UNIJERPS
Unizik Journal of Educational Research and Policy Studies VOL.14 (3);
https://unijerps.org
2021 Impact Factor: 5.641; 2020 Impact Factor: 5.355.
July-December, 2022
Indexing and Impact Factor URL: http://sjifactor.com/passport.php?id=21363

AVAILABILITY AND UTILIZATION OF ELECTRONIC LIBRARY RESOURCES FOR TEACHING AND RESEARCH IN UNIVERSITIES IN SOUTH EAST NIGERIA

Akubugwo, Ijeoma Ginikanwa
Department of Curriculum Studies and Teacher Education
Faculty of Education, Abia State University
Email: ije1468@gmail.com, Contact: +234 7031584260

ABSTRACT

The study examined availability and utilization of electronic library (e-library) resources for teaching and research in universities in south east Nigeria. Descriptive survey design was adopted for the study. The population for this study comprised 29,540 students and lecturers in universities in South east Nigeria. This was made up of 24,268 students and 5,272 lecturers. The sample for the study comprised of 2,954 lecturers and students which included 2,427 students and 527 lecturers who were assigned using cluster and stratified random sampling techniques. A researcher-designed questionnaire titled "Availability and utilization of e-library resources for teaching and research (AUETR)" was used for the study to gather relevant information. The instrument had two sections, section A contained demographic information of respondents, while section B contained information in two (2) clusters on availability and utilization of e-library resources for teaching and research. It was structured along a four-point Likert scale, strongly agree (SA)- 4, Agree (A)- 3, Disagree (D) – 2, and strongly disagree (SD) – 1. The face and content validity of the instrument was determined by three experts, two from department of curriculum and teacher education and one from measurement and evaluation unit from Abia state university. The reliability of the 10-item instrument was carried out using twenty lecturers who were not part of the study. Cronbach's alpha reliability statistic was used and an alpha coefficient of 0.78 was obtained which meant that the instrument was reliable for the study. Data collected was analyzed using the statistical packages for the social sciences (SPSS, V23). Mean and standard deviation was used to answer research questions, while ANOVA was used to test hypotheses at 0.05 level of significance. The finding from the study revealed that electronic library resources were available and also utilized in universities in South east. The study recommends among other things that stakeholders in the university should ensure that electronic library resources are made available at all times with required subscriptions, and that lecturers and students should be encouraged to utilized more resources which may be available for their research and teaching activities.

Keywords: Electronic Library, Resources, Research, University

Introduction

E-library which is the short form of electronic library simply refers to an online information source usually hosted in servers of universities or higher institutions of learning. It houses information materials which can be accessed for use by library users in higher institutions without restriction; as in most cases those institutions have an unrestricted access as long as its usage is for research or teaching

purpose. Onwuchekwa and Jegede (2011) opined that electronic library is the library where some or all of the holdings of the library are available in electronic format, and the services of the library are also made available electronically-frequently over the internet so that users can access them remotely. This will enhance ubiquitous research and learning among lecturers' and students.

Electronic library acquires, processes, stores, evaluates and disseminates information via electronic means to the audience in need of information. It can serve as a medium for achieving national and community development through provision of relevant information necessary for decision making and policy enhancement. Electronic library is a multi-disciplinary concept that shares various branches of computer science including data management, information retrieval, library science, document management, information systems, the web, image processing, and artificial intelligence (Anyim, 2018). According to Hirsh (2014), the mission of e-library is to provide both information services and resources that are capable of meeting the research, teaching and learning needs of the faculty and students. It is of importance to state that academic researchers see e-library as research Centre and intellectual energy house where resources, knowledge, ideas and directions are generated to achieve research and teaching goals of the university.

Electronic library resource is defined here as the provision by a library of primary information (actual materials) and secondary information (information about the materials) electronically, via communications networks, together with the infrastructure for this purpose. It is therefore a collection of information as full text (aggregated) databases, e-journals, image collections, multimedia in the form of CD, tape, internet, web technology. Electronic resources (e-resources) also include e-journals, e-discussions, e-news, data archives, e-mail, online chatting, just to mention but a few (Thanuskodi, 2012). Electronic information resources are a wide range of products going from electronic periodicals to CD-ROMs, from mailing list to databases, having a common feature of being used and sometimes modified by a computer (Thanuskodi, 2012).

