

Availability and Utilization of Ict Resources by Undergraduate Students of Federal University of Technology, Owerri and Imo State University Owerri

Justice Chinonso Ujoununna*, Esther D. J. Okai, Justice Nnamdi Okorie, Amanze Onyebochi Unagha

Department of Library and Information Science, Abia State University, Uturu, Nigeria

Abstract This study examines the availability and utilization of ICT resources by undergraduate students of Federal University of Technology Owerri (FUTO) and Imo State University, Owerri (IMSU). The research adopted a descriptive survey design with a study population of 1872 undergraduate students of the universities under studied from which a sample size of 188 respondents was gotten from Taro Yamme's statistical formula. Data was analyzed using the SPSS software frequency distribution and percentages. The findings revealed that ICT Resources which include e-mail, World Wide Web, Gopher, teleconferencing and file, transfer protocols were the ICT resources available and utilized by the undergraduate students of Federal University of Technology, Owerri and Imo State University, Owerri. However, poor network/internet connectivity, inadequate poor supply and limited access, lack of skill and personnel are the challenges facing the availability and utilization of ICT Resources.

Keywords Availability, Utilization, ICT Resources

1. Introduction

The evolution of the ICT has optimally changed the social structure and mode of operation, most especially in the education sector. This means that the ICT has radically altered students mode of research, reading and learning. With reference to the role of Internet and its allied technologies in education, Owolabi (2016) citing shields (2000) broke down the socio-technological movements into three stages. The first stage, the personal computing movement of the early mid-1980s spawned the second, the networking of the late 1980s to mid-1990s; the latter, in turn envisions the rise of virtual universities during the 2000s (Rosemberg, 2011). What is interesting about the third movement is that some of the advocates of virtual education believe that the traditional model of campus based teaching, learning and scholarship must adapt to new technological realities, (for example the Internet, digital libraries, brad and multimedia capabilities, etc) or the proponents of distance learning believe that an ICT driven revolution can make higher education more affordable and more acceptable. (Owolabi, 2016).

Barclay (2001) maintains that information and communication technology significantly changes the way

* Corresponding author:

justiceujo@yahoo.com (Justice Chinonso Ujoununna)

Published online at <http://journal.sapub.org/ijis>

Copyright © 2018 Scientific & Academic Publishing. All Rights Reserved

learning is conducted with the increase of information and communication technologies for instructional design, delivery and technology supported learning equipment. With the evolution of Internet and information technology, ICT Resources are now very available for use in campus, libraries and at homes. In the light of the forgoing, this study intends to examine the availability and utilization of ICT resources by undergraduate students of Federal University of Technology, Owerri and Imo State University, Owerri.

2. Objectives of the Study

The objective of this study is on the availability and utilization of ICT Resources by undergraduate students of Federal University of Technology, Owerri. However the following objectives are identified:

- To find out the types of ICT resources available for undergraduate students use in the of Federal University of Technology, Owerri and Imo State University, Owerri.
- To find out the benefits being denied by the

undergraduate students from the use of ICT information resources.

- To determine the purpose for which the undergraduate students use the ICT resources; and
- To investigate the factors that hinders the use of ICT resources by the undergraduate students?

3. Research Questions

The following are research questions for the study:

- What are the types of ICT resources available for undergraduate students use in FUTO and IMSU?
- What benefits do the undergraduate students drive from the use of ICT resources in the library?
- What is the purpose for which the undergraduate students use the ICT resources?
- What are the factors that hinder the use of ICT resources by the undergraduate students?

4. Literature Review

According to Ujournna (2013), ICT is the generic term use to describe all computer based devices and electronic gadgets that enables the computer interact with one another all over the globe, irrespective of geographical distance; it resources may be seen in general as all technological tools and documents that provide useful information to Internet and system users. ICT resources have gradually become major resources in every university library in recent years Shuling (2007). The growth and diversity of Internet resources, especially e-journals, has led many to predict the extinction of the printed journals; it has been suggested that a new paradigm is sweeping scholarship (Liew, Foo, and Chennupati, 2000; Harper et al; 2006).

