BORNO LIBRARY, ARCHIVAL

Information Science Journal

ISSN: 1596-4337

JOURNAL OF THE NIGERIAN LIBRARY ASSOCIATION,

BORNO STATE CHAPTER



VOL. 9, NO. 2, 2010

The Changing Culture of Information Retrieval, Use and Storage in an Academic Library: A Case Study of The Faculty of The Social Sciences Library, University of Ibadan

by

Josephine Umejei Igbeka (Ph.D.) Kenneth Dike Library University of Ibadan, Ibadan, Nigeria

and

Evelyn Nkechi Emeahara

Department of Library, Archival and Information Studies,
Library, University of Ibadan, Ibadan, Nigeria

Abstract

The paper investigated the changing culture of information retrieval, its utilization and storage among students in an academic library in Ibadan, Nigeria. Data was collected through the use of questionnaire, observation and interviews. A total of two interviews with the Library management of the faculty over a period of two sessions, 2007/2008 and 2008/2009, was conducted, 100 users responded to the questionnaire. The questionnaire sought to find out the frequency of library use, the value users attached to the use of the library and why they used the library. About 49% of the respondents use the library three times a week, 40% of the respondents uses the library mainly to search for other information apart from their lecture notes, and 94% of the respondents showed how much value the attached to the library by their utilization of the information sources within the library. The study also described the online information storage practices in the library; the computer literacy level of users as well as the library user-education was examined. The study

found that although students used electronic sources they still preferred to consult traditional information sources such as text books and thesis. The study also revealed that 51% of students liked accessing the OPAC (Online Public Access Catalogue) because it is faster to use and time saving when seeking information although this is often hampered by frequent electricity cuts. On their attitude to the increased ICT presence in the Library, they initially resisted the changes but later developed interest and adapted as library use instruction was being applied.

In terms of the utilization and non-utilization of the Internet there were complaints from the respondents that the time allotment was too short and the computers were not enough. Other respondents mentioned the issue of the server not working at a consistent and regular basis. The study also found that library support by top management in all its ramifications was vital in order to meet up with current trends in information service provision and development.

Keywords:

Information retrieval; information use; information storage; Academic library.

Introduction

Cultural change is a form of organizational transformation, that is, radical and fundamental form of change. Cultural change involves changing the basic values, norms, beliefs, etc. among members of the organization in order to improve organizational performance (McNamera, 1999).

Problems associated with demand for information and cultures around information do occur, thus people are often intimidated by or do not often understand how to use information sources such as databases, intranets, internets. etc

Different strategies are often created or developed by information professionals in order to encourage and train people on how to find and use information. Librarians are

continuously reorganizing procedures and processes in order to optimize information service provision and delivery. Their ability to successfully maintain their information function could be measured in terms of information use, ability to promptly retrieve needed information as well as how these information are stored to enable easy retrieval and use

It is this reorganization that prompted the researchers to assess how this process and the use of ICT for information use retrieval and storage, have impacted on the users of information in the faculty of the Social Sciences Library, University of Ibadan, Nigeria.

Objectives

- (i) To investigate the application of IT (Information Technology) in accessing and utilization of print and electronic sources in the library.
- (ii) To determine the frequency of library use, the reasons associated with use of the library as well as computer literacy levels of the patrons.

Methodology

The study used the descriptive survey research design. A self administered questionnaire was used for data collection. A total of one hundred and ten (110) questionnaires were administered to students of the Faculty of the Social Sciences Library at the time of the study. The duration of data collection was about one month. One hundred (100) of the questionnaires were returned (Approx. 91% response rate). A total of two interviews with Faculty Library Management over a period of four months were conducted. Observations and oral interviews were conducted among library users.

Literature Review

Available literature in Information Science defines storage as a source from which documents or information of specified description may be supplied. It is a receptacle for information (Prytherch, 2005). This in essence describes storage devices, whether print or digital that enables information retrieval. In relation to this, Taylor, (2004) extensively describes some basic retrieval tools, their formats and their function and how these help in the organization of information for use. Some of these tools include bibliographies, pathfinders, catalogues, indexes, finding aids, registers, search engines and directories. Taylor equally traced the evolution of the various forms of catalogues, from the book catalogues to the card catalogues and then the COM (Computer Output Microform) and the OPAC (Online Public Access Catalogue).

