



THE LIBRARIANS' ROLE IN EQUIPPING THE STUDENTS TO UTILIZE THE DIGITAL LIBRARY: A CASE STUDY OF UNIVERSITY OF JOS LIBRARY

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ABSTRACT

This research was designed to investigate the librarians' role in equipping the students to successfully utilize the 21st Century digital library, using University of Jos library as a case study. Survey research design was adopted for this study. The instrument used for data collection was questionnaire. There were two sets of questionnaire; the first set was for the librarians while the second set was for the undergraduate students. Using simple random technique, 20 and 600 copies of questionnaire were randomly distributed amongst the librarians and undergraduate students respectively. After which 17 and 588 copies were filled, returned and found suitable for use, representing 85% and 98% response rate. The questionnaires were later categorized and analyzed using frequencies, percentages and tables. The findings of the research revealed that about one third 204(34.69%) of the undergraduate students in University of Jos did not know about the existence of the University of Jos digital library. Furthermore, from the research it was also discovered that although most of the undergraduate students 498(84.69%) were computer literate; they still required additional ICT skills to successfully utilize the digital library. The study recommended, amongst others, the need for the students to be sensitized on the existence of the digital library and the introduction of ICT topics into the "Use of library" course outline.

Keywords: digital library, 21st Century, equipping, librarians, students, utilize

Introduction

Due to the new Information and Communication Technology (ICT) trend, the library in the 21st Century is undergoing a gradual transformation from the usual traditional library where materials are stored in a physical structure to a digital library where materials are stored electronically. A digital library is a managed collection of information, where the information is stored in a digital or electronic format and is accessible over a network, Arms (2005). Students in an academic environment cannot do without a library and since the library is presently transforming, the students must also adapt to this transformation. It is the duty of the librarians to adequately equip the students to utilize the 21st Century digital library. If not, the electronic resources put in place for their academic works will not be fully utilized, thus, defeating the aim of establishing the digital library. On the other hand, the students' academic performance will also not measure up to standard; this will in turn have an adverse effect on the growth and development of the country. Hence, there is the need for the librarians to equip the students to utilize the 21st Century digital library.



Background to the Study

The University of Jos library was established in February 1972 and is presently divided into three broad units: Administration and Systems unit, Subject Libraries and Support Service. Like other traditional libraries, the University of Jos library has a physical structure which houses 169, 404 volumes of books, 25, 824 bound journals and 20,263 materials in the document section. The library also has a seating capacity of about 1, 869 for its users. With the emergence of Information and Communication Technology (ICT), the library through the Administration and Systems unit has put in place 2 computer laboratories with about 80 computers and free internet service. In 2002, the Wider Net Project Team from the University of Iowa (USA) established the e-granary digital library in the University of Jos. Later an Institutional Repository was established, then in November 2010 the library successfully launched its Online Public Access Catalogue (OPAC). Presently, the library has digitized its list of serial collection and is in the process of digitizing the records in the Circulation unit. The theses and dissertations in the documents section are also being digitized into the Database of African Theses and Dissertations (DATAD). Finally, the library subscribes for some important databases such as HINARI, JSTOR, AGORA and OARE which are accessible through user name and pass word that could be obtained from the various subject librarians. All the e-resources contained in the digital library are usually updated regularly and the library intends to acquire more as time goes on.

Statement of the Problem

Most academic libraries worldwide are gradually digitizing their resources due to the new trend in ICT. University of Jos is also digitizing its library resources to meet up with the new trend. Although, there are still hard copies of resources in the shelves, the library has an e-granary, Institutional Repository, Open Access Resources and some subscribed databases such as HINARI, JSTOR, AGORA and AORE. The theses and dissertations in the documents section are also being digitized. Some of the benefits of using a digital library include easier and faster access to resources, availability of current issues and the ability to access resources remotely without necessarily visiting the library physically. It was observed that the present "Use of Library" course outline does not have a single topic on ICT that teaches students about the e-resources in the digital library and how to search for them. It was also observed that although the library had organized sensitization on e- resources to academic staff, none had been done to the students; hence the students were completely in the dark about the utilization of the digital library. Thus this research was carried out to investigate the role of the librarians in equipping the students to successfully utilize the 21st Century digital library, using the University of Jos library as a case study.

