The future of libraries and implications for the Caribbean

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Professor Fay Durrant Head, Dept of Library and Information Studies The University of the West Indies, Mona

Abstract

This presentation discusses the developments in libraries and their implications for the Caribbean region. Librarians and libraries continue to have a key role in making information and knowledge publicly available, and in enabling access to and utilization of this knowledge. It presents some of the present and future issues related to accessibility and usability of information, particularly in relation to library and information systems and services.

Introduction

Today it gives me great pleasure to be here at this meeting of the members of LATT, to discuss the developments in libraries and their implications for the Caribbean region. Librarians and libraries continue to have a key role in making information and knowledge publicly available, and in enabling access to and utilization of this knowledge. I would like to talk today about some of the present and future issues related to accessibility and usability of information, particularly in relation to library and information systems and services.

I also bring greetings from the Library and Information Association of Jamaica (LIAJA) which is celebrating Library Week and which will tomorrow will be holding the first National Forum on School Libraries at which over 230 school librarians, librarians and teachers, education officers, principals and members of the Jamaica Teachers Association will hold discussions with the Hon Maxine Henry-Wilson, Minister of Education and Youth on policies relating to school libraries.

The Department of Library and Information Studies

As most of you know, the Department of Library and Information Studies has a mission to educate librarians from the CARICOM region. We have always been interested in understanding **the future of**

libraries in the Caribbean, as this is of necessity related to the dimensions and focus of our teaching and research. With faster change in the information sector there is even more interest in determining future directions in relation to the areas of focus for our programme. We therefore seek to identify, on an ongoing basis, the current and anticipated trends and future activities in the information sector.

Today I would therefore like to discuss with you some of the changes in our environment, and some of the responses which are being developed by libraries in the Caribbean and globally.

The Department offers education in library and information studies, and produces graduates who now work mainly in government and academic institutions in the region. We find that there is a trend towards our graduates being responsible for combined units of libraries and records centers and expect that the trend toward greater integration to continue. I expect that more opportunities will arise for our graduates to work as consultants, and as information brokers for organizations in the public or private sector.

We have therefore taken note of greater linkages among libraries, archives and records management centers as we find that many "special libraries" in government agencies and in corporations are being or have been merged with the records centers to form single information centers with various titles: information resource centers, information services unit, information and records centers.

In recognition of these trends in the workplace, our teaching and research cover concepts, theories, techniques and developments in the information sector locally and globally, and we seek to identify solutions to local problems. You will see from the brochures on the department that we offer a number of courses and provide the opportunity for focus on areas of interest.

Our two undergraduate degrees are taken by the majority of our students. The BA (Library and Information Studies) degree was our first qualification and it has been adjusted and modified over the past thirty five years in keeping with the trends in the profession and expectations of the future. Our second undergraduate degree, the B.Ed (School Librarianship) is offered jointly with the Department of Educational Studies and is intended for teachers who wish to become teacher librarians.

A number of community colleges, in the region are offering associate degrees and certificates in library studies and we recognize that graduates from the programme will be interested in entering an undergraduate degree. As a result we are working with other departments in the university to provide a means of articulation of qualifications from those institutions to the UWI.

We seek to ensure that these programmes provide a broad introduction to the concepts and trends of LIS and that they also cover management of information units, technical processes, information technology, information literacy and applied research related to these areas.

At the graduate level we offer two degrees – the Master of Arts in Library and Information Studies (MALIS) and the Master of Library and Information Studies (MLIS). The MLIS replaced the Postgraduate Diploma in Library Studies and is open to graduates from any undergraduate programme. We encourage entrants from a variety of disciplines so that there can be information specialists in a number of areas.

The MALIS is the programme for graduates from one of the undergraduate programmes. It is more research-oriented, and assumes that with courses covering Trends and Issues in Library and Information Studies, Information Technology, Digital Libraries, Information Communication and Society and Techniques of Multimedia Librarianship. New courses including Copyright issues for libraries in Archives and Records Management were introduced four years ago. Access to Information / Freedom of Information is taught within the Archives and Records Management course.

Quality Assurance of the teaching and research programmes is an important issue at the UWI. The Department was recently reviewed in 2004 to determine how it was accomplishing its mission and meeting its objectives. We got a number of good marks but there were also suggestions for new courses, and closer supervision of fieldwork.