Taylor (2004) further noted that (OPACs) are the predominant form of catalogues in the United States and a number of other countries. Nigeria is no exception. Indeed, the use of computers for retrieval has totally altered previous traditional or manual methods (Turner, 2005) and Goldfarb (1999) theoretically reflected that technology indeed should provide greater access to information. Citing the example of the automated library catalogue she explained that this kind of facility is supposed to provide greater access to existing resources and new information.

Lapatin (2004) in her review on academic library organization and reorganization pointed out that several factors have contributed to reorganization in academic libraries since the late 1980s in the U.S. The factors she listed include the implementation of new library systems, automation, declining budgets, downsizing, and digital technology. She however noted that this reorganization has been more of an evolution than a revolution, meaning that the changes and development have been gradual.

In this era where ICT use is prevalent Tan (2003) argues that the use of computers did not displace the vital role of Academic librarians, who are still the sole keepers of research resources on the campus and possess profound knowledge and dedication of the information work they do.

Their activities continue to play a vital role in students' pursuit of academic excellence. She added that academic librarians' contributions are widely recognized and appreciated by students and faculty alike.

Essentially what these librarians manage are the information resources or stock that characterizes the academic library environment. Totterell (2005) presented the fact that the stock of academic libraries usually have a much higher proportion of non-fiction and this reflects the need for the stock to support the courses being taught specifically in narrow curriculum terms, and in a more general cultural context.

In the organization of information for easy retrieval and use, Taylor (2004) analyses the implications of maintaining closed or open stacks, she stated that while the closed stacks eliminates physical browsing possibilities, users of library collections could physically browse open stacks. She however argued that since classification is a major form of subject access and there are situations in some library settings that could warrant closed access policies, browsing of the classification listing in the catalogue which could be online must be prioritized by library management. Subject access to library collections is perhaps the major key to the collections visibility and access to information by users.

One key ingredient that ensures that the library user can truly navigate electronic information resources is the use of notices or instructions. Focusing in on notices or operating instructions for the use of library information sources, Morris and Dyer (1998) asserted that "Instructions" for use of an OPAC or for end-user searching on CD-ROMs or the Internet needed to be given prominent space and should be "eyecatching." They added that less frequently used or more confidential instructions, such as identification numbers and passwords for online searching, needed to be secure but easily accessible by authorized users. This is true of institutionally-based user names and passwords for electronic databases such as HINARI-OARE-AGORA among many others. Jones (2007)

also stated that library automation is easier than the maintenance of a card catalogue and provides many more access points to the information than the traditional cards arrangement can provide.

Table 1: REASONS FOR USING THE LIBRARY

Decil Const	Most Important		THE STREET WHEN YOU IN THE STREET SHOULD		Important		Averagely Important		Least Important		Total*
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq	%	
Why do you come to the Library? a. Do my assignme nts	17	17	13	13	20	20	1	7	4	4	
b. Search for other informati on	40	40	27	27	n	11 :	4	4	1	1	
c. Make additional notes	17	17	16	76	21	21	10	10	7	7	
d. Carry out research	20	20	9	9	15	15	1	4	14	14	
e. Others	6	6	4	4	7	7	10	10	19	19	
Total*	100	100	69	69	74	74	35	35	45	45	

Table 1 shows the reason why students use the Faculty of the Social Sciences Library. The search for other information (40%) ranked highest followed by those This was followed by those who carry out research (20%) while there was a tie (seventeen percent) in third place for those who come to do their assignments as well as those who use library facility to make additional notes.

