

E-resources Usage by Students in Tertiary Institutions: How Do Libraries and Librarians Interfere?

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Abstract

This paper discussed the usage of e-resources by students in tertiary institutions. It adopted a review of literatures on various issues relating to e-resources usage in tertiary institutions including types of e-resources used, purpose of e-resources and the various challenges confronting students in the use of e-resources. The roles of librarians and libraries in facilitating effective usage of e-resources by students of tertiary institutions were also discussed.

Keywords: *E-resources usage, Librarians, Libraries, Students, Tertiary institutions*

Introduction

The library is a core component of the university that houses all the resources, including e-resources, needed for effective teaching and learning and has the capability to inspire both students and staff alike (Barrett and Douglas, 2004). Clark (2006) stated that in recent years, the emergence of Information and Communication Technology (ICT) facilities and resources including e-resources has considerably changed not only the educational theory and process, but also the university libraries services and facilities. The potential of e-resources in the university is such that it can help sustain the quality of teaching and learning as well as reinforce the relationship between learners and curriculum.

The provision of e-resources within the university library provides the university community with a wide range of information resources and stimulates users' perception of information (Garner, 2006). Evidence suggests that e-resources have granted access to a broader range of knowledge beyond the university enclave (CILIP, 2001). Developed countries, in particular, have integrated and deployed the use of e-resources into their education system, mainly through and with the support of the library. The library plays the role of housing the e-resources and making it available and accessible for the academics and students alike just as it also provide the needed support, through the librarians in terms of collaborating with the teaching faculty on the appropriate e-resources to be used in implementing a particular curriculum.

Roles of Library and Librarians in Facilitating E-resources Usage in Tertiary Education

Aina (2014) emphasised the 'Information specialist' role of the librarians as key in the provision of e-resources to support teaching and learning in educational institutions. He further stated that the librarians perform the role of information specialist through the provision of leadership and expertise in acquiring and evaluating information resources in all formats, including e-resources. Access to information resources in all formats, including e-resources is much needed in guaranteeing effective teaching and learning outcomes delivery in universities (Bashorun, Isah and Adisa, 2011). The university library through the librarians brings an awareness of information issues into collaborative relationship with teaching faculty, administrators, students, and others while also providing lecturers and students with information on strategies and skills for using the e-resources within and beyond the university library.

The impressive change on the university library in recent years has varied its role. The antiquated library was solely a store of books located within the university, supporting lecturers and students with physical information. However, the university library of the 21st century has evolved into a learning laboratory situated prominently within institution, providing non-traditional materials such as computers, internet and audio-visual means, in addition to traditional resources such as books, reference materials and periodicals, (Aina, 2009; Angello, 2012). Egberongbe (2011) in his own view described the typical university library as a "centralised information and ICT centre" designed to support the university curriculum and provide resources that meet the educational and recreational needs of both the staff and the students". Interestingly, the university library has played an important role in the university community, especially when ICT was integrated in its services (McDonald, 2006).

The integration of e-resources into teaching and learning as well as the support given by the university library to ensure success in the integration of e-resources into the school curriculum has had a vast influence on the education sector. This recent technological innovation has created a significant evolution in role of the university library over the last few decades (Ingersoll and Culshaw, 2004). However, in spite of the widespread nature of ICT-based resources and applications, there are few studies conducted on the role of the university library in provision and facilitation of use of e-resources for teaching and learning in universities.

In the developed countries' literature indicates that university libraries provide disparate traditional and non-traditional services and also advanced ICT services that provide sophisticated access to e-resources that support the curriculum. Surprisingly, other studies have showed that many university libraries in developed countries lack decent basic ICT resources (Liguete, 2007; Turner, 2006; Tilbian, 2005). In addition, Barstad, Audunson, Hjørsteter, and Oslie. (2007) found in their study that the majority of academic staff and undergraduates use the e-resources in the university library infrequently just as he added that students claimed that their lecturers never encouraged them to visit the library not to talk of accessing the e-resources available therein.

