### AWARENESS, PERCEPTION AND USE OF DIGITAL LIBRARY SERVICES BY UNIVERSITY OF IBADAN DISTANCE LEARNING STUDENTS

Tolulope ADEPOJU and Kazeem ADESINA The Polytechnic Library The Polytechnic Ibadan, Ibadan

#### **Abstract**

The study investigated the level of awareness, perception and use of digital library services by the University of Ibadan distance learning students. The descriptive research design was adopted while questionnaire won as the major instrument of collecting data. One hundred comes of questionnaire were administered to selected distance learning students using convenience sampling technique. Find man from the study revealed high level of awareness, positive perception, easy and high level of accenibility to digital library service by distance learning students. Also, major challenges confronting students use of digital library services are lack of enough equipment, lack of support staff, lack of enough space and poor power supply. Recommendations were made based on the findings.

**Keyword**: Awareness perception, use digital library services, distance learning student.

#### Introduction

Distance learning is often described as the formalized learning received while the student is on a location outside the university campus. Both the teacher and student are expected to have minimal physical contact, but much reliance on electronic communication and independent studding. Distance learning as defined by Oladeji (2000) is an educational programme designed for those who could not, may be for family, financial or some other reasons, attend existing educational institutions to acquire learning without necessarily becoming regular students of such institutions. He stressed that distance education is considered as a branch of adult education where the clientele may comprise of those who have no exposure of any kind to formal education, or those who dropped out of the formal school system and those who wish to supplement their formal education.

However, for open and distance learning to be effective and efficient, access to digital learning resources is essential. The central purpose of libraries is to provide information services that are useful and accessible to the users. With the current development in ICT, libraries are provided with options to providing services in electronic format which allows students to be able to access a wide range of electronic information resources. However, it is yet to be established if students really are familiar with digital library services.

Distance learning has become more popular in recent times because it is cost-saving for universities to reduce the number of residential and full-time students. However, open and distance learning normally demands much use of digitally based and enhanced library resources. These are essential for communicating with a large group of people especially in distance locations. They also make for

interactive sessions with groups and individual students. On the other hand, the learners also need to read all kinds of texts and information materials when they are not in school. This is to prepare them for the course content and examinations. Thus, the students need to use libraries and information centers for reading and for information search.

Distance learners have characteristics which Akintayo and Bunza (2000) listed as adults with professional responsibilities (jobs), social responsibilities (families), study part time, limited formal education or are a long time away from formal education, highly and intrinsically motivated and who are interested in practical results for career, occupation or life style. Sacchanand (2002) reported that distance students' characteristics are different from regular students in universities.

Since the library is the nerve centre of any educational institution as it promotes the acquisition of reading, inquiry and independent thinking through the provision of resources to support teaching and learning activities (Mabawonku, 2004), the provision of digital library to support open and distance learning cannot be ignored. Most researchers in distance learning are in agreement that library support is a key element (Caspers, Fritts and Gover 2001).

Distance learners' expectations of library services as revealed in the literature, demonstrate a great need (Niemi, Ehrhard and Neeley 1998). The library needs of distant learners are not unique; they have the same library and information needs as on campus students (Dugan 1997; Rodrigues 1996), but Rowland and Rubbert (2001) in their study on information needs of distant learners reported that the university libraries did not cater for the specific needs of these students. Apart from the manner in which they are accessed, requested and delivered, the same resources are required, the same questions are asked, and the same quality of service is expected (Rodrigues 1996); and they expect the same level of library service as that provided to their peers on campus (Riggs, 1997).

Distance learners access library and educational resources and services in various ways (Sacchanand, 2002). Access can be direct such as face to face, or mediated by printed material such as manuals, brochure, or mediated by technology, using a variety of media such as telephone, radio and the Internet among others. Successful direct access is characterised by flexibility, reliability, availability, user-friendly, portability, efficiency and service ability (Sacchanand, 2002). Kavulya (2004) in his study of distance education in four universities in Kenya opined that some of the students have little or no exposure to digital library use and this affects their access to library resources. Effective and appropriate services to distance learning communities may differ from, but must be equivalent to those services offered on a traditional campus (ACRL 1998).