Table 2: Utilization of Information Sources in the Library by Departments

Departments	Analysis of Internet searches deducted within a month	No of Books consulted from closed access	Projects consulted in a month	Analysis of search from the Encarta/On line Encycloped ia
Psychology	102	372	38	27
Economics	99	184	23	19
Sociology	57	281	17	17
Political Science	36	101	62	8
Geography	110	324	37	4
Other Departments	19	101	De.	5
Research	222		Y	-
Assignments	147	- 0	-	-
Total	782	1,363	177	80

Table 2 show that a total of (363 textbooks were consulted by users within a period of one month (August, 2005) from closed access section of the libraryin various social sciences disciplines. Students of psychology and geography departments consulted more (372) and (324) close access books respectively than others The table also shows that students make due use of information sources – showing the importance and vibrancy of the library. The print sources seem to be more utilized by the students than the electronic sources.

One hundred and seventy seven students' projects were utilized within a period of one month. Sixty – two of these were utilized by the department of Political Science students.

A total of 80 students made use of the 'Encarta Multimedia' to search for information within a period of one month (August $1^{st} - 31^{st}$ 2005).

Psychology students made more (twenty seven) use of this source, followed by Economics, only a few (four) Geography students.

A total of about 323 students used the internet to search for information. Students from the department of Geography made use of the internet more(one hundred and ten) than others. This is followed by Psychology Department (102) and only (36) students from the department of Political Science utilized the Internet search engine. The Internet was used by total of (222) students for research purposes while (147) claimed that they utilized it for assignments. On the whole, it could be seen from the table that students do make use of the electronic sources of information' Despite the problems associated with the usage of electronic resources (electricity outages and Internet access, lack of infrastructure), students still prefer to use them. But compared to the print sources, they are still not very much utilized.

Table 3: Information Need and Information Seeking Behaviour of Respondents

Item Description	Yes	No		No	Total		
	Freq	%	Freq	%	Freq	%	
Does using the QPAC satisfy my information need?	71	71	15	2	12	1 2	100
Do you use the book catalog to search for your information?	36	36	51	5	13	1 3	100
Do obtain enough literature for my work?	50	50	39	1	10	1 0	100
Are you able to find more information sources/textbooks by browsing through the OPAC?	53	53	30	1	16	1 6	100
Is it easier for you to search for literature by means of the internet than from textbooks and	66	66	30		4	4	100

journals (traditional print materials) ?							
Do you obtain enough literature for research work from the internet?	67	67	30		3	3	100
Is the time allotted to you for search (30 minutes) enough?	10	10	85		5	5	100
Is the internet faster in obtaining information than traditional materials?	81	81	17		2	2	100
Do you make a lot of effort when trying to find information using the internet?	55	55	43		2	2	100
There is more effort put in when searching for information using textbooks, journals etc. as compared to the internet	True 70	70	False 27	SP	3	3	100
Do you use the 'Encarta' software to search for information in the library?	True 24	24	False 67		9	9	100

The results for Table 3 showed that users had a higher preference using OPAC for searches (51%) than the book catalogue (36%), 13% of the respondents did not answer the question. 71% of those who preferred OPAC found their choice satisfying, since they were able to find adequate literature to meet their needs.

In response to the question on whether they obtained enough literature for their work, 50% of users stated that they obtained enough literature for their work while 39% did not. Fifty three percent of students found more information by browsing through the OPAC.

Sixty-six percent of users indicated that they found it easier to search for information from the Internet than the print materials, while 67% indicated that they obtain enough literature for research. 85% of the respondents complained that the 30 minutes allotted was too short for browsing. They agreed that the Internet was faster than the use of traditional materials (81%) while 55% indicated that they put in a lot of effort when trying to find information on the Internet. Forty three percent stated that it was easy for them. Seventy percent agreed that it was more tasking using print forms of information. A larger number (67%) indicated that they did not use the 'Encarta' for information searches.

Table 4: Computer Literacy and Training of Users

	Yes		No		Respon se		Total
	Freq.	%	Freq	%	Fre q.	%	
Are you computer literate	82	8	18	1 8	-	-	100
Have you been trained in this library on how to use the OPAC to search for the materials you need?	27	2 7	73	7 3	-		100
Have you used the internet facility in the library?	44	4	54	5 4	2	2	100

Results from Table 4 showed that respondents who were computer literate were far more (82%), than those who were not (18%). Out of this number only 27% indicated that they have been trained on how to use the OPAC while 73% have not received the OPAC training.

