

## **ASSESSMENT STUDENTS' USE OF INFORMATION AND COMMUNICATION TECHNOLOGY FACILITIES: A CASE STUDY OF OBAFEMI AWOLOWO UNIVERSITY LIBRARY**

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### **Abstract**

*This research work is being conducted to expose some of the inhibiting factors that are hindering the impact of ICT in Nigerian academic libraries considering OAU library as a case study. This study begins with an investigation on ICT literacy and its application for library services by students. The study examines the utility and ascertain the reasons for the use and non-use of internet resources at the library, OAU. The study also assess the purpose and relevance of the use of ICT in the Hezekiah Oluwasanmi Library, OAU. This study gathered information through questionnaires. The population of the study was made up of purposively selected 100 students. Data was analysed using univariate and bivariate analysis. The results for the analysis showed that respondents agreed that most of the ICT facilities are available and functional. It also revealed that ICT literacy is required to effectively utilize the ICT applications in the library. Based on the findings, it was recommended that individuals should be sensitized on the availability of ICT facilities and be encouraged to use them for their personal and library services. Students should constantly use computer system and the internet in order to attain ICT literacy proficiency, they should also be sponsored for ICT literacy training, library management software should be acquired and installed for efficient and effective library services; funds, ICT infrastructure and training opportunities should be provided by the government, NGOs and other stakeholders.*

**Keywords:** ICT, universities, literacy, library, government

### **INTRODUCTION**

The continuing advancements and innovations in the field of scientific knowledge and technology have contributed to the globalisation of the world and continually makes the world a global village. From time immemorial man has always sought means to communicate with each other and has developed different ways of sharing information over the years. However, since the advent of the technological age man has developed various means of



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Agunbiade *et al.*

sharing information and communication giving birth to what is called Information and Communication Technology (ICT).

The use of ICT has permeated every segment of life and has revolutionized the way things are done and has been one of the major factors that has contributed in making the world a global village and the twenty first century has been aptly dubbed the “information age” (Lawal-Solarin, 2015). One of the major sectors that has benefitted from the use of ICT is the educational sector and particularly universities and higher institutions all over the world. Thus, Aguolu and Aguolu, (2002) asserts that, the basic tripartite function of any university is to conserve the existing knowledge, to transmit knowledge through teaching, and to create new knowledge through research via the establishment of functional, modern and up-to- date libraries.

Therefore, (Oriogu *et al.*, 2014) states that the library is a repository of resources; it is an integral part of the educational system whose primary function is to serve users. Buttressing the above Aguolu and Aguolu in (Odeh, 2011:13) states that:

The University library is the university’s principal instrument in the conservation of knowledge through its rational, systematic and comprehensive acquisition of all types of human communication records, published and unpublished, written or oral in recorded form that embodies the ideas of knowledge of the past. As a store-house of information or a record of human experiences to which students, lecturers, and researchers may turn for data or information, the university library stands in the same relationship to the society as the memory to an individual by making available and accessible to its users information resources needed for teaching and student’s independent study.

To act on these noble core purposes in today’s academic environment, however, requires that libraries move beyond parameters of earlier times to pursue new modes of serving their institutions. The need to have ready access to relevant information for improving knowledge is of strategic importance to society (Lakos & Shelley, 2004). The importance of information to the success of any academic institution cannot be over-emphasized.

Akintunde (2000), ascertain that it is a valuable resource required in any society or an institution to meet its objective. Thus, the importance of libraries equipped with modern and up to date ICT facilities cannot be overemphasised as ready available information to students determines largely their success and future development. Studies such as (Nwankwoala, 2015; Oriogu *et al.*, 2014; Ugwuanyi, 2011; Umaru, 2011; Odeh, 2011) have shown that most university libraries in Nigeria have inadequate ICT facilities to provide the critical function of

Agunbiade *et al.*

supplying the academic environment with up to date information and compete with university libraries all over the world, thus affecting student' access to ICT facilities in Nigeria. While scholars have focused largely on the inadequacies of ICT facilities in libraries, this study however focuses on assessing student's use of the available ICT facilities in universities using Obafemi Awolowo University as a case study.