According to Dadzie (2005), ICT resources are invaluable research tools that complement the print-based resources in a traditional library. Their advantages include access to information that might be restricted to the user due to geographical location or finances, access to more current information, and provision of extensive links to additional resources or related content. His arguments for students using ICT resources are compelling. However, knowledge to determine what computer skills students need to access library Internet resources (Okello-Obura and Magara, 2008).

Tella (2007) noted that students' ability to find and retrieve information effectively is a transferable skill useful for their future lives as well as enabling the positive and successful use of academic ICT sources. The ability to explore the digital environment is a requirement for academic success Lawson (2005). Students such as undergraduate students are expected to use ICT information resources in the

university. In order to make use of the growing range of ICT resources, CCE students of FUTO & IMSU acquire and practice the skills necessary to exploit them. Skills learning are essential in a technology driven environment, and it can be enhanced through the use of innovation learning strategies.

Uhegbu (2007) saw availability as a capability of something at one's disposal, something being obtainable within one's reach. It is the probability that a system has not failed or under-going a repair action when it needs to be used. To utilize means the ability to make practical use of something, it also means to use effectively.

Undergraduate students are students learning in a system of education that focuses on teaching methods and technology with the aim of delivering teaching, often in a classroom basis, to students who are physically present in a traditional educational setting such as a classroom who are at their pursuit of first degrees (Ujournna, 2017; Simsora, 2015).

5. Methodology

Survey method was adopted for this study primarily because it was a suitable and efficient way of studying large populations. It allows only a sample population to be used to represent the entire population. The target population for this study was the undergraduate students of the Federal University of Technology, Owerri and Imo State University, Owerri. The population consisted of 1872 students. A sample size of 188 was Questionnaire was the only instrument used for the collection of data for this study because it is capable of reaching a large number of respondents and provides privacy and confidentiality. The descriptive statistical technique made up of tables and percentages was used in analyzing the sate collected.

6. Bio-Data

Table 1. Center of Study of Respondents

Institution	Frequency	Percentage (%)
IMSU	119	63.3
FUTO	69	36.7
	188	100.0

Majority of the respondents, 119 (63.3%) were from IMSU while 69 (39.7%) were FUTO.

Table 2. Gender Distribution of the Respondents

Gender	Frequency	Percentage (%)
Male	101	53.7
Female	87	46.3
	188	100.0

The above table revealed that 101 (53.7%) of the respondents were male while the remaining 87 (46.3%) were female. These respondents cut across FUTO and IMSU.

Table 3. Age Distribution of the Respondents

Age Range	Frequency	Percentage (%)
18-25	107	56.9
26-35	78	41.5
36-45	3	1.6
	188	100.0

Table above showed that majority 107(56.9%) of the respondents were within the age range of 18 and 25 years old. Also, 78 (41.5%) of them were within 26 and 35 years of age while only 3 (1.6%) of the respondents were between 36 and 45 years old.

7. Answer to Research Questions

In order to achieve the objectives of this study, six research questions were drawn and these questions were answered below.

Research Question 1: What are the types of ICT resources available for undergraduate students use in FUTO and IMSU?

Table 4. Types of Internet Resources

	Electronic Resources	SA	A	D	SD
a.	CD-ROM Databases	00	47 (25%)	69 (36.7%)	72 (38.3%)
b.	Internet services/resources	78 (41.5%)	110 (58.5%)	00	00
c.	E-mail services	83 (44.1%)	105 (55.9%)	00	00
d.	Electronic journals	24 (12.8%)	51 (27.1%)	61(32.4%)	52 (27.7%)
e.	Online Public Access Catalogue (OPAC)	15 (8.0%)	45 (23.9%)	96 (51.1%)	32 (17%)
f.	Online databases	27 (14.4%)	68 (36.2%)	53 (28.2%)	40 (21.3%)
g.	Electronic databases	39 (20.7%)	69 (36.7%)	57 (30.3%)	23 (12.2%)
h.	Electronic books	21 (11.2%)	55 (29.3%)	76 (40.4%)	36(19.1%)
i.	Cybercafés	67 (35.6%)	121-64.4%	00	00

The table 4 revealed that about 47(25%) of the respondents agreed that CD-ROM databases were available in FUTO & IMSU. Contrarily, 188(100%) of the respondents agreed that both the internet resources and e-mail services were available for the use of undergraduate students in the Universities. 'A little less than half of the respondents 75(39.9%) and 60(31.9%) affirmed the availability of electronic journals and OPAC respectively. However, for the online databases, 95(50.6%) of the respondents confirmed its availability while 108(57.4%) respondents confirmed the availability of electronic databases. Electronic books was only affirmed by just 76(40.5%) of the respondents while all the respondents 188(100%) agreed that cybercafés were available for students' use in the Universities of FUTO and IMSU.