Turning to the developing countries, the e-resources in the university library have been widely circulated due to their importance. The extensive nature of the new digital environment has dominated the developing countries' considerations in integrating the ICT-based resources into their libraries (Moahi, 2002). However, very few countries have taken real initiatives to supply their educational institutions, or indeed embrace the fusion of ICT-based resources with traditional materials into the university library to enable the library to respond adequately to the curriculum needs of the faculty staff and students. In addition, insignificant research has been conducted on the role of the university librarians in the provision of e-resources for teaching and learning..

Magara and Nyumba (2004) emphasised that most developing countries struggle to enlarge their library services and concentrate on providing sufficient e-resources and services for the university community. However, the status of the university library as well as the integration of e-resources in educational institutions in some developing countries is still ambiguous and negligible in other countries due to its failures in different sectors. There are other factors that influence the development of e-resources in the university library, which include budget, bureaucracy issues and mismanagement (Swee and Abdullah, 2005). Todd (2004) also reiterated the role of university library in facilitating e-resources use by undergraduates to include: provision of ICT facilities, ICT resourcing/infrastructural support, provision of technical support and human/training support.

Developing countries have striven to pursue the technological revolution and adoption of and integration of e-resources into the education system through the university library,(Al-Mekhlafy and Al-Basha, 2000). Albirini (2006) described the situation in developing countries regarding the deployment of ICT-based resources including e-resources into the education system through the university library as improving because governments in most developing countries have responded to the challenge by initiating national programmes to introduce ICT facilities and resources integration and application into education with the university library equipped with the needed resources to ensure the success of the programmes.

Libraries, information centres and librarians play valuable roles in meeting undergraduates' information needs, facilitating and making access to information resources relevant in meeting their needs. The traditional functions of librarians are being transformed and made compatible with the demands of the electronic age which has ICT facilities as the driving force.. However, there is a great demand on the roles the librarians would play in facilitating the use of e-resources among the undergraduates in Nigerian university libraries. With the emergence of ICT the role of librarian has definitely change from traditional to modern services oriented. Ogunsola, Akindojutimi and Omoike (2011) asserted that advances in ICT and computer applications to the functions and services of libraries have brought remarkable benefits to the users, libraries and librarians. Such benefits include provision of fast, effective and efficient services, ease of access to vital statistical records, cost reduction, elimination of duplication of work, improved networking and cooperation among libraries. It is very essential for librarians to know about the undergraduates demand for e-resources which forms an integral part of their information needs.

Moreover, libraries have the primary objectives of acquiring, organising, preserving, retrieval and dissemination of relevant and useable information resources in all formats including e-resources to support research work among users, including undergraduates, in Nigerian university libraries. Lee (2008) stated that in reflecting on events and trends in the library, on campus and beyond campus e-resources accessibility have already overtaken print resources in their importance to library collections, and promise of e-resources for undergraduates in the future are as boundless as those of the printing press are to scholarship and as important to our ability to support learning of users in the university.

Raitt (2005) posited that the fast-paced technological developments have changed the way the undergraduates' access and retrieve information since information is regarded as an important resource and valuable input with power for societal development. It is power as it is the basis of all planning, indeed of all activities such that it is making libraries and librarians to change in their response to changes in the learning and research environment. On the other hand, Krolak (2006) stressed that libraries and librarians assist in finding, using and interpreting appropriate information that opens up opportunities for life-long learning, literacy enhancement, informed citizenship, recreation, creative imagination, individual research, critical thinking and ultimately empowerment in an increasingly complex world. This equitable access to information is essential to enable educated and informed citizens to participate in a democratic global community.

