective knowledge and experience.

In this regard I was recently made aware of the work by noted Singaporean academic and author Kishore Mahbubani. In his book “The Great Convergence: Asia, The West, and the Logic of One World”, he makes a very persuasive case that “never before in history has humanity been so interconnected and interdependent.” Economically, socially, and even politically. He notes the rise of the global middle

class that brings an unprecedented convergence of interests and perceptions, cultures and values.

Certainly, in our world, libraries are seeing the inevitability and merit in embracing a similar convergence of attitudes, values, and standards. But of course convergence doesn't happen in a vacuum. It needs the active participation of those who can encourage it and those who will benefit. In the case of the former, it becomes increasingly important for library associations and organizations to participate in multi-stakeholder forums and to develop non-traditional alliances. Only by working together will our voices be heard (including the need to speak with one voice) particularly on the international stage.

And this is where IFLA works closely with library associations through our advocacy work.

Copyright protection and limitations, and e-lending issues are but two examples that come to mind when it comes to the need for showing a common front. Our proactive approach – lobbying for copyright exceptions for libraries through international negotiations has been critical. We were so gratified that the Visually Impaired Persons Treaty was recently signed in Morocco by national delegations to the World Intellectual Property Organization.

Of course issues like copyright protection are only one of many that influence our ability to effectively deliver services to our patrons. It is more important than ever that we remain aware of the ever-changing environment libraries will be working under in the years to come.

That is why IFLA embarked on the Trend Report, which will be launched during tomorrow's plenary session at 8:30 in the morning. The report is not concerned with what libraries will look like in a decade's time, but rather focuses on what society might look like – and how libraries may adapt to best meet the evolving needs of their communities.

Since it is the nature of technology to change so rapidly, there will never be a final report. Rather it will be a living resource that will evolve over time. And of course, it will be available online – providing ongoing opportunities for discussion and debate over the next several years.

Finally, since I have referred throughout my talk to the multi-cultural and multi-lingual world we live in, I did want to mention what we are doing at IFLA to bridge linguistic divides that can put distance between and among a membership that comes from all over the world.

We are continually working on increasing the number of standards, guidelines and other documents made available in IFLA's seven official languages. In a similar fashion we are continuing to develop our

multilingual websites. I was delighted to announce the launch of the Spanish version of our website in February of this year, and the French edition in July. The other language versions will follow. Coming from a bilingual country myself, I have been personally committed to this project for the past two years. And I know members of our Board are equally dedicated to this mission as we move forward.

Colleagues, we are living in tumultuous, exciting, and sometimes anxious times. Nobody can predict the future with certainty. But I am convinced that libraries are going to play a pivotal role. In fact, never before have libraries and librarians been in such a key position to help and guide their users to better and more prosperous lives.

Although every generation can say their time was special – it is difficult to imagine a more interesting time to call ourselves “librarians”. It will, as our conference theme suggests, be a time of infinite possibilities.

Some of those possibilities will be discussed at this congress over the next few days. Your agenda is packed. Whether this is your first conference, or your tenth, or more, I know you will go home tired, but inspired by the ideas you have shared, by the new friends you have made, and by the excitement of being with a group of like-minded participants who love what they do, and just want to do it better.

Thank you very much. Have a great conference.

Ingrid Parent

IFLA President 2011–2013

## IFLA Trend Report

*IFLA President Ingrid Parent provided an overview of the just released Trend Report, which was prepared through an extensive process of consultation.*

Good morning everyone. It's with great pleasure that I welcome you to the launch of the IFLA Trend Report, here at the 79th World Library & Information Congress in Singapore.

This occasion is the culmination of several months of work on behalf of many experts and stakeholders. I would like to thank everyone who worked so hard on this document – your efforts are greatly appreciated. And I'd like to note what a privilege it was to participate in the process. I was able to attend the March roundtable session of key experts in Mexico City, and I greatly enjoyed meeting everyone who gathered there to discuss the ideas behind the document that I am introducing today.

I'd like to speak now about the Trend Report, to highlight its significance as a broad-based resource.

The IFLA Trend Report isn't the first study to consider the impacts of new technologies on our global information environment. How citizens, sectors and governments adapt in the Internet age is a question that is being considered in many contexts, with many voices, around the world.

Our intention in compiling the IFLA Trend Report was to do more than add one more static report to the digital archive. We wanted to do something to harness the unique perspective IFLA offers, as an international voice for library and information associations.

The Trend Report isn't looking at libraries in the information environment – it's looking across society. The Trend Report is the starting point for libraries to work back from, and consider how they fit in to the new global economy.

The IFLA Trend Report is perhaps more aptly described as the IFLA Trend 'Resource' – a comprehensive, and ever evolving, repository of information and forum for discussion among IFLA members. With the Trend Report platform, we want to initiate a conversation with IFLA members around the world: how are information trends affecting libraries in Chile, as compared with libraries in Singapore or Kenya or Lithuania? The IFLA Trend Report being launched here today is just the tip of the iceberg – and it's now for you to explore what's under the water.

Over the past 12 months a number of components have been drawn together to develop the Trend Report:

- In November 2012 IFLA commissioned a comprehensive literature review surveying recent studies and reports on emerging trends. This was completed in January 2013.
- In February and March 2013, a panel of ten key experts prepared submissions based on these materials and participated in a round table meeting in Mexico City.
- In May and June the experts continued to discuss and expand on the trends via the online discussion forum, with input invited from a wider pool of experts.



- In July, all of these different resources were drawn together to produce the web platform and the document *Riding the Waves or caught in the tide? Insights from the IFLA Trend Report*.

Which brings us to today . . . and the next phase of discussion between libraries.

Our expert contributors spanned social scientists, economists, education specialists, lawyers and technologists. Some of the experts included:

- Olivier Crepin-Leblond, Chairman Internet Corporation for Assigned Names and Numbers (ICANN) At-large Advisory Committee (ALAC)
- Divina Frau-Meigs, Professor, Université du Paris III: Sorbonne Nouvelle
- Deborah Jacobs, Director, Global Libraries Development Programme, Bill and Melinda Gates Foundation
- Kate Russell, Presenter, BBC Click Online
- Fred von Lohmann, Legal Director, Copyright, Google Inc.\*

You can find a full list of all our expert contributors to the IFLA Trend Platform in the Insights Document and on the web platform, trends.ifla.org.

So what is the Insights Document? It synthesizes the enormous amount of information that has gone into discussions over the past twelve months. It's a snapshot of the broader IFLA Trend Report, and can be downloaded from the Trend Report platform after this session.

The Insights Document summarizes five high level trends emerging in the global information environment, based on discussions with our experts.

The IFLA Trend Report looks in detail at five key trends which will change our information environment. I'm going to summarize the five trends briefly – they're expanded on in the Insights Document:

#### ***New technology will expand access to information, but also present barriers***

The IFLA Trend Report acknowledges access to information as having a profound influence on future developments in the information economy. This trend looks at the importance of information literacy skills – not only digital tools but also basic literacy – to online inclusion. It also considers barriers to access for the visually impaired – as information becomes more abundant, but restricted through technological means. It looks at new online business models and their impact on how information is owned, profited from, shared or accessed in the future.

#### ***Online learning will transform and disrupt traditional education***

Online educational resources are making learning opportunities cheaper and more accessible. There will be an increased value placed on lifelong learning and recognition of non-formal and informal learning. Trends in online education will profoundly change demographics in employment in the areas of age, cultural background and geographical location.

#### ***Boundaries of data protection and privacy will be redefined***

The value in personal data for companies and governments, coupled with increasingly sophisticated methods of monitoring and filtering communications data by those entities, are challenging the boundaries of privacy and data protection. I have some fascinating issues for libraries to consider when it comes to privacy that we'll go through in a minute.

#### ***Hyper-connected societies will recognize and empower new voices***

Mobile technologies are connecting people and enabling the rise of new voices and groups—single-issue movements are emerging to challenge traditional political parties; there are new opportunities for collective action and protest; and new connections across geographic and language borders.

The gap between developing and developed countries will continue to diminish – mobile technologies are enabling greater participation by diaspora communities and education opportunities are more widely available. And while the developed world continues to struggle with the challenges of an aging population, the connected developing world will be able to exploit demographic advantages associated with having young and growing populations.

#### ***Our global information economy will be transformed by new technologies***

The evolution of new technologies is the connector between all other information trends. The spread of hyper-connected mobile devices, networked sensors in appliances and infrastructure, 3D printing and language-translation technologies are transforming the global information economy, and are the force behind other trends identified in the IFLA Trend Report.

By themselves, we may look at these trends and think, 'and? So what? We knew that already'. But

these trends are evolving rapidly and set to collide, or already colliding, with one another – with reverberations that ripple through the services, and very identity, of libraries around the world.

We've been looking at questions that arise for libraries at the points that these trends come into conflict. We tried to ask ourselves, what impacts could these trends have on the way libraries operate currently, and into the future?

For me, when I look at the trends, I see that they all have a connection to technology. Even if the trends are education or privacy or heritage, they are all shaped by "technology" in some way. In this respect the trend report could really boil down to how evolving technology impacts our lives, our societies. Technology is the key connector.

