# Accessibility and Utilization of Electronic Information Resources in Kano Study Centre Of National Open University of Nigeria

By

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**ABSTRACT -** Access to information is vital for efficient research at Universities. Electronic resources provide new platforms for information to aid in conducting research at Universities. In this study, we examined access and utilization of electronic information resources by distance learners in Kano Study Center libraries of National Open University of Nigeria (NOUN). A Survey research design was adopted for the study with a target population of 3000 representative sample size of 361 using purposive sampling technique. Questionnaire was the main instrument used in collecting data for this research. Data collected were analyzed using simple descriptive statistics. The studies revealed that majority of the students are not acquainted with these electronic resources available in the study center. The study found out that inadequate electricity supply and poor network connectivity are some of the problems the students encountered while accessing the electronic resource. The study recommended that Information literacy programmes, orientation exercises, wireless network within the school premises should be installed and remain functional for easy accessibility of the electronic resource.

**Index Terms** – Accessibility, Distance Learner, Electronic Resources, Library, Network connectivity, Utilization, University

## INTRODUCTION

The 21st Century has experienced a remarkable proliferation of electronic resources (e-resources) which have tremendously change the information seeking attitude of students and researchers globally. In recent times, electronic resources have been identified as the major sources for information dissemination in the Universities, especially for researchers. Electronic resources, in most Universities, are integral part of the electronic library and stand as vital academic resources that support teaching, learning and research activities. In a study carried out by [1] on Electronic Resource, Information and communication technology (ICT) is a modern tool that provides access to information, in specific terms, electronic resources.

It has been reported that Nigerian Universities are lagging behind their counterparts in western countries in terms of research productivity [2]. Part of the problems has been attributed to inadequate modern ICT infrastructural facilities in Nigerian Universities leading to low levels of availability and utilization of electronic information resources by postgraduate students. In order to know the cause and make recommendations, the study investigated the extent of availability, accessibility and utilization of electronic resources DLs in NOUN. It is in the light of the above reasons, that the researchers examined the available electronic resources in NOUN Kano Study Center and how they are used by the students in learning and research.

[3] emphasized the need for the use of computer-based information in research, and thus carried out a survey to investigate the state of electronic information environment that is providing support to biological research in academic and research institutions in the United Kingdom (UK). It was found that most of the academic staff in the survey was reported to have computers in their offices and at homes, although the percentage of those with access to computers at homes was lower than those with access in the offices. There was a wider

access to electronic networks by the academic staff but this varied from one institution (university) to another. [4] in a survey of electronic information environment at Glasgow Caledonian University, reported that 56 % of academic staff has access to the Internet in their offices, 34% at home, 9% at the library and 1% for other access points. This is a reflection that majority of the academic staff has enabling information environment to access and use e-resources in their research.

[5] did a survey of electronic information environment in four Universities in Saudi Arabia. Highlights of the findings of the study showed that about 38% of the academic staff had access to computers in their offices with 81% of these computers being stand-alone; while 86% of the respondents had access to computers within the departments. It was found that networking was new and in rapid progress in the surveyed Universities, with increasing impact on research activities of the academic staff.

[6] studied the prevailing electronic information environment in the United States (US) through a questionnaire survey. The study indicated that over 90% of academic staff in the surveyed university was found to have computers in their offices and at homes. Access to the Internet was also high at the two access points – offices and homes.

[7] explored the electronic information environment at the Gulbarga University, India in respect to access to the Internet. The findings of the study showed that major access points to the Internet by the academic staff in the survey were the university library (63.55%), department (37.24%), Internet cybercafé (35.51%), and home (18.22%). This revealed that the Internet connectivity at offices of the academic staff was apparently lacking, and this confirmed a poor state of electronic information environment at the university.

[8] carried out a survey to determine the state of electronic information environment in the University of Zambia. The findings of the study revealed that, the University of Zambia had a well-developed network for both Intranet and Internet that was established to foster communication and access to both internal and external information.