Koohang (2001) in a study on use of digital library by distance learning students in University of Wisconsin, USA found that the students had positive perception towards the use of digital library just as Karim and Hasan (2006) also noted the exponential growth of digital information, which changes the way students perceive, study, read and how printed materials are used to facilitate study. Liu

(2005) and Ramirez (2003) reported that students print materials from the Internet in order to study and read later on. Igun (2005) also found that Nigerians study from materials downloaded from the Internet.

Liu and Yang (2004) reported that distance learners showed preference for easy and fast information retrieval and their field of study also affected their use of institution digital libraries in a study on graduate students' use of information sources in Texas A. & M. University, Texas, USA. Most distance learning students in Nigeria may not use the digital libraries probably because the incentives are not there as the libraries lack current library materials, In a study on library use by distance learners in three Nigerian universities by Mabawonku (2004), it was found that many of the students attributed their low use of the library to their tight schedules which were fully occupied with lectures and interactions with lecturers.

Nowadays the scenario has changed with grater use and application of information and communication technology (ICT) especially in libraries. As more and information sources become available online, many university libraries are introducing digitals services. The aim of these services is to broaden the range of information resources available and add value to their content by making them accessible through digital means so that students, researchers and the entire members of the university community can access them anytime, anywhere Chowdhury and Margariti (2004) further pointed out that the introduction and development of the internet and its associated Web technologies in the past decade have significantly influenced both the way libraries provide information services to their users and the way users choose to access information. Academic libraries are now trying to meet the needs of the academic and research community by improving their services and enhancing their resources. One of the means is the provision of digital library collection. A successful strategy to enhance exploitation of resources is to ensure users' awareness about the existence of particular services such as the current technologies in libraries which are meant promote services efficiency and effectiveness.

But it is remarkable to point out that despite the significant investment made by the university management for providing digital services and other computer-based technology to ensure that distance learning students have access to information and other related services, many of these students are unaware of the existence of these digital library facilities just as their perception about and use of digital libraries cannot be established. Therefore, this study investigated the awareness, perception and use of digital library by the University of Ibadan distance learning students. Hence, this study provided answers to the following research questions related to the study:

- 1. What is the level of awareness of University of Ibadan distance learning students about digital library service of the distance learning centre?
- 2. How do University of Ibadan distance learning students perceive the digital library services of the distance learning centre?
- 3. What is the level of accessibility provided to digital library services by

- University of Ibadan distance learning students?
- 4. What are the problems constraining the use of digital library services by University of Ibadan distance learning students?

#### Literature Review

## Role of digital libraries service in open and distance learning

The digital revolution has brought dramatic changes to information storage, access, and retrieving processes. The creation of digital libraries has made an essential impact on the teaching and learning process. Digital libraries facilitate information services for students, independent of time and place. This is much needed, especially if active learning styles become a common place (Beagle, 2000; Roes, 2001). The major bene? ts of digital libraries include storing resources in digital format, which allows online access to students at numerous locations at anytime and anywhere, it can be at home, in the library, in the class, laboratories, to mention among many. Digital libraries containing representations of original works provide opportunities for students and scholars to conduct research from their personal computers and workstations set in their homes, of? ces and laboratories. It also facilitates remote research from private and public locations and offers learners' opportunities that are unconstrained either by the limited resources found in particular physical libraries or by their schedules of operation.

Historically, librarians have sought to provide services to distance learners that are equivalent to those available to on-campus learners, and these aspiration is grounded in the philosophical frameworks of the Canadian Library Association's Guidelines for Library Support of Distance and Distributed Learning (2000) and the Association of College and Research Libraries Guidelines for Distance Learning Library Services (2000). Both the Canadian and the American guidelines recognize that distance learners frequently do not have direct access to the full range of library services and materials. In this situation, the goal of equity makes it necessary that libraries provide services that are more "personalized" tailored to the needs of the online learners – than those provided on campus.

This brought about several issues on online library support such as: access to library resources and services, the interaction of library to its users and other information providers and how these library resources and services can be delivered to online learners. Library literature provides a rich record of service models and best practices, and there has been an explosion in publication as librarians consider way to support learners in a networked environment.