Table 5: Use of Online Sources of Information

	Very Usefu	ı	Some		Not U	seful		
	Freq	%	Freq	%	Freq	%		
Please rate the usefulness of the information provided in the 'Encarta', internet	8					2		
and OPAC.			-		D			
Encarta	20	20	23	23	6	6		
Internet	61	61	17	17	3	3		
OPAC	26	26	25	25	8	8		
No Response	21	21	21	21	21	21		
Reasons why I like using the OPAC	Frequency			Percentage				
a. It is faster to use		49		49				
 I can obtain more information 		47		47				
 I find other sources of information 	42			Dec				
d. I choose any other information I want	O.	27		27				
e. I become more knowledgeable with information sources	38			*				
f. There is less effort involved while searching for a book	43			43				
g. it saves me much time when seeking for information	49				49			
h. No response		24			24			
		Yes			No		spor	_
Have you used the internet facility in the	Freq.		%	Freq.	%	Free		9/
library	44		44	54	54	2		2

The Changing Culture of Information Retrieval...

If yes, what specifically sear	ch fo		equency	y	Percer	itage	
from the internet	?						
 a. Literature 	fo	or					
research		22			22		
b. Completin	g m	у) Mean		
assignmen	t	30	1		30	1	
c. Mails		4			4	F	
d. Checking	for jobs	-			-	<	
e. Titles for							
topics		14			14		
f. Others		6			6		
14	Yes	0	No		No		
Do you usually find			OTE -	Response To			
this information	Freq.	%	Freq.	%	Freq.	%	
	46	46	28	28	26	26	100
If no, why a. I do not know how to use the system b. The time given is too short c. No	Freque 100 18	ency	3/2		10 18	ntage	
response	26				26		

Note. - percentage add up to more than 100% due to multiple responses

Table 5 shows uses of Online sources of information (Encarta, Internet and OPAC) by students/users. 61% found the Internet very useful. This was followed by those who found

the OPAC very useful (26%) and the Encarta ranked third with 20%. 21% of the respondents did not respond to the question.

Results further showed that students liked using the OPAC because it is faster to use and time saving when seeking for information, while 54% claimed they had not used the Internet facility in the library 44% used it. Result also showed that among those who used the Internet, 30% used it for completing their assignment. This was closely followed by those who used the Internet to search for literature for research. Those who used the Internet to check for titles for research, ranked third (14%).

A greater number (46%) of those who used the Internet found the information they sought after, while 25% indicated otherwise. Among those who said 'No ,18% indicated that the time was too short while 10% admitted that they did not know how to use the system.

Discussion

Result of the findings showed that only thirty eight percent of the students in the Faculty of the Social Sciences made use of the library everyday while forty nine percent visit the library three times a week. This agrees with Carlson's study (2002) where undergraduates stated that they spent one third of their time in the library. This indicates that students do really know the value of the library though some of them may not be able to visit everyday perhaps due to their lectures or various other reasons. The value these students attach to the use of the library can be seen on table 3. Students do enjoy using the Faculty library since according to them they can find the information they need most of the time and this includes the information which will help them understand more what is happening in their various fields of study (see table 3). This proved the vibrancy of the library and showed how the information service offered by the library staff affects the users positively.

The result of the study as seen in table 4 is also in line with Carlson (2002). According to him, the use of electronic resources varied from discipline to discipline. This could explain the differences in the utilization of information sources in the library by departments.

The information needs and information seeking behaviours of the respondents also support the fact that the students prefer the electronic sources of information. Daniel Greenstein, executive director of the California Digital Library, pointing to a related study by Carlson, stated that "the real change is a cultural one, and it seems users are telling us that it's all about access." In support of this also Jones (2007), asserted that electronic access to the catalogue data designing library items give many more points of access for finding materials. This is because summaries, notes and keywords are indexed searches. Studies also show that schools that have automated their libraries report that students actually checked out two or three times more items after automation than they did before automation. The reason is that searches are easier and quicker for students (Jones 2001).