Electronic library resources could as well be referred to as electronic information resources which are hosted on the website of various organizations giving high institutions' access in most cases using a password. Muteshewa (2004) reveals that traditional libraries stored different types of information resources in different formats in buildings. However, currently information is housed in the cloud where everyone with access can reach it. Muteshewa (2004) asserted that with the advent of computers and telecommunication technologies, libraries and information services can provide access to these resources through work-stations like PCs and terminals that are in patron's offices, as well as in the library. Hawkins (2010) emphasized that the library of the future will have the daunting mission of helping scholars discover what relevant information exists anywhere in the world and in a variety of formats and

media. Understanding how students navigate this maze of resources is important in helping the librarians to develop and assess pedagogy designed to instruct students in library use.

Availability of e-library resources simply mean the state of information resources being available. The e-library resources are most often times situated in the tertiary institutions of which the university belongs to. University is a part of tertiary institution which comprises of colleges, liberal arts and science, professional and graduate schools for degree awarding in various areas of specialty (Dim and Mole, 2021). There is no functional university without effective and efficient electronic library which assists in teaching and learning with other relevant academic activities. It is mandatory to every university to utilize e-resources to make teaching and learning easier and efficient.

Services and resources in e-library include the typical traditional library and information services and other global information services through diverse internet systems. However, it is pertinent to state that availability in some cases does not equate to accessibility or utilization. Trivedi (2010) states that improved access to e-library resources enhances research activities, promotes efficient delivery of information economically to all users; encourages cooperative efforts in research resources, computing, and communication networks; strengthens communication and collaboration between and among academic researchers and take leadership role in the generation and dissemination of knowledge.

Availability of electronic library resources refers to readily access to information in electronic format with little or no stress to the educators and students as long as they have the required data connection. Availability of electronic library resources may not be enough as there is need for unrestricted access for utilization. Thus, university teachers must know of their existence to be able to use them effectively; and to put to use what's available, lecturers need to possess the requisite skills that will enable them make use of the electronic library resources. Tekale and Dalve (2012) opined electronic library resources should be available at any time of the day; hyperlinks to other resources; huge information reservoirs; quick information; various search options; easy citations; ease in uploading and updating; ease in storage and dissemination; flexibility; time, space and cost are not major hurdles; ease of archiving is also importance of information resources.

Availability of electronic information sources relates to the provision for and inclusion of the resources in the collection of the libraries at the disposal of users in academic institutions. In the words of Rosenburg (2006) availability of electronic resources provides access to authoritative, reliable, accurate and timely access to information. In addition to this, the resources can enable innovation in teaching and increase timeliness in research. Furthermore, electronic library resources reduce pressure on academic libraries for physical storage space for books and journals and provide unlimited access to academic users of the library (Lefuna, 2017). Of a truth,

electronic libraries resources reduce stress on the physical library, but it is in utilization that the problem lies.

The Utilization of electronic library resources by educators does not however take the place of printed resources but facilitates it through access to large stock of library materials domiciled online (Okezie, 2016). The change that has occurred in the world of ICT is what has shifted the content of libraries' resources from printed information to online information resources where teachers, lecturers are at liberty to use whatever learning resources that they so desire in the comfort of their home or classes. Electronic library resources give new dimension to learning and have affected education in many ways (Bajpai et al. 2016).

Utilization of electronic library resources implies to put to use of information/resources available for academic in the libraries. It can measure how available electronic resources are being put to use. Tella, Ayeni and Popoola (2007) noted that students' ability to find and retrieve information effectively is a transferable skill useful for their future lives as well as enabling the positive and successful use of academic electronic resources. The ability to explore the digital environment is a requirement for academic success today. Students are increasingly expected to use electronic information resources at the university. In order to make use of the growing range of electronic resources, students must acquire and practice the skills necessary to exploit them. Skills' learning is essential in a technology driven environment, and it can be enhanced through the use of innovative learning strategies (Lawson, 2005).

Ekere, Omekwu and Nwoha (2016) showed the various services and resource provided at digital library which include: online internet search services; e-mail services; online reference services; online cataloguing and classification service; customer care services; management of online databases; Subscription services; awareness and workshop services; audio and video communication services; news groups/dialogue databases; electronic document delivery services; interoperability services; technical training in information and communication technology (ICT) for staff and users; online inter-library services; digitized finding aids such as online indexes and bibliographies and online cataloguing and classification services.