Digital libraries are becoming a part of academic learning community; Roes (2001) stated that digital libraries are accepted complements to the electronic learning settings. This is because digital libraries has recorded a significant number of importance such as bringing information to user, providing enhanced searching, collaboration, sharing, and have drastically reduced the issue of digital divide. Digital libraries have changed the way humans interact with information, for, as long as there is an internet connection available and the user has an appropriate access device, the requested information can be accessed from anywhere at any

time. Moreover, in so doing, digital libraries have introduced learning, and especially distance learning, to new dimensions (Blandford, 2006). Another advantage of digital library is that, as opposed to traditional libraries, which have a limited storage space, they have the advantages of saving physical space by holding all information digitally on a server. Indeed, digital libraries can always be extending their storage space, as long as relatively inexpensive computer memory is available. What is also interesting is that there need not be a one-to-one mapping between a digital library and a traditional library, as the information contained in a digital library could be distributed geographically in separate sites (Slonim and BaronLaurie, 1994).

However, perception of students have also been found to affect rates of adoption and extent of utilisation of digital libraries (Agarwal and Prasad 1997; Payo, 2000). Many factors can be attributed to influence perception of students about digital libraries. Some students have negative perception towards e-resources which is mostly caused by lack of ICT skills. To make use of growing range of electronic resources, students must acquire and practice the skills necessary to exploit them (Okello-Obura and Magara (2008). Also, Ray and Day (1998) suggested that the skills required to access the maximum potential of electronic resources are much greater than those required for searching printed sources. These skills include knowledge of the structure of the database instructions which must be input into the computer by the searcher as well as understanding of the ways in which the instructions are linked to one another. Some students have poor perception towards e-resources as a result of insufficient training. For this reason, Uwaifo (2010) suggested that government should enforce compulsory ICT training at all levels of education.

In this 21st century, students must adopt a positive perception towards the use of eresources available through digital libraries. Students especially need to be trained and re-trained in the use of digital libraries in order to take part in the modern technology. Students need to be trained in the use of searching tools like e-database, the use of online catalogues etc. In this regard, Omoniyi and Akinboro (2009) reiterated the need for acquisition of skills and competence in the use of digital libraries by the students for quality and efficient information search.

Calhoun (2014) in the social roles of digital libraries identified some potential social contributions of digital libraries such as broad access to content, public infrastructure, free flow of ideas, individual empowerment, informed citizenry, formal education, scholarly collaboration and partnerships, progress of knowledge, economic benefits, and preservation and curation. Describing these social roles, Calhoun (2014) maintained that broad access to knowledge, for instance, allow more content to be collected; allow more access for more people in more places or contexts; balance between open access for all and rights of creators and providers of content; make information mobile; enhance appreciation and engagement with culture; and enable full participation in a democratic society.

Adekunjo, Idiegbeyan-ose, Okoedion & Nduka (2015) critically assessed digital

library functions and services in Nigeria academic libraries. It highlighted the roles of Information and Communications Technologies (ICTs) that brought about digital libraries. It is a collection of digital contents that is housed electronically and made available to users. The advantages of the digital library were also discussed such as improved access, improved information preservation; it improved information sharing, it enhances library functions and services. Nigerian academic libraries have benefited from the enormous advantages of the digital library.

Igwe and Onwuchekwa (2015) cited Okebukola (2002) admitted that digital library services would improve the quality of teaching and research in higher institutions through the provision of popular e-books, e-journals and other library e-resources and services. This will enhance scholarship, research and lifelong learning through the establishment of permanent access to shared virtual archival collections; guide academic libraries on ways of applying appropriate technologies for the production of virtual library resources and to advance the use and usability of globally distributed networks of library resources. Gani and Magoi (2014) in a study of digital library services in Northwest Nigerian universities highlighted the prospects and benefits of digital library services like digitisation of local content, broad access range of services and scholarly publishing among others. Emojorho (2012) examined digital reference services in Nigeria university libraries. The study showed that the use of digital facilities in reference services lead to better reference services.