Research Question 2: What benefits do the undergraduates derive from the use of ICT resources in the library?

Table 5. Benefits of Use of ICT Resources to Undergraduate Students in FUTO and IMSU

	Benefits of Use of ER	Frequency	Percentage %
a.	Access to a wider range of information	104	55.3
b.	Faster access to information	125	66.5
c.	Access to current up-to-date information	147	78.2
d.	Easier access to information	99	52.7
e.	Improved academic performance as a result of access to quality information	90	47.9

The benefits derived by the undergraduates from the use of Internet resources are varied and are indicated in the table below. Most of the respondents 347(78.2%) affirmed that they have access to current and up-to-date information, 125(66.5%) respondents indicated faster access to information, and 104(55.3%) respondents indicated access to a wider range if information. Meanwhile, a little more than half of the respondents 99(52.7%) indicated that they have easier access to information as a result of the use of electronic information resources while a little below half 90(47.9%) of the respondents reported that the use of the electronic resources improved their academic performance as a result of access to quality information.

Research Question 3: What is the purpose for which the undergraduates use the ICT resources?

Table 6. Purpose of Use of ICT Resources by Undergraduate Students in FUTO and IMSU

	Purpose of Use	SA	A	D	SD
a.	To my academic purposes/course works	77 (41%)	111 (59%)	00	00
b.	Complete assignments	69 (36.7%)	101 (53.7%)	18 (9.6%)	00
c.	For research purposes	35 (18.6%)	61 (32.4%)	88 (46.8%)	4 (2.1%)
d.	Communicate with friends and colleagues	57 (30.3%)	85 (45.2%)	35 (18.6%)	11 (5.9%)
e.	Online application/ registration	122 (64.9%)	66 (35.1%)	00	00
f.	Source for materials for project writing	30 (16%)	92 (48.9%)	60 (31.9%)	6 (3.2%)
g.	Personal use 49	49 (26.1%)	83 (44.1%)	56 (29.8%)	00

Table 6 presented the various purposes for which the undergraduate students used the electronic information resources. The Table showed that all the respondents 188(100%) used the electronic resources for academic purposes/ course works and for online application/ registration. About 170(90.4%) of the respondents used the electronic resources for assignments, 96(51%) respondents used it for research purposes, 142(75.5%) used it to communicate with friends and colleagues, while 122(64.9%) used it as sources of information for project writing and 132(70.2%) of the respondents used the electronic resources for other personal purposes.

Research Question 4: What are the factors that hinder the use of ICT resources by the undergraduate of students of FUTO & IMSU

Table 7. Factors that Hinder the Use of ICT Resources by the undergraduates of FUTO & IMSU?

	Factors that Hinder ER Use	Frequency	Percentage %
a.	There is too much information when retrieving information	107	56.9
b.	It is time consuming and wastes a lot of my time	81	43.1
c.	Limited access to computer terminal	112	59.6
d.	Lack of IT knowledge to effectively utilize the services of	56	29.8
e.	Using Internet resources often distracts me from doing my other works	48	25.5
f.	Uncooperative staff to facilitate easy access to Internet	79	42
g.	Inadequate power supply	156	83
h.	Poor network/internet connectivity	148	78.7

Table 7 presented the various factors that hinder the use of electronic resources by the undergraduates in University of Ibadan. Among these factors, inadequate power supply was a major problem which had the highest ranking of 156 (83%) response rates. Following this is the poor network/internet connectivity with 148(78.7%) of the respondents agreed, and limited access to computer terminals of which 112(59.6%) of the total respondents agreed, as well as too much information retrieved which had 107(56.9%) respondents agreed.

