

Full Length Research

Challenges and Strategies to Enhanced Use of Digital Information Resources in e-Library among University Students: A Case of Adeyemi Federal University of Education, Ondo, Nigeria

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The study was designed to determine Challenges to Use of Digital Information Resources in e-Library among University Students: A Case of Adeyemi Federal University of Education, Ondo, Nigeria. It ascertained the challenges encountered in the utilization and proffer solutions. Descriptive survey research design was used to guide the study. Out of 100 copies of questionnaire distributed, 80 copies were returned representing 80%. Quota sampling technique was used due to the enormity of the student population. The face validation of the questionnaire was determined by experts in research. The copies of questionnaire was administered through face to face method which involve the researcher and research assistants moving from one department to another. In analyzing the data collected, mean (\bar{x}) was used as the statistical method. The study revealed the challenges encountered in the utilization; strategies to enhance effective utilization was proffered. The research work recommended for the provision of more facilities, accessibility to the facilities, provision of reliable internet services, and centralization of proposed library building on the campus, training and retraining of library staff on ICT utilization to help students search for information.

Key Words: Digital Information Resources, e-Library, University Students, Adeyemi Federal University of Education, Ondo, Nigeria

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INTRODUCTION

In the recent years, Information and Communication Technologies have developed very rapidly in line with the growth and convergence that occurred in telecommunication technology. The convergence of computers and telecommunication technology has popularized the electronic generation and access to information. Consequently, different technological applications are now created in order to support the operational activities of human life and organization. As a result of this, users are now expected to be computer literate to enable them explore information resources in the library. ICT is mainly concerned with the storage, retrieval, manipulation, transmission or receipt of digital data. It includes all types or components of technological tools used to provide, store, disseminate and retrieve

information for effective library service delivery. The tools include internet, personal computers, scanners, printers, CD-ROMs, flash drives, floppy diskettes, photocopies, fax machines, audio/video tape players, digital projector/screen digital camera and T.V (Anyagwu, 2007).

Similarly, ICT was explained as Combination of computers, ancillary equipment, software, hardware services and resources inter-connected together to form network that is fused in the acquisition, storage, manipulation, management, movement control, interchange, transmission or reception of information. It is an umbrella term that includes all the manipulation and communication of information. Information and Communication Technologies encompass any medium to record information (magnetic disk/tape, optical disk, CD/DVD, flash memory etc and arguably paper records); technology for communicating through voice and sound image microphone, camera, loud speakers and telephone to cellular phone. It also includes a range of technological equipment such as computers, mobile telephones; MP3/MP4/WMA, storage devices, file transfer protocols, satellites, World Wide Web etc are used for information exchange among people for different purposes. These devices are capable of both synchronous and asynchronous communication format, and the most advanced of these technological application is the concept of multimedia, which refers to teaching and learning devices that include a combination of data manipulator e.g. video, CD ROMs, floppy disks e.t.c which facilitate interactive communication between and among researchers (Akinola, 2011; 99)

Achebe (2005) categorized ICT into five broad groups as follows: Capturing technologies (e.g. keyboard, touch screens, voice recognition system, image scanner etc). These technologies help researchers to send in their data to the system for processing, while storage technologies (e.g. floppy disks, smart card, magnetic tapes, disc e.t.c.) enable them to get from the system what data have been stored into the storage devices for use at a convenient time. Processing technologies comprise the system and application software while communication technologies are meant to display the captured object or information (e.g. Digital video, disc, CD ROM drives, audio CD, printers, computer display screen)

In this digital age, university libraries and other academic libraries are shifting from traditional to electronic library services. Libraries now make use of ICT to capture, process, store and disseminate information for users' satisfaction. Students, staff and other researchers make use of web pages, e-mail, CD ROM, electronic journal in library for research and other activities. Thus, Postgraduate students have access to internet at various points such as knowledge retrieval center (library), computer center as well as the department and departmental laboratories. Consequently, they can now access a wide range of e-journals in various academic disciplines. Such access includes full text journal articles, abstracting and indexing services (Patil, 2012). Obviously, the present demand of a good research student has transcended the norms of black and white (paper) only. Researchers are becoming advanced in retrieving information from electronic medium. Definitely the use of ICT has been of immense help in successful completion of a good research. In the light of this, accelerated, adoption and use of information and communication technology (ICT) has resulted in the globalization of information and knowledge resources (Islam and Islam, 2007).