Let's take a look at some of the collision points for libraries:

### *Google Glass*

Google Glass is a hot topic right now. For those of you who might not be aware of Google Glass, it's a tiny wearable computer attached to a pair of glasses, with information projected on its lenses. It has a camera, is connected to the Internet at all times and is voice activated. These are:

- Mobile and increasingly wearable technology like Google Glass are redefining the boundaries of privacy.
- According to Cisco's Global Mobile Data Traffic Forecast, by 2016 there will be over 10 billion mobile devices connected to the Internet, with the Middle East and Africa alone experiencing a 104% increase in mobile data traffic.
- The next generation of wearable computers, like Google Glass, have the computer turned on, and its camera turned outwards, all the time. Putting that in the library setting for a moment: a user walking into a library wearing Google Glass has, in a fashion, put all their fellow library users under surveillance. Everything he or she sees is captured by its lens.

What does the library do about it? Libraries position themselves as 'safe' spaces for the benefit of the whole community. Can this be maintained once Google Glass is in the reading room?

Or, to put it another way, as new generations of technology users embrace wearable tech, will they even care about privacy?

Let's look at another scenario:

### *Personal data in libraries*

The online economy is increasingly built on 'information mining' – using personal data like our most visited websites, our Google searches, our geo data, to produce better-targeted goods and services.

Let's put this in a library setting:

Just before the Congress, I came across a fascinating article. A couple of years ago, librarians at the University of Huddersfield realized that analysing the electronic trail left every time a student swiped into the library, borrowed a book or looked something up online, and then combining that information with other student records could not only help to improve library services but also answer more fundamental questions about the way students learn. Was use of the library, for example, related to how well students performed academically? The answer proved emphatic. By plotting library usage against academic achievement they discovered that students who did not use the library were more than seven times more likely to drop out of their degree than those who did.

Universities around the world are waking up to the value of student data and discovering how it can help them better develop course modules, term timetables and ways of responding to the needs of different students.

Is there a point, though, at which too much information about our students is being collected? How do libraries manage this treasure trove of personal data? What about their obligations to their students/users?

Things get even murkier when libraries are acting as conduits for access to digital content subscriptions and e-books owned by publishers.

Another collision involves e-lending in libraries:

### *E-lending*

Reading an e-book today reveals a lot about you – how fast you read, your favourite parts, your spending habits. This kind of data is immensely valuable to authors, publishers and distributors producing and selling new content. If libraries are providing publishers with a rich pool of personal information on user reading habits, have they become part of the business model?

### *The algorithm has all the answers – so what's a library?*

A recent study by the Oxford Internet Survey found that "trust in people providing Internet services" exceeds trust in other major institutions including newspapers, corporations and government<sup>1</sup>.

Today, automated search technologies limit information available to us based on our search habits, language and geographical location. Can the results returned by our search engines really be trusted? A big question libraries around the world have been discussing, is *discovery*:

### *Serendipitous Discovery*

How can libraries and educators ensure students and users are accessing the information they *need*, and not simply the information their data tells the algorithm they're looking for?

This leads to more unsettling questions for libraries, like:

- If the primary vehicle for information seeking is a privately owned algorithm, how do libraries engage with that? Build a competing algorithm? Or should they focus on building digital literacy skills to help users navigate to the most authoritative information returned by existing search technologies?
- Fundamentally, can libraries actually deliver different vehicles for serendipitous discovery if everyone is getting from A to B using a search engine?
- And who bears responsibility for information online that is false, or manipulative?

Many more questions are posed of libraries in the Insights document accompanying the trend report.

### *Digital preservation*

A priority for libraries, with several challenges. How do libraries identify content of historical or cultural significance in the information deluge? How to deal with copyright restrictions? Preserving obsolete formats?

In an era where libraries are increasingly turning to automated technologies like web harvesting and search algorithms to identify and record our digital output – what have we lost in turning curation and preservation over to algorithms?

### *Machine translation*

Automated machine translation, like Google Translate, is changing the way we communicate with one another and breaking down language barriers.

We'll soon be able to read in their own language any book, article or online blog ever written, from any location.

The likes of Google Translate are breaking down barriers, but they pose questions too. If we are relying on machines to translate, say, Alexandre Dumas'

works into our own language, what will we be reading? We can translate it, but do we understand it? What is the cultural impact of using machine translations without the benefit of cultural context?

And in an age where anything can be translated, copy and pasted, taken out of its original context, how do libraries and archives manage this as "recorders" or "preservers" of this information? Should we be following the excerpt or the translation back to its original source? Or follow the information as it is used in new contexts? In the Internet economy, what is "information" and what is a "record?"

While new creative partnerships and business models will emerge as language barriers dissolve, what impact will it have on existing business models and regulatory frameworks? If you can run any work through an automated translator, what impact could this have on publishing?

What about education?

### *Education going global and mobile*

What impact will automated translation have on education? In an environment where students can theoretically access content from anywhere in the world in their own language, what impact will this have on literary analysis and cultural understanding?

Open access and automated machine translation together pave the way for the global classroom. But what impacts will global access to content have on the production of local content? Will students be learning from resources originally produced in their own language, in their own country? What will be lost?

### *Emergence of new voices in surveillance society*

Mobile technology and automated machine translation are also helping new voices and groups connect across the globe. We've witnessed the power of mobile technology in successful campaigns against the Stop Online Piracy Act (SOPA) in the US, and the Anti-Counterfeiting Trade Agreement (ACTA) in the EU as well as the rise of the Arab Spring.

Knowing, however, that these technologies can also be used for harmful ends, governments around the world are taking steps to monitor and control the flow of information. How far should information surveillance go to protect the public interest? Can fringe/grassroots activism movements have an impact in a society where nothing is private?

Governments around the world, even those seen as democratic, are taking steps to filter online access to information that is extremist, criminal, sensitive or deemed otherwise "immoral". Libraries have historically opposed government censorship – have our

responses to Internet censorship been adequate? If filtering is becoming a standard government practice, what impact could that have on libraries' ability to adequately collect and preserve our digital history?

### Conclusion

Certainly, these are all pressing concerns. Each collision that I've highlighted for you today raises all sorts of questions and challenges. And while we may not have all of the answers, it's imperative that we recognize the changes going on around us, prepare and transform ourselves accordingly, and stay flexible – because Internet time waits for no one, and that includes libraries.

Again, I'd like to stress that while the Trend Report is now public, the process for us as librarians is just beginning. Let's use this document as a valuable starting point for our libraries as we navigate our way through the information environment of today and tomorrow. And let's also remember to use this as a resource – one that I hope leads to an array of discussions, actions and ultimately, outcomes that will enhance our lives, our communities and our societies.

Thank you.

### Note

1. Oxford Internet Survey 'Trust on the Internet now exceeds Trust in other Major Institutions' (2011) <http://microsites.oii.ox.ac.uk/oxis/blog/2010/trust-interet-now-exceeds-trust-other-major-institutions>

## IFLA Statement on Libraries and Development

Access to information is a fundamental human right that can break the cycle of poverty and support sustainable development. The library is the only place in many communities where people can access information that will help improve their education, develop new skills, find jobs, build businesses, make informed agricultural and health decisions, or gain insights into environmental issues. Their unique role makes libraries important development partners, both by providing access to information in all formats and by delivering services and programmes that meet the needs for information in a changing and increasingly complex society.

As the United Nations moves to establish a post-2015 framework to guide development worldwide, IFLA calls upon all stakeholders to recognize that libraries, in every part of the world, can be reliable mechanisms for underpinning the delivery of sustainable development programmes. IFLA affirms that:

### Libraries provide opportunity for all

Libraries are found in all locations – in the countryside and in the city, on the campus and in the workplace. Libraries serve all people, regardless of their race, national or ethnic origin, gender or sexual preference, age, disability, religion, economic circumstances or political beliefs. Libraries support vulnerable and marginalized populations and help ensure that no person is denied basic economic opportunities and human rights.

### Libraries empower people for their own self-development

Libraries underpin a society where people from any background can learn, create and innovate. Libraries support a culture of literacy and foster critical thinking and inquiry. Through libraries, people can harness the power of technology and the Internet to improve their lives and their communities. Libraries protect the rights of users to access information in a safe environment. Libraries are socially and culturally inclusive. They can help all people engage with the public institutions they need to access services, and can act as gateways to civic participation and new e-government services.

### Libraries offer access to the world's knowledge

Libraries are an essential part of a critical infrastructure that supports education, jobs and community growth. They offer meaningful, convenient access to information in all its forms, whether it is manuscript, printed, audio-visual or digital. They can support formal, informal and lifelong learning, the preservation of folk memories, traditional and indigenous knowledge, and the national cultural and scientific heritage. When national information policies aim to improve telecommunications and provide high-speed broadband networks, libraries are natural

partners for the provision of public access to Information and Communication Technologies (ICTs) and networked information resources.

### **Librarians provide expert guidance**

Library staff are trained, trusted intermediaries dedicated to guiding people to the information they seek. Librarians provide training and support for the media and information literacies people need to better understand and participate in the information society. They are also cultural stewards, curating and providing access to cultural heritage and supporting the development of identity.

### **Libraries are part of a multistakeholder society**

Libraries work effectively with many different stakeholder groups in varied situations. They deliver programmes and services alongside local and national governments, community groups, charities, funding organizations, and private and corporate enterprises. Librarians are agile actors who are able to work alongside others in governments, civil society, business, academia and the technical community to help deliver policy goals.