## Awareness of students about digital library service

Lack of knowledge among library users of the services their university libraries provide is a growing concern in academic librarianship. This has been caused by poor communication and inadequate interaction between users and the library, coupled with the library's failure to apply marketing strategies to promote its services (Roberts, 1995). If the library is to promote awareness of its services and activities, there must be continual interaction with its users, This Interaction can be influenced both by factors directly related to the library, such as how efficiently and effectively it is run, the relevance of the information it provides and the communication channels it employs (Rocio, Lotero & Rua, 1987). Whereas libraries use different activities to create awareness about service, literature shows that in other instances awareness can result from family and friends, or under self-tuition. Hinson and Amidu (2006) reveal that the majority of the final year students in the University of Ghana Business School are aware of the digital libraries, having been introduced to it by family and friends, or under self-tuition. With respect to obstacles to digital library use, the majorities of the students have difficulty in accessing the digital libraries and thus consider lack of access to be an obstacle to its use.

Students in universities in India find electronic information resources through digital libraries useful because they save time. Adomi, Omodeko and Otolo (2004) opined that students have to access the digital libraries resources to supplement notes given to them by lecturers, to complete class assignment, write the project and

to communicate via e-mail. In this regards, Temopir (2003) wrote that it is clear that there is increase in the use of digital library services and resources because of the unavailability of the traditional print format any more. More reasons given for the student's use of digital libraries' resources in Universities is that many students are beginning to depend upon e-resources such as electronic journals, because publications are appearing with mixed media and increasingly in a complete electronic format.

It is important to note that undergraduates at the university level use digital library services and resources, because of ease of access (Oyedeji, 1996). This is supported by Scoyoc and Cason (2006) in their opinion that the vast majority of undergraduates of all categories turn to the computer services like the digital libraries for their academic works. Also, in support of this notion, Schayan (2001) stated that the way undergraduates who were once used to read through books page by page have now turned to the use of e-resources for their academic needs is unimaginable. Ezeji (2008) reiterated that undergraduates of all categories in one way or the other use digital libraries and other electronic information resources for their academic work.

Problems associated with the use of digital libraries and electronic information resources are diverse. In order to utilise the growing range of electronic resources available through digital libraries, students must acquire and practice the skills necessary to exploit them for students using a variety of on-line database, it is as though they were parking lot attendants, where every vehicle is not only a different make and model but has a different configuration (Blandy and Libutti, 1995). As Dutton (1990) suggests, the skills required to maximise the potential of digital libraries' services and resources are much greater than those required for searching printed sources. These skills include a knowledge of the structure of the database and the instructions which must be input into the computer by the searcher, as well as an understanding of the ways in which the instructions are linked with one another.

## Perception of students about digital library service

Service perception is the users? judgment and evaluation of a service performance received and how it compares to their need (Jiang and Wang, 2006). Since University libraries are an integral part of the education system, how they are perceived determines their smooth existence and value to the users. Academic Libraries should therefore contribute to the goals of the system as a whole and respond to the changing social needs. Muddiman (2000) discovered that research has an important role in shifting the institutional core of the library service and innovating newer social roles, particularly as a way of identifying the reading and information needs of library users. This indicates that research about users has an invaluable contribution not only to the library services but to the parent institution as well.

# Challenges of digital library services in open and distance learning

Many academic librarians are not computer literate, which hinders the level of adoption and delivery of digital library services. Also, the level of professional training in information technology received by the professional and paraprofessional library staff in Nigerian university libraries is generally inadequate (Ajidahun, 2007). Information Technology infrastructure and librarian skills and competencies, as well as the level of awareness resources and funding, are significant barriers to implementing digitization and digital library services in academic libraries (Ali and Haider, 2015).

Achugbue & Anie (2013) examined the attitudes of librarians towards digital library in e-learning, the imperativeness of training and knowledge for the effective functionality of digital libraries in Nigerian universities. It was discovered that training and experience are the sine qua non of a positive attitude towards digital libraries in distance learning. And there was a high interest in the use of online information by researchers and learners, but the lack of awareness and how best to integrate digital libraries into service delivery poses a great challenge to the librarians in Nigerian universities. Younus (2014) in a study of digital reference services identified some issues which affect the implementation and management of digital library services. These include: scarcity of competent human resources; access to appropriate digital resources; unavailability of suitable software for DRS; financial constraints; lack of ICT facilities; absence of a digital reference policy; lack of ICT application; paucity of resources; electricity supply; inadequate physical facilities; lack of local research and literature.

