

## **AN ASSESSMENT OF ELECTRONIC RESOURCES AND UTILIZATION IN UNIVERSITIES OF NORTH CENTRAL NIGERIA**

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### **Abstract**

*The study examined the availability, purpose and extent of the utilisation of electronic resources in universities of North-Central Nigeria. It aimed at finding out the available electronic resources, extent of utilisation, reasons of utilising electronic resources and purpose of utilising electronic resources. The population of the study was made up of 2,361 postgraduate students. The study adopted descriptive survey research design using a Multi stage sampling technique. A structured questionnaire was used to collect data from 331 postgraduate students. Mean and standard deviation were used to analyse the data collected. Findings of the study revealed that electronic books and electronic databases were the most available electronic resources, although the utilisation of these resources was low among postgraduate students in universities of North-Central Nigeria. The study recommended increased investment in Information and Communication (ICT) facilities to promote increase utilisation of electronic resources by postgraduate students in North-Central Nigerian universities.*

**Keywords:** *Assessment, Electronic resources, Utilization, Universities, Information resources*

### **Introduction**

Universities are established to provide research, teaching and community services to its host communities. Universities are higher institutions of learning that awards undergraduate and postgraduate degree to its students. In order for a university to function properly its need a functional library that will provide the needed information resources which will serve as a backbone to meet the information needs of its students and staff.

Information resources are sources from where information is gotten to meet the needs of the university community. With the advent of Information and Communication Technology (ICT) these sources are now in electronic formats termed as electronic resources, digital library resources or electronic information resources.

Electronic resources are information sources in digital formats that are accessed over a network with the aid of an electronic device like computer. Electronic information resources include e-journal, e-books, e-newspapers, e-theses and dissertations. Thanuskodi (2012) identified electronic resources as sources of information in electronic formats accessed via the internet. Dhanavadan, Esmail and Nagarajan (2012) corroborated the above view when they opined that electronic resources are of different forms which are available on the internet with e-journal and e-books the most used.

In this study, utilisation of electronic resources is the extent to which postgraduate student use these sources of information and for what purposes they use them. It is important for students to maximise the use of the available resources in order to improve their academic work. Emwanta and Nwalo (2013) reported that electronic resources could enhance the

learning process of students by providing relevant information for their academic work. Furthermore, electronic resources are used for research, teaching purposes, preparation for presentation and conferences. The use of these sources of information is aided by information and communication technology infrastructure in universities of North Central Nigeria. It is against this backdrop that the study intends to identify the available electronic resources in universities of North central Nigeria, the extent of utilization and the reason why postgraduate student use these sources of information.

### **Statement of the problem**

Universities in North-Central Nigeria are subscribing and purchasing electronic resources due to advancement of information technology and in order to meet the information needs of the students and faculty members. Libraries are benefiting from the attributes associated with the use of these resources as such electronic resources have become an integral part of library collections. Electronic resources are complementing their print counterpart.

Despite these benefits attributed to the use of these resources they are still report cases to low access and use of electronic resources. This situation indicates more efforts needs to be done to determine the extent of utilization of these resources among postgraduate students in North Central Nigerian universities. It is against this backdrop that the study intends to assess electronic resources and its utilisation by postgraduate students in universities of North-Central Nigeria.

### **Objectives of the study**

The general objective of this study was to assess electronic resources and utilisation in universities in North-Central Nigeria. Specifically, the study was designed to:

- (i) Identify the available electronic resources in universities in North-Central Nigeria
- (ii) Identify the extent of utilisation of electronic resources by postgraduate students in universities North Central Nigeria.
- (iii) Determine the reason for utilising electronic resources by postgraduate students in universities of North-Central Nigeria.
- (iv) Ascertain the purpose of utilisation of electronic resources by postgraduate students in universities in North-Central Nigeria.

### **Research Questions**

The following research questions guided the study:

- (i) What are the available electronic resources in universities in North-Central Nigeria?
- (ii) What is the extent of utilisation of electronic resources by postgraduate students in universities in North-Central Nigeria?
- (iii) What is the reason for utilising electronic resources by postgraduate students in universities in North-Central Nigeria?
- (iv) What is the purpose of utilisation of electronic resources by postgraduate students in universities in North-Central Nigeria?

