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Full Length Research

Challenges Facing Undergraduate Students in the Use of Digital Library Resources in Dr. Aliyu Obaje Library, Kogi State University, Anyigba, Kogi State

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The study investigated the challenges facing undergraduate students in the use of digital library resources in Dr. Aliyu Obaje Library, Kogi State, Nigeria. This study adopted descriptive survey research design. The study was conducted in Kogi State University, Anyigba, Kogi state of North-Central geopolitical zone of Nigeria. The sample for the study comprised one hundred and thirty-nine (139) undergraduate users in the university under study. Simple sampling technique was employed to select respondents for questionnaire distribution. The instrument used for the collection of data was a structured questionnaire and thereafter the copies of the final version of the questionnaire were administered with the help of research assistant to undergraduates of the library as at the time of administration. The data obtained for this study were analyzed and presented based on the research questions that guided the study. Descriptive statistics was used to answer all the research questions. The questions were analyzed using the Likert scale. Out of 139 questionnaires distributed, only 112 were duly completed and returned. This shows 80.6% return rate. The study concluded that certain problems affect the use of digital library resources such as inadequate budget for digital resources, inadequate ICT infrastructure, lack of up-graded ICT skill level of users, software and hardware problems such as network access challenges, inadequate electricity supply, and high cost of airtime and slow speed of server. The study also proffered solutions to these challenges.

INTRODUCTION

Digital library resources supply all the information that a library provides through computer network. These include electronic books, electronic journals, bibliographic databases, library web pages articles from magazines, encyclopaedias, pamphlets and other resources that are accessed on electronic devices. Oduwole and Akpati

(2003) noted that CD-ROM, electronic mail and Internet browsing constitute electronic resources. According to Ukonu (2012), "Digital libraries are increasingly becoming part of school systems in many countries in Africa. Even though Africa is reputed to be a latecomer in the adoption of ICT in education, the continent is making strides to tap the benefits of ICT driven-education sector and a good part of the stride is to find out the challenges faced by the

prime beneficiaries of technology". No doubt, digital libraries are faced with different challenges but efforts should be made to overcome such problems that are being encountered. Since digital libraries are saddled with multimedia and information based services necessary for teaching and learning, attention should be given to provision of effective service delivery that can benefit users.

Madondo (2017) posited that electronic information forms an integral part of libraries assisting users in learning, teaching and research. Digital resources are invaluable research tools that complement the print-based resources in a traditional library setting". There are great functions that digital or electronic information resources perform in areas of academic support programmes of learning and research.

The integration of e-books in academic libraries is beneficial as they are remotely accessible and available around the clock, they are e-resources that enable academic libraries to benefit from shared, stored and easier integration to virtual learning environment, users readily benefit because of the wide range of information resources. According to Hawthorne (2008), the library profession recognised early in the development of computer technology the potential of computers to make library resources more accessible. Librarians were often enthusiastic and sometimes early adopters of technology. The use of electronic resources in libraries began with the development of the Machine Readable Cataloguing (MARC) format in the mid-1960s a full 30 years before the advent of the wold wide web, bibliographic databases became available at that time. During the microcomputer revolution of the 1980's, libraries acquired software and data on diskettes and offered databases on acquired CD-ROM. Problems associated with the implementation of ICT projects in Nigerian higher institutions namely a general lack of project-management skills unstable electric power supply and tendency to invest in equipment rather than human capacity. Indeed, reasons abound for the development of libraries to meet the expectations of modern digital libraries that can support teaching, learning and research.

However, the development of digital libraries in tertiary institutions in Nigeria is faced with numerous challenges. These problems range from lack of fund, shortage of manpower, low level of electricity supply, constant computer breakdown, inconsistent training of staff, lack of sufficient materials and necessary required equipment for operation affect the information needs, use and seeking behaviours of undergraduate students.

Thus, these problems have slowed down the activities of Nigerian tertiary institutional libraries in utilizing the global information and technological innovations for the services of their clienteles or users. It is against this backdrop that the study seeks to investigate the challenges facing undergraduate students in the use of digital library resources in Dr. Aliyu Obaje Library, Kogi State University, Anyigba.