### **Libraries must be recognized in development policy frameworks**

As libraries have a natural role in providing access to the information content and networked services that underpin sustainable development, policymakers should encourage the strengthening and provision of libraries and utilize the skills of librarians and other information workers to help solve development problems at community levels.

IFLA therefore urges policymakers and development practitioners to leverage these powerful existing resources and ensure that any post 2015 development framework:

- Recognizes the role of access to information as a fundamental element supporting development
- Acknowledges the role of libraries and librarians as agents for development
- Encourages UN Member State support of the information frameworks underpinning development – providing networks, information and human resources – such as libraries and other public interest bodies

*Approved by the IFLA Governing Board in Singapore, August 16th 2013.*

## **Winners of SAGE co-sponsored ARL attendance grant for IFLA WLIC 2013**

The IFLA World Library and Information Congress (IFLA WLIC) is a pivotal conference for the library and information services sector, and having been the publisher of IFLA journal for over ten years, we were delighted to support the Academic and Research Libraries Section (ARL) attendance grant for the annual Congress this year. Each travel grant supports a librarian or information professional with a free place at the IFLA WLIC, taking place in Singapore from 17 to 23 August 2013. Each winner will also have their Congress experience published as part of The Academic and Research Libraries Section (ARL) blog, to be published three months after the conference.

The three winning recipients; Joseph A. Semugabi, Librarian at the Law Development Centre, Uganda; Saseka Harris, Academic Librarian at the University of the West Indies; and Aditya Nugara, Head of Library at Petra Christian University, Indonesia, were

all selected for their insightful and creative take on what impact the conference will have on their professional development.

***SAGE spoke to all three winners to find out more about what this travel grant means to them and to their future careers.***

### **Joseph A. Semugabi**

*For the first of the three interviews we spoke to Joseph A. Semugabi, Librarian at the Law Development Centre, Uganda.*

**Thank you for joining us Joseph. Firstly congratulations on being awarded the SAGE co-sponsored ARL attendance grant for IFLA WLIC this year! Would you be able to tell us a little more about what this SAGE conference bursary will mean to you?**

Thank you! Yes, of course. When you are awarded grants like these, you are reassured that all your efforts were not in vain and it provides a sense of accreditation to the work that we are doing. Winning has greatly improved my standing with my employer and confidence in my profession has definitely been invigorated. This recognition has also given me the confidence in my ability and has opened my eyes to the opportunities that both this grant and other grants can offer me on the international level to help me obtain greater achievements in my profession.

**How do you feel the travel grant will impact your future career development?**

I have always been interested in undertaking research. With such a grant my confidence is renewed to pursue my dream. Moreover with this support, I now have the rare opportunity of interacting with other researchers whose experience and guidance will inevitably influence and materialize my own research work. I even intend to pursue a Doctorate, and this opportunity to interact at the international level will expose me to people who I can gain advice and assistance from, an opportunity which I see as invaluable.

**You mentioned in your paper that your library needs an overhaul, a new strategic direction to stay relevant. What do you hope to get out of attending the conference that will help you address this?**

As I mentioned earlier, the conference will be an opportune time for me to interact with international members of the librarian community and gain invaluable knowledge and guidance. The conference, I believe, will also lead to the appreciation of the vital role that librarians play in harnessing the infinite possibilities that today's technologies avail for effective and efficient information access and service delivery, as appropriately captured in the theme: "Future Libraries: Infinite Possibilities." It will constitute a forum for discussion of insights that will lead to the much needed paradigm shift and shape policy to address challenges affecting our careers and profession. Discussion of the unlimited possibilities availed by advancement in information and communication technologies will definitely lead to the rethinking of the whole idea of librarianship dominated by manual systems in my country. I believe therefore that there is great possibility for understanding new strategic directions that we can obtain for libraries, such as ours, that urgently require an overhaul if they are to continue to be relevant, efficient and effective in the era of information deluge and unprecedented technological sophistication.

The conference will also provide a firsthand opportunity to further understand and appreciate the

role of such international organizations as IFLA and SAGE.

I believe the conference will also contribute to my professional development as I interact with best practices and well researched presentations in the context of the new information and communication technologies that are inevitably shaping a rather different library of the future. Providing me with the opportunity to meet other fellow professionals/researchers and share with them experiences, knowledge and opinions will undoubtedly augment my vision and experience and stimulate and inspire my own research.

**What do travel grants such as this mean to professionals such as yourself?**

Such grants as this provide the much needed stimulus for researchers to go ahead with their work, or for those that have never conducted research, to start thinking seriously about it. There is definitely a lot to research about in developing countries but due to financial constraints little or nothing is done. These grants also expose researchers, who hitherto could not finance themselves, to even greater possibilities and assistance as they interact with other accomplished researchers/scholars. They are a great incentive to potential that has until now not been exploited. They also provide the much needed exposure of one's work and abilities for constructive criticism from others. One is exposed to a global audience as well as being able to meet fellow professionals/researchers and creating mutually beneficial relations. All professionals and upcoming researchers would immensely benefit from such arrangements and I would encourage them to always try their luck. Personally, I will forever be grateful for being a beneficiary and being availed such an invaluable opportunity.

**A brief about the conference experiences – by Joseph Semigabi**

*Introduction*

The theme for this year's conference was "**Future Libraries: Infinite Possibilities**". I was able to attend this auspicious annual event because I was awarded an attendance grant from the Academic & Research Libraries (ARL) Section of IFLA with generous sponsorship by SAGE and ExLibris. Among the sessions attended the following were the most educative, that is, the Opening Session 72, Session 98 on Agile Management: Strategies for Achieving Success in Rapidly Changing Times – Knowledge Management with Academic and Research Libraries; and Session 151 – Hot Topics in Academic and Research Libraries. All in all I was able to attend presentations of a total of 13 papers.

### *How I found the Conference*

There is no doubt that the 79<sup>th</sup> IFLA General Conference & Assembly was an exceptional event – more so this being my first time in attendance. It was an outstanding learning and networking experience. The programme was well balanced with both academic and social activities as well as tours that contributed to the understanding of Singapore. Such arrangement was invaluable and simply a memorable experience. Neither could one come here and fail to make acquaintances at a business, professional and social level. The facilitators – balanced between accomplished scholars in various disciplines and librarians on the other hand – undoubtedly contributed to professional development and ensured that we left with enough knowledge to understand the new role of the library in an increasingly technologically sophisticated world.

### *What I learned/found most informative*

By and large, the congress effectively provided new insights on how the future library should be managed to remain relevant and useful in an era of information and communication technologies that can avail information to people anywhere and anytime. Our eyes were also opened during the exhibitions to the new technologies that can facilitate the library of the future.

The following are some of the issues presented/discussed during the various sessions that most caught my attention providing a rich learning experience in connection to new developments and best practices affecting academic institutions, research and libraries:

- **Cloud computing** facilitates access to an on-demand shared pool of computing resources including networks, servers, storage, applications, and services. It was described as omnipresent, convenient and readily available from service providers with the least involvement by management. It is now a widely recognized technology that increases organizational efficiencies and effectiveness as well as cutting down on technological investment costs. Most networking websites and applications espouse cloud computing services. Libraries are investing in cloud computing in order to adopt that omnipresent social media framework for a new breed of users.
- **‘Library 3.0’** was given as an example of web-based “social interactive” application that can be executed with cloud computing technology and services to meet the needs of its readers and

learners whose information seeking habits are undoubtedly changing very fast.

- Libraries like any other organizations should be keen to use the **digital social media platform** to support their users anywhere, everywhere and at any time.
- We were also educated on the concept of **“Discovery Systems”** where concepts like “user experience”, “information seeking”, and “relevance ranking” were also discussed. We were therefore informed that in recent years, library users have shifted from searching in library catalogs and scholarly databases to searching in library discovery systems. There is therefore a fundamental change in the information-seeking process. “Discovery systems provide access to a large, diverse information landscape of scholarly materials—regardless of where the materials are located, what format they are in, and whether the library owns them or subscribes to them. At the same time, these systems typically offer simple, Google-like searching as the default option, to accommodate the expectations of today’s users. With this type of searching, users do not spend much time formulating queries, and their queries often yield large result sets; therefore, discovery systems focus on relevance ranking and on tools that help users easily navigate and refine result sets”. (Sadeh, Tamah: IFLA 2013). The discovery system thus described facilitates research more than the traditional library system.
- Traditional library systems, we were informed, are lagging in popularity behind non-library information systems. This is because what shapes expectation of users when seeking for scholarly materials includes “immediacy of information, availability of communication channels, abundance and diversity of tasks that people routinely accomplish online, and the effects of social networks.” The reality is that library users have shifted from searching and accessing content via library services to attempting to satisfy their information needs through non-library services, such as web search engines, online bookstores, blogs, online news, and e-mail.
- Examples of discovery systems/services which have been adopted at a rapid pace by several institutions around the world were given and they include Ex Libris Primo, Serial Solutions Summon, EBSCO Discovery Service, and OCLC WorldCat Local.