This study aims to access the literacy or awareness of students to the internet resources at Obafemi Awolowo University library; examine the utility of the internet resources at the Obafemi Awolowo University; identify the mostly preferred ICT resource at Obafemi Awolowo University; and to ascertain the reasons for the use and non-use of the internet resources at the library, Obafemi Awolowo University.

### **LITERATURE REVIEW**

Information is an important factor in all aspects of human growth. Information is defined by Aina (1995) as "ideas, facts, and imaginative work of the mind and data of value potentially useful in decision making, question answering and problem solving". The International Encyclopedia of Library and Information science (2003) refers to Information Communication Technology (ICT) as the application of modern electronic and computing capabilities (technologies) to the creation and storage of meaningful and useful facts or data (information) and its transmission to users through various electronic means (communication). These electronic means communication devices or application like radio, television, cellular phones, computer and network hardware and software, satellite systems and internet, as well as the various services and applications associated with them.

In the same vein, the Wikipedia free internet encyclopaedia (2009) defines information communication technology (ICT) as the technology essential for statistics processing. Adeyoyin (2005) agrees with the Wikipedia that ICT is a tool for information processing put it as -'the acquisition, processing, storage, and dissemination of information by means of computers and other telecommunication equipment. Various trends of technological developments and human activities have led to the avalanche of information thereby creating an information society'.

Wright, (2004) in a study on ICT in public libraries, finds that only a few public libraries in Nigeria are computerized and do make use of the internet as computers are not available and the libraries lack developed manpower. Ugwuanyi (2011) in a study on availability and use of ICT in six Nigerian university library schools; notably identified availability of computers,

Agunbiade *et al.*

internet, CD-ROMS, e-mail, microfilm, microfiche, videotapes, and slide projectors as resources available and that they use the resources notably for education and training.

Information Communication Technology has made it possible for Nigerian academic libraries to use the internet for search engines such as Yahoo, Google, e-mail etc. and to access online digital resources such as Amazon, Wikipedia etc. (Lawal-Solarin, 2015). In a study by Ilo and Ifijeh (2010), 94% of final year students at Covenant University indicated that the internet had greater impact on their projects. Also, Nwezeh (2010) in a study on the use of ICT in Nigerian Universities finds that 78% of students at Obafemi Awolowo University use the internet for research purposes. Studies found that students constitute the major category of users of electronic services in the university libraries surveyed (Oduwole, et al., 2003).

Nigerian university libraries being the hub and research activities for development require internet connectivity to be viable in this age of ICT. The importance of ICT to learning in modern societies cannot be downplayed as such Oketunji (2004) affirms that the Internet and other ICT tools provide a golden opportunity for the provision of value-added services by libraries. Indexing, abstracting and publication of local research and their digitization are means of facilitating learning. Despite the immense benefits attached to the use of ICT in learning environments, university libraries in Nigeria are faced with challenges of catching up with modern trends in deployment of ICT facilities.

In the light of the foregoing, Omekwu and Echezona (2008) noted that the north-south digital divide is proportionately skewed against Africa, thereby making information global access faster, broader and diverse in Europe and America than in Africa. This divide is due a lot of challenges such as inadequate facilities, inadequate funding among other things. Affirming this position, Krubu and Osawaru (2011) reveals some factors hindering the impact of ICT in Nigerian university libraries as lack of search skills, epileptic power supply, expensive software and hardware, and huge amount of money spent to fuel generators.

Aina (2004) identified the negative laissez-faire attitude of lecturers, students, and other libraries as other factors militating against the development and use of ICT in university libraries in Nigeria including the high cost of ICT training as a major challenge faced by university libraries. Another key challenge is that users of most university libraries are not aware of the availability of ICT facilities in university libraries, which was why Umaru, (2011) suggests continued information literacy and awareness programmes, because he discovered that most users of university libraries are not aware of the information resources available in libraries or they do not know how to access them.

### **Electronic Sources in Hezekiah Oluwasanmi Library, OAU**

Obafemi Awolowo University has established computer provision facilities. Hezekiah Oluwasanmi Library, the main library at Obafemi Awolowo University, Ile-Ife, has an ICT unit. The library has its own server and battery converters, thus the library's collection can still be accessed when there is no electricity. The university library has an e-library for students which is a form of cyber café within the library where students can access the Internet and search for library materials for a fee that is not as high as the fee charged by other cyber cafes within the university environment. Although, the library is equipped, the number of computers available for users in Hezekiah Oluwasanmi Library is not adequate.

