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Information Retrieval Skills and the Use of Electronic Resources in University Libraries by Undergraduate Students in Benue State University

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Abstract

This study was designed to identify Information Retrieval Skills and the Use of Electronic Resources in University Libraries by Undergraduate Students in Benue State University. Four questions were raised and answered. Population for the study was 6194 registered 200 level library users in the Benue State University. The sample size for the study was 376 respondents. Data was collected through questionnaire. Data was analysed using mean, standard deviation and Chi-square statistics. Findings for the study revealed that informational retrieval skills significantly affect the use of electronic resources by undergraduate students of Benue State University Makurdi. The study concluded that informational retrieval skills are indispensable for use of library e-resources by undergraduates in universities however the extent to which they possess these skills is not enough for effective and efficient use of the electronic resources and the students are faced with a plethora of challenges that affect their use of these resources to

retrieve information for their academic work. The study recommended that University libraries should organize programmes that will assist undergraduates to acquire the information retrieval skills needed for the use of e-resources and University management should make provision for standby generator to complement the public power supply.

Key Words: Information, Retrieval Skills, Use, Electronic Resources, University Libraries and Undergraduate Students

Introduction

Universities all over the world irrespective of the type and structure whether federal, state and private require information resources to achieve their different goals. Information resources therefore have become of the most vital assets of every university system. The basic function of any university is to conserve the existing knowledge, to transmit knowledge through teaching and to create new knowledge through research (Daramola, 2016). The branch of the university responsible for acquisition, organization, preservation and dissemination of its information resources to its users is the university library.

University libraries are therefore libraries established in universities and are devoted to the pursuit of knowledge and the development of manpower. Their main functions are to provide information resources and services to support learning, teaching, research and resources linkages for students and faculty of the parent institution. The collections of university libraries are influenced by their curriculum and the levels at which the courses are taught which include undergraduates and postgraduate programmes as well as other general programmes (Ani and Ahiauzu, 2008). As a result of their commitment to knowledge, their acquisitions and collections are generally large in size. The reason is that they contain all the course-related resources to the curriculum like books, periodicals, reference materials in both print and electronic formats.

University libraries play a prominent role in providing information resources in various library, Okunu, Akalumhe, and Monu in Nkamnebe. Udem and Nkamnebe (2014) assets that it is the 'heart and blood' of the university. This means a university cannot function without a well-equipped library to provide needed information resources for its academic programmes. It is also in recognition of its importance that the National Universities Commission (NUC) as cited in Nkamnebe, et al considered university libraries as one of the fundamental necessities required for accreditation of academic programmes in Nigerian universities.

Electronic resources, as defined by Ekwelem, Okafor and Ukwoma in Abubakar and Adetimirin (2015), are information sources that are available and can be accessed electronically through such computer networked facilities as online library catalogues. The internet and the World Wide Web (WWW) databases. The electronic resources could either be subscribed to or be digitized in-house. Electronic resources in its ambit include all kinds of digital collections in the form of e-books, e-journals online databases, CD-ROM databases, Online Public Access Catalogue (OPAC) and the internet resources.

Electronic resources are important elements for the academic community as they enable users to access up-to-date information in the right format without expanding much time (Adekammbi, 2016). Electronic resources have the potentials for enhancing students learning as they provide teachers and students with vast quantities of information in an easily accessible non-sequential format. That is why Gakibayo, Ikoja-Odongo and Okello-Obura (2013) citing schulingasseted that the development of e-resources has rapidly and practically in university libraries.

In describing the important of e-resources, conyers, Dadzie and Egberongbe in Abubakar and Adetimirin (2015) submitted that apart from the fact that e-resources are easily retrievable in university libraries, they also meet user's information needs. The above submissions could be reasons why many university libraries are shifting preferences towards e-resources, which are found to be more useful for university libraries. The shift from print materials to e-resources has indicated the importance of e-resources in information retrieval and instructional delivery which support learning, teaching and research activities acknowledged worldwide. This of course is the major reasons why university libraries in Benue state are also providing electronic resources to facilitate access to up-to-date information resources to their students.