- A range of challenges around the world that call for Agile Management were indicated as “the restructuring of education, alternative models of scholarly communication, the growth of private/for-profit institutions, the onset of new modes of delivery, knowledge management and content management, the expansion of online learning and the rise of MOOCs new spaces and new roles.” Agile management among other things could be implemented through **collaborative social computing**.
- **MOOC (Massive Open Online Courses)** was also a new concept. These courses emerged within the context of online learning tools and distance learning and we were given examples of Universities in the USA which had integrated these technologies in their pedagogy.
- We were educated on the fact that **Open Access** to information undoubtedly leads to open knowledge, and open innovation. The library of the future should therefore be an open knowledge service platform. Open access is actually becoming the main stream model of scholarly communications. “The traditional subscription-based library solution will no longer be a robust and valid solution for research and academic institutions. Open access is not only free retrieval but it is also about developing smart Open Data, linkable, re-usable, computable, to enable data/text mining, and to support strategic analysis, relationship detection and exploration, automatic knowledge construction, and many more applications. This is a type of supporting infrastructure for research, learning and innovation where knowledge is openly accessible, smartly organized, with tools developed openly and collaboratively, with knowledge experts working effectively with users and with data-centric knowledge discovery and learning processes, and with organizational structures supporting open communities and their open innovation processes. This is the essence of a research library, and the future” (Zhang, Xialon, IFLA 2013).
- It was also wonderful to learn that social media can be used to **build an engaged community**. The reasons for engagement include enhancing awareness and customer service, protecting reputation, and building community.

#### *What i will be taking back to practice*

- I intend to suggest the introduction of online legal education, that is, Massively Open Online

Courses (MOOCs) especially that demand for legal education in my institution has dramatically shot up and yet the physical infrastructure to accommodate all prospective students is grossly inadequate.

- Cloud computing could also be adopted in my institution to save on the costs of on-site storage and management of computer applications and services.
- Increasingly adopt non-library information systems to effectively and efficiently aid learning and research in addition to the traditional structured library systems. So emphasis should be on discovery systems as well as social media networks and the like.
- Progressively enforce where possible Open Access to scholarly materials. Actually, just like Zhang effectively argues, our library should be “an Open Knowledge Service Platform.”
- My organization is involved in legal aid projects to members of the community who cannot afford legal services. Access to and use of Information Communication Technology should also be part of these programs in the community. I intend therefore to write a proposal in this direction in a bid to obtain funding from the Bill Gates Foundation for this purpose.
- The papers which fortunately were also downloadable from the IFLA Website are precious tools for further reference, research and implementation. The knowledge/information therein shall also be shared with management, Library staff and members of the local Association to help shape a new conceptual outlook.
- All in all I have taken back a paradigm shift whereby managers like myself should be more agile, accommodative, innovative and pragmatic to ensure that the library stays relevant and useful in the era of information communication technology. Whatever the new technologies can offer can be adopted in the library as long as resources allow. Proposals for donor funding can actually be prepared and submitted for this purpose.
- The digitization technology should be adopted in my organization. I was able to obtain the contacts of the vendors and the details about these products for possible procurement. We should also give a shot at obtaining e-books to supplement the hard copies which are never adequate.

#### *Benefits from the conference*

I was not a mere delegate attending yet another IFLA/WLIC event. I had the honor and privilege of being



awarded a certificate by the Academic & Research Libraries (ARL) Section having submitted one of the best essays and recognized before other professionals from all over the world.

The event was also a long awaited opportunity to understand IFLA and its functions as well as operations having had a firsthand experience of this global Association. It will therefore be much easier for me to persuade and convince members of our local Association to obtain and sustain membership to IFLA.

The presentations, responses and discussions by well travelled and experienced professionals were very inspiring as well as stimulating and they broadened my understanding and articulation of such pertinent issues in the library and information profession. I got to learn about the myriad of options zavailed by information and communication technologies regarding knowledge/information management as well as dissemination. Terminologies like cloud computing, MOOCs, Discovery Systems, Open Access, etc., which hitherto were very complicated to fathom became very clear to me. These are concepts we were never exposed to in college.

It is because of this conference that I was able to have the opportunity to visit such a beautiful country like Singapore which apparently is developing very fast.

The exhibition was also beneficial in that it brought me in direct contact with some products which hitherto I did not know they existed and yet would be very useful for my organization which is currently undergoing transformation to cope with problems related to increased numbers of students. Such products and applications used in digitization like book/document scanners can go a long way in solving the problem of document loss, inadequate storage space, etc. The exhibition also opened my eyes to a lot of technological developments especially with regard to acquisition and use of e-books.

It was again through this conference that I learnt about Bill Gates Foundation that supports computer literacy programmes in third world countries. My institution which is already involved in aiding poor communities would apply for such funding.

I was privileged to interact and make acquaintance with several participants. This was even easier given that I was one of the three beneficiaries of the ARL Attendance Grant. Naturally everybody wanted to check us out and congratulate us. You can bet that I left with my bag full of business cards as well as contacts of a couple of sales representatives exhibiting various products. The Conference gave me the rare opportunity to literally interact with people from almost every continent.

I was able to freely obtain all the papers presented during the Congress thus enhancing my knowledge regarding best practices, innovations and new developments in the field of library and information science. These papers will definitely constitute an invaluable source of information for literature reviews when undertaking research in related fields of library and information science. The papers also constitute benchmarks for us who have plans to make well researched presentations in the future.

### Concluding remarks

There is no doubt this conference has effectively demonstrated and led to the appreciation of the vital role that libraries can still play in harnessing the inestimable possibilities that today's technologies avail for equitable, effective and efficient information access and service delivery as appropriately captured in the theme: "Future Libraries: Infinite Possibilities." It constituted a forum for debate regarding ideas, innovations and current trends that will lead to the much needed paradigm shift and shape policy to address challenges facing our careers and profession. Discussion of the unlimited possibilities availed by advancement in information and communication technologies within the context of learning and research has definitely led to the rethinking of the whole idea of librarianship dominated by manual and traditional systems in my country. A new strategic direction has therefore been obtained for academic libraries that urgently require an overhaul if they are to continue to be relevant, efficient and effective in an era of an information deluge and unprecedented technological sophistication.

### References

This report includes some few quotations from papers of the following presenters who are hereby acknowledged:

- Sadeh Tamah (IFLA 2013) *From search to discovery*. Ex Libris, Jerusalem, Israel.
- Calter F. Mariellen (IFLA 2013) *MOOCs in the library: addressing the changing needs of students and faculty in the age of online learning*. Stanford University, Stanford, CA, USA.
- Zhang Xialon (IFLA 2013) *Convergence of open access, open knowledge, and open innovation: towards libraries as an open knowledge service platform*. National Science Library, Beijing, China.
- Cribb Gulcin and Ishak W. Yuyun (IFLA 2013) *Using social media to build an engaged community*. Singapore Management University, Singapore.

## Sasekea Harris

*In the second of our IFLA WLIC winners' interviews, we spoke to Sasekea Harris, Academic Librarian at the University of the West Indies, to find out more about what this travel grant means to her and the ways in which new strategies can help advocate the role of the library and librarianship.*

**Thank you for joining us Sasekea. Firstly congratulations on being awarded the SAGE co-sponsored ARL attendance grant for IFLA WLIC this year! Would you be able to tell us a little more about what this SAGE conference bursary will mean to you?**

Yes of course, thank you! I was delighted to receive the travel bursary to attend IFLA as it is enabling me to attend my first IFLA WLIC, which I am very much looking forward to. Not only will it give me the opportunity to interact with an international network of librarians and information professionals but it will also enable me to attend several information sessions of interest which will enhance my knowledge in cataloguing, marketing, STEM and academic/research libraries. Based on the line up of cataloguing sessions I will be exposed to international best practices and new trends, which will certainly enhance my cataloguing lectures. Further, the marketing session will provide new insights, which I will share with my library's marketing and customer service teams upon my return home. The STEM session as well as the academic and research libraries hot topic session will inform my delivery of STEM library and information services in an academic context.

Secondly I am looking forward to meeting with representatives of SAGE, where I am looking forward to getting the opportunity to learn more about their library support products and services, which I will then be able to discuss with my colleagues on my return home with the objective of using this knowledge to help improve our library services in Jamaica.

Lastly on a personal note, I am looking forward to experiencing Asian culture!

**You mentioned in your paper that for you cataloguing is the core of the librarian profession, but that there is limited engagement with the possibilities it provides. How do you feel the conference sessions will help you address this?**

Yes, as you mention I am a passionate believer in cataloguing – without it access to information would be thwarted. I have a great interest in STEM academic libraries, cataloguing and customer service and the programme content suggests the sessions that I will attend as a result of this grant will inform my future

research topics, objectives and methodology as well as highlight further options of inquiry in these areas. I am convinced that the sessions will help us and the other local libraries to align with international best practices. This travel grant therefore helps support my career development, allowing me to meet with experts in my areas of interest and thereby opening up the possibility of research relationships.

**What do you hope to get out of attending the conference?**

Attendance at IFLA I believe will be a great opportunity for me to build new relationships and partnerships with likeminded individuals in my professional field. By being able to make the most of the conference agenda and networking opportunities, I feel it will help to develop both my understanding of how others adapt to serve their user communities, as well as developing my knowledge of the challenges that others face and the wider field that we work in. Introducing me to new library and information products and services, as well as new trends and issues in global librarianship, will go a long way to enhancing my own professional development, and therefore will provide me with invaluable insight to take back to my library team.

