

Full Length Research

Awareness, Availability and Utilization of E-Resources in Online Free Libraries among Final Year Undergraduate Science Students in Adeyemi Federal University of Education, Ondo, Nigeria

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The research work centered on Awareness, Availability and Utilization of E-Resources in Online Free Libraries among Final Year Undergraduate Science Students in Adeyemi Federal University of Education, Ondo, Nigeria. Out of the one hundred copies of questionnaire that were distributed to respondents, eighty one copies representing 81% were filled and returned. The copies of the questionnaire were administered to final year students in physical sciences. They were organized, computed and analyzed using mean (x). The responses of the respondents were collected, aggregated, and presented in a tabular form. Based on this, frequencies of occurrence were established and used for the analysis using percentages, mean and standard deviation. The students claimed there were aware of E-resources. ICT infrastructure and tools in the Online libraries as internet, telecommunications, world wide web (www), library network and resource sharing, e-books, CD-ROM, electronic databases, online searching and e-mail. Information and communication technologies (ICTs) have proved to be a variable tool in enhancing quality academic work among students. It is a good spring board for research, training and manpower development. From the study undertaken it was discovered that various kinds of ICT facilities were available functional, and some available but not regularly functional. The ICT facilities are inadequate in the Online libraries. The study recommends that there are needs to make all the available ICT facilities in the Online Free libraries accessible to all students worldwide universal information workflow. There is need for the provision of more internet space (cloud) to enhance users' convenience The study is recommending the provision of reliable internet facilities in all the libraries to enable users access their resources and excel in their academic activities. This can be done by government of each countries as prescribed by UNESCO.

Key Words: Awareness, Availability, Utilization of E-Resources, Online Free Libraries, Final Year Undergraduates, Adeyemi Federal University of Education, Ondo, Nigeria.

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INTRODUCTION

Practically, ICTs have made resource sharing and online academic friendship easier. Users always want to consult information from online environment, particularly the World Wide Web (www) to unlimited sources of information globally and ICT has provided the solution for the problem of delay in information access and use. Subsequently, it has made information sharing effective and efficient. The accelerated, adoption and use of information and communication technology (ICT) has resulted in the globalization of information and knowledge resources (Islam and Islam, 2007). Aliu (2007) stated that internet has made it possible for people to discuss and share information the same time regardless of time, space and distance constraints. The use of internet can help to avoid duplication of research work to be carried out on related disciplines and title. On the same note, Okiki and Asiru (2011) writing on the importance of internet stated that student offering correspondence course in Africa have the benefit of the use of e-mail and world wide web to embark on studies on line. Consequently, time and distance is no longer a barrier to research because at any time of the day, contact can be made to gather needed information from anywhere in any part of the world.

Students in science and technology need more of online resources than those in the Arts due to the need of the currency of their research. The older an information, the better it is for researchers in the Arts but for those in sciences the more current the information the more useful it is, due to the latest events and discoveries in the field which call for continuous research. Kumar and Kaur (2005) in Nwokedi and Amkpa (2011) affirmed that internet provides scientists, lecturers and students access to un-traditional sources of information at any points of the globe.

science students cannot work without access to collaborators, to instruments, to information sources and sometimes to distant computers. Computers and communication networks are increasingly necessary for that access. Thus, three technologies are concerned with communications and collaboration: word processing, electronic mail, and networks. Word processing and electronic mail are arguably the most pervasive of all the routine uses of computers in research communication, electronic mail- sending text from one computer to another over the networks- is replacing written and telephone communication among many communities of scientists and is changing the way in which this communities are defined. Large collaborative project such as oceanographic voyages, use electronic mail to organize and schedule experiments, coordinate equipment arrival and handle other logistical details (National Academy of Science, 2000).

Generally, the utilization of ICT has a lot of invaluable advantages to information users. Siddigui, (1997), Henderson, (1992) cited in Anyakoha (2005) itemizing the following benefits of ICT to library users: speedy and easy access; remote access; round the clock access; access to unlimited information; and facilitating the reformatting and combination of data from various sources.