It is however, worthy to note that the benefits university libraries reap from the investment information technologies and e-resources are influenced by the extent to which library users possess information retrieval skills needed for using e-resources. To libraries e-resources depends on the ICT gadgets or devices provided by the university libraries and information retrieval skills possess by graduates to retrieve relevant information for their academic for their academic performance and lifelong learning. It is this light that, Ani and Ahiauzu (2008) citing Tsakonas and Patatheodorou stated that "the transition from print to electronic medium apart from resulting in a growth of electronic information has provided users with new tools and

applications for information seeking and retrieval” similar, kwafoa, Imoro and Affur-Arthur (2014) posited that available of e-resources does not necessarily illicit utilisation. This means the responsibility of university libraries is not only to provide e-resources but also to provide necessary of skills which are demanded for this information age through such programme like use of library and study skills.

Information cannot be fully retrieved if students are unfamiliar with how to operate the system. This leads to lack of ability to successfully retrieve information required for academic work (Fordjour, Badu & Adejei, 2010). Information retrieval is concerned with the exploitation and extraction of information and other contents of documents from different information sources (Echem & Udo-Anyanwu, 2018). In order for undergraduate students to gain access to documents or information in an electronic environment represented by digital libraries, online databases, virtual libraries the students must be conversant with the assistive technologies and skills necessary for the purpose (Arua, Uzuegbu & Ugah, 2014).

Information retrieval skills is defined as the ability and competence too find information in such a way that non-relevant data are excluded while relevant information is found (Fordjour, Badu & Adejei, 2010). Information retrieval skills are crucial for retrieving information because these resources in electronic formats have to be retrieved through electronic devices such as the use of computers, ipad and smart phones which required certain skills. Ilogho and Nkiko as cited in Adekannbi (2016) stated that university students have often experienced difficulties in searching and using information effectively. Skills acquisition is very crucial to the use of electronic resources because of information in electronic forms can only be used if students possess the skills to retrieve the exact information needed for their learning and research purposes.

The information retrieval, skills entail being able to define an information need, know information sources to use, evaluate the information when retrieved and put it to maximum use. Operational retrieval skill is the ability and competences a user has to operate computers and its basic applications whole strategic retrieval skills include the ability to plan, create appropriate queries and search terms or combination of keywords or concepts which enable the students to retrieval relevant information.

It is also important that for the students to make use of the resources, they ought to be skilled in information and communication technology (ICT) application in order to gain independent use of various electronic resources around the globe. Since electronic resources are information stored electrically and made accessible through electronic systems and computer networks. Undergraduate students need skills to made adequate use of e-resources and if these skills are not possessed by students to navigate the internet their academic and research needs will suffer a setback. Therefore, the combination of informational, operational and strategic retrieval skills is needed to be possessed by the undergraduates for effective utilization of electronic resources provided by the university libraries.

These e-resources include e-books, e-journals, online databases such as AGORA (access to global Online research in Agriculture), HINARI (Health internetwork Access to research initiative), EBSCO-HOST (e-conten–Muklti-disciplinary coverage), ARBI on the Environment), TEEAL (the essential Electronic Agriculture Library) and JSTOR (journal storage), Online Compact Disc Read Only Memory (CD-ROM), online public access catalogue (OPAC) as well as internet resources for their academic use.

Objectives of the Study

The general purpose of this study is to investigate information retrieval skills and use of electronic resources in university libraries by undergraduate students in Benue state University.

Specifically, the study sought to:

1. Find out the types of electronics resources used by the undergraduate students in university library Benue State University.
2. Identify the information retrieval skills required by undergraduate students of University in Benue state
3. Find out the extent of usage of electronic resources in university library by the undergraduate students in Benue state University.
4. Identify the challenges hindered effective utilization of electronic resources in university library by undergraduate students Benue state University.

1.4 Research Questions

The following research questions were raised to guide the study

1. What are the types of electronic used by undergraduate students in university library Benue state University?
2. What are the ways through which undergraduate students acquired information retrieval skills in the Benue state University?
3. Too what extent do undergraduate students used electronic resources in university library Benue state University?
4. What are the challenges hindering effective utilization of electronic resources in university library by undergraduate students in Benue state University?