PURPOSE OF THE STUDY

The general objective of this study is to investigate the challenges facing undergraduate students in the use of digital library resources in Dr. Aliyu Obaje Library, Kogi State University, Anyigba. It has the following specific objectives:

1. access the availability of digital library resources in Dr. Aliyu Obaje Library
2. find out problems facing undergraduate students in the use of digital library resources in Dr. Aliyu Obaje Library
3. suggest possible ways of solving problems facing the use of digital library resources by undergraduate students in Dr. Aliyu Obaje Library

RESEARCH QUESTIONS

Based on the objectives of the study, the following questions will guide the study:

1. What are the available digital library resources in Dr. Aliyu Obaje Library?
2. What are the problems facing undergraduate students in the use of digital library resources in Dr. Aliyu Obaje Library?
3. What can be done to solve the problems facing undergraduate students in the use of digital library resources?

REVIEW OF RELATED LITERATURE

Digital information resources are very important to the university setting and most especially in the academic libraries. University libraries house the intellectual contents of institutions. The efforts to digitalize the intellectual property is what is called digitalization. According to Urgiewu (2014), the aim of digitalizing library materials is for preservation and easy access students, researchers and other users. In this era known as information age, seekers of knowledge need to have access to information resources that come in various forms, this is made possible by the provision of digital resources. In the words of Madondo (2017), electronic resources refer to the materials that require computer access whether through a personal computer mainframe or smart technologies, students are increasingly expected to use electronic resources while at the university. Some of the resources include e-books and journals among others.

According to Aditya (2013), the use of digital

information resources and services in the university libraries, electronic resources can be classified as E-journals, E-books, E-databases, CDs & DVDs, E-theses and dissertations, E-reference sources, E-magazines and E-newspapers. Digital libraries manage environment of multimedia materials in digital form, they are designed for the benefit of its user population, structured to facilitate access to its content and equipped to search global network of information resources. According to Ankral et al (2017), digital information resources satisfy the unique needs of students, faculty and research scholars faster and at much low cost than borrowing or purchasing low cost because they are readily available online and the delivery of the resources virtually to desktop. Electronic resources have the potential power to increase students learning opportunities because of the interactive and multimedia components provided by the electronic media which offers multiple learning experience more than the print documents. Students can easily access, experience and learn diverse content without facing much difficulty in accessing and understanding.

Over the years, libraries in Nigeria have remained deficient in stocking relevant books and literature particularly in the academic institutions. This was partly why the digital library became a veritable alternative to providing students with access to educational material. Ya'u (2003) notes, however, that poor ICT infrastructure, inadequate ICT skill and the financial implication of connectivity and access to electronic database are a hindrance to use of ICT.

Academic libraries that have stock of digital resources tend to face some enormous problems that may be due to Ankrah (2017) quoting Ming-der (2012) revealed that students encountered some problems that included inability to retrieve relevant materials, especially when searching by keywords, internet connections to access library resources and text articles were not complete because libraries did not subscribe to the journals.

In spite of the immense benefits derivable from the utilization of online information resources, problems still abound. Such challenges are lack of awareness, inability to have the required knowledge of how to use the e-resources, inadequate computer system, poor internet connection, lack of guidance on use of electronic resources, lack of experts and non-payment of subscription. Similarly, Enakrire and Onyenania (2007) outlined challenges hampering users' access to electronic resources such as financial constraints, lack of training on how to browse the internet, knowledge of websites and problems associated with searching of information on the internet. Buttressing the above, Dadzie (2005, P. 295) indicated that lack of access to electronic sources, inadequate knowledge of usage and inability to acquire the necessary skills that are required to use these resources.

Digital resources are expected to be preserved in order to have long lasting effects and durability. According to

Jewell (2011), recording media for digital materials are vulnerable to deteriorating and catastrophic loss and even under ideal conditions, they are short lived relative to traditional format materials. All digital resources if not well preserved will not last long and surely there must be prevailing challenges that hamper effective use of electronic resources.

Greenstein (2001) observed that the challenge is the absence of established standards, protocols and proven methods for preserving digital information. Preservation of digital resources is essentially important in ensuring effective use of these information sources. Greenstein (200) also viewed ICT infrastructure is an impediment to access of information as libraries need to enhance and upgrade current ICT architecture to accommodate digital materials especially with the rapid changes in technology. Infrastructural facilities that are lacking may definitely pose greater challenge to digital resources utilization in libraries.