Objectives

The objectives of the study were to:

1. evaluate students' awareness of the existence of the digital library and their competence on its utilization;
2. highlight the need to equip the students to successfully utilize the digital library;
3. identify the basic steps needed to be taken by the librarians to adequately equip the students;
4. identify the basic skills required by the students to successfully utilize the digital library;



5. determine the constraints librarians may encounter in equipping the students.
6. suggest the way forward.

Review of Related Literature

Akintunde (2006) discovered in his research that Ahmadu Bello University Zaria, Bayero University Kano, University of Ibadan, Obafemi Awolowo University Ife, University of Jos and University of Port Harcourt libraries were making some significant changes from manual to a fully digitized library. His findings corroborated the works of Idowu and Mabawonku (1999) who also discovered in their research that the application of Information Technology is gradually taking roots in Nigerian Libraries. Youngok (2006) found that the change in the nature and role of libraries in the digital environment had equally brought about the need for the development and acquisition of new skills and competencies. He further opined that without well-educated digital librarians, the digital libraries cannot reach their full potential. Chavan (2012) also found that the digital age had brought a tremendous change in the way information is stored and accessed. He further stated that this change had also redefined the concept of librarianship, their collections and services .In separate works,

Fadehan et al (2010) and Julien (2002) also discovered that library users needed additional knowledge and skills in digital education to be able to cope with the 21st Century digital environment. Other related literature include the works of Ezeala et al (2011) and Yemi Peters (2011) who evaluated the need for the 21st Century librarian to be competent in training students on internet use, search engines, online databases, catalogues, access to e-journals and online tutorial. The present study focuses on library users acquiring the ICT skills that are required to utilize the digital library. One of the ways the users can acquire such skills is from the already trained librarians. At the moment, the University of Jos librarians are fairly competent in ICT skills due to the numerous in-house trainings and workshops they have attended on ICT. Hence, there is the need to also impart this knowledge to the students who form the majority of the population that use the library.

Research Method

Survey method was used for the study with structured questionnaires as instrument for data collection. The questionnaires were pretested before being administered to the respondents. The respondents for the study comprised of librarians and undergraduate students of the University of Jos, Nigeria. There were two sets of questionnaire. The first set was for the librarians, while the second for the undergraduate students. The validated questionnaires were distributed to 20 librarians and 600 undergraduate students during their library use. After which 17 and 588 duly completed copies of the questionnaires were retrieved and used for data analysis, representing 85% and 98% response rates respectively.

Results and Discussions

The data gathered from the research instrument were analyzed using frequency counts, percentages and tables.

Table 1: Computer Literacy of Respondents

N= 588

Response	Frequency	Percentage (%)
Yes	498	84.69
No	90	15.30
Total	588	100

Table 1 shows the number of students that are computer literate and the number that are not. From the table, majority of the respondents 498(84.69%) admitted that they were computer literate which was quite impressive. Although 90(15.30%) respondents admitted that they didn't know how to operate the computer. This was not surprising, because in most developing countries like Nigeria, due to insufficient basic social amenities like electricity; not all students have access to electronic devices like the computer. Some students dwell in rural areas where there is neither electricity nor computer.

Table 2a: Awareness of the University of Jos Digital Library

N=588

Response	Frequency	Percentage (%)
Yes	384	65.30
No	204	34.69
Total	588	100

Table 2 shows the awareness of the digital library amongst undergraduate students. From the table, it could be seen that 384(65.30%) respondents knew about the University of Jos digital library, while 204 (34.69%) respondents did not know about the digital library. From this result, it could be deduced that about one third of the students did not know about the existence of the University of Jos digital library, which implies that they had never consulted the e-resources put in place for their studies and researches.

Table 2b: Frequency of Utilizing Resources in the Digital Library

N=384

Response	Frequency	Percentage
Very often	54	14.0
Often	108	28.1
Rarely	180	46.8
Not at all	42	10.9
Total	384	100

Table 2 shows the degree of the digital library utilization by the undergraduate students. 180 (46.8%) respondents indicated that they rarely utilize resources in the digital library, while 108 (28.1%) respondents indicated that they often utilize the digital library. Only 54 (14.0%) of the respondents utilize the digital library very often, while 42 (10.9%) do not utilize the digital library at all. This finding is disappointing because the library in collaboration with the University management had spent a lot of time, energy and money to establish the digital library for the academic staff and students to utilize the e- resources for teaching, studies and research. If



majority of the students 180 (46.8%) rarely utilize the resources in the digital library, then the aim of establishing the digital library has been defeated.