Convergence

We find increasing difficulty in separating or isolating the activities or components of the library environment. The content is increasingly integrated with the technologies, and the activities of people who produce and use information services are converging with the roles of the librarians. Christine Borgman predicts that:

"we will see more convergence of information and communication technologies, blurring the lines between tasks and activities and between work and play."

The term convergence which has been much used in relation to converging technologies can be used to describe the information and communication flows within a library and information system so that a person may receive information via the Internet - email, websites, blogs, radio, television, print - newspapers, magazines, books, music, drama.

The number of formats, functions and locations related to libraries are increasing as "hybrid libraries" combine analogue and digital versions of materials, and use networking technologies that facilitate varied forms of access to services, and increased interactivity between librarians and clients.

Another kind of convergence is evidenced in the merger of libraries and archives as is the case of the National Library and National Archives of Canada into one unit officially established in 2004 as Libraries and Archives Canada with an appropriate URL http://www.collectionscanada.ca This new organization is working towards the integration of its collection and consequently is in the process of merging the national bibliographic database and the national archival database into a single system, to provide seamless access to the collection. This move towards a single access point is one which other libraries are likely to consider in the future with a view to making access easier.

Convergence is also evident in the changing roles of information seekers, and librarians who are also increasingly authors, producers, and publishers. Nicholas and Dobrowolski writing in 2000, discussed terminology to describe digital information users. They suggest that today's digital information users act like "information players" who interact with the Internet in a multidimensional relationship, and who form part of the system rather than being on the outside on the receiving end of services. The roles which our users play are changing in what is sometimes described as "the shift of power" from information provider to information consumer. The user is now often an informed consumer who can choose among many possible sources including the library and the reference librarian, and can determine which source is most appropriate to the particular need.

In the light of these trends and changes in the environment of libraries, we at the DLIS we are advancing the records management aspect of our programmes, having begun with a certificate programme which is taught by the staff of the UWI Archives and Records Management Programme and offered at the Mona and Cave Hill campuses. With the assistance of CIDA we began in January 2004 to provide two courses in records management, one at the undergraduate and one at the postgraduate level. The undergraduate programme has been taught over the Internet using in the first year a Canadian online system *intrafinity.com* and in the second year we used *ourvle* the UWI adaptation of the *Moodle* open source course management system.

Assessing the increasing range of information sources

We see indications that today, tomorrow and the day after tomorrow, the challenge continues to be effective evaluation and rationalization of the increasing range of information sources. Users speak of Google with familiarity. Last week a friend was telling me about her niece who has begun acting in Toronto. She could not remember the URL for the niece's website so of course she said that all I would need to do is to enter the niece's name in Google. And indeed I found the correct site.

Where is the balance then between the "World Wide Web" which has been tamed somewhat by Google and other search engines, but which may also produce information which is not reliable. A recent article in CNET News.com reported that:

A search on the keywords "Martin Luther King," gave the first result on Google and AOL--whose search is powered by Google--and the second result on Microsoft Windows Live search is a website created by a white supremacists' group that purports to provide "a true historical examination" of the civil rights leader."

That was bad enough, the report goes on to state that Google was contacted by AOL but has not changed the page rank formula of the search algorithm. In fact up to yesterday the site was still coming up as top ranked of the results of a search on Martin Luther King.

I see this scenario as an illustration of the great need for digital information users to be information literate and discriminating, to understand the role of search engines, and to develop the capability to assess the results of their searches.

Information literacy

With an increasing range of information sources, we may therefore find ourselves in an environment of "information overload" with libraries having a greater role to play in assessing and evaluating, accessing, and organizing information from a multiplicity of sources. In this tumultuous information environment librarians have advanced from library use instruction to teaching information and ICT literacy as a means of guiding users through access paths to critical evaluation of print and networked electronic resources.

Recently the High Level Colloquium on Information Literacy and Lifelong Learning held in November 2005 in preparation for the second phase of the World Summit on the Information Society, issued the Alexandria Proclamation which noted that:

"information literacy empowers people in all walks of life to seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goals"

This definition shows similarities with the concept presented in the ALA Information Literacy Competency Standards for Higher Education which states that:

"to be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information."

The Educational Testing Service (ETS) which uses the term ICT Literacy rather than Information Literacy states:

"students need to know how to define, access, manage, integrate, evaluate, **create and communicate** information efficiently and effectively."