### **METHODOLOGY**

This study gathered information through a questionnaire. A detailed questionnaire based on the objectives of the study was administered to students. A purposively selected sample of 100 students participated in the study. A total of 100 usable questionnaires were returned by students for a response rate of 100%. This paper presents the results of the analysis procedures using univariate and bivariate analysis, including charts to presents the answers to the research questions and objectives of this study among students concerning their use of information and communication technology in Obafemi Awolowo University Library, Ile Ife.

### **DATA ANALYSIS AND INTERPRETATION**

The results are presented in the following sections:

- (i) Socio-demographic Variables of Study Participants
- (ii) Literacy or Awareness of students to the internet resources at Obafemi Awolowo University library
- (iii) Utility of the internet resources at Obafemi Awolowo University
- (iv) Most preferred ICT resources at Obafemi Awolowo University
- (v) Reasons for the use and non-use of the internet resources at the library, OAU

### **Socio-Demographic Variables of Study Participants**

**Table 1:** Distribution of respondent by socio-demographic characteristics

This table shows age group, gender and status of the respondents

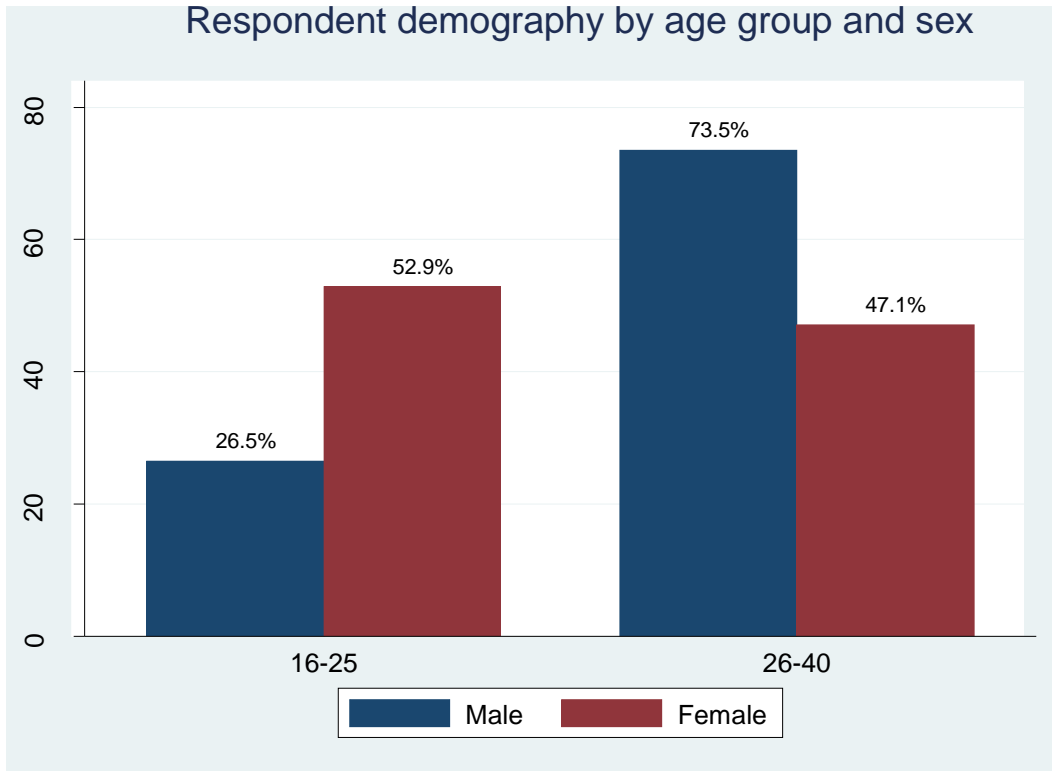
<b>Age Group</b>	<b>Frequency</b>	<b>Percentage</b>
16-25	40	40.0
26-40	60	60.0
<b>Gender</b>		
Male	49	49.0