### **Literature review**

Dongardive (2015) identifies electronic resources as those materials that require computer access through mainframe computer or handheld devices. Parameshwar and Patil, (2009); Swain (2010) found that electronic resources include e-journals, e-books, online databases, e-theses/e-dissertations, electronic references documents, CD-ROMs databases. From literatures, it was discovered that out of the different types of electronic resources, electronic journals and electronic books are the commonly used types of electronic resources.

Library users need not visit the library before they can access these sources of information. Access is no longer restricted to the walls of the academic libraries with the aid of internet; personal computers and hand held devices like the tablet and mobile phones users can now access the library's electronic resources. Postgraduate students at Madurai Kamaraj University used the library's subscribed electronic resource through the UGC-Infonet consortium (Thanuskodi, 2011). Access to electronic resources could be through consortium agreement and personal or university subscribed access as reported by (Adetoro, 2013). The same case can be said of Nigeria University Library. Consortium of Nigeria University Libraries (NUBLIB) have subscribed to EBSCOhost, Access to Global Online Research in Agriculture (AGORA), Health Internetwork Access to Research Initiatives (HINARI), Online Access to Research in the Environment (OARE) and other offline database like MEDLINE which could be accessed through the university library gateway (Annuobi & Okoye, 2008), though the major sources of access to electronic resources is through the institutional subscription (Khan, 2012). Postgraduate students at University Libraries of Tirupati when asked to identify their preferred location of access of electronic sources, 85.55% of the respondents chose the library, while the remaining accessed it from computer centres on campus, departments and other places (Konoppa, 2014). The responses of users in as to where they accessed electronic resources showed that it was evident that majority of postgraduate students at North Eastern Hill University Shilong, accessed electronic resources in the library, as against going to the cybercafé, department, hostel, computer centre (Naga & Sten, 2012). Furthermore, Obaje and Camble (2008), found that CD-ROMs are frequently used for literature searches during project/dissertation and thesis writing as well as personal research by staff.

Adeniran (2013) undertook a survey on the use of electronic resources by undergraduates focusing on the extent of awareness of electronic resources, the types of electronic resources available and the impact of electronic resources on the academic performances of undergraduate students.

Ajebomogun and Fagbola (2015) reported that postgraduate students at University of Agriculture Abeokuta utilise electronic resources majorly for research purposes because it easily provides access to the relevant materials needed to help in their work and in literature search. In a similar view, it was found that majority of respondents use electronic sources of information for research. About 29.4% use it to prepare lectures and 24.8% for knowledge acquisition (Ansari and Zuberi, 2010). However, it was found that in some selected private universities in Bangladesh, students use electronic resources for research purpose with a few of them using it for entertainment purposes (Mostofa, 2013). In support of Mostofa, investigations on the use of digital library sources by scholars in Banara Hindu University reveals that scholars use electronic sources for research (88%), 38% for writing articles, (30%) to search for important literatures in their subject field and (22%) to keep abreast with latest trends of information (Shukla & Mishra, 2011).

### **Research methodology**

This study adopted a descriptive survey research design. Multistage sampling technique was used to arrive at the desired sample size. The population of the study was 2,361 postgraduate students from the four selected faculties of the government owned universities of North-Central Nigeria (University of Ilorin, University of Agriculture Makurdi, Federal University of Technology Minna, Kwara State University Malete and Ibrahim Badamasi Babangida University Lapai). The sample size of the study was 331 obtained for Morgan and Krejcie estimation table. The sample was distributed proportionately using 30%, 25%, 20%, 15% and 10% respectively amongst the selected universities based on the population of postgraduate students in each university. A structured questionnaire was used to collect

data from respondents. Frequency counts and percentages were used to analyse the results. The study used a four point Likert scale type of questionnaire: Strongly Agree (S.A = 4), Agree (A = 3), Disagree (D = 2) and Strongly Disagree (S.D = 1). The rating scale in terms of the means score of 2.50 and above was considered adequate while below 2.50 was regarded as inadequate.

### Results and Discussion

A total of three hundred (331) copies of the questionnaire were administered to postgraduate students in the selected universities. Out of this number, two hundred and seventy-four (274) copies of the questionnaire representing 83% were properly filled and returned for the analysis while fifty-seven (57) representing 17% were not returned. The overall response rate was 83% with the respondents from University of Agriculture Makurdi returned 82(83%) of the questionnaire, University of Ilorin returned 65(78%), Federal University of Technology Minna returned 57(86%), Kwara State University Malete returned 39(78%) and Ibrahim Badamasi Babangida University Lapai returned 31(94%) of the total copies of the questionnaire. The distribution of respondents by faculties is indicated in Tables 1.