Definitions of Information Literacy and ICT literacy

INFORMATION LITERACY American Library Association (ALA) (2000) RECOGNIZE	ICT LITERACY Educational Testing Service (ETS) (2005) DEFINE	INFORMATION LITERACY Alexandria Proclamation (2005)
INFORMATION NEED		
		SEEK
LOCATE	ACCESS	
	MANAGE	
	INTEGRATE	
EVALUATE	EVALUATE	EVALUATE
USE EFFECTIVELY		USE EFFECTIVELY
	CREATE	CREATE
	COMMUNICATE	
		IN RELATION TO PERSONAL, SOCIAL OCCUPATIONAL, AND EDUCATIONAL GOALS

While there are similarities between the three conceptualizations of information literacy, the Alexandria Proclamation is the one which seems to be the best description as it articulates the relationship between effective use and personal, social, occupational, and educational goals.

In the Caribbean as in other regions, the creation of information literate societies, has been mainly the task of educational institutions – school / teacher librarians, and university librarians who are responsible for guiding staff and students to critical assessment of information. At the UWI, the librarians teach Information Literacy programmes to enable the members of the university community to develop appropriate skills. In January 2006, in collaboration of the Commonwealth Library Association and Unesco's IFA Programme, The UWI Library at Mona mounted a workshop on Information Literacy for Public Librarians. It is expected that this aspect of the work of reference or information literacy librarians will expand and incorporate more aspects of critical thinking as students and staff move on from the basics of information literacy.

At the DLIS Information Literacy is taught as part of the B.Ed School Librarianship programme, and the course provides future teacher / librarians with an introduction to the concept of Information Literacy as an integral part of the school curriculum.

Libraries as cultural centres, meeting places

In spite of the impression to the contrary which we may get from some research, there is evidence that large well appointed public and national libraries are being built worldwide.

The recent Unesco World Report **Towards Knowledge Societies** states that "What we are now witnessing, however, in many countries, is a real estate boom in big public libraries." Some of the libraries with grand new buildings include the Bibliotheca Alexandrina in Egypt, The National Library of Singapore and of course the central building of NALIS.

The Bibliotheca Alexandrina is "the major cultural centre in the city of the famous ancient library, Alexandria, in Egypt With more than 250,000 visitors a year, it has already become one of the most important libraries in the Arab world."

The National Library and Information System of Trinidad and Tobago (NALIS) provides another example of a grand public library, with a major public role. It provides the general public with an agency for lifelong learning, a meeting place, a centre for cultural activities, and a clearinghouse of knowledge. Several large National Libraries have been built in the last few years including The National Library of Singapore which was designed in 2004 occupies two city blocks.

Research in Library Users' Needs and Behaviour

The above developments can be expected to impact on the expectations and behaviour of our users or clients. We have seen some indications that the nature of information users, information players, and information consumers is changing and is resulting in new expectations and behaviour. Research in this area continues to develop from the seminal work of Dervin, Jacobson and Nilan. Research into the usability of library websites and of portal websites help us to gain feedback on the ways in which users seek information and consequently the most appropriate ways of providing information. This research has mainly been done in academic libraries but there are

public libraries such as the Toronto Public Library which has been assessing the usability of its own library website, and has been making adjustments suggested as a result of the usability tests. Our staff and students have been undertaking research with a view to determining solutions to the questions of usability and Michelle Gill an MLIS student undertook a study of the usability of the Caribbean Digital Library of ECLAC, and her findings suggest that the students who made up the pilot group indicated a preference for direct searching as against searching within categories.

Libraries, Access and the Internet

The Internet can be expected to increasingly play a role in enabling the clientele of libraries to access the Internet for information which they need. For the past decade libraries have enabled their clientele to access the Internet via groups of in house computers which function as tele-centres. In the Caribbean most of the public libraries charge an access fee, one of the notable exceptions being the free Internet access provided by NALIS to all its clients. Interesting variations on Internet access include facilities on bookmobiles provided by public libraries such as the Jamaica Library Service and NALIS to enable users to access the Internet.

As library services and the Internet develop in the Caribbean we can expect that greater use will be made of the Internet in enabling local and remote users to access information and to provide feedback on the services. Several libraries are using their websites to provide access to their catalogues and to other information considered relevant to their main user groups. We can expect that each library website will move towards providing its users with a single point of access to all its resources. Portals or gateway websites will continue to be developed for libraries, and I expect that portal sites similar to Yahoo will enable users to customize their access to the library. One of our graduate students Cherita Fearon-Reid recently "sought to determine the response of higher level vocational students to web portals and the implications for the adoption of a portal that will offer the services of the library online." light of the students' preference for "the communication, search, and other online features such as news and entertainment the library can adopt the portal technology by tailoring the portal's features to offer library services online."