Globally, university libraries are embracing the use of information and communication technology (ICT) because their collections are large, information demand is high; users are diverse and fast service delivery is expected of them. The avalanche of information sent online daily are the ingredient for research and university libraries should no longer operate without ICT due to the volume of the information. For proper management, Nworu and Enwereuzor (2006) pointed out that the application of basic information technology and system to meet the expectation of modern users, whose focus have turned world class, has become imperative. In essence, any university that wants to be relevant and up to date in this information age must be ICT-friendly. However, any attempt to sideline ICT will render such a library archaic. Thus, it is very important for universities to ensure that their library maintain credibility in the provision of ICT to meet the researchers' needs. With installation of ICT in the library, there will be simultaneous access for many users and self-service might become encouraged. And for library users to explore the ICT resources that are available in the library, they need to possess the required skills. Essentially, it is the skill they possess that will complement the technology the library has provided for maximal result and satisfaction. More so, the acquisition of such skills can be of immense benefit to them later in life.

Tella...et al. (2007) in Okello-Obur and Ikoja-Odongo (2010) affirmed that the students' ability to find and retrieve information effectively is a transferable skill useful for their future life as well as enabling the positive and successful use of the electronic resources while at school. They noted that in this digital era, any student at higher level who intends to be an achiever should have the ability to explore the digital environment. Postgraduate students especially, are increasingly expected to explore electronic information resources while at the university because they are the pacesetters in research among the generality of students. Therefore, students who are using the growing range of electronic resources must acquire and practice the skills necessary to explore them. They must have the ability to surf web and know the relevant websites that are useful to them. They are also expected to have the basic knowledge of computer applications. Equally, other technological tools must not be strange to them. This has a lot to do with their research work or other basic academic exercises.

Statement of the Problem

With the speedy nature of information resources in this digital age, students being information users should be more concerned on how to capture, process, preserve and use information. As ICTs have helped in the generation and management of information; and as such could be assessed with relative ease, researchers need to explore the facilities more. Digital Information Resources have helped in academic work in the area of searching for information, cross fertilization of idea and experiment, data gathering, analysis and use; the importance of ICT in research work is becoming more prominent. Specifically, students researchers in need to engage in research to make discovery of new properties in sciences; this stresses the reason why they need the resources more in carrying out their researches. Despite the high involvement of stake holders in building ICT facilities for students use in the library, the researchers observe that most of them do not normally use Digital Information resources especially in the library. Hence, the study considers it appropriate to find out the Challenges to Use of Digital Information Resources in e-Library: A Case of Adeyemi Federal University of Education, Ondo, Nigeria.

Purpose of the Study:

- (1) To find out the challenges facing the utilization of Digital Information Resources in e-Library: A Case of Adeyemi Federal University of Education, Ondo.
- (2) To find out solution to the challenges facing the utilization of ICT Digital Information Resources in e-Library: A Case of Adeyemi Federal University of Education, Ondo.

Research Questions:

- 1) What are the challenges facing the utilization of Digital Information Resources in e-Library: A Case of Adeyemi Federal University of Education, Ondo?
- 2) What are the strategies to enhance effective utilization of Digital Information Resources in e-Library: A Case of Adeyemi Federal University of Education, Ondo?

Review of Related Literature

In the university community, the faculty and other post graduate students are the major researchers that mostly use the available information resources for seminar, teaching and research. Hence, Omogbemi et al. (2004) in Okiki and Asiru (2011) affirmed that postgraduate students are researchers and they need variety of information from various sources. In a similar vein, Rasul and Singh (2010) stated that postgraduate students are the key producers of research in universities and an important element in their research is the access to information. However, students in science and technology will 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.

Frankly, a typical researcher needs a variety of information to accomplish the research being undertaken and this can be gotten through internet. Information is needed on previous literature on the subject which reveals current state of research in the area to avoid duplication of research. Research activities could be divided in parts to methodology in the area of investigation; the variables that have been tested; scope and limitation of previous studies, the result of findings; further area of investigation, names and addresses of researchers conducting research in similar areas of investigation. Nigeria is linked to the internet hence it is possible for Nigerian researchers to access up to date information from the net to make their research, journal articles, conference/ workshop/ seminar papers, technical reports, scientific findings known worldwide (Afolabi, 2001). It cannot be disputed that the major tool of ICT in terms of its use for downloading and uploading information is internet. 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. Thus, access to current literature for research work has been made easier through the use of internet connectivity. The current information revolution and the increasing impact of information and communication technology have gone a long way in modernizing the process of teaching, learning and research in most universities. Postgraduate studies are basically dwelling on research and the report of the research is given for further research. Also, different publications are made available through the internet. Some libraries have their digital collections in the internet which can easily be accessed by users. This has made it possible to have access to vast amount of resources such as dissertations, books, articles

etc. All published and uploaded in the internet (Ezeani, 2010). Therefore, academic library as the gateway to information should offer high-quality vetted internet search engine links, open access databases and journals, user guides / help sheets, and information literacy instructions on their websites.