Gani and Maqoi (2014) highlighted funding, infrastructure and technology as challenges facing the application of digital libraries in Northwest universities in Nigeria. The study concluded that, though they were confronted with numerous challenges, however, the university libraries could gradually overcome such challenges in the course of time, in particular through library collaboration. As a result, the study recommended that the virtual library project of the Nigerian University Commission (NUC) should be well funded and managed to support the digital libraries in various universities. Also, there is a need for CULNU to ensure a unify method of linking Nigeria university libraries together through a particular network, among others.

# Research Methodology

The descriptive research design of the ex post facto type was adopted for this study. The population for this study consists of all the registered 2,352 distance learning students for the 2014/2015 at the time of conducting this study. However, the convenience sampling technique was used to select only 100 distance learning students to participate in this study. This is done to ensure effectiveness of this study.

The instrument used for data collection is the questionnaire, which is titled: "Students Attitude towards Electronic Information Resources Questionnaire (SATEIR). The questionnaire was designed by the researcher and consists of two

sections. Section A is designed to elicit relevant background information about the respondents while section B deals with items raised from the research questions of

Statement	Strongly Agree	Agree	Disagre e	Strongly Disagre e
I am aware of the existence of digital library in the DLC at university of Ibadan	65 (65.0%)	30 (30.0%)	1 (1.0%)	4 (4.0%)
The digital library is well sited	35 (35.0%)	49 (49.0%)	7 (7.0%)	9 (9.0%)
The environment where the digital library sited is conducive for learning		33 (33.0%)	2 (2.0%)	4 (4.0%)
The DLC students are well informed about the existence of the digital library service at the university of Ibadan	17 (17.0%)	48 (48.0%)	14 (14.0%)	21 (21.0%)

The result shows the majority of the respondents (84.0%) affirmed their awareness of digital library service of University of Ibadan distance learning centre. Also 94.0% and 65.0% of the respondents affirmed that the environment where the digital library of University of Ibadan distance learning centre is sited was conducive and that the students are well informed about the existence of the digital library respectively. Most of the respondents also attested to the conduciveness of the digital library environment for learning with 94.0% response rate. It can therefore be inferred from the foregoing that the University of Ibadan Distance Learning Centre students are aware of the existence of the digital library service of the Centre and that their level of awareness is high.

**Research question 2:** How do University of Ibadan distance learning students perceive the digital library services of the distance learning centre?

Table 2: Perception of University of Ibadan Distance Learning Students About the Digital Library Service of the Distance Learning Centre

Statement	Strongly	Agree	Disagree	Strongly
	Agree			Disagree
Digital library provided by	31	57	3 (3.0%)	9 (9.0%)
DLC is needed by the students	(31.0%)	(57.0%)		
DLC students visit DLC Digital	28	39	11	22
library regularly	(28.0%)	(39.0%)	(11.0%)	(22.0%)
The digital library resources are	61	33	2 (2.0%)	4 (4.0%)
relevant to students needs	(61.0%)	(33.0%)		

The results presented in Table 2 above on the perception of the respondents about the digital library service of University of Ibadan Distance Learning Centre showed that majority of the respondents affirmed that the digital library service provided by the University of Ibadan Distance Learning Centre is needed by the students and that the distance learning students do make regular visits to the library with 88.0% and 67.0% response rates respectively. Also, 94.0% of the respondents affirmed the relevance of the digital library resources to students' needs. The implication to be drawn from this is that the distance learning students have positive perception towards the digital library of University of Ibadan Distance Learning Centre

**Research question 3:** What is the level of accessibility to digital library services by University of Ibadan distance learning students?