Advancing beyond Integrated Library Systems

As mentioned earlier libraries provide access to their catalogues through. As the number of web-based resources expands the needs of users will require that libraries provide "one stop shopping" for access

to range of sources including the integrated library systems. In the Caribbean we are seeing the development of web-based resources. Some important examples are online access to the Laws of Jamaica and to the Laws of Trinidad and Tobago. Robin Murray in examining the trends in library related resources considers that "The role of the library, and its supporting systems, is to synthesize these atomic Web services into a cohesive user-centric environment." Some websites of Caribbean libraries:

- National Library of Jamaica www.nlj.org.jm
- Jamaica Library Service www.jamlibs
- National Library and Information System Authority www.nalis.gov.tt
- The University of the West Indies, Mona www.uwimona.edu.jm
- The University of the West Indies, St Augustine www.mainlib.uwi.tt
- The University of the West Indies, Cave Hill http://www.mainlibrary.uwichill.edu.bb
- The University of the West Indies, Law Library http://www.lawlibrary.cavehill.uwi.edu
- University of Technology, Jamaica <u>http://www.utech.edu.jm/library</u>
- ECLAC Port of Spain <u>www.eclacpos.org</u>
- JAMPRO http://www.investjamaica.com/library/
- Northern Caribbean University http://www.ncu.edu.jm/services/library/
- University of the Southern Caribbean <u>http://usc.edu.tt/library/</u>

Open Access

Open Access is a factor which has already begun to have a significant impact on the availability of information. I think that it will continue to change the quantity of scholarly information available to the public either through libraries or directly through searching the Internet.

The Open Access movement began about 10 years ago, and gathered momentum from 2002, with a number of declarations supporting the development of open access facilities. The Budapest Open Access Initiative of 2002, which was the first declaration, describes open access as:

"free availability on the **public Internet**, permitting any users to read, download, copy,

distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the Internet itself".

John Willinsky in his book the *Access Principle* is almost evangelical as he lays out the case for open access and explains why it should be part of the future. He also identifies a number of factors which have contributed to the trend to open access projects. Willinsky highlights the fact that in 2003 the journals Nature, Science, The Scientist and The Wall Street Journal "all ranked open access and the advances in the movement among the top science stories for 2003"

What was the rationale for this acceleration?

Traditionally academics have submitted the results of their research to peer-reviewed journals as a means of making their work known in the scientific community. Academics produce the content of scholarly journals, but are not paid therefore neither the writers nor their institutions benefit in monetary form. As the sales prices of scholarly peer-reviewed journals increased rapidly in the 90s, universities and research institutes found that the visibility of their work and access to electronic versions could decrease through sale in prescribed packages and the imposition by publishers or database owners, of restrictions on access. Another impetus for open access resulted from policies on accessing the results of publicly funded research.

The success of the *open access movement* can be seen in the number of journals which have been created or have introduced open access methodologies. In our own field *First Monday: a peer reviewed journal on the Internet* has published successfully since 1996, and celebrated its 10th anniversary in May of this year. Jennifer Papin-Ramcharan and I participated in its anniversary conference FM10 Openness: Code, Science and Content which covered a variety of open access issues. This journal takes its peer-review process seriously and has gained an international reputation in a relatively short time. In my experience in the publication of an article in First Monday I took out a Creative Commons Attribution Licence which "permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited." Another open access journal <u>Information</u> Research which is also in its 10th year, covers a range of library and

information research topics, and is accessible without cost to users who have access to the Internet.

The number of open access journals continues to expand rapidly. The Directory of Open Access Journals (DOAJ) which is produced by Lund University with sponsorship from that university provides a useful webbased repository. This service covers free, full text, quality controlled scientific and scholarly journals in all subjects and languages. A check on the contents of DOAJ on June 30 2006 showed that there were 2271 journals in the directory with 645 journals and 99,329 articles searchable at the article level.

A subsequent review of the Directory on October 4 2006, showed 2405 journals in the directory with 697 journals and 110,124 articles searchable at the article level. This increase of 52 journals in 3 months shows the speed with which the open access movement is expanding in terms of journals. Currently this Directory shows 70 open access journals in the field of Library and Information Studies.