The advances in ICT have progressively reduced the cost of managing information enabling individual, researchers and organization to undertake information related task much more effectively (Aliyu, 2007). OSTI,(2006) cited in Aliyu, (2007) expressed that the application of technology in teaching, learning and research is wide. For instance the use of e-prints is one of the major impacts of ICT on information network, access and use. E-print is very useful to researchers. They are scholarly and professional work electronically produced and shared by researchers with the intent of communicating research findings among colleagues pursuing common research objectives, between theoretical and experimental scientists, between those in basic and applied scientists, between scientists and engineers, between investigation and those in academic program. This is an indication that ICTs connect people. Thus the era of hoarding information is over! Information and communication technologies resources are good resources that facilitated cooperation's among information producers and users. This helps them in exchange of view, ideas and perceptions. Internet is a tool that really brings about the good information exchange and marketing. A research work that has been conducted in United State of America can be of assistance to related research that is taking place in Africa and this is made possible as the information is being displayed online through the internet access.

Researchers 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 these 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)

Students of the present dispensation see university library of this age as not just a collection of prints rather a place where information in non print format can also be found. That is, online information resources of present age are found in Nigerian university libraries and they are not restricted in use. The university libraries need to adequately rise to the challenge of providing the information resources. Therefore, the use of ICT in library has also generated many concepts such as digital library, automated library, electronic library, virtual library, community network, library 2.0., and so on. An automated library is the library that has converted all the normal manual routine to electronic system. It is the first stage in creating electronic library. When databases of information are built and they can be accessed through digital medium, they are regarded as the digital library. Virtual libraries are libraries in electronic form with no physical location and contain digital information that could be accessed through internet. However, automation is the first stage of computerization in the library and it is the term used when manual routine of the library are converted to electronic system. Library users have discovered the numerous advantages attached to the use of ICT. The use of ICT in the library has a sole aim of meeting the needs of users effectively, appropriately and timely.

Generally, the utilization of ICT has a lot of invaluable advantages to library 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. Ekere (2006) pointed out that university library is regarded as the heart of the intellectual life of the university. Hence, it was stated that no university can exist without a library since a university is a place meant to teach and carry out research. University library is the apex reservoir of knowledge in the university environment where one can go at will and be exposed to the whole fields of knowledge and practices of life. It is established to support and promote teaching, learning and research. The library is the soul of the university because it is the information house of the academic activities. Aguolu (1996) pointed out that since independence in 1960; there has been an unrelenting effort in the establishment of educational institutions at all levels especially in university education. It must be realized that university libraries being integral academic part of the universities generally emerged simultaneous with their parent institutions. Thus, as the number of universities are increasing so also the population of postgraduate students are growing larger and the researches they conduct are increasing and ever since the problem of the literature explosion became noticeable in the 1970s, the developed world has devised various systems to facilitate the flow of information both within and across the countries (Ogunsola, 2004).

Over the past 25 years, academic libraries have been affected by changes in information technology. The rate of change is still accelerating in the area. The introduction of various ICT has brought significant change in the services repackaging and delivery (Okon, 2005). In other words, the concept of university library as a place you can go to retrieve only print information has drastically changed to services which provide access to the intellectual records regardless of time and space. In a related development, Ogunsola and Aboyade (2005) stated that it worth noting that both federal government of Nigeria and other international agencies are now interested in the general development of ICT in higher

education in Nigeria. For instance, the Federal ministry of Education has embarked on the establishment of virtual library project. A model virtual library at National Universities Commission (NUC) will be the hub of the university-based libraries. The delivery of virtual library will be through the internet, CD ROM, and wide area network (WAN). The importance of research in national development has made some international and national agencies to contribute immensely to the use of ICT. Some agencies like UNESCO, Carnegie Corporation, and Rockefeller support the establishment of Databases at the University of Ibadan, Nigeria. These databases are helpful to students and other researchers for the research findings. With similar grant for academic development, the corporation is presently in collaboration with Obafemi Awolowo University, Ile-Ife, Nigeria and the University library is well positioned to gain the grant. Nigerian libraries are now gradually being computerized especially in the universities. In the past 5-10 years, many Nigerian libraries are now either computerizing some of their activities either through their respective university computer centers or installing these computers in their own libraries. However, Ghuloum and Ahmed (2011) itemized the challenges facing the implementation of ICT services in Kuwait academic libraries (KAL) as follows:

- There is lack on quality and quantity of ICT equipment. In essence, the available ones get spoiled quickly and the required number is not available.
- There is lack in the annual budget.
- There are no workshops or training programmes for the users regarding the improvement of their ICT skills.
- There is no good infrastructure in Place.
- There are no future plans toward the development of ICT services.
- There is shortage in number of qualified staff.
- There is no awareness in the decision makers as to the value of ICT in academic libraries.

METHODS

Population of the Study

The population comprises all the Undergraduate students in Adeyemi Federal University of Education, Ondo.

Sampling Technique and Sample Size

Quota 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 Challenges to Use of Digital Information Resources in e-Library: A Case of 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 DIGITAL INFORMATION RESOURCES IN AFUED E-LIBRARY

SN	ITEM	N	YES	NO	Mean
1	Are You Aware of Digital Information Resources in AFUED e-Library	81	57	24	1.30

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

Table 5: WHAT ARE THE CHALLENGES TO EFFECTIVE UTILIZATION OF DIGITAL INFORMATION RESOURCES IN THE UNIVERSITY LIBRARY?

SN	ITEMS	N	SA	A	D	SD	MEAN
1	POOR AND UNCONDUCTIVE ENVIRONMENT	74	29	23	16	6	3.01
2	UNFRIENDLY ATTITUDE OF THE LIBRARY STAFF	74	23	28	19	4	2.95
3	INSUFFICIENT ICT FACILITIES	73	32	31	6	4	3.25
4	INADEQUATE INFRASTRUCTURES	74	32	24	15	4	3.15
5	SLOW INTERNET CONNECTION	74	36	26	9	3	3.28
6	DIFFICULTY IN LOCATING WEBSITES	73	20	33	17	3	2.96
7	POOR ICTs KNOWLEDGE/INABILITY TO USE COMPUTERS	75	24	32	15	4	3.01
8	TIME CONSTRAINTS DUE TO LECTURE SCHEDULES	75	32	29	13	1	3.23
9	LIBRARY LOCATION IS FAR FROM LECTURE HALL/HOSTELS	75	25	20	25	5	2.87
10	ERRATIC POWER SUPPLY	72	31	28	7	6	3.17
11	SPACE CONSTRAINT	72	25	31	13	3	3.08
12	RESTRICTED ACCESS TO THE FACILITIES IN THE LIBRARY	72	29	29	10	4	3.15
13	INCOMPETENCE OF LIBRARY STAFF TO HELP USERS IN USE OF THE FACILITIES	72	25	21	21	5	2.92

The means from the table above ranges from 2.87 to 3.25 which shows that all items are accepted as the challenges facing the effective utilization of ICT facilities in the college library since the lowest mean is 2.87 which is greater than the criterion mean. It therefore implies that all the items in table 8 are responsible for the ineffective utilization of ICT facilities in the college library.

Table 6: WHAT ARE THE STRATEGIES TO ENHANCE THE EFFECTIVE UTILIZATION OF DIGITAL INFORMATION RESOURCES IN THE UNIVERSITY LIBRARY?

SN	ITEMS	N	SA	A	D	SD	MEAN
1	PROVISION OF BETTER AND CONDUCTIVE LIBRARY ENVIRONMENT BY THE LIBRARY MANAGEMENT	74	49	24	1	0	3.65
2	NEED FOR RE-ORIENTATION OF LIBRARY STAFF BY LIBRARY MANAGEMENT TO BE MORE FRIENDLY	74	35	32	6	1	3.36
3	PROVISION OF MORE INFRASTRUCTURAL FACILITIES	70	40	25	4	1	3.49
4	INTERNET SERVICE PROVIDERS SHOULD BE CONTACTED FOR MORE EFFECTIVE SERVICE	74	42	29	2	1	3.51
5	ICT COURSES SHOULD BE MADE AS PART OF GENERAL STUDIES OF STUDENT TO GAIN THE KNOWLEDGE	74	41	25	8	0	3.45
6	THE LIBRARY SHOULD EXTEND THEIR SERVICE HOUR TO HELP FOR MORE EXPLORATION	72	29	32	9	2	3.22
7	LIBRARY BUILDING SHOULD BE WELL CENTRALIZED IN THE CAMPUS	74	32	32	6	4	3.24
8	THERE SHOULD BE ADEQUATE POWER SUPPLY	73	44	25	4	0	3.55
9	MORE SPACE SHOULD BE PROVIDED FOR USERS CONVENIENCES BY THE LIBRARY MANAGEMENT	73	41	26	4	2	3.45
10	ACCESS TO THE FACILITIES SHOULD BE MADE FREE	73	40	24	7	2	3.40
11	LIBRARY STAFF SHOULD BE MORE TRAINED AND UPDATED ON THE USE OF ICT IN LIBRARIES	74	42	28	4	0	3.51