Statement of the Problem

E-resources in the world of information is an indispensability in the 21st century. Students, faculty, consultants, professors, in summary, both academics and non academics make use of e-resources for information sourcing and retrieval. With the proliferation of information resources in this digital age, students being information users should be more concerned on how to capture, process and use e-information. As ICTs have helped in the generation and management of information; and as such could be assessed with relative ease, therefore, the researchers need to explore the availability of the facilities more and purpose why it is being utilized in Online Free Libraries.

Purpose of the Study:

1. To determine Awareness knowledge of final year undergraduate Science students of the ICT facilities that are available in Online libraries.
2. To investigate the ICT facilities that are available in Online Libraries.
3. To investigate the purposes of ICT utilization among final year students in Online Libraries.

Research Questions

The following research questions guided the study:

1. What is the Awareness knowledge of final year undergraduate Science students of the ICT facilities that are available Online libraries?
2. What are the ICT facilities that are available in Online libraries?
3. What are the purposes of ICT utilization among science students in Online libraries?

Review of Related Literature

The information technology found in Nigerian university libraries today combines computer storage media and telecommunication. In other words, computer does the processing, storage and retrieval of information, while telecommunication provides the data/ information from work-station to another library. Thus, ICT provides libraries with capabilities for the location of information, storage and retrieval of information and dissemination of information (Etebu, 2010). Globalization of information is the resultant effect of the advent, application and utilization of information and communication technologies (ICT) for information generation and delivery. The electronic age has made users search beyond print media while looking for information resources. Latest research work are sent across the world through electronic means and no serious researcher of this age ever depends solely on print media, rather the use of internet, websites, e-mail etc are the language of the day. Thus, it is difficult to imagine a world without ICT.

Library and information centers in this generation are set out to create access to information not only through print medium but also by electronic means in order to facilitate quick delivery. Both users and librarians benefit immensely from the use of ICT resources in libraries. Ogunsola (2005) affirmed that it is highly recommended that for survival and relevance of university libraries in Nigeria, ICT should be declared an institutional priority with adequate funding and support. This will make researchers of this age to patronize them for information. For effective and modern information services, the use of information and communication technology is indispensable. Not only does ICT introduce new ways of information handling, it also brings about change in the very structure of information and its communication concepts like universal bibliography, accessibility to and availability of documents irrespective of location, highly personalized services, matching users needs with document databases, full text searches, storage and retrieval with speed and accuracy etc. have all being accomplished to a great extent (Rana, 2008). The students will be able to benefit maximally when the electronic services are in order and the library staff attend to them appropriately.

Prior to the application of ICT to information processing and use in libraries, prints are the predominant group of their collections. However, the advent of ICT and its stimulation in libraries have brought about digital resources to support teaching, learning and research. Functionally, libraries of the current dispensation provide access to both print and electronic resources to serve users and to increase the visibility of their institutions, and as a measure of prestige. In other words, they must go beyond the border of print collection in information delivery. It must extend to computer resources and other non-print format. Consequently, Oketunji (2000) listed ICT resources in library as personal computers, CD-ROM, fax, network, scanners and internet, although, many were left out in the list of the generalities of ICT facilities. However, Ebijuwa (2005) listed ICT infrastructure and tools in the library as internet, telecommunications, world wide web (www), library network and resource sharing, CD-ROM, electronic databases, online searching and e-mail.

METHODS

Population of the Study

The population comprises all the final year Science undergraduate students in Adeyemi Federal University of Education, Ondo.

Sampling Technique and Sample Size

Simple Random sampling technique was used for the study. Therefore the sample size of the study was one hundred (100) degree students.

Procedure for Data Collection

The researchers and research assistants collected the data through face-to-face administration of questionnaire. This involves going to the various sections of the college library to administer the questionnaire and collecting them back at the same time because library is a venue where virtually all students are present to study.

Research Design

The research design for the study is descriptive survey research design. It is a design that allows a population to be studied by collecting and analyzing data from only a sample considered to be representing the entire population. This is suitable for this research because none of the variables was manipulated but explained the way they occurred in the field of study.