Ogunsola (2005) averred that Nigeria libraries especially in the universities are faced with problems in their attempts to computerize their library operations. The shortage of manpower, lack of spare parts, low level of electricity supply and constant breakdown of computers. All these have slowed down the activities of Nigerian university libraries in utilizing the global information and technological innovations for the services of their clienteles. There are other challenges of skills acquisition that are computer based or compliant without which users may not be able to search on the internet, low connectivity to the internet, and lack of project management skills in the aspect of computer handling. Collaborating this, Aduwa-Ogiegbaen (2005) posited that computer teaching and learning be properly integrated in Nigeria. Inadequate funding and financing of education constitute a major problem.

METHODOLOGY

The research design adopted in this study is a descriptive survey. This method is considered appropriate because of its flexibility which permits the use of a variety of data collecting techniques such as questionnaire, interview and observation. However, the study covered Dr. Aliyu Obaje Library which is the academic library of Kogi State University, Anyigba, Kogi State. Therefore, the population for this study consists of undergraduate library users in the university under study. According to Library Statistics for 2017/2018, the total number of undergraduate users in this university is 1, 391.

The sample size for the study comprises 139 representing 10% of the 1,391 population of undergraduate library users in Dr. Aliyu Obaje Library. The simple random sampling method was used to select ten (10%) of the total population for the study. Osuala (2005) stated that simple random sampling method is the

Table 1: Observation checklist result on available digital library resources in Dr. Aliyu Obaje Library

S/N	Digital library resources	A	NA
1.	Computer servers	√	
2.	Printers (laser jet etc.)	√	
3.	Office applications	√	
4.	Microsoft Office application	√	
5	Web Browser	√	
6	Internet services	√	
7	Bibliographic databases	√	
8	Full-text databases		√
9	e-books	√	
10	e-journals	√	
11	Telephones	√	
12	Library website	√	
13	OPAC	√	
14	Local Area Network (LAN)	√	
15	Reprographic machines		√
16	Scanners	√	
17	Photocopiers	√	

Key: A-available, NA- Not Available

method that ensures that each element in the sample has equal chance of being selected. There is no preferential choice of any element because each has the same probability of being included. This sample technique was used only for selecting the undergraduate students from the institution. The instruments used for the collection of data was structured questionnaire and thereafter the copies of the final version of the questionnaire were administered with the help of research assistant in school to undergraduate students of the library as at the time of administration. The data obtained for this study were analysed and presented based on the research question. Descriptive statistics (mean) was used to answer all the research questions. Using the Likert scale for the mean analysis, any factor with a mean of 2.50 and above indicated agreement while those with mean less than 2.50 indicated disagreement. Out of 139 questionnaires distributed, and 112 were duly completed and returned. This shows 80.65% return rate. Analysis was based on this number.

Data Analyses

Research question 1: What are the available digital library resources in Dr. Aliyu Obaje Library?

From table 1, the findings arranged according to the university library investigated, revealed that out of the (17) items listed, (15) items are available and functional in KSU library, while (2) are Not available in the library. Facilities and equipment such as computer servers, Printers (laser jet etc.), office applications, Microsoft office application, web browser, internet services, bibliographic databases, e-books, e-journals, telephones, library website, web OPAC, local area network (LAN), scanners, and photocopiers are available for use in the library. While reprographic machines, Full-text databases are not available.

Research question 2: What are the problems facing undergraduate students in the use of digital library resources in Dr. Aliyu Obaje Library?

The table 2 shows the problems facing undergraduate students in the use of digital library resources in Dr. Aliyu Obaje Library. Responses show the mean value ranging from (2.8) to (3.5), all of which agree that there are problems affecting the use of digital library resources amongst undergraduate students. These problems range from inadequate budget for digital resources, inadequate ICT infrastructure and inadequate ICT qualified staff in libraries. It also includes software and hardware problems such as network access problem, inadequate electricity supply, high cost of airtime and slow speed server.

Research question 3: What can be done to solve the problems facing undergraduate students in the use of digital library resources?

