USE OF SUBSCRIBED ELECTRONIC RESOURCES BY UNDERGRADUATE STUDENTS IN KASHIM IBRAHIM LIBRARY, ZARIA

By

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Abstract

The study examined the use of subscribed electronic resources by undergraduate students who patronize the Database/CD-ROM Service Unit of Kashim Ibrahim Library, Ahmadu Bello University Zaria, Nigeria. A snowball sampling technique was used to sample and gather patrons' opinions who utilize the unit services through a period of six months (January – June, 2014); a total of 350 undergraduate students patronized the unit during the period. Data collected were analyzed quantitatively, results presented in tables and graphically. The results revealed awareness level of the diversified electronic information resources to be very low. Scores of distribution shows the most patronized electronic resource to be JSTOR (13.2%), Science Direct (9.4%) and AGORA/TEEAL (7.0%). Reported barriers militating were compiled and ranked by the unit staff which comprise of low bandwidth, poor connectivity, lack of skill to surf the subscribed databases, constant power failure and insufficient knowledge of the available e-resources. Conclusively, there are sufficient electronic resources which the library management subscribed for use by undergraduate student. Recommendations include the utilization of demographic data generated by the unit for e-resources selection and acquisition, sensitization of the students, refurbishing of the dilapidated infrastructure of the unit and expanding the unit sitting capacity.

Keywords: undergraduate students, awareness, access, electronic resources, Nigeria

Introduction

Electronic resources are valuable tools for study, learning and research, and capable of servicing a large number of patrons in any educational setting. They are easily transmitted virtually compared with the traditional print-based resources; characteristically, contains current information and can be updated frequently, offer advanced search capabilities and are flexible because they not bound by time and location. The prioritization of access to electronic resources in Kashim Ibrahim Library necessitated the establishment of a unit popularly called

CD-ROM search services, strictly for undergraduate students to compel them to learn how to find, select and use a wide variety of electronic resources subscribed by the University library.

To benefit from the unit services, students are expected to develop appropriate skills to bridge the gaps of dearth information precluding them from writing well-articulated and constructive term papers, assignments, develop and compare notes and write project requisite for graduation and to also justify the huge amounts spent by the university on subscription. Weingart and Anderson (2000) observed that libraries spend a substantial percentage of their budgets on acquiring electronic resources and making them available for users. These resources provide access to information far beyond the limits of the libraries' print collections. But to effectively use the electronic resources and services, users must know of their existence, thereby making it the responsibility of libraries to acquire these resources and offer the services that can bring the awareness of such resources and services. Patron's sensitivity and response is a key issue, and vital ingredient for achieving goals aimed at enhancing the quality of learning and research work when availed by just visiting the library to inquire and practice.

As a concept, electronic resources stand for those electronic information resources that user access electronically via a computing network from inside the library or remote to the library (Shim *et al.*, 2001). According to ALA as cited in Gwazah (2011), electronic resource is a material (data and or programme) encoded for manipulation by a computerized device. This material may require the use of a peripheral directly connected to a computerized device (e.g. CD-ROM) or a connection to a computer network (e.g. Internet). The concept of electronic resources consists of texts, audio, visuals, graphics and animations in nature that are accessible through the aid of digital technologies. Ideally, these should provide users access to electronic information resources via electronic means. However, this definition also includes electronic resources such as databases on stand-alone personal computers, information on CD-ROMs that may not be accessible through the Internet or other networks. Tammaro (2006) observed that electronic resources include websites, online/offline databases such as HINARY, AGORA, JSTOR, SCIENCE DIRECT, BIONE, AORE, etc. Offline databases or information on CD-ROMs that may not be accessible through the Internet include but not limited to TEEAL, DATA ON CD, Audio-Visual and Multimedia resources.