Of course with this increasing number of journal articles available free of cost, one question is how useful are these for Caribbean people. The DOAJ directory permits searching across journals and I recently did a quick search on "Caribbean" and "West Indies" to see the kind of coverage of things Caribbean.

The search on "West Indies" produced 13 articles and the search on "Caribbean" resulted in 191 articles.

The articles done by people from the UWI included one by Carter, Carter and Broomes on the experience of the School of Clinical Medicine and Research Library at UWI, Barbados in purchasing online journal access. This article was published in July 2006 in the journal Biomedical Digital Libraries.

While Open Access usually removes price and copyright barriers there are other possible barriers. Sauber identifies four which may be imposed by institution policies or circumstances as: Institutional Filtering and censorship barriers; Language barriers; Handicap access barriers; and Connectivity barriers.

A barrier to authors' or institutions' participation in Open Access Journals is the fact that although Open Access makes the contents of scholarly research articles available without cost, authors are in some cases required to pay fees for having their works published. Jennifer

Papin-Ramcharan's paper in First Monday on Open Access journals discusses some of the problems which authors may have in getting their work published. Willinsky provides a summary of the conditions of publishing in his table Ten flavors of open access to journal articles p.212-213

HINARI is an example of open access under special conditions. Access is provided to researchers and students through a special arrangement so that access is limited to registering institutions in an access management system. This is available to specific developing countries which are determined according to per capita national income.

Open access journal as presently designed assume that those who wish to use the contents have reliable and affordable access to the Internet. In the Caribbean usage of the Internet is still relatively low and for Trinidad and Tobago the Telecommunications Authority gives the percentage of Internet users up to March 2006 as 15.4 percent. This indicates that there is a lack of connectivity which forms a barrier to use.

E-government information

In the future it is also possible that information produced by Caribbean governments will be considered open access. Caribbean governments have been using the Internet to improve the availability of official documents. Nearly all governments have a gateway website. I do not think that there will be any attempt to impose copyright restrictions and rather it will be a matter of ensuring that the general public is made aware of the documents which are available, and how to access them. With the coming into force of the Access to Information or Freedom of Information Acts public libraries can be expected to expand their roles as advisors and public meeting places in making the public aware of accessible government information sources in electronic or printed form.

Assessing the Impact of Information

In all of the activities in which libraries are engaged there is increasing access to a variety of information sources, and increasing investment in information and communication technologies. What returns can one expect from these investments? We could look at the question on various levels.

In the IFAP programme of Unesco, we are seeking to do two related activities. The first is the identification of instances where the access to information has led to direct identifiable benefits. There is an

interesting study of the use of one of the telecentres of the Jamaica Sustainable Development Network. One fisherman who knew how to access the weather reports on the Internet would each day get the forecast and explain it the others so that they could use the information to prepare for their fishing expeditions.

That story has been written up as Islands caught up in the Web in the UNDP magazine Choices by Barbara Blake Hannah a journalist in Jamaica. I think that it would be very useful for us as Caribbean librarians to seek out these stories from our users as a means of determining the impact of information.

As libraries continue to work in collaboration with educational institutions to mount information literacy programmes, it is expected that the information literacy of the user populations will continue to increase. The second activity of IFAP which relates to assessing the impact of information is identification of policies which are contributing to increased access to information including policies for developing information literate people.

Conclusion

Libraries are changing, sometimes gradually sometimes dramatically. There are undoubtedly more 'digital information users' than there were five years ago, and today's users are becoming information literate and are able to locate some information for themselves. At the same time we find that there is an increasing variety of information sources, in a range of formats, which require the knowledge and experience of librarians for assessment and evaluation. Librarians' roles in the development of portals or gateway websites will continue to expand.

The studies of usability of library websites which have been ongoing for the last few years, will continue and will inform the further development of these sites. The changes which we are experiencing point to a reduction by each library of the number of access points which a user is expected to consult in his or her search for information. These portal or gateway websites are likely to reflect the design of the site of Amazon.com which links users to reviews and related works.

Various forms of networking can be expected to develop if there is adequate connectivity available to clients in their libraries, homes, offices, etc. At present the levels of connectivity in the Caribbean are relatively low and ranges from 6% in several countries to 60% in Barbados and Bermuda.

As connectivity increases I think that we can expect greater interactivity between librarians and users. The social spaces such as chat and instant messaging, blogs and the Web 2.0 social networks will be able to facilitate this interactivity.

I am sure that as libraries progress we will become a key part in the process of enabling lifelong learning.

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