A number of researchers have carried out surveys to explore the state of electronic information environment in Nigerian universities [9] [10] [11] [12] [13] [14].

## METHODOLOGY

The survey method was used in this study with questionnaire as instrument of data collection. Purposive sampling technique was adopted which refers to a judgmental form of sampling in which the researcher, based on his/her knowledge of the population under study handpicked certain group or individuals for their relevance to the problems under study. This become necessary because getting Distance Learners at once to fill in the questionnaire will be very cumbersome considering the fact, they are not attending regular classes like their counterpart in the conventional Universities.

The populations of the study consist of registered Distance Learners (DLs) running all programmes of study with NOUN in Kano Study Centers. The target populations for this study Six thousand (6000) DLs with representative sample of Three hundred and Sixty One (361). This sample size offers Confidence Level of 95% and Margin of Error of 5%. The designed questionnaire was divided into six (6) sections. Section A was designed to elicit demographic information about the respondents, Section B captured the availability of electronic information resources in NOUN, Section C captured the types of electronic information resources in NOUN, Section D dealt with the accessibility to electronic information resources in NOUN, Section E dealt with the use of electronic information resources by DLs in NOUN and Section F captured the challenges in accessing electronic information resources by distance learners in NOUN.

## RESULTS

*Demographic Information*

**Table 1:** General Questions

| Demographics | Responses | Percentage |
|---|---|---|
| **Gender** | Male | 258(71.5%) |
| | Female | 103(28.5%) |
| | **Total** | **361(100%)** |
| **Programme of study** | Undergraduate | 199(55.1%) |
| | Postgraduate | 162(44.9%) |
| **Visit to study center** | Yes | 359(99.4%) |
| | No | 2(0.6%) |
| **Frequency of visit** | Daily | 13.3% |
| | Once in a week | 49.6% |
| | Once in a month | 33.8% |
| | Once in a semester | 1.9% |
| | Once in a session | 1.4 |
| | **Total** | **361(100%)** |
| **School/faculties** | Faculty of Science | 78(21.6%) |
| | Faculty of Arts and Social Science | 32(8.9%) |
| | Faculty of Law | - |
| | Faculty of Education | 96(26.6%) |
| | Faculty of Management Science | 65(18%) |
| | Faculty of Health Science | 67(15.6%) |
| | Faculty of Agriculture | 23(6.4%) |
| | **Total** | **361(100%)** |

**Source:** Fieldwork Survey, 2019

The result of the study showed that the respondents were dominantly male students (71.5%) compared with female (28.5%). This showed that there are more male students in the NOUN Kano Study Center than female. The table equally showed that majority of those that responded to the questionnaires were Undergraduate Students (55.1%) while the rest (44.9%) of the respondents were Postgraduate Students. This indicated that the Undergraduate population in NOUN Kano Study Center is more than the Postgraduate Students. From the table, it can also be seen that most of the respondents visited the NOUN Kano Study Center on a weekly basis (49.6%), followed by monthly basis (33.8%). The study also indicated that students from with the highest response were those in Faculty of Education (26.6%) and the least being Faculty of Agriculture (6.4%).

*Types of Electronic Resources are Available in NOUN Kano Study Centre*

**Table 2:** Types of electronic resources available to the students

| SN | Types of Electronic resource Available to DLs | Responses |
|---|---|---|
| | | |

|   |   | Available | Not Available | Don't have an idea |
|---|---|---|---|---|
| 1 | AGORA | 21(5.8%) | 59(16.3%) | 281(77.8%) |
| 2 | EBSCOHOST | 23(6.4%) | 54(15%) | 284(78.7%) |
| 3 | National Virtual Library | 21(5.8%) | 68(18.8%) | 272(75.3%) |
| 4 | Online Access to Research in Environment (OARE) | 10(2.8%) | 17(4.7%) | 333(92.2%) |
| 5 | JSTORE | 14(3.9%) | 73(20.2%) | 274(75.9%) |
| 6 | HINARI | 9(2.5) | 17(4.7%) | 335(74%) |
| 7 | QUESTIA | 3(0.8%) | 13(3.6%) | 345(95.6%) |
| 8 | LEXISNEXIS | 6(1.7%) | 21(6.4%) | 334(92.8 |
| 9 | LEXIS ACADEMICS | 2(0.6%) | 51(14.1%) | 307(85%) |
| 10 | World Bank e-Library | 4(1.1%) | 19(5.3%) | 338(93.6%) |
| 11 | Multi-Science Journal | - | - | 361(100%) |

