Accessibility and Utilization of E-Learning Resources of Undergraduate Students in Academic Libraries: A Precursor to Academic Goals

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Abstract

The hallmark of the 21st century era is access and share of information across the globe for sustainable capacity and development. .Little wonder then, that equitable access and utilization of information is being championed globally. Academic libraries are at the center of learning and research in higher institutions. The library is tasked with provision of timely, important, accurate, up-to-date, and accessible information resources to support teaching, learning, and research and in turn, help students to become functional members of the society through access to information. The world as a global village depend so much on the internet/web in share of timely information not limited by geography. This led to the adoption of Information Communication Technologies (ICTs) in academic libraries. E-learning resources are components of ICT. However, librarians are therefore, concerned with the accessibility level of these wonder-resources by students. Consequently, this study further examined the relationship between accessibility and utilization of e-learning resources and achievement of academic goals. The paper adopted correlational study design. The population of the study comprised of undergraduate students of the University of Port Harcourt, Rivers State, Nigeria. The finding showed that there is indeed a relationship between accessibility and utilization of e-learning resources and achievement of academic goals. It was therefore, recommended that efforts should be made by educationists and managements of higher institutions to provide adequate e-learning resources to aid learning.

Keywords: E-learning resources, accessibility, utilization, academic libraries, undergraduates, academic goals.

1. Introduction

The world as a global village derive so much power through information, therefore, the absence of information makes one powerless and cannot make informed decisions or have access to the resources that are necessary for survival. Consequently, the fundamental aim of every academic library is to provide information resources and enabling environment for research and dissemination of knowledge targeted at societal development. Access to information is vital for successful research outcome. Adeoye (2000) affirmed that access and use of information is needed for problem solving and decision making in research process. Therefore, the global concern for timely access and utilization of information resources orchestrated the adoption of Information Communication Technologies in the management and use of information. The Millennium Development Goals (MDGs) and the transformation agenda of the Nigerian government perceived education as a vital tool towards the realization of the objectives of the developmental programmes. Thus, Academic libraries have consistently provided electronic learning resource (e-learning resources) to boast accessibility and utilization of information resources for the attainment of the educational policy.

The 21st century could be described as an era of information revolution, with the presence of information materials in diverse formats. Ojwang (2012) in Owate (2017), defines e-learning as the intentional use of networked information and communication technology in teaching and learning. The term e-learning comprises a lot more than online learning, virtual learning, distributed learning, networked or web-based learning. Libraries and information centres are not only equipped with materials in traditional formats but also in electronic formats offering users a vast selection. The arrays of electronic-based learning resources constitute the electronic learning resources. E-learning resources include all forms of electronically supported teaching and learning materials. It is best described as training on a computer, using many different mechanisms and forms of media aimed at helping students to develop knowledge, skills and understanding through the use of computer-based technologies (Owate, 2017). Ebigbo (2010) refers to e-learning resources as the use of electronic media and information communication technologies (ICT) in education.According to Ile and Okolocha (2012) e-learning resources when integrated into education could attract the following benefits to the students, lecturers and the society as:

- Provide access to information with the latest technologies to support professionalism in education.
- Enhance the development of standard through curriculum development design and innovation, which will put in place appropriate human and material instructional resources for effective teaching and learning.
- Help to engage students in learning process and skills which will be useful in social life and in the

world of work.
- It promotes motivation of students and teachers to engage in research for indebt knowledge in business education, information communication technology and general education.
- It promotes timely and remote access of information resources

Owate (2017), outlined the usefulness of e-learning resources in enhancing the academic performance of students as;
- Educating a large number of students with optimal efficiency, which provides greater learning opportunities location notwithstanding.
- E-learning method is versatile in nature as computer can produce colourful graphics other than just sounds. In a nutshell, a picture is worth more than mere words.
- Students tend to remember through illustrations, pictures, diagram and charts than what they heard.
- Through the use of e-learning resources, learning is maximized in the most efficient and effective manner.
- Through the use of the internet, the subject matter of a course is known and mastered by students before the commencement of the relevant topics.
- The use of e-learning resource saves time and money. It reduces tension and increases productivity as we now do thrice the work we use to do as a result of substantially decreased pressure.

The author concludes that perspectively, the use of e-learning resources in educational institutions brought individualization in academics. It increases proficiency in accessing, evaluating and communicating information. However, with the collection of information sources obtainable in the university library, little wonder then that the library is regarded as the academic heart of the university (Odiase, Unegbu, and Haliso, 2001), there is still a mismatch between what is available and the use statistics. It is on this note that Ajibero (1998) noted that Nigerian university libraries do not meet user expectations from her undergraduate population. Umeozor and Emasealu (2018) accessing the availability and utilization of electronic resources opined that in most parts of the developing world, not much has been achieved regarding easy access to current information. They further explained that the expected impact of e-resources usage and the accompanying ICT infrastructural development has not been fully realized. In this technology-driven information age, every aspect of a country's economy is networked with the global environment for effective learning and development (Gabadeen, Alabi, and Akinnubi, 2005). Students are therefore, expected to capitalize on the availability of e-learning resources to improve their learning capability towards the achievement of academic goals, ultimately aimed at attainment of the educational policy; education for self-reliance. It is based on this foreground that this research seeks to investigate the accessibility and utilization of e-learning resources by undergraduates in academic libraries.