**What do travel grants such as this mean to professionals such as yourself?**

It enables professionals and researchers to get the opportunity to attend enriching sessions in our research areas and areas of interest to our careers. The conference presentations, I believe, will bring to the fore new areas of knowledge where more research is needed and thus can help us understand more about where we can support this and what we should be doing.

In addition we also get exposure to international studies and discussion, that we can learn from and take back to our own home libraries, or even replicate such studies in our own areas, thereby enhancing the local library and information studies literature in our own country.

What I always find most beneficial, however, is the exposure to the research forums for discussing issues relating to various branches of librarianship – this is always of great benefit to understanding more about the wider sector in which we work in.

## Aditya Nugara

*For the final of our IFLA WLIC winners' interviews, we spoke to Aditya Nugara, Head of Library at Petra Christian University, Indonesia.*

**Many congratulations Aditya and thank you for joining us. What has winning the SAGE bursary meant to you?**

I am very happy to get the 2013 IFLA Attendance Grant (sponsored by SAGE). The IFLA Congress in Singapore provides a very good opportunity for Southeast Asian (SEA) librarians and researchers to attend, to network and learn more about the wider issues affecting our community, two aspects which I am greatly looking forward to benefiting from.

For librarians and researchers in South East Asia, a lot of these larger conferences are inaccessible to us due to the high rate of registration fees, thus making it almost impossible for us to get permission, and secure funding, from our institutions. Thus the availability of grants, such as the IFLA WLIC attendance grant, is very crucial and helpful.

**What impact do you think that the grant and your attendance at the conference will have on your career development?**

Attending conferences always give us several advantages. Besides the new ideas and knowledge we gain, we can always meet new people and develop new networks. The additional benefits of attending conferences on a grant is that you will get rare opportunities to meet selected people during the events organized by the sponsors. You will be connected instantly to the sponsors' network or circle of friends/colleagues. I think this is invaluable since expanding networks will open new horizon and open new opportunities for collaborations.

**What do travel grants such as this mean to professionals such as yourself?**

As I mentioned above, not only to grants like this help with exposure to new knowledge and valuable networking opportunities, but they are also a great accreditation to have on your resume. Having this external accreditation of your work helps not only with your confidence and understanding of how to develop your career (by being exposed to other professionals and these conferences), but it also helps with building and understanding more about your own personal development and what you want from your career.

**Further comments by Aditya Nugara**

*How you found it*

I found IFLA World Library and Information Congress to be enlightening, both professionally and personally. Besides acquiring new knowledge from the speakers and presentations, I got to know and talked to colleagues from around the world.

*What you learned/found most informative*

What I found to be most interesting is the IFLA's atmosphere of networking and passing the torch to the next generation of leadership.

*What you will be taking back to practice*

I am impressed by the various best practices and fresh ideas from colleagues all around the world in tackling problems in the field as well as improving access to information and relationship with library users. What I found particularly enlightening is best practices in using social media in reaching out to college-level library users and how to create an engaged community of users by utilizing the social media properly. My library has been trying to engage our college-level users. However I realized that we only use the social media with the mindset of traditional media. From the presentations I realized that we need to 'talk in the language of social media'.

I was also very impressed by the concept introduced in the congress on libraries as placemakers and the need for libraries to formulate "mobile strategy" (utilization of mobile devices by library users). I believe that I should take back home these issues and share them with my colleagues in the hope that we can put them into practice to enhance our existing products and services.

*What benefit you felt that it had*

I believe that IFLA WLIC has particularly broaden my worldview of international libraries and librarianship. Practically, it has also broaden my international network of colleagues. The Congress has refreshed my commitment in librarianship and the spirit of sharing.

## Abstracts

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### قتطفات

سياسات المحتوى الرقمي الوطني: دراسة مقارنة بين البلدان العربية والدول الأخرى:

رامي عيود

العدد 39 (2013) من مجلة الإفلا المتخصصة، رقم 4، ص: 294-310

تتناول هذه الورقة البحثية تحليلاً مُقارناً للسياسات الوطنية ذات الصلة بالمحتوى الرقمي في عشرة بلدان، إلى جانب الاتحاد الأوروبي وبذلك قُسمت الدول إلى مجموعتين: عربية وغير عربية. فقد صُمم شكلاً نموذجياً لمعايير تقييم السياسات (PAC)؛ للمساعدة على الرفع من جودة السياسات الخاصة بالمحتوى الرقمي والتي تُعد في طور الإنشاء. وبناءً على مُتغيرات معايير تقييم السياسات الستة وخمسين تم أيضاً تطوير مؤشر لجودة السياسات (PQI)؛ لقياس جودة السياسات نفسها، في كلماتٍ أخرى؛ لتحديد مستوى جودة إطار عمل مفهوم سياسات المحتوى الرقمي والذي يُمكن استخدامه على المستوى العالمي. بالإضافة إلى وضع نموذج معايير التقييم ومؤشر جودة السياسات، يُلقي هذا البحث الضوء على اتجاهات التخطيط الإستراتيجي في مجال المحتوى الرقمي، خاصةً من خلال مُقارنة عددًا من السياسات العربية بغيرها من السياسات في الدول النامية والمتقدمة حول العالم.

دور المدرس في غرس روح التعلّم المُستقل في مدارس زنجبار الثانوية:

عباس محمد عمر

العدد 39 (2013) من مجلة الإفلا المتخصصة، رقم 4، ص: 311-318

يهدف هذا البحث إلى بحث دور المدرسين في غرس روح التعلّم المُستقل لدى الطلاب، من خلال استخدام المكتبة المدرسية، وذلك بالنظر في مدى إتاحة المواد المكتبية المدرسية وأساليب استخدام المكتبة المدرسية والتعاون بين المدرسين والعاملين في المكتبة والطرق المُختلفة التي يستخدمها المدرسون لتنمية مهارات طلاب المرحلة الثانوية في التعلّم بصورة مُستقلة. أُجريت هذه الدراسة في زنجبار وشملت ثلاث مدارس حكوميتين ومدرستين خاصيتين. وابتاع منهج استطلاع الرأي أجاب 95 شخص على استبيانات، وأجريت مُقابلات مع 35 آخرين، منهم طلاب ومدرسين وعاملين في مكتبات ومديري مدارس ومُدير المكتبة العامة. واثبع منهج الملاحظة في كل المدارس. وكشفت النتيجة الأساسية لهذه الدراسة القائمة على أطروحة رسالة الماجستير الخاصة بصاحب البحث، أن المكتبات المدرسية تواجهها العديد من المشكلات كنقص المواد وعدم حداثةها ونقص ثقافة استخدام

المكتبة بين الطلاب والمُدرسين وعدم كفاءة وتدريب العاملين في المكتبات المدرسية وعدم شمولية وتكامل المعلومات المُتاحة مع المناهج وعدم التعاون بين المدرسين والعاملين في المكتبة. وفي النهاية، طُرحت بعض التوصيات بُناءً على ما توصل له البحث من نتائج.

ربط مكتبات جامعة أجاخان التسع عبر ثلاث قارات بنظام مكتبي مُشترك:

أشرف شريف و Normand Demers

العدد 39 (2013) من مجلة الإفلا المتخصصة، رقم 4، ص: 319-326

تُعد جامعة أجاخان (AKU) هي الوحيدة في الدول النامية التي تقوم على خدمة 11 حرم جامعي تابع لها في 8 دول على مستوى ثلاث قارات، حيث تضم شبكة من 9 مكتبات صغيرة الحجم لكن موجودة في أربعة من الدول النامية في إقليمين (جنوب آسيا وشرق أفريقيا). نفذت المكتبة مؤخرًا نظامًا إداريًا يدمج المكتبات التسع الموجودة في الدول الأربع عبر قاعدة بيانات واحدة. نهدف من خلال هذا البحث إلى مشاركة تجربتنا في تنفيذ نظام مكتبيًا معياريًا. ويُزيد موقع مكتبات جامعة أجاخان الجغرافي ومُقتنياتها المُتعددة لغويًا من أهمية هذه التجربة. فبالنظر إلى تركيبة اختلاف المواقع الجغرافية وتعدد لغات المُقتنيات والتوقيينات المُختلفة واختلاف العاملين، يُمكننا اعتبارها حدثًا فريدًا في مجال المكتبات والمعلومات.

قيمة المكتبة في الدول النامية:

Nell McCreddie

العدد 39 (2013) من مجلة الإفلا المتخصصة، رقم 4، ص: 327-343

يُعد هذا البحث تكملةً للدراسة التي أُجريت عام 2012 تحت عنوان "تطور قيمة المكتبات الأكاديمية" والتي اشتملت على نتائج ثمان دراسات حالة من المملكة المتحدة والولايات المتحدة الأمريكية والدول الاسكندنافية، ويتناول بحثنا هذا "قيمة المكتبة في الدول النامية" نتائج مشروع امتد لسنة أشهر مع 12 دراسة حالة من دول نامية مُصنفة من صاحبة الدخل القومي المُنخفض والمتوسط، أي ما يقل عن 4,035 دولار أمريكي. تم جمع البيانات وتقسيمها من خلال سلسلة من استطلاعات الرأي والمقابلات. ونص البحث على بعض المُقارنات مع مكتبات الدول المُتقدمة ونماذج من الممارسات الجيدة التي يُمكن أن تتعلم منها المكتبات الأخرى مما يُقدمه المكتبيون للكليات وعلاقة العمل بين المكتبات الأكاديمية والمُتفنيين الأساسيين منها.