**Source:** Fieldwork Survey, 2019

Results indicated in table 2 above showed that most of the respondents don't have an idea on the available types of electronic resources in NOUN Study Center of Kano as it stood at 70% and above response rate.

## *Extent of Utilization of the Electronic Resources*

**Table 3:** Indicate the extent to which the electronic resources are utilized

| SN | Electronic resources | Responses | | | |
|---|---|---|---|---|---|
|   |   | MU | SU | NU | UD |
| 1 | AGORA | 7(5.8%) | 14(3.9%) | 57(15.8%) | 283(78.4%) |
| 2 | EBSCOHOST | 5(1.9%) | 18(5%) | 63(17.5%) | 275(76.2%) |
| 3 | National Virtual Library | 9(2.5%) | 12(3.3%) | 85(23.5%) | 255(70.6%) |
| 4 | Online Access to Research in Environment (OARE) | 2(0.6%) | 8(2.2%) | 14(3.9%) | 337(93.4%) |
| 5 | JSTORE | 4(1.1%) | 10(2.8%) | 78(21.6%) | 269(74.5%) |
| 6 | HINARI | 1(0.3%) | 8(2.2%) | 18(5%) | 334(92.5%) |
| 7 | QUESTIA | 1(0.8%) | 2(0.6%) | 61(16.9%) | 297(82.3%) |
| 8 | LEXISNEXIS | 6(1.7%) | 9(2.5%) | 55(15.2%) | 291(80.6%) |
| 9 | LEXIS ACADEMICS | 1(0.3%) | 9(2.5%) | 32(8.9%) | 319(88.4%) |
| 10 | World Bank e-Library | 1(0.3%) | 3(0.8%) | 19(5.3%) | 338(93.6%) |
| 11 | Multi-science journal | - | 3(0.8%) | 61(16.9%) | 297(82.3%) |

| 12 | Armed Conflict Database | 7(5.8%) | 14(3.9%) | 57(15.8%) | 283(78.4%) |
| 13 | Synthesis Digital Library | 5(1.9%) | 18(5%) | 63(17.5%) | 275(76.2%) |

*Mostly Utilized: [MU]   Sometimes Utilized: [SU]   Not Utilized: [NU] Undecided: [UD]
**Source:** Fieldwork Survey, 2019

Table 3 above indicated that most of the respondents (70% and above) were undecided. This indicated that majority of the students don't utilize the electronic resources in the NOUN Kano Study Center. Today, it is very common to find electronic resources in most University Libraries. However, their availability does not necessary equates their utilization.

*Purposes for Utilizing Electronic Resources*

**Table 4:** Purpose for utilizing the electronic resources

| SN | Purpose | Responses | |
| --- | --- | --- | --- |
| | | **Frequency** | **Percentage** |
| 1 | Study | 78 | 21.6% |
| 2 | News | 12 | 3.3% |
| 3 | Check Student portal | 56 | 15.5% |
| 4 | Assignment | 21 | 5.8% |
| 5 | Social network | 3 | 0.8% |
| 6 | Send e-mail | - | - |
| 7 | Research | 29 | 8% |
| 8 | Access NOUN Open Courseware | 159 | 44% |
| 9 | Updating subject knowledge | 3 | 0.8% |
| | **Total** | **361** | **100%** |

**Source:** Fieldwork Survey, 2019

From the table above, 21.6% of the respondents indicated that the purpose for utilizing the electronic information resources are for Study, 3.3% selected News, 15.5% selected to check Student Portal, 5.8% selected for assignment, 8% indicate for Research and 44% indicated that the purpose for utilizing the electronic resources is to access NOUN Open Courseware.