2. Literature Review
In this technology age, information and communication technology (ICT) is fast becoming a major source of information. The internet has greatly changed the way people obtain information which also affects their reading culture. In fact, the internet has now become the way of life of many people, especially adolescents. The internet has changed the world in an incalculable number of ways. It has changed the way people communicate, the way business is done, and the way information is shared and received. The academic library is the hub of every academic activity in higher institutions, where researchers and students are granted access to an army of refined information. To the undergraduates, the library is the learning centre because it provides materials that are needed for learning in all the courses that may be offered by the institution (Aina, 2014). The study of the use of e-learning resources across academic disciplines in academic institutions has been the crux of most researches in the information science since evolution of the information age in view of its impact on the society particularly in the universities. While technology is slowly taking a steady control over individual lives, Librarians are constantly improving the provision of information services by harnessing the acceptance accorded to ICTs by collection and provision of electronic learning resources. this is because according to Hindu (2004) browsing the net, thereby making reading a book or any other piece of written material in a quiet or peaceful corner of a library or home becomes an archaic and unfashionable idea for most school children and adults. Copper ,Wiki (2008) bemoaned the decline in reading habit to be caused by the offshoots of technological advancements. Graham & Kingsley (2005)estimated that on the average, young people spend more time watching TV and videos, listening to music, using computers and playing video games instead of reading. Also, Hastings & Henry (2006) reported that 85% of children prefer watching television over reading. Majid *et al*(2001) found that 57.6% of the children in Singapore prefer playing on computer or surfing the Internet whereas only 44.1% prefers reading as their leisure time activity. It is therefore, a justified venture that these technologies can now be utilized in learning as electronic learning resources.

The traditional reading habits of library users, especially adolescents, have now change with the advent of ICT. Strouse (2004) showed that users (especially younger users) have developed a clear preference for

receiving information in electronic formats. Li-Bi Shen (2006) observed that college students reading habits have change drastically from paper-based to Internet-based reading. He revealed that 83.9% of students read information electronically everyday whereas only 31.4% and 33.1% read newspapers and magazines daily, respectively. Friedlander (2002) found that staff seem to expect a hybrid environment of print and electronic resources, while undergraduates seem more willing to live in a wholly online world. Ramirez (2003) and Liu *et al.,*(2008) revealed that with the growing amount of digital information available, people particularly young adults are found spending more time reading electronic materials**.** A report released by the Pew Internet & American Life Project observed that 73% of college students reported they use the Internet more than the library for research, however, only 9% said that they still gather information the old-fashioned way (Balas, 2003). Liew (2000) found out that a majority of graduate students prefer electronic journals over print journals.

According to World Bank (1994), tertiary education is seen as the capstone of the traditional education pyramid. As the apex of educational structure, it is a critical pillar of human development which provides a life-long learning framework for training high-level skilled human capital resources in all spheres of life namely, teachers, doctors, nurses, civil servants, engineers, humanities, entrepreneurs, scientist and myriad of personnel (Aduwa-Ogiegbaen &Imogie, 2005). The authors further maintained that improved tertiary education is necessary for sustainable progress in basic education. With the advent of globalization and information revolution, education is expected to create intellectual capacity on which knowledge production and utilization depends on. It is also expected to play a key role in promoting lifelong learning practices that is necessary for updating people's knowledge and skills. To achieve this, tertiary institutions need to change their instruction modes of operation and delivery by taking advantage of e-learning technologies, which is an integral part of information communication technology. Realizing the importance of e-learning resources, the Government, particularly at the federal and state levels in conjunction with some non-governmental organizations (NGOs) have contributed towards the promotion and provision of information communication technology facilities and capacity building in some Nigerian tertiary institutions. However, a bit more is needed in this regard. The inclusion of information communication technology courses is compulsory in all courses in Nigerian tertiary institution and as a major feature in business education courses point to the fact that ICT and e-learning is a necessity and of great importance, if we are to achieve the millennium development goals of the UNESCO.

The support on the use of e-learning resources has received wide acceptance from information professionals, government, stakeholders and educationists as improving the teaching and learning process. According to Wodi (2009) the Nigerian policy on learning technologies capped 'National Information Technology Policy (NITP)' was approved in March 2001,leading to the subsequent establishment of the National Information Technology Development Agency (NITDA) to implement NITP in April 2001. The policy stipulated the relevance of ICT to tertiary education. To further strengthen the impact of the policy, the National Universities Commission (NUC) prescribed PC ownership for universities as follows: one PC to every four students, one PC to every two lecturers below lecturer I; one PC per senior lecturer, and one notebook per reader/professor (Agyeman, 2007).