The importance of Online Sources to students cannot be overuled as can be seen on table 7. The Internet plays a very major role in their research and helps them in completing their assignments, making additional notes, searching for literature etc. There seem therefore to be a liaison or co-operation developing between faculty and the library especially in terms of information literacy.

Some Challenges faced by the Faculty of the Social Sciences Library in Relation to information Retrieval and Use

Though the faculty of the Social Science library has improved in many ways there are still some problems which could be looked into or solved to make the library even better.

 More computers are needed in the library both for the OPAC and for Internet search.

- The time allotted for internet search (30 minutes) is too short for the students. The students complain very much about this.
- Electricity supply is not very constant and hence interrupts information search whenever there is power failure.
- Most of the users did not make themselves available for training on how to use the online sources during the session in the library. Repetitive sessions therefore become very necessary.
- The university Server which is the main server keeps breaking down thus Internet search is often stopped, interrupted or not available for days in some occasions.
- More Current textbooks and Online electronic sources (databases etc) could be provided for the library.

Attitudinal Problems

Some of the Users do not want to make use of the Online Public Access Catalogue (OPAC) while searching for information. They believe that it is not possible to find the information they need by making use of the OPAC. They prefer the book Catalogue instead. Literature has always proved that Users are not easily adaptable to change. They usually prefer using the old traditional method which they are used to. The attachment to searching for sources of information from Print sources (Catalogue cards, Book Catalogues etc.) is not unique to this group of users. Igbeka (2001) found this applicable to agricultural engineers while searching for information. Also Williams (1998), considered the reason for this type of information seeking behaviour to be mainly due to familiarity and conservative attachment to traditional sources. The policy for the usage of the internet in the Faculty library is mainly academic. The library Users are not allowed to utilize it for writing or receiving mails, or for recreational purposes e.g. playing games etc. The situation is however improving but they are still attached to the print sources as can be seen in the

Miller.

number of print sources requested each day compared to the number of online searches. Also despite the addresses of various Websites pasted in the Internet section of the library, the student still prefer print sources of information. They utilize the print sources and even photocopy pages and chapters from them more than the online sources. If left alone, the students would prefer searching for information from the print sources. It has been noticed by the library staff that users do not want to attempt searching or even undergo training on the use of online sources. But when they now understand and know how to use them, they prefer them to the print sources. The issue here is to get them to use the online facilities. This problem is mainly attitudinal, therefore the librarian sometimes has to persuade and sometimes even force the students to search with these information tools. A lot of improvement has been notices in recent times and it is our utmost wish that this trend continues. Williams (1998) reported that journalists, despite their exposure to the Internet in the U.K., fewer than 1 in 5 seek for information using the Internet. Williams therefore considered the reason for this as familiarity and conservative attachment to the traditional sources. Training, and time allotment of these information sources, and known benefits, can also influence usage pattern, attitude and number of users, and known benefits, can also influence usage pattern, attitude and number of users, especially with the categories of users - students and researchers, Librarians can also influence the use of library databases or online sources for specific class assignments, referring to online sources or specific databases on a library's welcome screen, or otherwise reminding users about a specific database (Tenopir and Read, 2000).

Recommendations

Based on our findings the following recommendations are hereby articulated:

- There is need for more computers, both for OPAC (Online Public Access Catalogue) search and for internet and ENCARTA searches.
 - The time allotment for Internet searches could be increased to one hour or more.
 - There is need for the provision of more electronic databases to provide easier access to information.
- 4. There is need for a good electricity generating plant to be purchased for the library because access to the automated system is unavailable to users when power fails.
- Lecturers should help sensitize stadents on the need to undergo library orientation. The Faculty should make the library instruction compulsory for all new students.
- The faculty management should look into the "server problems" so that it will be possible for the server to remain stable.
- More current textbooks should be provided for the students and staff.
- A tally system should be introduced for browsing the internet to eliminate queues.