**Table 1: Distribution of respondents by faculties**

<b>Faculties</b>	<b>N</b>	<b>%</b>
Law	10	3.6
Health Science	9	3.3
Life science	36	13.1
Management science	123	44.9
Physical science	13	4.7
Environment technology	17	6.2
Engineering technology	20	7.3
Veterinary medicine	3	1.1
Agronomy	12	4.4
Food technology	11	4.0
Natural science	2	0.7
Language and communication	1	0.4
Nimasa	3	1.1
Humanities, management and social science	8	2.9
Pure and applied science	2	0.7
Information and Communication Technology	1	0.4
Education	3	1.1
<b>Total</b>	<b>274</b>	<b>100</b>

Table 1 indicated that 72(26%) being the majority of respondents were from faculty of management science, followed by (9%) of the respondents from faculties of Life Science and Engineering technology. Data further revealed that 21(8%) of respondents were from faculty of Agronomy, (5%) of respondents from faculties of Physical sciences, Food technology, NIMASA, Humanities, management and social sciences respectively, 11(4%) from Environment technology, furthermore, (3%) from faculties of law, health science, veterinary medicine and pure and applied sciences respectively and lastly, 2(%) of respondents from faculties of Information and communication technology, Language and communication and natural sciences respectively.

Table 2: Types of electronic resources

S/N	Types of electronic resources	A	NA
1	Electronic journal	210(77%)	64(23%)
2	Electronic books	213(78%)	61(22%)
3	Electronic thesis and dissertation	135(49%)	139(51%)
4	Electronic databases	213(78%)	61(22%)
5	Electronic newspapers	164(60%)	110(40%)

**Key: A=Available NA=Not Available**

Table 2 provides the types of electronic information resources available to postgraduate students in the library. Majority of respondents that is 213(78%) indicated that electronic books are the most available while 64(23%) of respondents stated that electronic books are not available. Moreover, 213(78%) and 61(22%) of respondents are of the view that electronic databases are available and not available respectively, 210(77%) and 64(23%) of respondents revealed that electronic journals are available and not available respectively in the library. Furthermore, 164(60%) of respondents indicated that electronic newspapers are available 164(60%) and 110(40%) of respondents indicated that electronic newspapers are not available. It was observed that postgraduate students in universities of North-Central Nigeria reveal that electronic journal, electronic books, electronic databases and electronic newspaper available based on their respective percentage. The same table shows that respondents stated that electronic thesis and dissertation 135(49%) and 139(51%) are available. Table 2 evidently shows that electronic books and electronic journals are the most available with electronic thesis and dissertations less available as result of most theses are still more in printed formats.

**Table 3: Extent of utilization of electronic resources**

S/N	Statements	$\bar{X}$	S.D
1	I use electronic resources daily	2.41	1.00
2	I use electronic resources once in a week	2.33	0.92
3	I use electronic resources twice a week	2.57	0.93
4	I use electronic resource monthly	2.07	0.95
5	I do not use electronic resources	1.63	0.86

Table 3 depicts the extent of utilisation of electronic information resources by postgraduate students in Universities of North central Nigeria. Only one had a fairly high mean score which was above the 2.5 mark on a four point Likert scale. It has to do with: I utilise electronic resources twice in a week ( $\bar{X}$ =2.57; S.D=0.93) as shown from Table 2, the remaining items had a low mean value below 2.5, these are; I use electronic resource daily ( $\bar{X}$ =2.41; S.D=1.00), I use electronic resources once in a week ( $\bar{X}$ =2.33; S.D=0.92), I use electronic resources monthly ( $\bar{X}$ =2.07; S.D=0.95) and I do not use electronic resources at all ( $\bar{X}$ =1.63; S.D=0.86). Thus, it is clear from Table 3 that majority of postgraduate students preferred to use electronic resources twice a week.

**Table 4: Reasons for utilizing electronic resources**

S/N	Statements	$\bar{X}$	S.D
1	Electronic resources are easily accessible	3.03	0.86
2	Electronic resources are up to date than printed sources of information	2.89	0.85
3	Electronic resources have no geographical restriction	2.80	0.84
4	Electronic resources are portable	2.58	0.80

Table 4 revealed the reasons for utilizing electronic resources by postgraduate students in universities in North-Central Nigeria. Majority of respondents agreed to the following statements as reasons for using electronic resources; electronic resources are easily accessible ( $\bar{X}=3.03$ ; S.D=0.86); Electronic resources are up to date than printed sources of information ( $\bar{X}=2.89$ ; S.D=0.85); electronic resources have no geographical restriction ( $\bar{X}=2.80$ ; S.D=0.84) and electronic resources are portable ( $\bar{X}=2.58$ ; S.D=0.80). Thus Table 4 revealed that the reason for using electronic resources is that they are easily accessible.