Table 3: Level of Accessibility Provided by University of Ibadan Distance Learning Centre to Digital Library Service by Students

Statement	Strongly	Agree	Disagree	Strongly
	Agree			Disagree
DLC students have direct	17	58	9 (9.0%)	16
access to the digital library of	(17.0%)	(58.0%)		(16.0%)
university of Ibadan				
DLC Student are restricted to	9 (9.0%)	13	27	51
perform certain operation in		(31.0%)	(27.0%)	(51.0%)
the digital library				
DLC students used to pay	5 (5.0%)	18	31	46
certain amount of money		(18.0%)	(31.0%)	(46.0%)
before having access to the				
digital library				
Digital library in the university	11	18	20	51
of Ibadan is meant for DLC	(11.0%)	(18.0%)	(20.0%)	(51.0%)
students alone				,

Table 3 presents information on the level of accessibility the respondents are permitted to University of Ibadan Distance Learning Centre's Digital Library. The results showed that majority of the respondents affirmed that they have direct access to the digital library on distance learning centre (75.0%). On the other hand majority of the respondents disagreed with the fact that distance learning students are restricted to perform certain operation in the digital library (78.0%) and that distance learning students used to pay certain amount of money before having access to the digital library (77.0%). It can therefore be deduced from the results that the distance learning students have easy and high level of accessibility to digital library of University of Ibadan Distance Learning Centre

**Research question 4:** What are the problems constraining the use of digital library services by University of Ibadan distance learning students?

Table 4: Problems Constraining the Use of Digital Library Services by University of Ibadan Distance Learning Students

Statement	Strongly	Agree	Disagre	Strongly
	Agree		e	Disagree
There is not enough	17	61	7 (7.0%)	15 (15.0%)
equipment to be used by the	(17.0%)	(61.0%)		
DLC students				
There are not enough	21	56	9 (9.0%)	14 (14.0%)
personnel to provide	(21.0%)	(56.0%)		
support for digital library				
u se				
There is not enough space	27	51	9 (9.0%)	13 (13.0%)
in the digital library of the	(27.0%)	(51.0%)	,	
University of Ibadan		`		
There is not frequent	37	41	3 (3.0%)	19 (19.0%)
electricity power supply	(37.0%)	(41.0%)	, , ,	<b>_</b>

Table 4 presents information on problems being faced by the respondents in their attempt to use the digital library collections of University of Ibadan Distance Learning Centre. The results showed that majority of the respondents affirmed that there is not enough equipment to be used (78.0%), there are not enough personnel to support provision of digital library service (77.0%), there is not enough space in the digital library (78.0%) and that there is no frequent power supply (78.0%). It can therefore be inferred from the results above that lack of enough equipment, lack of support staff, lack of enough space and poor power supply are major constraints hindering use of digital library by distance learning students of University of Ibadan, Nigeria. Summary and Conclusion

This study had showed that majority of the DLC students are aware of the University of Ibadan digital library. Based on the result on the Table 3, it was shown that all the DLC students have access to the library. In conclusion, the findings revealed that there is adequate provision of all necessary infrastructural and personnel resources to ensure and guarantee access and utilization of DLC digital library services by the distance learning students of university of Ibadan.

It can be concluded that the benefits enjoyed by the distance learning students from using the library, such as access to photocopy facilities and reading materials. It was also discovered that the distance learning students were given full access to the digital library service without any restriction. No any hidden fee was charge for access to the digital library to encourage the distance learning students from making use of the library. The research also reveled that the location of the library is well sited for easy location of all the students. Finally it reveled that the distance learning students' level of awareness of the digital library services is very high as most of the respondents are fully aware of the library services.

### Recommendation

Based on the findings and conclusion of this study, the following recommendations are therefore made.

- 1. The university management should strive to make an effort to upgrade the digital library system to be more user friendly so that it will be easier to use by students
- 2. The institution can also organise a kind of training workshop at least once in a semester. For the DLC students in order to enable them effectively utilize and benefit from this new library technology.
- 3. The library should put more steps forward in the digitization of up to date past question papers because they serve as guides for students on how to go about confronting their end of semester examinations.
- 4. The library management should provide a feedback stock which will serve as a means for users' responses on the performance of each digital item or content and the level of satisfaction derived

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