Conclusion C

The library is a friend and an inevitable tool in any academic environment, thus the importance of the library as can be seen from the above results cannot be overemphasized. It is the "spinal cord" of any academic system, be it primary, secondary or tertiary institution. The faculty library being part of the faculty's academic system is supposed to meet the information needs of the members of the faculty. In the case of students, their information need/goal might be directed towards passing their examinations and excelling on their assignments. However, passing their examinations and carrying out their assignments requires more than utilizing the notes and information they are given in their respective lectures. They still

have to add other current information and read up other facts and information in order to really understand the subject. Students also have to know other scholars available in their field. Knowledge also cuts across boundaries and subject areas. It is only in an information centre/library you can find different sources of information, different backgrounds of knowledge and information that can eventually merge as one, forming the individual.

The academia can also benefit from the library. The library is a 'growing organism' which in most cases grows faster than the individual. The faculty of the Social Sciences library does not contain or store obsolete materials or information sources, anymore. Rather, it contains very current information sources especially in the six departments, it is meant to serve. The staff has to visit, search and utilize the information sources in order to know what to recommend to their students. This helps the students to be users of information sources and thus improve their various productivity levels.

The On-line facilities (Internet and Encarta) can be recommended by the lecturers to students by giving them assignments from various Websites. They could be asked to search recommended websites by their lecturers. This will facilitate the use of the On-line sources (see Jones).

The library is a friend and an inevitable tool in any academic environment.

References:

Bahurinska, J. Protection of Cultural heritage in Slovak Republic based on computerized documentation Slovak National Gallery, Riecna 1, 815 13 Bratislava Slovak Republic Downloaded 20th August 2007.

Beaumont J. and Cox J. (1989). Retrospective conversion: a practical guide for libraries.

- Carlson, Scott (2007) Students and Faculty Members turn to Online Library Materials before Printed ones, study finds:

 http://chronicle.com/free/2002/10/200210301t.htm.
- Goldfarb, Elizabeth k. (1999). Learning in a technological context. In Learning and libraries in an information age: Principles and practice. Stripling, Barbara, K (ed). Westport, Connecticut: Libraries Unlimited pp.83.
- Gredley E. and Hopkinson A.(1990). Exchanging bibliographic data: MARC and other international formats. American Library Association
- Guidelines for weeding library materials: http://www.sbac.-edu~media/quid weeding.html(downloaded 4/23/2007)
- Igbeka, J. U. (2001). Information seeking behaviour and Information Utilization as Correlates of Agricultural Engineers' productivity in Nigeria.

 (Unpublished PhD Thesis)
- Jones, W.D. Benefits of Automating the school Library Book Systems www.booksys.com Downloaded 4/23/2007.
- Lopatin, Laurie (2004) Review of the Literature: Technical Services Redesign and Reorganisation In: Innovation redesign and reorganisation of library technical services: Paths for the future and case studies. Edited by Eden, B.L. West Port, Connecticut: Libraries unlimited. P.3.
- Morris, Ane and Hilary Dyer (1998) Human aspects of library automation. 2nd ed. Aldershot, Hampshire, England.

The Changing Culture of Information Retrieval...

- Prytherch, R. (2005) Harrod's librarians' glossary and reference book: a dictionary of over 10,200 terms, organizations, projects and acronyms in the areas of information management, Library science, publishing and archive management 10th ed. Aldershot, England: Ashgate Publishing Limited.
- Tan, Wendy (2003) Academic Librarians as caring knowledge managers: Are we there yet? In Expectations of librarians in the 21st century. Westport Connecticut: Greenwood Publishing Group, Inc. p145-212p.
- Taylor, A.G. (2004) The organization of information. 2nd ed. West Port, Connecticut Libraries Unlimited 119p.
- Tenopir, Carol and Read, E. Patterns of Database Use in Academic College and Research Libraries May 2000 vol. 51 no. 3 pp 234-248.
- Totterdell, Anne (2005) An introduction to library and information work. London: Facet Publishing.
- Turner, John (1992) Out of print books Edited by Pearce Michael in Non-Standard Collection Management. Aldershot Hants, England
- Williams P. (1998). Journalists: Note true to type. *Library Association Record* 100(2) p. 84.85. p. 36 54.