Table 2: Respondents view on problems facing undergraduate students in the use of digital library resources

S/N	Problems facing undergraduate students in the use of digital library resources	SA	A	D	SD	Total	Mean score X=∑X/n	DECISION
1.	Inadequate budget for digital resources	57	47	6	2	112	3.5	A
2.	Inadequate ICT infrastructure	56	45	9	2	112	3.4	A
4.	Low ICT skill level of users	53	42	13	4	112	3.2	A
5	Inadequate ICT qualified staff in libraries	55	43	8	6	112	3.1	A
6	Network access problem	55	43	11	3	112	3.3	A
7	Hardware problem	52	41	9	10	112	3.0	A
8	Software problem	55	43	8	6	112	3.1	A
9	Inadequate electricity supply	55	43	8	6	112	3.1	A
10	Difficulty of locating useful websites for research	55	43	11	3	112	3.3	A
11	Slow speed of server	50	39	13	10	112	2.9	A
12	High cost of airtime	49	38	14	11	112	2.8	A

Key: SA-Strongly Agree, **A-**Agree, **D-**Disagree, **SD-**Strongly Disagree

Table 3: Respondents view on the strategies for solving the challenges facing undergraduate students in the use of digital library resources

S/N	Solutions to the problems facing undergraduate students in the use of digital library resources	SA	A	D	SD	Total	Mean score X=∑X/n	Decision
1.	Provision of adequate ICT infrastructure	58	47	5	2	112	3.6	Accepted
2.	Adequate funding	57	47	6	2	112	3.5	Accepted
3	Training of library users on ICT use	57	47	6	2	112	3.5	Accepted
4	Provision of adequate electricity supply with back-up power plant	58	47	5	2	112	3.6	Accepted
5	Institutional subscription to useful websites	58	47	5	2	112	3.6	Accepted
6	Reduction of tariff on access time	55	43	11	3	112	3.3	Accepted
7	Provision of functional digital library equipment	58	47	5	2	112	3.6	Accepted
8	Upgrading the speed of servers regularly	59	47	2	5	112	3.7	Accepted

Key: SA-Strongly Agree, **A-**Agree, **D-**Disagree, **SD-**Strongly Disagree

The table 3 shows the strategies needed to resolve the problems militating the use of digital library resources in Dr. Aliyu Obaje Library. The data in table 3 show a mean score of (3.6) in favour of adequate provision of ICT infrastructure, others are adequate funding, and training of users on ICT use, all of which are reflected in the mean scores of (3.5) and (3.5). It further reveals the mean scores of (3.6), (3.6), (3.3), (3.6), and (3.7) all of which support the provision of adequate electricity with back-up power plant, institutional subscription, reduction of tariff on access time and upgrading the speed of servers regularly.

DISCUSSION OF FINDINGS

The result of the finds revealed that the following digital resources are available in Dr. Aliyu Obaje library. They include: e-books, e-journals, telephones, library website, web OPAC, are available for use in the library. While reprographic machines, Full-text databases are not available. Oduwole et al (2003) in a similar study identified the following as digital resources available in Nigerian university libraries: OPAC, CD-ROMs databases, e-mail and internet browsing. However, the finding negates the study by Gbaje (2007) who noted that most university libraries in Nigeria do not have available digital resources for their patrons. However, it is imperative to not that the availability of digital library resources for users will go a long way in making university libraries to be more relevant to their users as well as be up to date so they can handle effectively the ever growing information need of their users.

Constraints to students effective use of Digital Resources in the University Libraries are inadequate budget for digital resources, inadequate ICT infrastructure, lack of up-graded ICT skill level of users, software and hardware problems such as network access challenges, inadequate electricity supply, and high cost of airtime and slow speed of server affect the use of digital library resources among undergraduates in universities. In the same context, Daniel, Oketunji, Okojie &

Abdulsalam, (2003) noted in their study on forty years of Information and Communication Technology (ICT) of Library Services in Nigeria, which covered 50 libraries in Nigeria. Outlined the following problems as hindrance towards ICT use: occasional breakdown; NEPA; obsolete equipment; lack of maintenance; lack of technical support; lack of adequate training.

However, some of the strategies that can be used in addressing the problems facing undergraduate students in the use of digital library resources range from the provision of adequate infrastructure, adequate funding, training of library staff on ICT use, provision of adequate electricity with back-up power plant institutional subscription, reduction of tariff on access time and up-grading the speed of servers regularly. This is collaborated by Adeniji, Adeniji and Oguniyi (2010) who are of the opinion that the problem of power outage should be addressed; adequate funding should be made available; the university library management should imbibe the culture of manpower development programme on ICT regularly for her work force and users; ensure that the amount charged for the use of ICT resources in the library is cheaper than others cybercafé within the university community so as encourage library users in using the ICT resources within the library premises.