Table 3a: Basic ICT Skills Required to Utilize the Digital Library

N= 588

Response	Frequency	Percentage (%)
Yes	96	16.32
No	492	83.67
Total	588	100

Table 3 shows the students' knowledge of the basic ICT skills. From the table, it could be seen that 96 (16.32%) respondents indicated that they had the basic ICT skills needed to utilize the digital library, while majority of the respondents 492(83.67%) indicated that they lacked the skills. This finding revealed that although the students knew how to operate the computer, they still needed additional ICT skills to utilize the digital library.

Table 3b: Source of training (if answer to question 3a is yes)

N = 96

Source of training	Frequency	Percentage (%)
Training offered by my faculty/department	-	-
Through workshops/ seminar	-	-
By trial and error	24	25
Self-study (user's guide)	42	43.7
Assistance from fellow students	30	31.2
Total	96	100

Table 3b shows the source of training by the students. From the table, it could be seen that self-study 42 (43.7%), assistance from fellow students 30 (31.2%), trial and error 24 (25%), were the major means through which the few respondents 96 (16.32%) in table 3a above acquired training on ICT skills.

Basic ICT Skills Required by Students

The basic ICT skills required by the students to successfully utilize the digital library include:

- i. Word processing skill: For the students to be able to utilize the digital library, they must have a fair knowledge of how to operate the computer especially the aspect of word processing. This is because the computer is the main device needed to utilize the digital library. Without being computer literate, it is impossible for the students to use the 21st Century digital library.
- ii. Computer- Related Storage Devices Knowledge: The students should know how to store data using storage devices such as disks, CDs, USB drives, zip disks, DVDs etc.
- iii. Web navigation skill: This is the ability to search effectively for data on the internet using search engines such as Google, Yahoo and Alta vista. Ability to use key words and Boolean operators for searches, interpreting information from a website, citing electronic references etc.



- iv. E-mail management skill: This is the ability to use e- mail to communicate, send attachments, create e-mail folders etc.
- v. Downloading software from the web: This is the ability to independently download software such as e- books and e- journals from the web and know major sites that can be used for this purpose.
- vi. File management and windows explorer skill: Students should be able to manage their computer files by understanding how to create files and folders, delete files and folders, move and copy files and folders using My Computer windows and windows explorer.
- vii. Electronic presentation skills: Students should be able to give electronic presentations using power point and they should be able to hyper link to images or websites from the slides. In addition, the students should be able to develop confidence and audience engagement in the course of their presentations.
- viii. Video conferencing skills: Students should be able to understand the basics of learning through video conferencing.
- ix. Educational copyright knowledge: Students should be able to know about the rights to be credited for a work, consequences of violating copy right laws in academics, the importance of citing sources, how to cite electronic references etc.
- x. Computer security knowledge: This is the ability to prevent and detect unauthorized use of a computer owned by an individual, ability to protect ones computer from virus, prevention of data loss, scanning of storage devices before usage, security from unplanned and natural disaster etc.

Table 4: Need to equip the students

Key: SA= Strongly Agree, A=Agree, D=Disagree, SD= Strongly Disagree

N= 17

S/N	The need to equip the student	SA(%)	A(%)	D(%)	SD(%)	Total(%)
1.	For improved academic performance.	11(64.7)	6(35.2)	-	-	17(100)
2.	For independent searches.	8(47.0)	9(52.9)	-	-	17(100)
3.	To acquire lifelong skills.	14(82.3)	3(17.6)	-	-	17(100)
4.	The digital library is easier and faster to access and is usually updated regularly.	10(58.8)	7(41.1)	-	-	17(100)
5.	Students already know how to use the digital library.	-	-	12(70.5)	5(29.4)	17(100)

Table 4 shows the need for the librarians to equip the students. Result from table 4 shows that majority of the respondents strongly agree that if the students are adequately equipped to utilize the 21st Century library their academic performances would improve greatly 11 (64.7%). Furthermore, majority of the respondents 9(52.9%) also agree that the students need these skills to carry out independent searches. The respondents 14(82.3%) also agree strongly that these skills if acquired would be lifelong skills which would assist the students greatly in their future



endeavors. Furthermore, 10(58.8%) respondents agree that the digital library has great advantage because it is easier and faster to access; it can be accessed remotely and is usually updated regularly. On the other hand, majority of the respondents 12(70.5%) strongly disagree that the students already know how to use the digital library.