Several studies on patron demography focus on what constitute the use and access of e-resources on the basis and influence of gender, colleges and programme of study (Dhanavand, 2012; Achonna, 2008; Isah, 2010). For instance, Dhanavand (2012) reported the dominance of male (65.33%) over those recorded for female (34.67%) students. The result was the same in Nigeria with the case of Yaba College of Technology where Achonna (2008) reported (53.1%) to be male and (46.8%) were females. From University of Ilorin, the demographic result for gender reported by Isah (2012) indicates (76.7%) males and (23.3%) to be females respectively. Further report on demography of Colleges distribution on Medical Centre in an Indian study was reported by Dhanavand (2012), however, in Nigeria, programmes of studies ranging from ND1, ND2, HND1, HND2, MA, MED, MLS MSC and Ph. D were reported by Achonna (2008) and Isah (2010) respectively as the classes and distributions investigated.

When users of a library have adequate information on available resources in the library, they are encouraged to use them as the need arises. Utility of electronic resources hinges on awareness, and awareness is defined as the knowledge that something exist. Gwazah (2011) stated that awareness of electronic resources means users of the library have information and knowledge of e-resources subscribed. Ajuwon (2003) also carried out a study of uptake of ICTs by health science students at the University College Hospital, Ibadan and reported that 57% of the students sample could not use a computer, that the use of the database was poor, due to lack of awareness, lack of access to computer, insufficient training and high cost of provision. At the same time, Egberongbe (2011) study the use and impact of electronic resources at the University of Lagos and reported that 80 (71.4%) of the researcher were aware of the electronic resources whereas 32 (28.6%) were not.

Aina (2014) revealed high rate of awareness of electronic resources among researchers of Babcock University Business School; 59 (69.4%) because researchers were aware of available electronic academic Journal, Dissertation, Theses and databases. The remaining respondents, 41 (30.6%) claimed not to be aware of diverse electronic media especially the listed resources like Book boon, World Bank resources, Open Knowledge Repository and National Virtual Library.

Access is a general term that describe the degree to which a resources or product seamlessly is put to use by as many people. Access is the capability to navigate the space of information with little or no stress. According to Aguolu (2002) resources may be available in the library and even identified bibliographically as

relevant as to one`s subject of interest, but the user may not be able to lay hands on them until such resources is at the grip of a patron, he can`t claim to have access. Osundina (1974) studies on the relationship between accessibility and library use in institutions of Nigeria reported that the problem of users is not the question of wanting to use the library, but whether or not the library can provide for their information needs and whether there will be access to the information provided. Aniebiet in Emwanta and Nwalo (2013) stated that electronic resources provide access to information that might be restricted to the user because of geographical location or finances. The more accessible information resources are the likely to be most patronized. It is not surprising that students argue and blame as the reason hindering them from using information resources that require the least effort like the e-resource to access during assignment, term paper and project works.

Numerous reason abound why students use information resources for academic purposes, online application/registration, research, communication with friends and colleagues, sourcing for materials for project writing, completing assignments and for other personal purposes, but some of the students end up being frustrated, develop phobia and total abandonment. According to Isah (2010) these is caused by barriers and that some of the barriers dominate putting to use of electronic resources by those topping the hierarchical ladder of the university setting, i.e., academic staff as revealed at the university Ilorin, Nigeria. Other barriers comprises lack of power supply, slow internet connectively, non-availability of e-resources and dislike reading from screen. In the same University, some respondents reported difficulty with the requisite User name and Password given to staff as means of getting access to electronic databases subscribed to by the University. In another study Okiki (2012) study Electronic information resources awareness, attitude and use by academic staff members of university of Lagos, and reported that academics vent their frustration on slow internet access, erratic power supply, information overload and non-availability of relevant electronic information resources during search regimes.

This collaborated with Oduwole and Akpati (2003) study on use of electronic information resources at the University of Agriculture Library in Abeokuta, Nigeria, where they identified lack of ICT and power supply outage as the major constraints to use of electronic resources. In the same vein, Watts and Ibegbulam (2006) surveyed some of the barriers to the use of electronic information resources available at the Medical Library of College of Medicine, University of Nigeria, Nsukka and reported lack of an adequate ICT (information and

communication technology) infrastructure and affordable online access, absence of in-depth ICT skills and information searching skills among library staff, and cost of using the cybercafé as barriers to the use of electronic resources.