Consequent upon this, the role of libraries and librarians is also changing as librarians themselves have been re-evaluating their role as reflected in many literatures. According to Bhatti (2009), librarians have continuously emphasised the provision of good library service as more important to the user than the mere physical library building. This perspective is also evident in several other studies by Khan and Ahmed (2013), Khan and Bhatti (2012) and Shan and Shaheem (2013). In Pakistan, Bukhari, Ranjha, Ahmad and Naz (2010) conducted a study on library use by undergraduates of the foundation course in University College of Liberal Arts and Sciences and findings from the study indicated that 47% of the respondents agreed that library had sufficient space for users, while 53% of the respondents do not agree with this statement. 56% of the respondents agreed with library staffs attitude regarding borrowing books while 44% of the respondents did not. Moreover, 46% of the respondents indicated that librarians assisted them in searching for e-resources to meet their needs. Also, Khan and Bhatti (2012) conducted a study on the departmental libraries of the University of Peshawar. Their study found out that most of the departmental library services were below standards as far as e-resources provision and usage facilitation are concerned. Major issues were identified as lack of budget, inadequate information technology infrastructure, inadequate administrative parameters, and poor physical facilities.

Odu and Afebende (2015) conducted an evaluation of undergraduate students' perception and utilization of electronic information resources and services at the University of Calabar library. The study, which involved 300 registered library users found that the students were well aware of the electronic library resources and services. Librarians are great facilitators of electronic resources

utilisation among undergraduate students. One of their roles is to ensure that users are well aware of the available e-resources. According to Odu and Afebende (2015), the use of directional signs by librarians to guide users to electronic resources area in the library really proved to be a good publicity for about 30.0% of the students to use the electronic library resources. More importantly, the librarians often educate the users on the electronic library resources which was further affirmed by Odu and Afebende (2015) that 25.6% of the respondents became aware of the availability of e-library resources and services during orientation programme for fresh students.

Librarians in university libraries are primarily saddled with the responsibility of providing services to an elite clientele including undergraduates. Librarians in this information age require serious deployment of ICTs and enormous skills to increase efficiency in the way they serve the users (Shidi, Igyuve and Tyonum, 2015). Edem and Ani (2015) studied the development of electronic libraries in Nigerian universities and discovered that librarians have really been playing a big role in ensuring that varieties of electronic resources like e-journals and online databases are accessible to their users. Consequent upon the students' lack of adequate knowledge and skills in accessing and using electronic information, Lwehabura (2008) suggested that librarians and teaching staff should become role models and mentors to students in using electronic resources. It was also recommended that the staff should adopt an active learning and student-centred approach in their teaching as well as strengthening ICT literacy programmes as intervention measures for improving students' skills in using electronic resources.

Taylor and Francis (2013) conducted a survey on facilitating access to free online resources with emphasis on the challenges and opportunities for the library community. The study pointed out that librarians have a critical role to play in helping their users spend less time searching and more time finding and reading content that they need for their research or studies. General search engines will be increasingly challenged to provide the level of filtering that will be required and librarians are well placed to develop methodologies and systems for the evaluation and presentation of a wider range of information resources, tailored to the needs of a specific institution. However, support is required from a range of stakeholders in the scholarly information supply chain.

Taylor and Francis (2013) survey highlighted that 94% of librarians already help their users find free online content. Meanwhile, as far as facilitating discovery of free online electronic information resources is concerned, the role of a librarian mainly falls into two key areas: 1) central work to evaluate and select resources following a clear methodology, and 2) providing guidelines and training to users to improve their search and evaluation skills. As observed by Johnson, Trabelsi and Tin (2003), librarians have been a major player in creating an environment that is responsive to the scholarly information needs of a diverse group of library users. More specifically, librarians locate, select and describe quality Internet resources, and provide access to journal databases and electronic book collections, providing users with full-text content from a wide range of online resources and publications, including peer-reviewed journals. This clearly demonstrates that the library works with faculty, researchers, scholarly societies, and publishers in developing and managing a collection of enriched online scholarly resources.