1.5 Statement of the hypothesis

The following null hypothesis were formulated and tested at 0.05 level of significance.

Ho: Informational retrieval skills do not significantly affect the use of electronic resources in university library by undergraduate students in Benue state University.

Ho: Informational retrieval skills significantly affect the use of electronic resources in university library by undergraduate students in Benue state University.

Methodology

The study adopted a survey research design. The population for the study was 6194 registered 200 le3vel library users in the university libraries in Benue State. The sample size for the study comprises of 376 registered 200 level undergraduate students who were composed using a multi-stage sampling procedure. Data was collected through questionnaire which was validated by experts. The reliability of the questionnaire was established using Cronbach Alpha method and a reliability coefficient of 0.77 was obtained. Data collected was analyzed using Means and Standard Deviation to answer the research questions while Chi-Square statistics was used to test the null hypothesis at 0.05 level of significance.

Table 1: Types of electronic resources used by undergraduate students in Benue state University library

S/N	Item	Mean	Std. Dev	Remarks
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1	E-Journal	3.09	0.66	Available
2	E-manuscript	2.03	1.82	Not Available
3	E-thesis	2.02	1.85	Not Available
4	E-book	2.09	1.89	Not Available
5	E-data achievers	2.20	1.69	Not Available
6	E-bibliographic adabase	2.11	0.33	Not Available
7	E-magazine	2.45	0.21	Not Available
8	E-mail	3.65	0.09	Available

Source: Field survey, 2019

Result in Table 1 shows that out of 8 items, 2 had their mean values ranging from 3.09 to 3.65 while 6 had their mean values ranged from 2.02 to 2.45 and were less than the bench mark of 2.50. This shows that the respondents disagreed that the 6 electronic resources. used by undergraduate students in Benue state University library.

Table 2: Ways undergraduate students acquired information retrieval skills in the Benue state University library

S/N	Item	Mean	Std. Dev	Remarks
9	Definition of your needs for research	3.15	0.83	Agree
10	Locating information in e-resources	3.22	0.63	Agree
11	Selecting articles with ease	3.38	0.6	Agree
12	Summarizing materials in your own words	3.18	0.84	Agree
13	Understanding terminologies used in databases	3.19	0.71	Agree
14	Use of reference sources to increase familiarity of topics	3.20	0.69	Agree

Source: Field survey, 2019

Result in Table 3 shows that all 6 items had their mean values ranging from 3.15 to 3.38 and were above the bench mark of 2.50. This shows that the respondents agreed that the 6 information retrieval skills used by undergraduate students in Benue state University library.

Table 3: Extent undergraduate students use electronic resources in Benue state University library

S/N	Item	Mean	Std. Dev	Remarks
15	E-Journal	2.54	0.66	HE
16	E-manuscript	1.77	1.82	LE
17	E-thesis	2.45	1.85	LE
18	E-book	2.08	1.89	LE
19	E-data achivers	1.89	0.69	LE
20	E-bibliographic	2.45	1.77	LE

	database			
21	E-magazine	2.03	0.32	LE
22	E-mail	3.20	0.22	HE

Source: Field survey, 2019

Result in Table 3 shows that out of 8 items, 2 had their mean values ranging from 2.54 to 3.20 while 6 had their mean values ranged from 1.77 to 2.45 and were less than the bench mark of 2.50. This shows that the respondents disagreed that the 6 electronic resources not used by undergraduate students in Benue state University library.

Table 4: Challenges hindering effective utilization of electronic resources by undergraduate students in Benue state University library

S/N	Item	Mean	Std. Dev	Remarks
23	Insufficient electricity	3.38	0.58	Agree
24	Technical problems	3.17	0.78	Agree
25	poor/inadequate orientation of students	3.20	0.63	Agree
26	Poor internet connection	3.22	0.75	Agree
27	Lack of technical-know-how on part of personnel	3.23	0.72	Agree
28	Poor personnel relation	3.22	0.63	Agree

Source: Field survey, 2019

Result in Table 4 shows that all 6 items had their mean values ranging from 3.17 to 3.38 and were above the bench mark of 2.50. This shows that the respondents agreed that the 6 items are Challenges hindering effective utilization of electronic resources by undergraduate students in Benue state University library.