Edem and Egbe (2016) examined the extent of availability and utilization of electronic resources by postgraduate students in the University of Calabar (Unical) Library. The result of the analysis revealed that electronic resources such as e-journals, e-books and access to databases and internet resources were available to a great extent at Unical Library. Based on the findings, the following recommendations were made: adequate budgetary allocation should be given to the University Library for subscription to online databases and acquisition of electronic books, more relevant open access databases should be made accessible to users, installation of inverter and battery system in the Electronic Library, and organizing

users' education for better use of electronic resources in the library.

Owolabi, Idowu, Okocha, and Ogundare (2016) examined the Utilization of Electronic Information Resources by Undergraduate Students of University of Ibadan: A Case Study of Social Sciences and Education. The study revealed that internet services, e-mail services, online databases, electronic databases and cybercafés were the available electronic information resources often used by the undergraduate students in University of Ibadan.

In spite of the roles and benefits of electronic library resources; it does appear that most lecturers and students in universities in South East libraries prefer not to use the electronic sources provided by e-library resources for one reason or another. In some cases, the non-utilization may be borne out of not being aware of the existence of such e-library resources. This has continuously affected research output and activities by lecturers and students in the university. In the midst of all these, it seems very little research is known about availability and utilization of e-library resources for teaching and research in universities in South East Nigeria. This also gives credence to the need for this study.

Research Questions

1. What are the electronic library resources available for teaching and research in universities in South East Nigeria?
2. What are the electronic library resources utilized for teaching and research in universities in South East Nigeria?

Hypotheses

Ho_1 There is no significant difference in electronic library resources available for teaching and research in universities in South East Nigeria.

Ho_2 There is no significant difference in electronic library resources utilized for teaching and research in universities in South East Nigeria.

Research Method

Descriptive survey research design was adopted for this study. The population for this study comprised 29,540 students and lecturers in universities in South east Nigeria. This was made up of 24,268 students and 5,272 lecturers in universities in South East, Nigeria. The sample for the study comprised of 2,954 lecturers and students which included 2,427 students and 527 lecturers who were assigned using cluster and stratified random sampling techniques. Ten (10) percent of the total population was used for the study. Selected faculties in ABSU, IMSU, EBSU, ESUT and ANSU were studied. A researcher-designed questionnaire titled "Availability and utilization of e-library resources for teaching and research (AUETR)" was used for the study to gather relevant information. The instrument had two sections, section A contained demographic information of respondents, while section B contained information in two (2) clusters on availability and utilization of e-library resources for teaching and research. Face and content validity of the instrument was determined by three experts, two from department of curriculum and teacher education and one from measurement and evaluation unit from Abia state

university. The reliability of the 10-item instrument was carried out using twenty lecturers who were not part of the study. Cronbach's alpha reliability statistic was used and an alpha coefficient of 0.78 was obtained which meant that the instrument was reliable for the study. Two thousand nine hundred and fifty-four (2954) copies of the questionnaire were distributed. However, 2,905 copies of the questionnaire were found well-filled for use. Mean and standard deviation was used to answer research questions, while ANOVA was used to test hypotheses at 0.05 level of significance.

Presentation of Results

Research Question One: What are the electronic library resources available for teaching and research in universities in South East Nigeria?

Table 1: Electronic library resources available for teaching and research

Electronic Library Resources	Available	Not Available	Mean	Std. Dev.
Internet services	2738 (94.3)	167 (5.7)	1.94	.233
E-mail services	1925 (66.3)	980 (33.7)	1.66	.473
e-bibliography databases	2849 (98.1)	56 (1.9)	1.98	.138
Electronic journals	2349 (80.9)	556 (19.1)	1.81	.393
Online Public Access Catalogue (OPAC)	2476 (85.2)	429 (14.8)	1.85	.355
Online databases	2320 (79.9)	585 (20.1)	1.80	.401
Electronic databases	2430 (83.6)	475 (16.4)	1.84	.370
Electronic books	2390 (82.3)	515 (17.7)	1.82	.382
Virtual library online	2064 (71.0)	841 (29.0)	1.71	.454
Science direct online	2322 (79.9)	583 (20.1)	1.80	.401
			1.82	

Table 1 revealed the responses on the available electronic library resources for teaching and research in universities in South east Nigeria. All items revealed mean scores above the criterion bench mark of 1.50 which is an indication that all stated e-library resources were available in the schools studied.

Research Question Two: What are the electronic library resources utilized for teaching and research in universities in South East Nigeria?