Brief History of Kashim Ibrahim Library, Ahmadu Bello University, Zaria

The history of the library date back to 1955 when the Nigerian College of Arts, Science and Technology was established, the college was the fore-runner of Ahmadu Bello University that was established in 1962 and became a Federal university in 1975. The main university library is called Kashim Ibrahim Library (KIL) and formally opened to the public in December, 1976 by Sir Kashim Ibrahim the then Governor of defunct Northern Region who the library was named after. The library since then coordinates and became in-charge of the University Library System (now referred to as the university library complex). The complex comprises of eleven satellite libraries situated in all affiliated institutions and Directorates, in addition, it also carters for the twelve (12) faculties and eighty three departments in Kongo and Samaru campuses of the University (Yunusa, 2013).

Excluding all its satellite libraries, KIL has holding capacity of over 1.2 million volumes of books, 66,000 periodical titles and a sitting capacity of 2,000. As a central centre of research and scholarship, the library and its subsidiaries continue to update and play major roles in acquisition, processing and lending library materials in print and electronic formats. Through the support of the National University Commission (NUC), KIL subscribed to a number of electronic information resources (Databases) that are expected to also enhance teaching, learning and research activities of the University community (Isah, 2010).These electronic resources are accessible either from the Database/CD-ROM Search Unit, MTN-Net Library and the Internet Training Unit of the library, and also from the Electronic centres spread in the faculties or private computers connected to the library portal on the internet. Those who connect via the internet access the electronic resources using prescribed user name and password provided by the university data centre in collaboration with the university management information system unit.

Statement of problem

Ahmadu Bello University through Kashim Ibrahim library have made significant investment in electronic resources and accompanying computer-based technology to ensure access to E-resource. However, data available show that the resources are under- utilized by the undergraduate students. What could be blamed is worth investigating because the undergraduate level is the foundation to sound

scholarship and critical mind formation. This study therefore, investigates the correlation of access and awareness of E-resources subscribed for undergraduate students use in the library.

Objectives

1. To find the demographic spread of undergraduate students utilizing the e-resources in Kashim Ibrahim Library.
2. Find out the e-resources used by undergraduate students who patronized and use the e-resources in the Database/CD-ROM Service Unit of Kashim Ibrahim Library.
3. Determine what constitute hindering barriers to effective use of the Database/CD-ROM Service Unit to undergraduate students.

Methodology

The study adopted survey research method and utilized the snowball sampling design to gather data from the undergraduate students of Ahmadu Bello University main campus as they patronize the database centre of the university main library – the Kashim Ibrahim Library. According to Dragan and Maniu (2013), snowball sampling technique is a non-probability sampling method administered through survey and data registration that are recommended when population cannot be strictly delimited or detailed. The characteristic of this type of sampling is that, it is not used to estimate the characteristics of the general population but to estimate the characteristics of network of "hidden" population. Therefore, the choice of snowball sampling is to be able to overcome the challenges of getting proposal number of undergraduate students to respond to the research questions as well as appraise those utilizing the services of the unit and what challenges they envisage is affecting attaining the goals of the unit. Furthermore, the prohibition to locate respondents that must have hands-on-deck before filling the research data collection instrument is imperative and cannot be overemphasized considering the implication and contribution of the study which aimed at supporting effective and efficient information service delivery for undergraduate in the university.

A total of 350 undergraduate students were sample using the snowball technique through a span of six months from January-June, 2014. The instruments used for data collection was the Unit Evaluation form administered to student who patronize the service of the unit, the instrument is structured purposively into five sections that comprise (i) Descriptor of client, (ii) List of subscribed database, (iii) List of open access resources, (iv) Evaluation of service provide, and (v) Rules and regulations guiding the use of the unit:, however, an addendum that

solicited the barriers to effective service delivery in the unit was included for the purpose of the research. Data collected were analyzed descriptively using tables and graphs.

RESULTS AND DISCUSSION

The data generated from the study are presented in the tables; frequencies counts and percentages.