Agunbiade *et al.*

Female	51	51.0
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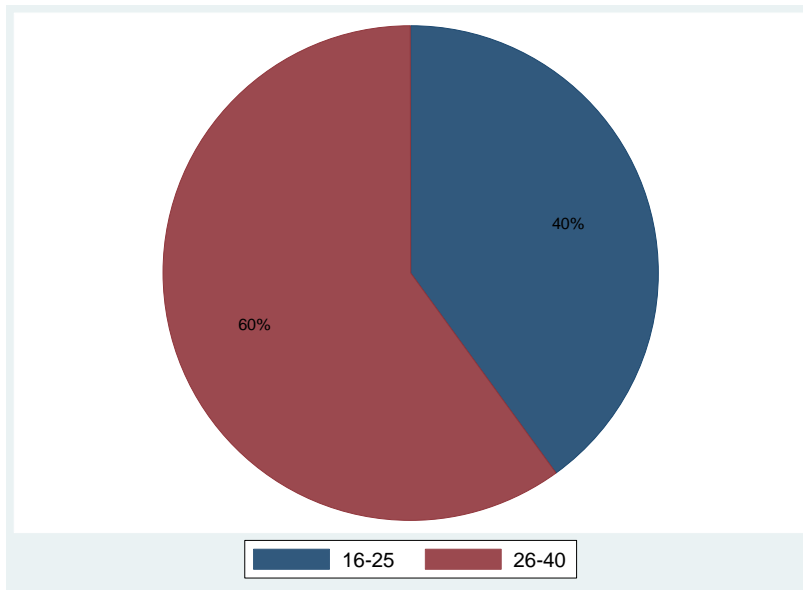
According to table 1, age group 26-40 constitute three-fifth of the total respondents while the remaining 40% are of age group 16-25. Male and female are almost of equal percentage. While we have 49% of total respondents as males, 51% are female.



**Figure 1: Respondent demography by sex (Source: Field Survey, 2017)**



Agunbiade *et al.*



**Figure 2: Respondent demography by age group (Source: Field Survey, 2017)**

**Literacy or Awareness of Students to the Internet Resources at OAU Library**

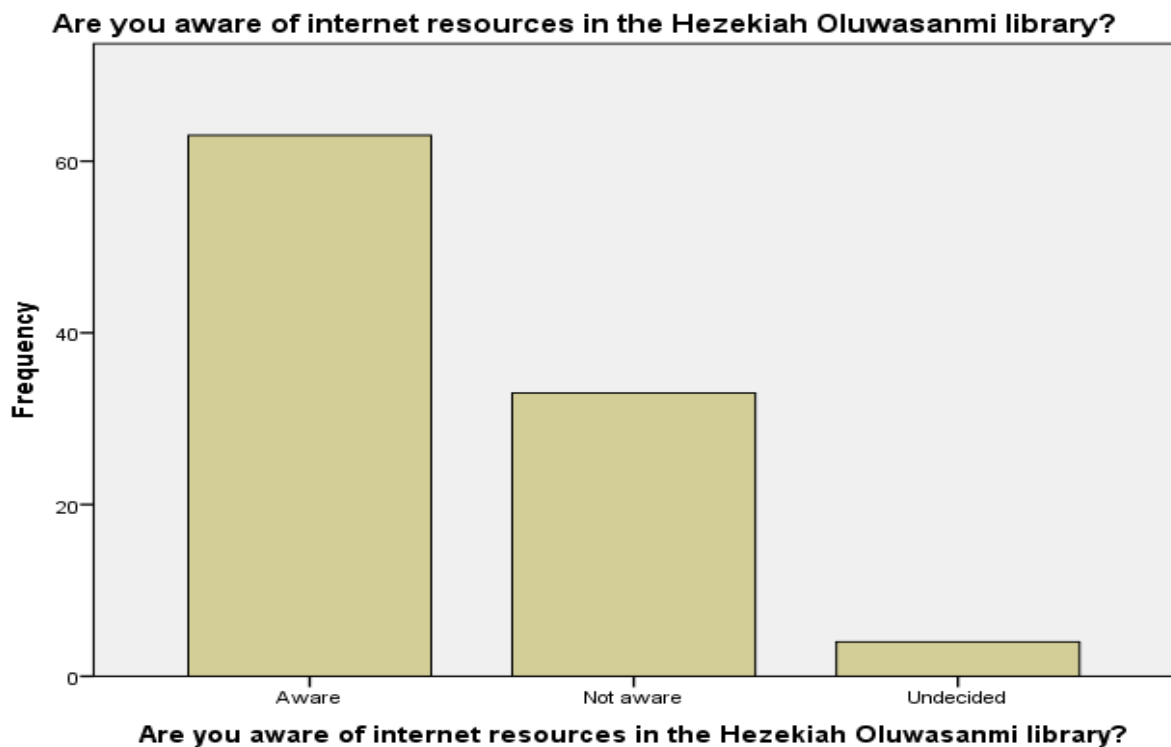
**Table 2:** Distribution of the respondents by their awareness of internet resources in the Hezekiah Oluwasanmi Library