Table 5: Steps Required to Equip the Students for the Digital Library

Key: SA= Strongly Agree, A= Agree, D=Disagree and SD=Strongly Disagree

N =17

S/N	Basic steps needed to be taken by the librarians	SA (%)	A (%)	D (%)	SD (%)	Total (%)
1.	Introduction of topics on ICT into the “Use of library” course outline.	17 (100)	-	-	-	17 (100)
2.	Librarians should practically demonstrate to the students using computer and internet how to use the digital library when teaching the “Use of Library” course.	8 (47.0)	8 (47.0)	1 (5.8)	-	17 (100)
3.	Whenever there is a new development in the library, librarians should sensitize the students immediately.	6 (35.2)	11 (64.7)	-	-	17 (100)
4.	The present course outline should not be reviewed.	-	-	14 (82.3)	3 (17.6)	17 (100)

In table 5, all of the respondents 17 (100%) strongly agree that topics on ICT should be introduced into the “Use of library” course out line. Further, 8(47.0%) and 8(47.0%) respondents strongly agree and agree that there is need to demonstrate practically to the students using computer and internet how to utilize the digital library. 11(64.7%) respondents also agree that whenever there is a new development in the library, the students should be sensitized immediately about it. But majority of the respondents 14 (82.3%) disagree that the present course outline should be maintained.

Table 6: What are the constraints librarians may encounter in equipping the students?

Key: SA=Strongly Agree, A= Agree , D=Disagree and SD=Strongly Disagree

N =17

S/N	Constraints librarians may encounter	SA (%)	A (%)	D (%)	SD (%)	Total (%)
1	Fluctuating internet network/ lack of modems	17(100)	-	-	-	17 (100)
2	Insufficient electronic devices.	-	2(11.7)	12(70.4)	3(17.6)	17(100)
3	Irregular power supply	-	-	10(58.8)	7(41.1)	17(100)



4	Librarians encountering difficulties in getting a convenient time and date from the various faculties for practical demonstrations.	11(64.7)	5(29.4)	1(5.8)	-	17(100)
5	Lack of enough man power.	2(11.7)	15(88.2)	-	-	17 (100)

In table 6, the respondents strongly agree that fluctuating internet network/ lack of modems 17 (100%) were among the constraints they may encounter. They also agree that getting a suitable time and date from their various faculties on when to practically demonstrate to the students may also be a constraint. Majority 15(88.2%) of the respondents also agree that manpower is a constraint. However, 10(58.8%) and 12 (70.4%) respondents disagree that irregular power supply and insufficient electronic devices are constraints .This could probably be so because the library has a standby generator , a large computer laboratory with about 80 workstations and enough projectors to carry out practical demonstration.

The Way Forward

1. Librarians should sensitize the students about the existence of the digital library; this will create awareness amongst them.
2. ICT topics should be introduced into the “Use of Library” course outline, this will enable librarians to teach the required skills needed to utilize the 21st Century digital library to the students.
3. Practical demonstrations of how to utilize the digital library should be done to the students by the librarians, this will make the students to learn faster.
4. Librarians should also liaise with the different faculties to fix convenient time and date for practical demonstrations.
5. The library should also acquire modems that could be put into use during demonstrations when there is no network from the server.
6. The free internet service in the library encourages students to visit the library for browsing.

Nevertheless, more effort should be put in by the library management to stabilize the internet service .If this is done, many students will be encouraged to utilize the digital library when fully equipped.

Conclusion

The emergence of the new ICT trend has brought about a great change and development all over the world. In the library, ICT has brought about a transition from the traditional library to the digital library. Although in developing countries like Nigeria, this transition is gradual. Nevertheless, in the foreseeable future; the digital library may dominate the traditional library. Since the students cannot do without the new library which is digital, there is need for them to be taught how to utilize it. Therefore, they need to be taught how to use the computer and browse the internet very well. These are the basic skills required to utilize the digital library. Unless this is done, their academic performances may not measure up to standard and when they eventually graduate, they may be unemployable. Hence it is imperative for the students to acquire the basic skills required to utilize the 21st Century digital library.



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