**Table 5: Purpose for using electronic resources**

S/N	Statements	$\bar{X}$	S.D
1	I use electronic resources for my assignment	3.40	0.75
2	I use it for preparation for seminar	3.20	0.89
3	I use electronic resources during my thesis and dissertation	3.15	1.23
4	I use for preparing for examination	2.85	1.04

Table 5 shows the purpose of using electronic resources by postgraduate students in universities of North-Central Nigeria. The four statements from Table 4 indicated that postgraduate students use electronic resources for assignments ( $\bar{X}=3.40$ ; S.D=0.75), preparation for seminars ( $\bar{X}=3.20$ ; S.D=0.89), during writing of thesis and dissertation ( $\bar{X}=3.15$ ; S.D=1.23) and for preparation for examination ( $\bar{X}=2.85$ ; S.D=1.04). Evidently, it is clearly that respondents use electronic resources for their assignments.

### Discussion

Table 2 revealed that majority of postgraduate students in universities of North-central Nigeria stated that electronic books and electronic databases are the most available electronic resources in universities of North-Central Nigeria. Out of the type of electronic resources listed, electronic theses and dissertations were least available. Generally, this implies that postgraduate students tend to use electronic books and electronic databases more than other electronic sources. This could be attributed to the fact that some electronic databases have electronic books embedded in them as such the university management will tend to save cost of purchasing electronic books. Moreover, it could be equally attributed to the fact that subscription to individual journals are expensive as such the need to subscribe to electronic databases since most of them contain electronic books and electronic journals. The above findings were in agreement with the findings conducted by Oyedapo and Ojo (2013) who stated that electronic journals, electronic books and electronic databases were readily available at the university library.

In addition, the findings agreed with the report of Chandran (2013) who highlighted the different kinds of electronic resources available to staff and students. Similarly, the findings of this study equally agrees with the opinion of authors like Naqvi (2014), Emwanta and

Nwalo (2010) and Tyagi (2012); as they all enumerated the above information or part of it as constituents of electronic information available to postgraduate students.

Table 3 shows that postgraduate students utilise electronic resources on daily, once a week, twice a week and on a monthly basis. The general low utilisation of electronic resources could be as a result of lack of awareness of the library subscription to electronic resources and also students not having the requisite skills to get the relevant electronic information sources. The finding of this study is in agreement with Singh and Meera (2013) who stated that postgraduate students prefer to use these sources of information twice and thrice a week.

Table 4 shows the reason postgraduate students use electronic resources. The reason for usage of these resources is because its electronic resources are easily accessible, electronic resources are up to date than printed sources of information, electronic resources have no geographical restriction and electronic resources are portable. The general reason of using electronic resources by postgraduate students could be attributed to the provision of good electronic devices like computers and tablets as well as reduction of cost in the purchase of data and bandwidth.

Table 5 shows that postgraduate students use electronic resources for different purposes with majority of them using them for their assignments. This could be attributed to the fact that electronic resources are readily available for use and convenient since they are easily accessible everywhere. The findings of this study is in agreement with Sethi and Panda (2011) who stated that faculty members, research scholars and postgraduate students at the department of Life Science Sambalpur University use electronic resources for different purposes ranging from keeping themselves abreast in their subject area, completion of assignments, research purposes, career development and routine study.

### **Conclusion**

The study found that there was low use of electronic resources by postgraduate students in the universities of North-Central Nigeria. The low use of these electronic resources by students makes it imperative for universities in North-Central Nigeria to provide means or avenues on how to increase utilisation of these sources of information.

### **Recommendations**

Based on the findings of this study, the study recommends the following;

- (i) The university libraries should conduct awareness campaigns on the available subscribed electronic resources in the library through the use of social media platforms like facebook, twitter and blogs.
- (ii) The university management should make electronic resources literacy compulsory for all postgraduate students in order to improve their search strategies.
- (iii) The university library should improve on subscription to different electronic databases so as to cover all subject areas in the university and allocate more funds to infrastructural development in terms of network and internet to make accessibility to electronic resources easy.

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