## 摘要

National digital content policies:

A comparative study of Arab and other countries

国家数字内容政策：阿拉伯国家与其他国家比较研究

Ramy Abboud

IFLA Journal 39 (2013) No. 4, 294-310

本文重点呈现了欧盟及十个国家数字内容相关国家政策的比较分析，其中欧盟 (EU) 分为阿拉伯国家和非阿拉伯国家 (全球集团) 两大集团。研究开发了政策评估标准 (PAC) 的原型模式，以帮助提高主要在制定中的国家数字内容政策的质量。基于PAC涵盖的56个变量，研究还开发了名为政策质量指标 (PQI) 的数据指标原型模式，用以衡量政策自身的质量，换句话说，用来鉴定数字内容政策概念框架的质量水平，这些政策有可能会在全球范围内应用。除开发上述PQI和PAC原型模式外，本文还特别对比了阿拉伯一些政策与世界各地发展中国家和发达国家的一系列政策，从而揭示了数字内容领域的全球战略规划趋势。

The teachers' role in fostering independent learning in high schools in Zanzibar

桑给巴尔中学生自主学习培养中教师的角色

Abbas Mohamed Omar

IFLA Journal 39 (2013) No. 4, 311-318

本文从学校图书馆资料的可及性、师生对学校图书馆的利用模式、教师和图书馆工作人员的合作以及中学教师培养中学生成为自主学习者的不同方式等方面讨论校园图书馆的使用，旨在考察教师在学生自主学习培养中的角色。本研究是在桑给巴尔的三所公立学校和两所私立学校开展实施的。通过调查法，共计95名受访者参与了问卷调查。35人接受了采访，包括学生、教师、图书馆工作人员、学校校长和公共图书馆馆长。在以上各所学校均使用了观察法。本研究基于作者的硕

士论文开展，研究主要发现表明学校图书馆面临图书库存有限的难题，包括材料不仅过时且当前材料极为有限，图书馆教育匮乏且师生缺乏使用图书馆的习惯，图书馆工作人员效率低下且未经培训，信息、课程和课堂学习缺乏整合，以及教工和图书馆工作人员缺少合作。基于研究发现，本文还提出了若干建议。

Connecting Aga Khan University's nine campus libraries across three continents through a shared library system

通过共享图书馆系统连接阿迦汗大学遍布三大洲的九个校园图书馆

Ashraf Sharif and Normand Demers

IFLA Journal 39 (2013) No. 4, 319-326

阿迦汗大学 (AKU) 是发展中国家中唯一一所在八个国家和三个大洲拥有十一个校园服务的大学。该校有涵盖九个图书馆的网络系统，尽管规模较小，却分布在两个地区 (南亚和东非) 的四个发展中国家。该校最近实施了一项图书馆管理系统，整合了位于四个国家的九大图书馆以共享同一数据库。本文旨在分享我们在实施符合行业标准且具有最新水平的图书馆系统过程中的经验。阿迦汗大学图书馆的地理位置及多语言的馆藏使得这一经验更重要。考虑到地理位置的复杂性，多语言的馆藏，不同的时区以及涉及人员的多样性，这可谓是图书馆与信息科学领域的一个奇闻。

Library value in the developing world

发展中国家的图书馆价值

Nell McCreadie

IFLA Journal 39 (2013) No. 4, 327-343

《发展中国家的图书馆价值》是对2012年研究《合作：学术图书馆发展的价值》的后续研究，后者报告了在英国、美国和斯堪的纳维亚所做的八个个案研究的发现。《发展中国家的图书馆价值》报告了一项为期6个月、涵盖12个个案研究的项目成果，个案研究来自国民总收入不到4035美元，被列为低收入和中等收入的发展中

国家。数据是通过一系列的调查和访谈收集得来并经过验证的。文章给出了一些同发达国家图书馆的对比和良好的实践案例，其他机构可以在图

书馆员为教职人员提供的支持、学术图书馆和其关键利益相关者的工作关系等方面从中借鉴学习。

## Sommaires

### **National digital content policies: A comparative study of Arab and other countries**

[Politiques nationales en matière de contenu numérique : une étude comparative entre pays arabes et autres pays]

Ramy Abboud

IFLA Journal 39 (2013) No. 4, 294-310

Cet article présente une analyse comparative des politiques nationales en matière de contenu numérique dans 10 pays, en plus de l'Union européenne (UE), qui ont été répartis en deux groupes : pays arabes et pays non arabes (groupe mondial). Un modèle de critères d'évaluation des politiques (CEP) a été conçu pour contribuer à une meilleure qualité des politiques nationales relatives au contenu numérique, qui sont essentiellement en cours d'élaboration. Un modèle d'indicateur statistique intitulé « Indicateur de la qualité des politiques » (IQP) et basé sur 56 variables incluses dans les CEP a également été conçu pour mesurer la qualité des politiques elles-mêmes ou, en d'autres termes, pour identifier le niveau de qualité du cadre conceptuel de ces politiques qui peuvent être utilisées à une échelle mondiale. En plus de développer cet indicateur et ces critères, l'article évoque les tendances mondiales de planning stratégique dans le domaine du contenu numérique, notamment en comparant un certain nombre de politiques arabes avec celles d'un ensemble de pays en développement et de pays développés à travers le monde.

### **The teachers' role in fostering independent learning in high schools in Zanzibar**

[Le rôle des professeurs pour encourager l'apprentissage autonome dans les établissements secondaires de Zanzibar]

Abbas Mohamed Omar

IFLA Journal 39 (2013) No. 4, 311-318

Cet article examine le rôle que peuvent jouer les professeurs pour encourager l'apprentissage autonome de la part des élèves grâce à l'usage des bibliothèques scolaires, en étudiant la disponibilité du matériel des bibliothèques scolaires, la façon dont les

élèves et les professeurs utilisent les bibliothèques scolaires, la coopération entre les professeurs et le personnel des bibliothèques et les différentes méthodes utilisées par les professeurs des établissements secondaires pour encourager leurs élèves à apprendre de façon autonome. L'étude a été menée à Zanzibar et porte sur trois établissements secondaires publics et deux établissements secondaires privés. Dans le cadre d'une enquête, 95 personnes au total ont répondu à un questionnaire. Des entretiens ont été menés avec 35 personnes, y compris élèves, professeurs, employés des bibliothèques, directeurs d'établissements scolaires et le directeur de la Bibliothèque publique. Une méthode d'observation a été utilisée dans tous les établissements scolaires. La principale constatation de cette étude basée sur le mémoire de maîtrise de l'auteur, c'est que les bibliothèques scolaires ne disposent que d'un stock bibliothécaire limité, composé de matériel vétuste et de trop peu de matériel actuel, qu'il y a un manque d'éducation bibliothécaire et que les élèves et les professeurs ont trop peu l'habitude d'utiliser les bibliothèques, que le personnel des bibliothèques scolaires est inefficace et mal formé, qu'il n'y a pas suffisamment d'intégration des informations, des programmes scolaires et de l'apprentissage en classe et qu'il y a un manque de coopération entre le personnel enseignant et le personnel des bibliothèques. Un certain nombre de recommandations basées sur ces constatations ont été faites.

### **Connecting Aga Khan University's nine campus libraries across three continents through a shared library system**

[Relier les neuf bibliothèques des campus de l'Université Aga Khan réparties sur trois continents par le biais d'un système de gestion bibliothécaire partagé]

Ashraf Sharif and Normand Demers

IFLA Journal 39 (2013) No. 4, 319-326

L'Université Aga Khan (AKU) est la seule université du monde en développement qui fonctionne avec onze campus répartis sur huit pays et trois continents. Elle se compose d'un réseau de neuf bibliothèques, de

petite taille il est vrai, dans quatre pays en développement dans deux régions du monde (Asie du Sud et Afrique de l'Est). L'université a récemment mis en place un système de gestion bibliothécaire pour intégrer ces neuf bibliothèques situées dans quatre pays en utilisant une seule base de données partagée. Cet article a pour but de faire partager notre expérience de la mise en place d'un système de gestion bibliothécaire de pointe basé sur des normes standard. La situation géographique des bibliothèques de l'AKU et des collections multilingues rendent cette expérience encore plus significative. Étant donné la complexité des situations géographiques, le fait que les collections sont multilingues, qu'il y a différents fuseaux horaires et que le personnel impliqué est très divers, il s'agit d'une occasion unique dans le domaine de la science de l'information et des bibliothèques.

### **Library value in the developing world**

[La valeur des bibliothèques dans les pays en développement.]

Nell McCreadie

IFLA Journal 39 (2013) No. 4, 327-343

L'article « La valeur des bibliothèques dans les pays en développement » fait suite à l'étude de 2012 « Travailler ensemble : évolution de la valeur pour les bibliothèques universitaires », qui rendait compte de huit études de cas au Royaume-Uni, aux USA et en Scandinavie. Le présent article donne les conclusions d'un projet sur six mois portant sur douze études de cas dans des pays en développement classifiés comme économies à faibles revenus et à moyens revenus avec un RIB (revenu intérieur brut par habitant) de moins de 4035 US\$. Des données ont été rassemblées et vérifiées par une série d'études et d'entretiens. Certaines comparaisons avec des bibliothèques de pays développés sont effectuées et des exemples de bonnes pratiques sont donnés, exemples dont d'autres institutions pourraient s'inspirer en ce qui concerne le soutien des bibliothécaires au corps enseignant, ainsi que la relation de travail entre les bibliothèques universitaires et les principales parties concernées.