8. Conclusions and Recommendations

Conclusions

The study found out that Internet resources like internet services, e-mail services, cybercafés, electronic databases and electronic journals were available for the use of undergraduate students in University of Ibadan and these resources are often used by them to support their academic course works, online application/registration, research, communication with friends and colleagues, sourcing for materials for project writing, complete assignments and for other personal purposes. However, the use of these resources by the undergraduates have resulted in a number of benefits such as access to current and up-to-date information, faster and easier access to information, and access to a wider range of information.

The study result has shown that the use of Internet resources by undergraduate students in University of Ibadan is a bit low. Inadequate power supply, inadequate provision of key electronic resources and facilities in the library were identified as key factors militating against the effective use of the electronic information resources.

Recommendations

The following recommendations were made, based on the findings of this study.

- The University should give priority to the development of information and communication technologies in the library by subscribing to relevant educational databases and carrying out a retrospective conversion of the library's print materials to digital format. This is to make the online searching easy for the students.
- The University Library should ensure sufficient networked computers and other facilities for the use of the undergraduate students in the library.
- Information retrieval skills using information technology should be included in the curriculum for the undergraduate students to be able to make use of these Internet resources effectively.

Hands-on training on the use of these resources should be actively promoted.

- The cost of accessing and downloading the electronic resources by students should be highly subsidized if they are to bear the list of off-prints and buy access time, in order to encourage the use of the electronic resources.
- Adequate provision should be made for alternative power supply to solve the problem of erratic and epileptic power supply which makes accessibility to the electronic resources difficult for the undergraduate students.
- The CD-ROM database should be resuscitated to reduce the stress and difficulties usually encountered in the online environment while using the electronic resources.

REFERENCES

- [1] Barclay, G. (2001). Patron response to bibliographic databases on CD-ROM. *RQ*, 29(1), 103-110.
- [2] Brophy, P. (1993). Networking in British academic libraries. *British Journal of Academic Librarianship* 8(1): 49-60.
- [3] Dadzie, P. S. (2005). Electronic resources: Access and usage at Ashesi University College. *Campus-Wide Information Systems* 22: 290-297.
- [4] Harper, P. V. et al. (2006). The 1st electronic resources and libraries conference: A Report. *Library Hi Tech News* 23.5: 12-22.
- [5] Lawson, K. G. (2005). Using eclectic digital resources to enhance instructional methods for adult learners: OCLC systems & Services: *International Digital Library Perspectives* 21: 49-60.
- [6] Liew, C. L., Foo, S. and Chennupati, K. R. (2000). A study of graduate student end-users' use and perception of electronic journals. *Online Information Review* 24.2: 302-315.
- [7] Okello-Obura, C. and Magara, E. (2008). Electronic information access and utilization by Makerere University students in Uganda. *Evidence Based Library and Information Practice*, 3(3). <https://ejournals.library.ualberta.ca/index.php/EBLIP/article/viewPDFInterstitial/935/3328>.
- [8] Rosemberg, P. (2001). Electronic library: A case study with reference to TERI. India; Bangalore.
- [9] Shields, A. (2000). Electronic information for students - the ELINOR project. *The New Review of Academic Librarianship*, 2, 91-100.
- [10] Shuling, W. (2007). Investigation and analysis of current use of electronic resources in university libraries. *Library Management* 28 (1&2):72-88.
- [11] Telia, A. (2007). Self-efficacy and use of electronic information as predictors of academic performance. *Electronic journal of academic and Special Librarianship* 8 (2) (Summer). Retrieved 11 Jan. 2009 from http://southernlibrarianship.icaap.org/content/v08n02/tella_a01.html.
- [12] Ujournunna, J. C. (2017). A comparative study of availability and utilization of Internet resources by students of center for continuing education, federal University of Technology and the Institute of Continuing Education programme, Imo State University, Owerri. An MLIS dissertation submitted to the department of Library and Information Science, Abia State University, Uturu, Nigeria.
- [13] Uhegbu, A. N. (2007). *The information user: issues and themes*. Okigwe: Whytem.