Research Instrument

The research instrument used for the study was adapted by the researcher. Section A comprises information on Biodata; Section B was on Likert type scaling which asked questions on Awareness, Availability and Utilization of E-Resources in Online Libraries among Final Year Undergraduates in Adeyemi Federal University of Education, Ondo, Nigeria

Procedure for Data Analysis

The responses of the respondents were collected, aggregated, and presented in a tabular form. Based on this, frequencies of occurrence were established and used for the analysis using percentages, mean and standard deviation. Out of the one hundred copies of questionnaire that were distributed to respondents, eighty one copies representing 81% were filled and returned. The copies of the questionnaire were administered to final year students in sciences. They were organized, computed and analyzed using mean (\bar{x}). The mean scores of the responses were presented in the tables below:

DEMOGRAPHIC DATA

Table 1: Sex distribution of the respondents

SEX DISTRIBUTION OF RESPONDENTS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	54	66.7	67.5	67.5
	FEMALE	26	32.1	32.5	100.0
	Total	80	98.8	100.0	
Missing	NR	1	1.2		
Total		81	100.0		

From table 1 above, 54 out of 81 respondents are males while 26 are females.

Table 2: Distribution of the respondents according to programme of study

PROGRAMME OF STUDY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	DEGREE	81	100.0	100.0	100.0
	Total	81	100.0	100.0	

The table above reveals that all the respondents are degree students.

Table 3: Distribution of the respondents according to programme of study

AREA OF STUDY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PHYSICS	51	63.0	63.0	63.0
	CHEMISTRY	30	37.0	37.0	100.0
	Total	81	100.0	100.0	

From the table above, 51 of the respondents are physics students while 30 are chemistry students.

Table 4: Awareness of Online Libraries

SN	ITEM	N	YES	NO	Mean
1	ARE YOU AWARE OF VIRTUAL LIBRARY IN THE ONLINE?	81	57	24	1.30

From the table above, 57 of the respondents agree that they are aware of virtual library in the Online while 24 disagree with the notion.

Table 5: ICT FACILITIES AVAILABILITY IN ONLINE LIBRARIES

SN	ITEMS	N	AF	ANRF	ANF	NA	MEAN
1	COMPUTER	71	38	14	10	9	3.14
2	INTERNET	70	42	21	2	5	3.43
3	COMPUTERS CONNECTED TO INTERNET	68	30	20	7	11	3.01
4	PRINTERS	71	44	11	5	11	3.24
5	SCANNERS	71	30	20	8	13	2.94
6	MICROFORM READER	66	19	16	7	24	2.45
7	PHOTOCOPIERS/SCANNERS	69	43	10	8	8	3.28
8	FASCIMILE (FAX)	67	14	19	10	24	2.34
9	FLOPPY DISKETTES	71	19	20	8	24	2.48
10	CD-ROMs	70	27	13	11	19	2.69
11	FLASH DRIVES	70	28	17	10	15	2.83
12	WAN	68	30	16	8	14	2.91
13	LAN	68	22	18	11	17	2.66
14	VIDEO TAPE PLAYER	67	20	15	6	26	2.43
15	MULTIMEDIA/DIGITAL PROJECTORS	70	28	13	7	22	2.67
16	PROJECTOR SCREEN	69	20	14	16	19	2.51
17	FUNCTIONAL LIBRARY E-MAIL	69	26	15	12	16	2.74
18	INTERCOM	66	12	12	16	26	2.15
19	INSTITUTION (UNIVERSITY) WEBSITE	69	47	13	7	2	3.52
20	DIGITAL CAMERA	67	28	12	12	15	2.79
21	TELEVISION	69	30	16	4	19	2.83
22	TELEPHONE	69	28	14	2	24	2.97

From table 5 above, items 1 to 22 reveal the various ICT facilities available in the virtual library. The mean of all items ranges from the lowest to the highest which is 2.15 – 3.52. The mean criterion is set at 2.5 which denote the point of acceptance or rejection of any item. Items with mean below the criterion mean of 2.5 are therefore rejected and are considered not available while items with mean above the criterion mean are accepted and are considered as available. This agreed with Ebijuwu (2005) listed ICT infrastructure and tools in the library as internet, telecommunications, world wide web (www), library network and resource sharing, CD-ROM, electronic databases, online searching and e-mail. Items 6, 8, 9, 14 and 18 have 2.45, 2.34, 2.43, 2.43 and 2.15 respectively and they fall below the criterion mean, therefore are rejected. This implies that the items rejected are not available in the college library. On the other hand, all other items are accepted as their mean are greater than 2.50.