This table show the number of people that are aware and the number that are not aware of internet resources in the Hezekiah Oluwasanmi Library

Variables	Frequency	Percentage
Aware	63	63.0
Not aware	37	37.0

Table 2 shows that larger percentage 63% of the total respondents is aware while 37% are not aware of internet resources in the Hezekiah Oluwasanmi Library.

Agunbiade *et al.*



**Figure 3:** Awareness of ICT at OAU library (Field Survey, 2017)

**Utility of the Internet Resources at Obafemi Awolowo University**

**Table 3:** Distribution of the respondent by ICT facility they use

This table shows ICT use, purpose for which it is used and the most preferred ICT

ICT Resources Use	Frequency	Percentage
Cybercafé	21	21.0
University library	12	12.0
Other library	12	12.0
Personal data	50	50.0
Staff office	5	5.0
<b>Purposes</b>		
Email	25	25.0
World Wide Web	28	28.0
Search interface	10	10.0
File transfer protocol	22	22.0
Others	15	15.0





Agunbiade *et al.*

Table 3 depicts that personal data is the most preferred ICT because half of the total respondent make use of it. 24% preferred school library and other library, 21% preferred cybercafé while very minor 5% preferred staff office. We can see that one-quarter of the respondent use the internet to check their Email; those that use it to check World Wide Web are close to one-third of the total respondents; 10% use it to search interface; 22% for file transfer protocol while 15% use it for other purposes.

**Reasons for the Use and Non-Use of the Internet Resources at the Library, Obafemi Awolowo University**

**Table 4:** Distribution of the respondents by reason for the use and non-use of the internet resources at library, OAU

Reasons	Frequency	Percentage
<b>Reasons for Use</b>		
Good and fast network	13	21.0
Easily accessible	6	10.0
Cheaper and convenient	3	5.0
<b>Reasons for Non-Use</b>		
Bad network	9	14.0
Non effective internet service	19	30.0
Not available for students	13	21.0
Total	63	100.0

Table 4 shows that among 63 people aware of internet resources in the library, 21% use it because of good and fast network; 10% make use of it because of easy accessibility; and 5% use it because it is cheaper compare to others. Some did not make use of it because of bad network, ineffective internet service and its unavailability for students.



Agunbiade *et al.*

**Bivariate Analysis**

**Table 5: Awareness of internet resources in OAU library by age group**

Awareness	Age group		Total
	16-26 (%)	26-40 (%)	
Aware	27(42.9)	36 (57.1)	63 (100.0)
Not aware	13 (35.1)	24 (64.9)	37 (100.0)
Total	40 (40.0)	60 (60.0)	100 (100.0)

According to table 5, among those that are aware of the use of ICT source in OAU library, age group 16-26 constitutes 42.9% while 57.1 are of age 26-40. 35.1% among those that are not aware fall among age group 16-26 while 64.9 of are age group 26-40.

**Table 6: Awareness of internet resources in OAU library by age group**

Awareness	Gender		Total
	Male (%)	Female (%)	
Aware	31(49.2)	32(50.8)	63 (100.0)
Not aware	18 (48.6)	19 (51.4)	37 (100.0)
Total	49(49.0)	51 (51.0)	100 (100.0)

Of all the gender that are aware, 49.2% are male while 50.8% are female. Among those that are not aware, 48.6% are male, while 51.4% are female.