Table 2: E-Library resources utilized by lecturers and students for teaching and research

Electronic Library Resources	Utilized	Not Utilized	Mean	Std. Dev.
Internet services	1901 (65.4)	1004 (34.6)	1.65	.476
E-mail services	2536 (87.3)	369 (12.7)	1.87	.333
e-bibliography databases	2238 (77.0)	667 (23.0)	1.77	.421
Electronic journals	2273 (78.2)	632 (21.8)	1.78	.413
Online Public Access Catalogue (OPAC)	1791 (61.7)	1114 (38.3)	1.62	.486
Online databases	2336 (80.4)	569 (19.6)	1.80	.397
Electronic databases	1899 (65.4)	1006 (34.6)	1.65	.476
Electronic books	2249 (77.4)	656 (22.6)	1.77	.418
Virtual library online	2377 (81.8)	528 (18.2)	1.82	.386
Science direct online	2592 (89.2)	313 (10.8)	1.89	.310
			1.76	

Table 2 revealed the responses on utilization of electronic library resources for teaching and research in universities in South East Nigeria. All items revealed mean scores above the criterion bench mark of 1.50 which implied that all the available e-library resources were utilized by lecturers and students for teaching and research in universities in South east, Nigeria.

Hypothesis One

There is no significant difference in electronic library resources available for teaching and research in universities in South East Nigeria

Table 3: Significant difference among universities on e-library resources available for teaching and research

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.650	4	.412	52.137	.000
Within Groups	22.944	2900	.008		
Total	24.594	2904			

Table 3 showed the significant difference among universities in south east on the e-library resources available for teaching and research. The analysis revealed an F-value of 52.137 and sig of 0.00 which implied that the null hypothesis was rejected and as such there is a significant difference in the availability of e-library resources for teaching and research among universities in south east, Nigeria.

Table 3b: Posthoc analysis for check of significant difference in availability of e-library resources

Universities	N	Subset for alpha = 0.05		
		1	2	**3**
3.0	617	1.7963		
1.0	528	1.7983		
2.0	247	1.8004		
5.0	658		1.8319	
4.0	855			**1.8519**
Sig.		.951	1.000	**1.000**

Table 3b revealed the post hoc analysis to show the direction of the significant difference. The analysis showed revealed that ABSU, IMSU and EBSU showed 1.79, 1.79 and 1.80 respectively, meaning that they shared the same level of availability while ESUT and ANSU showed 1.85 and 1.83 respectively which is an indication that the e-library resources were more available in the two states.

Hypothesis Two

There is no significant difference in electronic library resources utilized for teaching and research in universities in South east.

Table 4: **Significant difference among universities on e-library resources utilized for teaching and research**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.235	4	4.059	228.357	.000
Within Groups	51.544	2900	.018		
Total	67.779	2904			

Table 4 revealed the significant difference among universities in south east in the utilization of e-library resources for teaching and research. The result revealed an F-value of 228.357 at significant level of 0.00 which implies that the stated null hypothesis was rejected, and as such there is a significant difference among universities in the utilization of e-library resources for teaching and research.

Table 4b: **Posthoc analysis for check of significant difference in utilization of e-library resources**

Universities	N	Subset for alpha = 0.05			
		1	2	3	**4**
3.0	617	1.6480			
2.0	247		1.6765		
1.0	528			1.7784	
5.0	658			1.7895	
4.0	855				**1.8442**
Sig.		1.000	1.000	.691	**1.000**

Table 4b revealed the post hoc analysis for the direction of the significant difference among the universities in south east Nigeria in the utilization of e-library resources for teaching and research. The analysis found that ESUT utilized more than others followed by ANSU and ABSU, then IMSU and EBSU with their differentiated mean scores.

Discussion of Findings

Research question one examined the electronic library resources available for teaching and research in universities in South East Nigeria. The study revealed that all the electronic library resources stated were available, such as internet services, e-mail services, e-bibliography databases, electronic journals, OPAC, online databases, electronic databases, electronic books, virtual library online, science direct. This is an indication that these resources were available for teaching and research. The study is in agreement with Edem and Egbe (2016) who examined the extent of availability and utilization of electronic resources by postgraduate students in the University of Calabar (Unical) Library. The result of the analysis revealed that electronic resources such as e-journals, e-books and access to databases and internet resources were available to a great extent at Unical Library.

Research question two examined the electronic library resources utilized for teaching and research in universities in south east, Nigeria. The study revealed that the electronic library resources mentioned were all in use such as internet services, e-mail services, e-bibliography databases, electronic journals, OPAC, online databases, electronic databases, electronic books, virtual library online, science direct. The study however found that availability was higher than utilization. The study is in agreement with Owolabi, Idowu, Okocha, and Ogundare (2016) who examined the utilization of electronic information resources by undergraduate students of University of Ibadan: A Case Study of Social Sciences and Education. The study revealed that internet services, e-mail services, online databases, electronic databases and cybercafés were the available electronic information resources often used by the undergraduate students in University of Ibadan. These services are meant to make teaching and research accessible to lecturers and students.