Table 1: Demographic Distribution of undergraduate students to the of E-Resources Center

Faculty	Frequency count	Percentage
Art	18	5.1
Education	112	32.0
Engineering	27	7.7
Environmental Design	18	5.1
Vet nary Medicine	22	6.3
Human Medicine	17	4.9
Social Sciences	43	12.3
Agricultural Sciences	16	4.6
Sciences	42	12.0
Pharmacy	17	4.9
Administration	18	5.1
Law	0	0
TOTAL	350	100

Demographic description and distribution of frequencies and percentages scores of undergraduate students from the faculty of Ahmadu Bello University are presented in the Table 1. The range of scores is 0-95 spread among the faculties. Appreciable patronage were recorded in faculty of Education scored 112 (32.0%), Social Science score 43 (12.3%) Science score 42 (12.0%) and Engineering score 27 (7.7%). The implication of these findings could be attributed to the earlier findings of Dhanavandan (2012) who reported numerous dispersal of patronage according to demography of Medical Colleges where Sri Venketeswara Medical College has the highest patronage.

The score for Law and Administration is not surprising because they not located near the study location in the main of the University.

Table 2: Distribution of respondents use and level of awareness of the available plant forms used for accessing E-resources in Kashim Ibrahim Library, CD-ROM/Database Unit

Online/Offline Databases	Frequency	Percentage %
AGORA/TEEAL	24	7.0
AORE	7	2.0
Bio-One	6	1.7
HANARI	12	3.5
Search Engine (google, yahoo, ask.com, etc)	164**	48.0
Journal of interrelated History	13	3.8
JSTOR	45	13.2
Science Direct	35	9.4
Data on CD	17	5.0
Britanica	22	6.4
TOTAL	342	100

**Not a database.

Results obtain on use and level of awareness of the available e-resources by undergraduate Students 'are presented in Table 2. Majority of the students use and are aware of JSTOR (13.2%) Science Direct (9.4%) and AGORA/TEEAL (7.0%).The low scores is a clear indication that Undergraduate students do not use, nor are they are fully aware of the available electronic resources subscribed for their use. This is affirmed by the numbers who use search engine 164 (48%), platform used to aid teaching/sensitization of the students on the differences and the available database. This has necessitated the centre staff to go round, engage undergraduate students periodically to ensure them actualizing the goals. The preference by the undergraduate students has also been revealed; JSTOR was the most accessed e-resources, compared to Science Direct (9.4%); AGORA/ TEEAL (7.0%) and Britannica (6.4%).

Results on the third objective that itemized the barriers militating against effective use and access to e-resources by undergraduate students include slow connectivity, lack of skill on how to search e-resources, power failure and insufficient knowledge to the available e-resources. This barriers were also reported in numerous papers on access and use of e-resources, the popular ones include slow connectivity and lack of constant power supply which has the frequency score of 98 (29%) and 102 (30%) respectively reported by Okiki (2012).

In the same way some of the respondents indicated they lacked skills to search due e-resources. This claims agrees with Achonna (2008) who reported that

36(24.8%) lacked skills on how to search the e-resources. Whereas Isah (2010) reported that the respondent confirmed insufficient knowledge of available databases and difficulty in using username and password which are requirements for accessing e-resources that are already subscribed by the university.

Table 3: Factors blamed by the Database/CD-ROM Service Unit Staff to Effective Utilization of the Unit by Undergraduate Students

Barriers	Frequency	Ranking
Constant power failure	317	2nd
Insufficient knowledge of the available e-resources	320	1st
Insufficient space and sitting capacity	320	1st
Undergraduate students' Lack of skill to surf	320	1st
Low bandwidth	317	2nd
Poor aeration	320	1st
Poor connectivity	317	2nd
Staff incompetence	301	3rd

The barriers hindering undergraduate students from utilizing the Database/CD-ROM Search Unit are presented after quantifying the respondent's multiple choices. The results are ranked as presented in Table 3. These barriers are reported in other studies, for instance, Oduwole and Akpati (2003) reported lack of ICT and power supply outage as the major constraints to use of electronic resources in University of Agriculture Library in Abeokuta, Nigeria. Watts and Ibegbulam (2006) reported lack of an adequate ICT (information and communication technology) infrastructure and affordable online access, absence of in-depth ICT skills and information searching skills among library staff, and cost of using the cybercafé as barriers in Medical Library of College of Medicine, University of Nigeria, Nsukka.

Conclusion

The study indicates that the library has subscribed sufficient databases and CD-ROM for use by undergraduate students, but the patronage by the students is very poor and low. Concluding, therefore, the study is of the opinion that it is not acceptable considering the resources expended, space allotted and staff assigned to the service.