Taylor and Francis (2013) further pointed out certain areas for improvement and innovation to facilitate access to free online electronic information resources by librarians, which include; creation and adoption of metadata standards to signal how 'open' content is; improved identification of free articles in hybrid journals; permanence of access and reliable archiving for free content; comprehensive indexing of quality free resources by discovery systems; provision of usage statistics for free online content, consistent across publishers; improved integration of free content with link resolvers; development of a wider range of trusted repositories linking to free content; improved user interfaces for accessing library-surfaced content; more training and support in information literacy skills for students and faculty; and lastly, development of metrics for evaluating impact of content (free and paid-for) on institutional performance. According to Wanyenda (2008), it is the responsibility of university management to facilitate ICT skills development by allocating resources in terms of funds, expertise and time. However, Msuya (2002) noted that, lack of funds limit universities to facilitate access to skills development materials like manuals, brochures, and CDs/DVDs with regards to internet access.

Constraints to Usage of E-resources Provision and Access in Tertiary Institutions in Nigeria. The introduction of e-resources and services is a welcome development to information dissemination in tertiary education. Their use by students poses some challenges and concerns (Gwazah, 2011). Chisenga (2004) cited in Egberongbe (2011) listed some factors hindering the use of e-resources in Nigeria higher institutions as including lack of strategic planning, lack of or inadequacy of reliable funding, lack of use of internet to provide information services to users and a lack of consistent training for users in new ICT services. Oduwole and Akpati (2003) identified some of the constraints in accessing e-resources to include insufficient number of terminals available for use despite high demand, and inadequate electricity supply. A major problem however identified by Egberongbe (2011) is lack of information retrieval skills for exploiting e-resources, thus making the level of usage of e-resources by students very low. Ashcroft and Watts (2005) noted that high cost of hardware, software and particularly the constraints attributable to internet service providers were significant barriers to the provision of electronic resources.

Isah (2010) mentioned slow internet access and lack of constant power supply as major factors inhibiting the use of e-resources. However, other less limiting factors were non-availability of e-resources relevant to students' information needs and dislike for reading from screen. In addition, Damilola (2013) reported poor electricity supply and poor internet connectivity as great hindrances to the use of e-resources. Other factors were insufficient skills, financial problem, poor training programme and excessive academic workload. Achonna (2008) investigated students' access, usage and problems faced in use of e-journal resources at the Yaba College of Technology library and reported low usage of e-journal resource while lack of ICT skills, inadequate provision of computers, and power outage were considered as major problems being faced in use of resources by students. The author suggested the need for training in ICT skills acquisition, provision of adequate computers; need to popularise the information technology and its usage and to motivate the students to use e-journal resources. Okello-Obura

and Magara (2008) highlighted internet and OPAC as the commonly used e-resources by students. According to them, Emerald and EBSCO full-text databases contain titles that would be most relevant to the academic needs of students. Nevertheless, the use of these two products was only minimal. In the same vein, Watts and Ibegbulam (2008) surveyed some of the barriers to the use of e-resources available at the Medical Library of College of Medicine, University of Nigeria, Nsukka and reported that lack of an adequate ICT infrastructure and affordable online access, absence of in-depth ICT skills and information searching skills among the users and cost of using the cybercafé are key among the barriers to the use of electronic resources.

The study of Olarongbe and Ibrahim (2011) revealed that slow internet connectivity (59.8%), lack of constant power supply (47.8%), and lack of online access (42.4%) were major factors hindering the usage of e-resources by learners. Similarly, other constraints like lack of technical know-how (27.7%), dislike for reading from a lit screen (27.2%) and a lack of awareness of e-resources (22.3%) limit the popularity of usage of e-resources. Other factors affecting the utilization of e-resources that are identified include lack of competence of the e-resources users, lack of knowledge, negative attitudes and poor practices and inadequate, and limited infrastructure (Manda, 2005). In another study, Alison, Kiyngi and Baeiraake (2012) found that utilisation of e-resources was influenced and sometimes often encumbered by human and institutional factors including poor information literacy, low bandwidth and limited number of resources available to users.