Conclusions

The study concludes that electronic library resources were available for teaching and research, it also found that the available electronic library resources were very much utilized in universities in south east, Nigeria. The study concluded that the utilization of electronic library resources will make academic activities more fun. The study also found that a lower number of persons utilized more than the availability of resources.

Recommendations

The following recommendations were made;

1. Stakeholders in the university should ensure that electronic library are made available at all times with the required subscriptions.
2. The lecturers and students should be encouraged to utilized more resources which may be available for their research and teaching activities.

REFERENCES

Anyim, W. O. (2018). Library Philosophy and Practice (e-journal). *E-Library resources and services: Improvement and innovation of access and retrieval for effective research activities in University e-libraries in Kogi state Nigeria*, 1-21.

Bajpai, R. P., Hada, K. S., & Bajpai, G. (2016). Academic Libraries and E-Learning : Initiative and Opportunities. *International Journal of Library & Information Science (IJLIS), 5*(3), 159–165.

Dim, C.L. & Mole, A.J.C. (2021). Academic satff use of electronic resources (ER) in Nigerian libraries during covi-19 lockdown period, Library Philosophy and Practice (e-Journal) 5341 https://digitalcommons.uni.edu/libphilprac/534

Edem, N. B., & Egbe, N. (2016). Availability and utilization of electronic Resources by postgraduate students in a Nigerian University library. A case study of University of Calabar, Nigeria. *Information and Knowledge Management, 6*(2), 60-70.

Ekere, J. N., Omekwu, C. O., & Nwoha, C. M. (2016). Users' perception of the

facilities, resources and services of the MTN digital library at the University of Nigeria, Nsukka. *Library Philosophy and Practice (e-journal)*, 1390.

Hawkins, B. (2010). Libraries, knowledge management and higher education in a electronic environment. http://conference:alia.org.au/alia.200/proceedings/brain.hawkins, accessed on 22nd June 2010.

Hirsh, K. (2014). *Using university-supported digital library collections in the K-12 classroom.* Durham, NC: North Carolina Central University Technology institute for Educators.

Lawson, K. G. (2005). Using Eclectic Digital Resources to Enhance Instructional Methods for Adult Learners. *International Digital Library Perspectives, 21*(1), 49-60.

Lefuma, S. (2007). Access to and use of Electronic Information Resources in the academic libraries of the Lesotho Library Consortium. Unpublished dissertation submitted to College of Humanities University of Kwazulu-Natal, South Africa.

Muteshwa, A. (2004). Enhancing Access Through Electronic Resources: The University of Botswana Experience. *Library HiTech, 18*(4), 315-320.

Okezie, C. A., & Onyekweodiri, N. E. (2016). An Evaluation of Relevance of Library and Information Science Publications of Librarians in South-East Nigeria : 2002 – 2012 in Focus. *International Journal of Library & Information Science (IJLIS), 5*(3), 24-33.

Onwuchekwa, E. O., & Jegede, O. R. (2011). Information Retrieval Methods in Libraries and Information Centers. *An International Multidisciplinary Journal, 5*(23), 27-35.

Owolabi, S., Idowu, O. A., Okocha, F., & Ogundare, A. O. (2016). Utilization of electronic information resources by undergraduate students of university of Ibadan: A case study of social sciences and education. *Journal of Education and Practice*, 30-36.

Rosenberg, D. (2006). Towards the digital library in Africa. *Electronic Library, 24*(3), 289-293.

Tekale, R. B., & Dalve, D. B. (2012). E-resources review of research. Avaihttp://www.reviewofresearch.net/ Publish Articles/45.pdf 29th August 29, 2022.

Tella, A., Ayeni, O., & Popoola, S. (2007). Work motivation, Job satisfaction and Organizational commitment of Library personnel in academic and research libraries in Oyo state, Nigeria. *Library Philosophy and Practice (E-Journal)*, 9.

Thanuskodi, S. (2012). Use of E-resources by the students and researchers of faculty of Arts, Annamalai University. *International Journal of Library Science, 1*, 1-7.

Trivedi, M. (2010). Digital libraries: Functionality, usability, and accessibility. *Library Philosophy and Practice*, 381.