## **Zusammenfassungen**

### **National digital content policies: A comparative study of Arab and other countries**

[Die Konzepte der einzelnen Länder bezüglich digitaler Inhalte: eine Vergleichsstudie zwischen arabischen und nichtarabischen Ländern]

Ramy Abboud

IFLA Journal 39 (2013) No. 4, 294-310

Dieser Artikel stellt eine vergleichende Untersuchung der nationalen Regelkonzepte bezüglich der digitalen Inhalte in 10 Ländern der Europäischen Union (EU) sowie weiteren Ländern vor. Diese wurden in zwei Gruppen unterteilt, je nachdem, ob es sich um arabische oder nichtarabische Länder (in der weltweiten Gruppe) handelt. In diesem Zusammenhang wurde ein Prototypenmodell eines Bewertungskriteriums für die Regelwerke („Policy Assessment Criteria, PAC“) entwickelt, um die Qualität der nationalen Regelwerke für die digitalen Inhalte zu verbessern, die sich mehrheitlich noch in der Entwicklungsphase befinden. Auf der Grundlage von 56 Variablen für die PAC wurde zudem ein Prototypenmodell eines statistischen Indikators mit der Bezeichnung „Policies Quality Indicator (PQI)“, also eines Qualitätsindikators entwickelt, um die Qualität

der eigentlichen Regelwerke messen zu können beziehungsweise – anders ausgedrückt - das Qualitätsniveau des Rahmenkonzepts der Regelwerke bezüglich der digitalen Inhalte zu ermitteln, die weltweit zum Einsatz gelangen können. Abgesehen von der Entwicklung des PQI und der PAC befasst sich dieser Beitrag auch mit den weltweiten Strategieplanungstrends im Bereich der digitalen Inhalte, insbesondere durch den Vergleich der Strategien der arabischen Länder mit denen einiger Entwicklungsländer sowie einiger wirtschaftsstarker Länder in der ganzen Welt.

### **The teachers' role in fostering independent learning in high schools in Zanzibar**

[Die Rolle des Lehrkörpers bei der Förderung des selbständigen Wissenserwerbs in der Sekundarstufe in Sansibar]

Abbas Mohamed Omar

IFLA Journal 39 (2013) No. 4, 311-318

Dieser Beitrag zielt darauf ab, die Rolle des Lehrkörpers bei der Förderung des unabhängigen Wissenserwerbs der Schüler durch die Nutzung der Schulbibliotheken zu klären. Er stützt sich dabei auf die Verfügbarkeit der Schulbibliotheksmaterialien, auf die Muster der

Nutzung der Schulbibliotheken durch die Schüler und Lehrer; die Zusammenarbeit zwischen den Lehrern und den Bibliotheksmitarbeitern sowie die unterschiedlichen Wege, die die Sekundarstufenlehrer beschreiten, um ihren Schülern den unabhängigen Wissenserwerb nahezubringen. Diese Studie wurde in Sansibar durchgeführt und bezog sich auf drei öffentliche und zwei private Highschools. Die Umfrage stützte sich auf 95 Fragebögen, die an entsprechende Auskunftspersonen ausgeteilt wurden. Insgesamt 35 dieser Personen wurden befragt – Schüler, Lehrer, Bibliotheksmitarbeiter, Schulleiter und der Direktor der Öffentlichen Bibliothek. In allen Schulen gelangte das gleiche Beobachtungsverfahren zum Einsatz. Diese Studie, die sich auf die MA-Dissertation des Autors stützt, hat im Wesentlichen gezeigt, dass die Schulbibliotheken nicht besonders gut ausgestattet waren. Sie enthielten viele überholte und nur wenige aktuelle Materialien. Zudem kannten sich die Schüler und Lehrer unzureichend mit den Bibliotheken aus und nutzten diese somit auch nur in begrenztem Umfang; hinzu kamen die ineffizienten und ungeschulten Mitarbeiter in den Schulbibliotheken, die fehlende Integration der Informationen, der Lehrpläne und der Teilnahme am Unterricht und eine unzureichende Zusammenarbeit zwischen den Lehrern und den Bibliotheksmitarbeitern. Auf Basis dieser Ergebnisse wurden entsprechende Empfehlungen formuliert.

### **Connecting Aga Khan University's nine campus libraries across three continents through a shared library system**

[Die Vernetzung der neun Campus-Bibliotheken der Aga Khan-Universität auf drei Kontinenten über ein gemeinsames Bibliothekssystem]

Ashraf Sharif und Normand Demers  
IFLA Journal 39 (2013) No. 4, 319-326

Die Aga Khan - Universität (AKU) ist die einzige Universität im Bereich der Entwicklungsländer, die über elf Campus in acht Ländern und drei Kontinenten verfügt. Sie besitzt ein Netzwerk aus neun (wenn auch kleinen) Bibliotheken in vier Entwicklungsländern in zwei Regionen (Südasien und Ostafrika). Die Universität hat kürzlich ein Bibliotheksverwaltungssystem implementiert, um alle neun Bibliotheken in

vier Ländern über eine gemeinsame Datenbank integrieren zu können. Der vorliegende Beitrag zielt darauf ab, unsere Erfahrungen mit der Implementierung eines grundlegenden hochmodernen Bibliothekssystems nach dem Industriestandard weiterzugeben. Der geographische Standort der AKU-Bibliotheken und der mehrsprachigen Sammlungen verleiht diesen Erfahrungen eine besondere Signifikanz. Angesichts der Komplexität der geographischen Standorte, der mehrsprachigen Sammlungen, der unterschiedlichen Zeitzonen und der Diversität der Mitarbeiter kann man dies als ein einmaliges Ereignis im Bereich der Bibliotheks- und Informationswissenschaften bezeichnen.

### **Library value in the developing world**

[Der Wert der Bibliotheken in den Entwicklungsländern].

Nell McCreadie  
IFLA Journal 39 (2013) No. 4, 327-343

Der Wert der Bibliotheken in den Entwicklungsländern ist eine Fortsetzung der Studie aus dem Jahr 2012 mit dem Titel „Working together: evolving value for academic libraries“, [Zusammenarbeit: die Wertentwicklung wissenschaftlicher Bibliotheken]. Der entsprechende Bericht enthielt die Ergebnisse aus acht Fallstudien aus Großbritannien, den USA und Skandinavien. Der Bericht mit dem Titel „Der Wert der Bibliotheken in den Entwicklungsländern“ enthält die Ergebnisse eines 6-monatigen Projekts mit 12 Fallstudien aus Entwicklungsländern, die bei einem BNE (Bruttonationaleinkommen) von unter 4.035,00 US-Dollar als Staaten mit niedrigem Einkommen beziehungsweise mittlerem Einkommen eingestuft werden. In diesem Zusammenhang wurden die Daten über eine Serie von Umfragen und Interviews erfasst und trianguliert. Zudem wird auch ein gewisser Vergleich mit Bibliotheken aus den Industriestaaten und Beispiele für bewährte Verfahren geboten, die für andere Institutionen möglicherweise in Bezug auf die Unterstützung von informativem Wert sind, die die Bibliothekare dem Kollegium und auch in Bezug auf das Arbeitsverhältnis zwischen den wissenschaftlichen Bibliotheken und ihren wichtigsten Anspruchsgruppen bieten.



## Рефераты статей

### **National digital content policies: A comparative study of Arab and other countries**

[Государственная политика в области цифровых информационных ресурсов: сравнительное исследование стран арабского мира и других государств]

Рами Аббоуд

IFLA Journal 39 (2013) No. 4, 294-310

В данной работе представлено сравнительное исследование государственной политики в отношении цифровых информационных ресурсов в 10 странах, наряду со странами Европейского Союза (ЕС), которые были разделены на две группы: Страны арабского мира и Неарабские страны (Глобальная группа). Для содействия улучшению качества государственной политики в области информационных ресурсов, которая в исследуемых государствах преимущественно находится на этапе разработки, была создана опытная модель Критериев оценки политики (КОП). На основе 56 переменных величин, включенных в КОП, была также разработана опытная модель статистического показателя, названного Показателем качества политики (ПКП), служащего для оценки качества политики как таковой, другими словами, для того, чтобы определить уровень качества концептуальной основы политики в области цифровых информационных ресурсов, которая может быть использована в общемировом масштабе. В дополнение к разработке КОП и ПКП данная работа проливает свет на общемировые тенденции стратегического планирования в сфере цифровых информационных ресурсов, в частности, посредством сравнения политики нескольких стран арабского мира и политики группы развитых и развивающихся стран по всему миру.