References

- Achonna, A.U. 2008. Awareness, access and usage of e-journal resources of the library by the students of Yaba College of Technology: Yaba - Lagos Nigeria. *Samaru Journal of Information Studies* 8.1:26-34.
- Adedeji, O. A. 2010. *The development of modern information and communication technology*. Ibadan: Creation Educational Publications Ltd. 58-62.
- Adekanye, E. A. 2004. Library building capacities and deficiencies: a case study of two Nigerian academic libraries. *Gateway Library Journal* 7.1:21-30.
- Adeloye, A. 2000. The information market in Nigeria. *Journal of Information Science* 26.4:282-285.
- Adeniji, M. A. 2014. Availability and utilization of electronic resources by lecturers of Ibogun campus of the Olabisi Onabanjo University, Ogun State, Nigeria. *Journal of Education Research and Behavioural Sciences* 3.7: 195-200, Retrieved May 21, 2015, from <http://www.apexjournal.org>.
- Adeniji, M.A, Adeniji, S.E and Ogunniyi, S. 2010. Availability and use of ICT in Olabisi Onabanjo University Library. *Practice North-West Library Association* 4.2:52-62.

- Adeniran, P. 2013. Usage of electronic resources by undergraduates at the Redeemer's University, Nigeria. *International Journal of Library and Information Science* 5.10:31-39. Retrieved July 12, 2015, from <http://www.academicjournals.org/IJLIS>.
- Adeogun, M. 2003. The digital divide and university education system in sub-saharan Africa. *African Journal of Library, Archives and Information Science* 13.1:11-20.
- Afebende, G. B. and Uyanah, D. 2008. Survey of the use of Electronic information resources by students in 2 selected academic library in Cross River State. *The Information Technologist* 5.1:21-29.
- Afolabi, M.O. 2007. Paper presented at Electronic Information for libraries Network (elFL.net) workshop Obafemi Awolowo University, Ile-Ife, Nigeria.
- Agbatogun, A.O. and Lawunmi, O. M. 2009. Gender, computer access and use as predictors of Nigerian undergraduates' computer proficiency. *African Research Review* 3.4:61-78.
- Agboola, I. O. 2009. Use of print and electronic resource by Agricultural Science Students in Nigerian universities. *Library and Information Research* 32.1: 62-65.
- Ajayi, S. A. Shorunke, O. A. and Aboyade, M. A. 2014. The influence of electronic resources use on students' reading culture in Nigerian universities: a case study of Adeleke University Ede, Osun state. *Library Philosophy and Practice* (e-journal). Paper 1182. <http://digitalcommons.unl.edu/libphilprac/1182>
- Alison, K. A. Kiyingi, G. W. and Baziraake, B. B. 2012. Factors affecting utilization of electronic health information resources in universities in Uganda. *Annals of Library and Information Studies* 59:90-66.
- Asefeh, A. and Nosrat, R. 2007. Awareness and use of digital resources in the libraries of Isfahan University of Medical Sciences, Iran. *The Electronic Library* 25.3:316-327.
- Bashorun, M. T., Isah, A. and Adisa M. Y. 2011. User perception of electronic resources in the University of Ilorin, Nigeria (UNIILORIN) *Journal of Emergence Trends Computer Information Science* 2.11: 557-562.
- Dafiaghor, F.K. 2012. Problems and prospects of electronic resources usage in Nigerian academic libraries. *Journal of Economics and International Finances* 4.9:200-225.
- Dala, N.S. 2009. The role of ICT in academic libraries and the achievement of the Millennium development goals. *The Voice of Teachers* 1.2:141-144.
- Damilola, O. A. 2013. Use of electronic resources by distance students in Nigeria: the case of the National Open University, Lagos and Ibadan

Study Centers. *Library Philosophy and Practice*. Retrieved April 15, 2015, from <http://digitalcommons.unl.edu/libphilprac>

Dhanavandan, S., Esmail, S. M. and Nagarajan, M. 2012. Use of electronic resources at Krishnasamy College of Engineering & Technology Library, Cuddalore. *Library Philosophy and Practice* 20.2:516-600

Ekwelem, V. O., Okafor, V. N. and Ukwoma, S. S. 2009. Students use of electronic information sources at the University of Nigeria, Nsukka. *African Journal of Library, Archival, Information Science* 19.1: 87-97

Gwazah, Y.T. 2011. An assessment of availability, awareness and use of electronic resources and services in the libraries of the Kaduna State Tertiary Institutions. Zaria: Ahmadu Bello University. 13-15.