Table 6: WHAT ARE THE PURPOSES OF ICT UTILIZATION IN THE ONLINE LIBRARIES?

SN	ITEMS	N	SA	A	D	SD	MEAN
1	CHECKING E-MAILS THROUGH INTERNET FACILITIES	76	49	17	9	1	3.50
2	TYPESETTING ON WORD PROCESSING	76	32	35	7	2	3.28
3	STORING AND COPING DATA INTO MY FLASH DRIVES, DISKETTES, AND CD-ROMs IN THE LIBRARY	76	32	31	8	5	3.18
4	WRITING PROJECT/DATA ANALYSIS/RESEARCH WORK	75	38	30	4	3	3.37

Table 6 continuation

5	UPLOADING DOCUMENTS INTO TEXT	74	26	37	9	2	3.18
6	BROWSING THE WEBSITES FOR ASSIGNMENT TERM PAPERS EXAMS SEMINAR PRESENTATION ETC.	76	35	30	7	4	3.26
7	ACCESSING OTHER UNIVERSITIES LIBRARIES DATABASE	75	26	22	19	8	2.88
8	RETRIEVING INFORMATION FROM STORAGE AND DEVICES IN THE LIBRARY	73	25	32	9	7	3.03
9	BROWSING TO READ DAILIES (NEWSPAPERS)	75	28	29	12	6	3.05
10	USING POWER POINT PACKAGES, PROJECTOR SCREEN, VIDEO OR AUDIOTAPE PLAYER FROM LIBRARY FOR PUBLIC PRESENTATION	76	26	28	12	10	2.92
11	ACCESSING DATABASES ON CDs OR DVDs WHICH BELONG TO LIBRARY OR INDIVIDUAL IN THE LIBRARY	75	28	24	12	11	2.92
12	ONLINE QUIZZES AND TESTS	76	21	34	13	8	2.89
13	ONLINE LABORATORY WORK	76	23	28	20	5	2.91
14	DOWNLOAD FILES AND PRINTING OF DOCUMENTS	76	35	33	2	6	3.28

The table above shows the responses of the respondents on the purposes of ICT utilization in college library. All the means of the items are greater than 2.5 which is the mean criterion. This therefore necessitates the acceptance of all items as the reasons for which respondents utilize ICT resources in the Online libraries. Also the finding agreed with National Academy of Science (2000) that although different scientific disciplines use information technology differently however, computers can handle large amount of information quickly and make possible research that was previously impracticable. From the findings, the researcher believed that ICT facilities are actually being utilized for various purposes which have been discussed.

CONCLUSION

Information and communication technologies (ICTs) have proved to be a variable tool in enhancing quality academic work among students. It is a good spring board for research, training and manpower development. From the study undertaken it was discovered that various kinds of ICT facilities were available functional, and some available but not regularly functional. The ICT facilities are inadequate in the Online libraries. The data for this assertion it based on the opinions of the respondents from the distributed questionnaires. To carry out a successful study, five research questions were formulated. Mean was statistical tools used to analyze the responses.

The analysis of the data yielded the following results:

1. That these types of ICT facilities are available and functional in the libraries of federal university libraries, south west, Nigeria. They are institutional website (university), computer, internet, computer connected to internet, photocopiers, projector screen, printer, flash drive, CD ROMs, floppy disk, functional, email, telephone. This shows that there are different types of ICT facilities in the libraries.
2. That ICT are being utilized for various purposes by the post graduate science students. The purposes which include writing project/research work, browsing websites for assignment, term papers, exams, seminar presentation, uploading document into text, storing and copying data into flash drives, diskettes and CD ROMs, checking email through internet among others.

RECOMMENDATIONS

1. The study recommends that there are needs to make all the available ICT facilities in the Online Free libraries accessible to all students.
2. There is need for the provision of more internet space (cloud) to enhance users' convenience
3. The study is recommending the provision of reliable internet facilities in all the libraries to enable users excel in their academic activities. This can be done by government of each countries as prescribed by UNESCO.

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