*Problems Encounter while Accessing and Using Electronic Resources*

**Table 5:** Problems encountered while accessing the electronic resources

| SN | Challenge(s) | Responses | | | | |
|----|-------------|-----|---|----|---|----|
| | | **AS** | **A** | **SD** | **D** | **UD** |
| 1 | Inadequate Power Supply | 102(28.3%) | 181(50.1%) | 7(5.8%) | 14(3.9%) | 57(15.8%) |
| 2 | Not Computer literate | 135(37.4%) | 140(38.8%) | 5(1.9%) | 18(5%) | 63(17.5%) |
| 3 | Data Cost | 100(27.7%) | 155(42.9%) | 9(2.5%) | 12(3.3%) | 85(23.5%) |
| 4 | Poor Network Connectivity | 236(65.4%) | 101(28%) | 2(0.6%) | 8(2.2%) | 14(3.9%) |
| 5 | Poor Orientation | 213(59%) | 56(15.5%) | 4(1.1%) | 10(2.8%) | 78(21.6%) |
| 6 | Lack of adequate IT facilities in the Study area | 70(19.4%) | 98(27.1%) | 1(0.3%) | 174(2.2%) | 18(5%) |
| 7 | Technophobia | 196(54.3%) | 101(28%) | 1(0.8%) | 2(0.6%) | 61(16.9%) |
| 8 | Difficulty accessing the Websites | 141(39.1%) | 150(41.6%) | 6(1.7%) | 9(2.5%) | 55(15.2%) |
| 9 | Difficulty downloading e-resources from the websites | 219(60.7%) | 100(27.7%) | 1(0.3%) | 9(2.5%) | 32(8.9%) |
| 10 | Poor attitude to work by the MIS unit of the center | 238(65.9%) | 100(27.7%) | 1(0.3%) | 3(0.8%) | 19(5.3%) |

*Strongly Agreed: [SA]   Agree: [A]   Strongly Disagree: [SD]   Disagreed: [D] Undecided: [UD]
**Source:** Fieldwork Survey, 2019

Table 5 above showed that 78.4% of the respondents agreed that inadequate electricity supply was a major problem encountered while accessing the electronic resources, 76.2% indicated that they are not computer savvy, 70.6% indicated that the problem encountered while accessing the electronic resources was data cost, 93.4% of the respondents indicated that there was poor network connectivity, 74.5% selected poor orientation, 80.7% indicated that they have difficulty accessing the websites and equally downloading resources, while 93.6% of the respondents indicated that poor attitude to work displayed by the MIS unit of the study center.

## CONCLUSION

The basic goal of any University is to provide enabling environment for the conduct of research and dissemination of knowledge for societal development, hence, access to electronic information resource is imperative to the students as the study established. The findings of the study revealed that poor attitude towards information literacy skills and orientation on the part of the NOUN Kano Study Center Library Personnel/Management to train and expose the student on how to access and utilize the various types of available electronic information resources. There are electronic resources available but

accessing and utilizing them by the students in the study center prove difficult due to myriads of challenges. Based on the findings of the study, Information literacy programmes, orientation exercises and other forms of campaigns should be organized bi-monthly by the Management of NOUN Kano Study center to acquaint the student on the available electronic resources. Also, wireless network within the school premises should be installed and remain functional for easy accessibility of the electronic resource.

## REFERENCES

[1] P. Dadzie, "Electronic Resources: Access and Usage at Ashei University College," *Campus Wide Information Systems,* pp. 22(5): 290-297. Also Available at: http/www: emeraldinsight.com/1065-0741.htm., 2005.

[2] J. Adams, C. King and D. Hook, "Global Research Report: Africa," Evidence, Leeds, 2010.