Hair, J. F., Black, B., Babin, B. J., Anderson, R. E. and Tatham, R. L. 2006. *Multivariate data analysis* 6th ed. Upper Saddle River, NJ: Prentice Hall.

Hakkarainen, K. and Ilomäki, L. 2007. Students' skills and practices of using ICT: results of a national assessment in Finland. *Computers and Education* 34.2: 103-117.

Hamilton, F. 1990. *Information: publicity and marketing ideas for the information profession*. Gover Publishing Company: Hants, England.

Hanson-Baldaufa, D. & Hughes Hassell, S., 2009. The information and communication technology competencies of students enrolled in school library media certification programs. *Library & Information Science Research* [online], <http://www.sciencedirect.com/science?ob=MImg&imagekey=B6W5R-4VB559G-1-.pdf>, [accessed 28.06.09]. 31.1:3-11.

Hardgrave, B., Davis, F. and Riemenschneider, C. 2003. Investigating determinants of software developers' intentions to follow methodologies. *Journal of Management Information Systems* 20.1: 123-151.

Hardy, C. Heeler, P. and Brooks, D. 2006. Are high school graduates technologically ready for post-secondary education. *Journal of Computer Sciences in Colleges* 21.4:52-60.

Harle, J. 2009. Digital resources for research: a review of access and use in African universities association of commonwealth universities. 24.

Hennessy, S. Harrison D. and Wamakote, L. 2010. Teacher factors influencing classroom use of ICT in sub-Saharan Africa. *Itupale Online Journal of Africa Studies*, 2:39 -54.

Hepperista, F.K. Lazarz, R. and Broug, E. 2008. Emerald academy 2008 authorship in Africa. Available at <http://info.emeraldinsight.com/pdf/report.pdf>. Accessed 20.3.09

- Herring, S. D. 2001. Using the world wide web for research: are faculty satisfied? *The Journal of Academic Librarianship* 27. 3: 213 – 219.
- Hoq, K. M. 2012. Role of information for rural development in Bangladesh: a sector-wise review. *Information Development*, 28.1: 13-21.
- Horton, R., Buck, T., Waterson, P. and Clegg, C. 2001. Explaining intranet use with the technology acceptance model. *Journal of Information Technology* 16, 237-249.
- Huang, L. Y. 2004. A study about the key factors affecting users to accept Chunghwa Telecom's Multimedia on demand. Dissertation, National Sun Yat-Sen University.
- Hui, A. I. 2009. Noise pollution at the University of Calabar, Calabar, Nigeria. *African Journal of Library, Archives & Information Science* 19. 1: 53-63.
- Husain, N.S. 2007. Use of electronic resources at Jamia Millia Islamia (A Central University): a case study. *NACLIN National Convention on Library and Networking*, 320-324.
- Ifijeh, G. 2012. Sustainable consortium building among university libraries in Nigeria: adoption of New-strategies. *The International Information and Library Review* 44.1:8-12. Retrieved March 22, 2012 from <http://www.sciencedirect.com/science/article/phis 51057231712000033>
- Igbaria, M., Zinatelli, N., Cragg, P. and Cavaye, A. L. M. 1997. Personal computing acceptance factors in small firms: a structural equation model. *MIS Quarterly* 21.3: 279-305.
- Igun, S.E. 2005. Implications for electronic publishing in libraries and information centres in Africa. *The Electronic Library* 23.1: 82-91.