Table 5: Chi-square result on the use of electronic resources in university library by undergraduate students in Benue state University

S/N	Variable	Mean	Std. Dev.	df	X ² -cal	X ² -tab	Remarks
1	E-resources	2.58	0.99	12	75.52	21.03	Rejected
2	Use	2.78	0.8				

Source: Field survey, 2019

Result in Table 4 shows Chi-square calculated value of 75.52 and Chi-square tabulated value of 21.03 at 12 degree of freedom. This implies that informational retrieval skills significantly affect the use of electronic resources. The null hypothesis which says informational retrieval skills do not significantly affect the use of electronic resources in university library by undergraduate students in Benue state University is rejected and the alternate hypothesis accepted.

Discussion of Findings

Research question 1 was on the types of electronic used by undergraduate students in Benue state University library. Findings revealed that E-Journal and E-mail were used by undergraduate students while E-manuscript, E-thesis, E-book, E-data achievers, E-bibliographic database, E-magazine were not were used by undergraduate students in Benue state University library. The findings are different from a study conducted by Ekenna and Iyabo (2013) on Information Retrieval Skills and Use of Library Electronic Resources by University Undergraduates in Nigeria which revealed that E-resource frequently used was the e-journals, e-book and e-magazines. Based on the findings, the study recommends that female students should be motivated to use the e-resources like their male counterparts. More computers should be provided in the library to cater for the needs of the students.

Research question 2 was on the ways through which undergraduate students acquired information retrieval skills in the Benue state University library. Findings revealed that definition of needs for research, locating information in e-resources, selecting articles with ease, summarizing materials in your own words, understanding terminologies used in databases and use of reference sources to increase familiarity of topics were ways through which undergraduate students acquired information retrieval skills in the Benue state University library.

Research question 3 was on the extent do undergraduate students used electronic resources in university library Benue state University library. Findings revealed that E-Journal and E-mail were used by undergraduate students on high extent while E-manuscript, E-thesis, E-book, E-data achievers, E-bibliographic database, E-magazine were used by undergraduate students in Benue state University library at a low extent.

Research question 4 was on the challenges hindering effective utilization of electronic resources in university library by undergraduate students in Benue state University library. Findings revealed that insufficient electricity, technical problems, poor/inadequate orientation of students, poor internet connection, lack of technical-know-how on part of personnel and poor personnel relation challenges hindering effective utilization of electronic resources by undergraduate students in Benue state University library. The findings are different from a study conducted by Ekenna and Iyabo (2013) on Information Retrieval Skills and Use of Library Electronic Resources by

University Undergraduates in Nigeria which revealed that the most significant challenge faced by the students was insufficient computers in the e-library. Based on the findings, the study recommends that female students should be motivated to use the e-resources like their male counterparts. More computers should be provided in the library to cater for the needs of the students.

Conclusion

Based on the findings of the study, the researcher concluded that, informational retrieval skills are indispensable for use of library e-resources by undergraduates in universities however the extent to which they possess these skills is not enough for effective and efficient use of the electronic resources. The students are faced with a plethora of challenges that affect their use of these resources to retrieve information for their academic work.

Recommendations

Based on the finding of the study, the following recommendations were made:

1. The University libraries should organize programmes that will assist undergraduates to acquire the information retrieval skills needed for the use of e-resources.
2. Efforts should be made by the university administrators and library management to improve on the bandwidth and enhance the internet connectivity so as to enable the students has easy access to e-resources in the university libraries.
3. University management should make provision for standby generator to complement the public power supply.
4. University libraries should provide more computer terminal for library users.
5. University libraries should organize constant awareness programmes such as, orientation, talks/seminars and workshops in the university libraries which should be tailored to informing undergraduates of the use of not just the e-resources available in the library.
6. University librarians should organize in-housing training and short-term course, for library staff, on the use of electronic resources so as to efficiently assist undergraduates in accessing and retrieval of information.

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