[3] J. Rolinson, A. Meadows and H. Smith, "Use of Information Technology by Biological Researchers.," *Journal of Information Science,* pp. 21 (2): 133-139, 1995.

[4] A. de Vicente, J. Crawford and S. Clink, "Use and Awareness of Electronic Information Services by Academic Staff at Glasgow Caledonian University.," *Library Review,* p. 53: 401407, 2004.

[5] H. Al-Shanbari and A. Meadows, "Problems of Communication and Information-handling among Scientists and Engineers in Saudi Universities," *Journal of Information Science 21(6),* pp. 473-478, 1995.

[6] N. Kaminer, "Scholars and the Use of the Internet," *Library and Information Science Research 19(4),* pp. 392-345. Also Available at http:www.sciencediect.com/science, 1997.

[7] S. Parameshwar and D. Patil, "Use of the Internet by Faculty and Research Scholars at Gulbarga University Library," *Library Philosophy and Practice,* p. Available at: http://digitalcommons.unl.edu/cgi/viewcontent. cgi?article=1268&context=libphilprac&se, 2009.

[8] V. Chifwepa, "2003. The Use of the Intranet and Internet by Teaching Staff of the University of Zambia," *African Journal of Library, Archive and Information Science 13 (2),* pp. 119-132., 2003.

[9] O. Ani, M. Edem and E. Ottong, "Analysis of Internet Access and Use by Academic Staff in the University of Calabar, Calabar, Nigeria," *Library Management 31 (7),* p. 535545, 2010.

[10] F. Ehikhamenor, "Internet Facilities: Use and Non-Use by Nigerian University Scientists," *Journal of Information Science 29(1),* pp. 35-48, 2003.

[11] D. Emojorho and A. Adomi, "An Assessment of the Use of Information Technology Facilities for Academic Pursuit.," *The Electronic Library 24(5),* pp. 706-713, 2006.

[12] V. Nwokedi, "Impact of Internet Use on Teaching and Research Activities of the Academic Staff of Faculty of Medical Sciences, University of Jos: A Case Study," *Gateway Library Journal 10(1),* pp. 13-22, 2007.

[13] C. Nwezeh, "The Impact of Internet Use on Teaching, Learning and Research Activities in Nigerian Universities: A Case Study of Obafemi Awolowo University," *The Electronic Library 28(5),* pp. 688-701, 2010.

[14] C. Watts and I. Ibegbulam, "Access to Electronic Healthcare Information Resources in Developing Countries: Experiences from the Medical Library, College of Medicine, University of Nigeria," *IFLA Journal 32(1),* pp. 54-60, 2006.

[15] J. Moon, M. Hossain, H. Kang and J. Shin, "Analysis of Agricultural Informatization in Korea: the Government's Role in Bridging the Digital Divide," *Information Development ,* pp. 28

(2): 102-116., 2012.

[16] M. Adeogun, "The Digital Divide and University Education Systems in Sub-Saharan Africa," *African Journal of Library, Archive and Information Science,* pp. 13 (1): 11-20, 2003.

[17] K. Hoq, "Role of Information for Rural Development in Bangladesh: A Sector-wise Review.," *Information Development,* pp. 28 (1): 13-21, 2012.

[18] O. Ani and N. Edem, "Trends in the Development of Virtual Libraries in Nigerian Universities.," *A Paper presented at the 50th National Conference of Nigerian Library Association (NLA) held from 15-20 July 2012 at the* *International Conference, Abuja, Nigeria,* 2012.

[19] B. Vickery and A. Vickery, Information Science in Theory and Practice, London: Butterworths, 1987.

[20] O. Ani and E. Esin, "Use of Information Technology by Academics in Selected Universities in Nigeria," *Global Journal of Mathematical Sciences 2(1),* pp. 57-63, 2003.

[21] O. Ani and E. Esin, "Use of Information Technology by Academics in Selected Universities in Nigeria," *Global Journal of Mathematical Sciences 2(1),* pp. 57-63, 2003.