IMPLICATIONS TO UNDERGRADUATES

The study has revealed that the Digital Library Resources are used to low extent by undergraduates in Dr. Aliyu Obaje Library. The implication is that undergraduates that utilized digital information resources to low extent will lag behind in their research, learning and assignment process in this digital age. The students could not compare themselves with other institutions of higher learning that use digital library resources to a very great extent. The University library where the students use digital library resources to low extent also could be regarded as traditional library because they have not incorporated full digital infrastructures and equipment for digital information resources which will be utilized by undergraduates in their studies. The study also reveals that there are numerous factors that hinder undergraduates to have access to digital library resources.

CONCLUSION

Based on the analysis and discussion of the results of this study, the below conclusion are drawn with reference to the research question. The findings of the study revealed that most of the digital library resources are available in Dr. Aliyu Obaje Library. The study further discovered that certain problems affect the use of digital library resources. These are inadequate budget for digital

resources, inadequate ICT infrastructure, lack of up-graded ICT skill level of users, software and hardware problems such as network access challenges, inadequate electricity supply, and high cost of airtime and slow speed of server.

To curb the aforementioned identified problems, the study suggested that the university library and their parent institution should provide adequate ICT facilities and infrastructure, parent institutions and government should provide adequate funding for training of staff and users; provide constant electricity supply by making available back-up power plants; institutional subscription to make access to information online free for users; government, donor agencies, non-governmental organizations and individual should be encouraged to intervene and support university libraries with funds to improve and maintain digital library resources.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made:

1. It was argued that lack of skills to access digital library resources hinder undergraduate students to make use of e-resources therefore, the researcher suggests that management of the university library in the study should try to train their students in up- to-date 21st century skills of Information Communication technologies (ICTs). This will help to solve the problems of ICTs skills among undergraduates.
2. It was also argued that lack of fund hinder the digital library resources availability therefore, the researcher suggests that university management of institutions either Federal or State should provide enough funds, that is government should vote a reasonable amount of fund to education, especially the library system, this will enable the library management buy all infrastructure and well equipment needed for digital library to work effectively and efficiently.
3. Effort should be made by the University and library management of both federal and state universities to minimize the challenges faced by undergraduates to access digital information resources.
4. Finally, there is need for university authorities to make adequate and constant provision on electricity supply to the library. They can achieve this by making available back-up power plants.

REFERENCES

Aduwa-Ogiegbaen E.S and Iyamu S.O. (2005). Using information and communication technology in Secondary schools in Nigeria: problems and prospects. Retrieved from *httpp.//www.ifets.info/journals*

Daniel, J.O., Oketunji, I., Okojie V. O., and Abdulsalam, R. (2003). Forty years of Information and Communication Technology (ICT) library service to the nation. In Olanlokun, S. O. *Forty years of library services in Nigeria.* Lagos: Nigeria Library Association. Pp. 83-93.

Dadzie, P.S. (2005), 'Electronic resources: access and usage in University College', *Campus Wide Information Systems, Vol.*22 No.5, pp. 290 – 297

Enakrire, T.R. and Onyanania, O.G.(2007), 'Causes inhibiting the growth or development of the information transfer in Africa: a contextual treatment', *Library HI – Tech News*, 24(4), pp. 20 – 8

Gbaje, E.S. (2007) Implementing a national virtual library for higher institutions in Nigeria. Libres. *Library and information science research electronic Journal 17 (2) September 2007.*

Greenstein, D.(2001). *Digital Library Standards: From Yours and Mine to Ours.* CLIR Issues 24: 1, 4–5.

Jewell, T. D. (2011), *Selection and Presentation of Commercially; Issues and Practices.* Council on Library and Information Resources. Washington, D.C.

Oduwole, A.A and Akpati, C.B (2003), Accessibility and retrieval of electronic information at the university of Agriculture library. Abeokuta, Nigeria. *Library Review*, 52(2), pp. 228-233.

Oduwole, A.A. et al. (2003). Electronic Services provision in Nigerian University Libraries. *Nigerian library and information sciences Review. 20 (1 &2).*

Ogunsola, A.L. (2004). Nigerian university libraries and the challenges of globalization: The way forward. *Electronic journal of academic and special librarianship* 5(2-3). Retrieved from *httpp.//southernlibrarianship.icaap.org/content*

Osuala, E.C. (2005). *Introduction to Research Methods.* 3rd ed. Onitsha: Africana – Feb publishers.

Ya'u Z.Y (2003). Towards a virtual library for Nigeria. Retrieved from *httpp.//portal.unesco.org*