**Table 7: ICT resource use by Gender**

ICT resource use	Gender		Total
	Male (%)	Female (%)	
Cybercafé	9(42.9)	12(57.1)	21 (100.0)
University Library	5 (41.7)	7(58.3)	12(100.0)
Other library	6(50.0)	6 (50.0)	12(100.0)
Personal data	23(46.0)	27 (54.0)	50 (100.0)
Staff office	3 (60)	2 (40)	5(100.0)
Total	46(46.0)	54(54.0)	100(100.0)

According to table 7, 42.9% of respondents that use cybercafé are male while 57.1 are female. Of those that use university library, 41.7% are male while 58.3% are female. Those that use other library are 50% male and 50% female. Majority use personal data, 46.0% of them are male while 54.7% are female and among minority that use staff office, 60% are male while 40% are female.



**Table 8: ICT resource use by age group**

ICT resource use	Gender		Total
	16-25 (%)	26-40 (%)	
Cybercafé	12(57.1)	9(42.9)	21 (100.0)
University Library	6 (50.0)	6(50.0)	12(100.0)
Other library	6(50.0)	6 (50.0)	12(100.0)
Personal data	19(38.0)	31(62.0)	50 (100.0)
Staff office	3 (60)	2 (40)	5(100.0)
Total	46(46.0)	54(54.0)	100(100.0)

According to table 8, 57.1% of respondents that use cybercafé are of age 16-25 while 42.9% are of age 26-40. Of those that use university library, 50% are of 16-25 while 50% are 26-40. Those that use other library are 50% age 16-25 and 50% are 26-40. Majority use personal data, 38.0% of them are of age 16-25 while 26-40 constitute 62.0% and among minority that use staff office, 60% are 16-25 and while 40% are of age 26-40.

## DISCUSSIONS

According to the survey, 63% of students are aware of the ICT facility at Obafemi Awolowo University. From the data gathered, students that use internet facility to check World Wide Web are close to one-third of the total respondents; only one-quarter of the respondent use the internet to check their Email; 10% use it to search interface; 22% for file transfer protocol while 15% use it for other purposes. The most used preferred form of ICT resource is personal data (50%) followed by café and university library.

According to the data gathered, the reasons why students patronize the university library for internet facility purpose is firstly because of good and fast network while challenges experienced in the use of ICT includes nominal internet service and non-availability due to restriction of a certain number of undergraduate students to the ICT room, OAU.

## RECOMMENDATIONS AND CONCLUSION

Based on the findings of this study, individuals should be sensitized on the availability of ICT facilities and be encouraged to use them for their personal and library services. Students should not be restricted from using the ICT facilities also. For effective acquisition, cataloguing, virtual reference services, serial management and resource sharing, Electronic Resource Management (ERMS) and other library management software should be bought and installed by the library administration for efficient and effective services to their patrons.

Agunbiade et al.

The library/institution can organize workshops for both staff and students so that they acquire knowledge to effectively use the Internet resources that are less used.

From the results obtained, the study showed that 63% being aware of the internet facility in the Obafemi Awolowo University library helps us conclude that is that there is high level of ICT literacy among students of Obafemi Awolowo University, Nigeria on the basis that the number is above the average. The study concludes that the effective and user-friendliness of the library internet facility will help create awareness and aid more research work.

The use of information and communication technologies no doubt is gaining momentum in Nigerian universities. Information and communication technologies assist libraries in providing efficient and current information services. Once the students are able to use these technologies effectively, the teaching, learning and research activities in the university will be made easier for the university community. ICT usage will facilitate development since there will be free flow of information.

## REFERENCES

- Adeyoyin, S. O. (2005). Information and Communication Technology (ICT) Literacy among the Staff of Nigerian University Libraries. *Library Review*, 54 (4): 257-266.
- Aguolu, & Aguolu, E. (2002). *Libraries and Information Management in Nigeria: Seminal Essays on Themes and Problems*. Maiduguri, Nigeria: Ed-linform Services.
- Aina, L. O. (1995). Information and Agriculture in Africa. In Aina, L. O, Kanki, A. M. & Ojiambbo, J. B. (Eds.). *Agricultural information in Africa*. Ibadan: Third World Information Services.
- Aina, L. O. (2004). *Library and Information Science Text for Africa*. Ibadan. Third World Information Services Limited 328-329.
- Akintunde, S. (2000). *Libraries as Tools for ICT Development: A paper presented at the 42nd National Annual Conference and Annual General Meeting of the Nigerian Library Association, Akure, June 20-25, 2000: 10-18.*
- Alison, A. K. (2007). *The Effect of Information Literacy on the Utilization of Electronic Information and Resources in Selected Academic and Research Institution in Uganda*. Retrieved from <http://www.emeraldinsight.com/journals.htm?issn=02640473&volume=25&page=3&articleid=1610818&show=abstract>
- Ilo, P. & Ifijeh, G. (2010). *Impact of the Internet on Final Year Students Research: A Case Study of Covenant University, Ota, Nigeria*. Available at <http://www.webpages.uidaho.edu/~mbolin/ilo-ifijeh.htm>.