Recommendations

1. The paper recommends that the demographic data generated in the Unit should be utilized for subscription of electronic resources for the undergraduate students particularly in the main campus.

2. The University library should periodically organize orientation programmes to teach undergraduate students what resources are subscribed for them and how to use these subscribed databases and electronic resources accordingly.
3. The numerous barriers responsible for the inefficient and ineffective use of electronic resources by undergraduate student that comprise inconsistencies or low bandwidth, unstable internet connectivity, unstable power supply, uncomfortable working environment and poor staff development should be addressed through a functional prioritized structure that include and attractive to the undergraduate students.

References

Achonna, A.U. (2008). Awareness, Access and Use of Electronic Journal Resources of the Library by Student of Yaba College of technology Lagos Nigeria. *Samaru Journal of Information Studies* 8 (1): 26-34.

Aina , R.F. (2014). Awareness, accessibility and Use of Electronic Database among Academic Staffs of Babcock University Business School. *Kuwait chapter of Arabian Journal of Business and Management Resources* 3 (6): 40-47.

Ajuwon, G.A (2003) Computer and Internet use by first year Clinical and Nursing Student in Nigerian Teaching Hospital. *BMC Medical Informatics and Decision Making Vol3 no10 September*, Available at Biomed Central.1472-6947/3/10. Accessed 16/3/2015

ALA (American Library Association) (2005). Access to Electronic Information Services and Networks: An Interpretation of the Library Bill of Rights.

Dragan, I. M. and Maniu, A. I. (2013) Snowball Sampling Completion. *Journal of Studies in Social Sciences* 5(2): 160-177.

Egberongbe, H.S. (2011). The use and Impact of Electronic Resources at the University of Lagos. *Library Philosophy and Practice.*

Emwanta, M and Nwalo, K.I.V. (2013). Influence of computer literacy and subject background on use of electronic resources by undergraduate students in universities in South-western Nigeria. *International Journal of*

Library and Information Science 5(2): 29-42. Accessed 16/3/2015 from http://www.academicjournals.org/IJLIS.

Gwazah, Y.T. (2011). An assessment of availability, awareness and use of electronic resources and services in the libraries of Kaduna State tertiary institutions.

Isah, A (2010). Electronic Library Resources used by Academic Staff at the University of Ilorin. *Journal of Library and Information Science* (JOLIS) 7(1&2): 138 – 149.

Oduwole A.A. and Akpati, C.B. (2003). Accessibility and Retrieval of Electronic Information at the University of Agriculture Library Abeokuta, Nigeria Library Review, 52 (5): 228-233

Okiki, O.C. (2012) Electronic Information Resources Awareness, Attitude and Use by Academic Staff Members of University of Lagos, Nigeria. *Library Philosophy and Practice (e-journal) p. 834.* http://digitalcommons.unl.edu/libphilprac

Osudina, O. (1974). The relationship between accessibility and uses made of the academic library by undergraduate students. Nigerian Libraries 41.

Shim, W., McClure, C.R., Fraser, B.T., Bertot, J.C., Dagh, A. and Leahy, E.H. (2001). Measure and statistics for research library networked services: procedures and issues (ARL E-Metrics Phase 11 Report). Washington DC: Association of Research Libraries. http://www.arl.org/stats/newmeas/emetrics/phasetwo.pdf Accessed on 15/3/2015

Tammaro, A.M. (2006). The Digital Library Users: Case Study on Needs Expectations and Skills.

Watts, C., and Ibegbulam, I. (2006). Access to electronic healthcare information resources in developing countries: Experiences from the Medical Library, College of Medicine, University of Nigeria. *IFLA Journal*, 32 (54). Accessed on 18/3/2015 from http://ifl.sagepub.com/content /32/1/54.full.pdf+html.

Weingart, S.J. and Anderson, J.A. (2000) when questions are answered; Using a survey to achieve Faculty awareness of library's Electronic Resources. *College and Research Libraries:* 127 – 134.

Yunusa, M. (2013) Staff Characterization for Effective Management and Delivery in Kashim Ibrahim Library, Zaria.