Table 6 above reveals that most of the respondents agreed to the suggested strategies to enhance effective utilization of ICT facilities in the college library because the mean ranges from 3.22 – 3.65. With all the means of the items greater than the criterion mean, consequently, all the items are accepted as strategies of enhancing the effective utilization of ICT facilities in the university library.

Conclusion and Recommendations

There is urgent need for all students irrespective of their level and experience to be ICT compliant and up to date with recent technologies. This is because the utilization ICT facilities depend heavily on the skills and knowledge acquired. This study recommends a compulsory ICT proficiency courses, seminar, lecture, workshops on ICTs for students in general and research students in particular. More computer system should equally be installed and connected to internets for students use.

REFERENCES

- Akinola, O.O.(2011). Integration of Information Communication Technology into Social Studies Programme. *Akunba Journal of Research in Education*. 1(1) 99-111
- Aliyu, M. (2007). Use of Information Communication Technology in information Networking Among Natural Scientists in Ahmadu Bello University, Zaria. *Global Review of Library and Information Science*. Vol. 2(1). 15
- Anyakoha, M.W. (2005). Information and Communication Technologies in Library and Information Services. *Coal City Libraries*
- Anyaogu U. (2007). Current Trends in the Utilization of ICT for Reference Services in Library and Information Centers. *Global Review of Library and information Science* 3(1) 24
- Ekere, F.C. (2006). (Ed.) Introduction to Library Administration. Enugu: ABC Publishing
- Ghuloum H. and Ahmed V.(2011). The Implementation of new ICT Services in Kuwaiti Academic Libraries. *The Built and Human Environment Review*. Vol. 4(1). Available at: www.tbher.org/index.php/bher/article.
- Islam Md. S. and Islam Md. N (2007). Use of ICT in Libraries: an empirical study of selected Libraries in Bangladesh. *Library Philosophy and Practice*. Available at : www.webpages.uidaho.edu/mbolin/shariful.htm ;
- The National Academy of Sciences(2000). The Use of Information Technology in Research. Available at: <http://www.nap.edu/openbook/030903888x/html/11.html>
- Nwokedi, V. C. and Amkpa, S. A. (2010). Information Technology: An Overview. *Modern Library and Information Science for Information Professional in Africa*. (1)1, 15-20
- Ogunsola, L.A. (2004). Nigerian University Libraries and the Challenges of Globalization: The Way Forward. *Electronic journal of Academic and Special Librarianship*.5(2-3) Available at :www.southernlibrarianship.icaap.org/content/v05n02/ogunsola_101.htm
- Ogunsola, L.A and Aboyade W.A. (2005). Information and Communication Technologies in Nigeria: Revolution or Evolution. Hezekiah Oluwasanmi Library, Obafemi Awolowo University, Ile Ife, Nigeria. Available at: www.krepublishers.com/02-journals/jss
- Okello-Oburra,C. and Ikoja-Odongo, J. R. (2010). Electronic Information-Seeking Among LIS Post graduate students at Makerere University, Uganda. Available at: www.webpages.uidaho.edu/mbolin/oburra/ikoja.htm
- Okiki, O.C and Asiru, S.M.(2011). Use of Electronic Information Resources by Postgraduate Students in Nigeria: Influencing Factors. *Library philosophy and practice*. Available at :[http:// digitalcommons.unl.edu/libphi/prac/500](http://digitalcommons.unl.edu/libphi/prac/500)
- Okon, H.I. Effective Communication and Smooth Administration of Academic Libraries in the 21st Century: A New Paradigm in Nigeria. *Library Philosophy andPractice*. 8(1). Available at: www.webpages.uidaho.edu/mbolin/okon.pdf
- Rasul A. and Singh (2010). The role of Academic Libraries in facilitating Postgraduate Students' Research. *Malaysian Journal of Library and Information Science*. 15(3), 75-84