Agunbiade et al.

- International Encyclopedia of Library and Information Science (2003).
- Krubu, E. & Osawaru, E. (2011). *The Impact of Information and Communication (ICT) in Nigerian University Libraries*. Available at digitalcommons.unl.edu/cgi/viewcontent.cgi?article1614&context=libphilprac.
- Lakos, A. & Shelley, P. (2004). Creating a Culture of Assessment: A Catalyst for Organizational Change Portal: *Libraries and the Academy*, 4(3), 345-363.
- Lawal-Solarin, E. O. (2015). The Use of Information and Communication Technology (ICT) in Academic Libraries in Nigeria: A Case Study of Covenant University Library Ota, Nigeria.
- Nwankwoala, H. N. L. (2015). An Investigation of Lecturers and Students Use of ICTs in Nigerian University Education as a Panacea for National Development. *Research on Humanities and Social sciences*, Vol.5 (20), 2015 <http://www.iiste.org>
- Nwezeh, C. (2010). *The Use of ICT in Nigeria Universities: A Case Study of Obafemi Awolowo University, Ile-Ife*. Available at [www.webpages.uidaho.edu/~mbolin/nwezeh.htm](http://www.webpages.uidaho.edu/~mbolin/nwezeh.htm)
- Odeh, P. (2011). *Utilization of Information and Communication Technologies (ICTs) by Students in Federal University Libraries in North-Central Zone of Nigeria*. An unpublished thesis submitted to the Department of Library and Information Sciences, University of Nigeria, Nsukka.
- Oduwole, A. A., et al. (2003). Electronic Services Provisions in Nigerian University Libraries. *Nigeria Library and Information Science Review (NLISR)* 20 (1 & 2): 1-7.
- Oketunji, I. (2004). *Library Development and the role of Information and Communication Technology*. A paper presented at National Workshop on Strategies for Managing Technology Services in Libraries and Information Centres, NLA Cataloguing, Classification and Indexing Section, held at Stella Obasanjo Complex, Lokoja, 17th-4th October.
- Omekwu, C. O. & Echezona, R. I. (2008). *Emerging Challenges and Opportunities for Nigerian Libraries in Global Information Environment: A paper presented at the 46th Annual NLA Conference, June 1 2008, Kaduna*.
- Oriogu, C. Et.al. (2014). Availability and Accessibility of ICT in the Provision of Information Resources to Undergraduate Students in Babcock University Library. *Research on humanities and social sciences*, 4(14), 2014 <http://www.iiste.org/Journals/>
- Ugwuanyi, C. F. (2011). *Influence of ICT Literacy Skills on its Application for Library Use among Academic Librarians in South-East Nigeria*. Unpublished thesis submitted to the Department of Library and Information Sciences, University of Nigeria, Nsukka.



Agunbiade *et al.*

- Umaru, F. A. (2011). The Challenges posed by Information Communications Technology (ICT) Facilities to Students of Tertiary Institutions in Bauchi State. *Journal of information and knowledge management*. Vol. 2(2), 2011. ISSN: 2141-4297.
- Wikipedia Free Internet Encyclopedia (2009). *What is ICT?* Retrieved from [www/http.wikipediafreeinternetencyclopedia.htm](http://www.wikipediafreeinternetencyclopedia.htm)
- Wright, C. A. (2004). The Academic Library as a Gateway to Internet: An Analysis of the Extent and Nature of Search Engines Access for Academic Library Pages. *College and Research Libraries* 65(4):276-286.



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