### **The teachers' role in fostering independent learning in high schools in Zanzibar**

[Роль учителей в содействии самостоятельному обучению в старшей школе в Занзибаре]

Аббас Мохамед Омар

IFLA Journal 39 (2013) No. 4, 311-318

Целью настоящей работы является изучение роли учителей в содействии самостоятельному обучению студентов посредством использования школьных библиотек; исследовалась доступность материалов в школьных библиотеках; рассматривались модели

использования школьных библиотек как студентами, так и преподавателями; взаимодействие учителей и персонала библиотек, а также различные методы, которые применяют учителя старшей школы, чтобы способствовать превращению учеников старшей школы в самостоятельных учащихся. Исследование проводилось в Занзибаре и охватывало три государственных и две частных старших школы. Использовался метод социологического опроса, опросные листы были розданы 95 респондентам. Были проведены собеседования с 35 респондентами, включая студентов, преподавателей, персонал библиотек, руководителей школ и директора публичной библиотеки. Во всех школах использовался метод наблюдения. В результате данного исследования, в основу которого положена диссертация автора на соискание ученой степени магистра гуманитарных наук, было выявлено, что библиотеки сталкиваются с нехваткой фондов, при этом имеющиеся материалы, за редким исключением, устарели; стали очевидны недостаток образования в области библиотечного дела и ограниченный характер использования библиотек как студентами, так и преподавателями, неквалифицированный и неподготовленный персонал библиотек, недостаток интеграции информации, учебной программы и классного обучения, а также недостаточное взаимодействие между преподавательским составом и персоналом библиотек. На основании результатов исследования были даны некоторые рекомендации.

### **Connecting Aga Khan University's nine campus libraries across three continents through a shared library system**

[Объединение девяти библиотек университетских городков Университета Ага Хана, расположенных на трех континентах, при помощи библиотечной системы с общим доступом]

Ашраф Шариф и Норманд Демерс

IFLA Journal 39 (2013) No. 4, 319-326

Университет Ага Хана (АКУ) является единственным университетом в развивающихся странах, который осуществляет свою работу посредством одиннадцати университетских городков, расположенных в восьми странах на трех континентах. У него есть сеть из девяти, хоть и небольших, библиотек, в четырех развивающихся странах в двух регионах (Южная Азия и Восточная Африка). Недавно университет внедрил систему управления библиотеками, которая объединила все девять библиотек из

четырёх стран при помощи единой базы данных с общим доступом. Цель настоящей работы - поделиться нашим опытом внедрения библиотечной системы, которая соответствует промышленным стандартам, и в которой используются последние технические достижения. Если учесть географическое положение библиотек АКУ, а также необходимость объединения многоязычных фондов, данный опыт приобретает особую значимость. Сознавая сложности, связанные с географическим положением, разноязычием фондов, различными часовыми поясами, а также этнокультурными различиями персонала, вовлеченного в процесс, можно рассматривать данный проект как уникальное явление в области библиотечного дела и информатики.

### Library value in the developing world

[Значимость библиотеки в развивающемся мире]

Нелл МакКриди

IFLA Journal 39 (2013) No. 4, 327-343

Работа “Значимость библиотеки в развивающемся мире” является продолжением исследования 2012 года “Работаем вместе: формируем значимость академических библиотек”, в котором изложены результаты восьми исследований на конкретных примерах в Великобритании, США и Скандинавии. В работе “Значимость библиотеки в развивающемся мире” изложены результаты проекта продолжительностью 6 месяцев, включающего 12 исследований на конкретных примерах в развивающихся странах, уровень дохода экономики которых определяется как низкий и средний, а ВНД (валовой национальный доход) составляет менее 4.035 долларов США. Сбор и триангуляция данных проводились на основании серии опросов и собеседований. Было проведено некоторое сравнение с библиотеками в развитых странах и выявлены примеры передовых методов, которые могут быть приняты на вооружение другими учреждениями в части поддержки, которую библиотекари оказывают преподавательскому составу, а также в части взаимоотношений между академическими библиотеками и их ключевыми партнерами.

### Resúmenes

#### National digital content policies: A comparative study of Arab and other countries

[Полíticas nacionales de contenido digital: estudio comparativo de los países árabes y otros países]

Ramy Abboud

IFLA Journal 39 (2013) No. 4, 294-310

El proyecto pone de manifiesto un análisis comparativo de las políticas nacionales relativas al contenido digital en diez países, además de la Unión Europea (UE), divididos en dos grupos: países árabes y países no árabes (grupo global). Se desarrolló un modelo de prototipo de unos criterios de evaluación de políticas (PAC, por sus siglas en inglés) para ayudar a mejorar la calidad de las políticas nacionales de contenido digital que están principalmente en proceso de creación. También se desarrolló un modelo de prototipo de un indicador estadístico denominado indicador de calidad de las políticas (PQI), basado en 56 variables incluidas en los PAC, para medir la calidad de las propias políticas, o en otras palabras, para identificar el nivel de calidad del marco conceptual de las políticas de contenido digital que pueden utilizarse a escala global. Además de desarrollar el PQI y los PAC, este proyecto

arroja luz en las tendencias globales de planificación estratégica en el ámbito del contenido digital, especialmente mediante la comparación de diversas políticas árabes con un grupo de países desarrollados y en vías de desarrollo de todo el mundo.

#### The teachers' role in fostering independent learning in high schools in Zanzibar

[El papel de los profesores a la hora de fomentar el aprendizaje independiente en las escuelas de educación secundaria de Zanzíbar]

Abbas Mohamed Omar

IFLA Journal 39 (2013) No. 4, 311-318

El objetivo de este proyecto es examinar el papel de los profesores a la hora de fomentar el aprendizaje independiente de los alumnos mediante el uso de la biblioteca escolar analizando la disponibilidad de los materiales de la biblioteca escolar, los patrones del uso de la biblioteca escolar por parte de alumnos y profesores, la cooperación entre los profesores y el personal de la biblioteca y los diferentes métodos empleados por los profesores de las escuelas de educación secundaria para fomentar a los alumnos para que lleguen a ser estudiantes independientes. El estudio se llevó a

cabo en Zanzíbar y participaron tres escuelas de educación secundaria públicas y dos privadas. Para realizar el estudio, se aplicó un método basado en encuestas; un total de 95 encuestados recibieron los cuestionarios. Se entrevistó a 35 encuestados, entre ellos alumnos, profesores, bibliotecarios, directores de escuelas y el Director de la Biblioteca Pública. En todas las escuelas se aplicó el método de observación. La principal conclusión del estudio, basado en la tesis de final de máster del autor, reveló que las bibliotecas escolares se enfrentan a problemas relacionados con recursos limitados (que incluyen material en su mayoría obsoleto y poco material actual), falta de formación bibliotecaria y hábitos de uso de las bibliotecas limitados entre los alumnos y profesores, bibliotecarios ineficientes y con poca formación, falta de integración de la información, los programas de estudios y el aprendizaje en clase, así como falta de cooperación entre los docentes y bibliotecarios. Se formularon una amplia variedad de recomendaciones basadas en las conclusiones extraídas.

### **Connecting Aga Khan University's nine campus libraries across three continents through a shared library system**

[Conexión de las nueve bibliotecas de los campus de la Universidad Aga Khan en tres continentes a través de un sistema de bibliotecas compartido]

Ashraf Sharif y Normand Demers  
IFLA Journal 39 (2013) No. 4, 319-326

La Universidad Aga Khan (AKU) es la única universidad de un país en vías de desarrollo que presta servicio a sus once campus ubicados en ocho países y tres continentes. Cuenta con una red de nueve bibliotecas, aunque de pequeñas dimensiones, en cuatro países en vías de desarrollo en dos regiones distintas (Asia Meridional y África Oriental). La universidad ha implementado recientemente un sistema de gestión de bibliotecas para integrar las nuevas bibliotecas ubicadas en cuatro países

distintos utilizando una sola base de datos compartida. La finalidad de este proyecto es compartir nuestra experiencia en la implementación de un sistema de bibliotecas de última generación basado en los estándares del sector. La ubicación geográfica de las bibliotecas de la AKU y sus colecciones multilingües la convierten en una experiencia aún más relevante. Teniendo en cuenta la complejidad de las ubicaciones geográficas, las colecciones multilingües, los diferentes husos horarios y la diversidad de personal implicados, puede considerarse un caso único en el campo de las ciencias de la información y la biblioteconomía.

### **Library value in the developing world**

[El valor de las bibliotecas en los países en vías de desarrollo.]

Nell McCreadie  
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«El valor de las bibliotecas en los países en vías de desarrollo» es la continuación del estudio publicado en 2012 «Trabajo de equipo: valor de desarrollo para bibliotecas académicas», que aportó conclusiones a partir de ocho casos prácticos del Reino Unido, los EE. UU. y Escandinavia. «El valor de las bibliotecas en los países en vías de desarrollo» aporta conclusiones extraídas de un proyecto de seis meses de duración con 12 casos prácticos de países en vías de desarrollo clasificados como economías de renta media y baja con una RNB (renta nacional bruta) inferior a los 4.035 dólares estadounidenses. Los datos se recopilaron y triangularon mediante una serie de encuestas y entrevistas. Se identifican algunos datos comparativos con bibliotecas de países desarrollados y ejemplos de buenas prácticas, gracias a los cuales otras instituciones podrían mejorar sus conocimientos con respecto a la asistencia que los bibliotecarios proporcionan al cuerpo docente y la relación de trabajo entre las bibliotecas académicas y las principales partes interesadas.