The importance of timely access and utilization of electronic learning resources cannot be over-emphasized, as resources may be available in the library and identified in the bibliography of the library as relevant to one's subject of interest, but the user may not be able to lay hands on them Agolu & Agolu(2002). There are indications that the profitability of e-learning resources on learning are enormous, Scott (2006) observed that researchers and librarians perceived e-learning resources as one of the valuable resource tool at their disposal and strongly urge that their use be continued and expanded.Despite these laudable prospects of e-learning resources, optimal accessibility and utilization remains crucial towards plausible research out come.No doubt, the existence of e-learning resources would be of no positive consequence learning if they are not accessed and utilized by students for learning and plausible research outcome. The campaign on acquisition of e-learning resources across academic institutions yielded positive outcome, therefore, attention has been focused on the level of accessibility and utilization. However, there is the need to determine the effect of accessibility for the intended outcome, because, the findings on the level of accessibility and utilization only tells the librarians how the e-learning resources are accessed, but does not inform on the impact it exerts on the teaching and learning process. It does not portray the relationship between e-learning resources and learning objectives. Therefore, in investigating the accessibility and utilization of e-learning resources by undergraduates, the focus is directed to e-learning resources as a precursor to the attainment of academic goals, using the following outlined objectives:
1. Examine the extent of accessibility of e-learning resources by undergraduates.
2. Examine the extent of utilization of e-learning resources by undergraduates.
3. Evaluate the relationship of accessibility and utilization of e-learning resources and the attainment of academic goals of undergraduates.

3. Methodology
The paper adopted correlational study design to study the accessibility and utilization of e-learning resources and

correlate it with attainment of academic goals of undergraduates. The study was carried out in the University of Port Harcourt, Rivers State, Nigeria. The population of this study comprised of undergraduate users of the library, this comprised of all registered undergraduate students of the University of Port Harcourt. According to Wikipedia (2018), the undergraduate students population of the University of Port Harcourt is 45,000. Using Yemena's formulae, the study arrived at a sample size of 400. Therefore, a sample size of 400 undergraduates we randomly selected across the 13 faculties in the University of Port Harcourt. Data were analyzed using descriptive statistic of mean and standard deviation, and Pearson Product Moment statistical method. The population of the undergraduates by gender are represented in Table 1.

Sample derivation from Tamane's formula.

$n = N/(1+N (0.05)^2)$

: $45,000/(1 + 45,000(0.05)^2)$

: 45,000/(45,001 x 0.0025)   : 45,000/112.5025

= 399.9911113 = 400

Table 1. Population of the study.

Gender	Frequency	Percentage
Boys	139	34.8
Girls	261	65.2
Total	**400**	**100**

4. Results and Discussion

The accessibility level of e-learning resources by undergraduates. Using mean and standard deviation as shown in Table 1. The finding shows that the accessible e-learning resources in the university of Port Harcourt library are E-mail (2.6), Web pages (2.9), OPAC (3.1), and Internet as the highly accessible item with mean score of 3.3. This means that the three items are among the e-learning resources accessible by students. Meanwhile, in a declining order, databases (1.3), computers/laptops (1.3), social media (1.2) are not accessible. Also, e-reference, film show/video, repository system, wikis, Google scholar, blogs, e-books, and online collaboration/teleconferencing are not accessible at all as they obtain an absolute standpoint mean score of 1.0. Generally, the items obtained a weighted mean score of 1.6. This is below the criterion mean score of 2.5, and therefore, established that e-learning resources are to a very low extent accessible by undergraduate students of the University of Port Harcourt.

The findings show that e-learning resources are either not available in the university of Port Harcourt or are not accessible even when they are available. This finding conflicts the report from Gabadeen *et al*., (2015) that e-learning technologies are reasonably accessible to students in Federal capital territory Abuja-Nigeria. However, the finding concurs with the opinion of Adelabu et al., (2014) that e- learning infrastructures are not adequate in the higher institution of learning.

Table 2. Accessibility level of e-learning resources by undergraduates.

N=400

SN	ITEMS	SA	A	D	SD	CM	M	SD	Decision
1	Databases	-	18(4.5)	86(21.5	296(74		1.3	1.5	Rejected
2	E-reference	-	-	-	400(10		1.0	2.6	Rejected
3	Film show/Video	-	-	-	400(10		1.0	1.8	Rejected
4	Online Public Access Catalogue	57(14.3	330(82.	10(2.5	3(0.8)		3.1	2.6	Accepted
5	Internet	139(34.	256(64)	5(1.3)	-		3.3	1.1	Accepted
6	Repository system	-	-	-	400(10		1.0	1.5	Rejected
7	Wikis	-	-	-	400(10		1.0	2.9	Rejected
8	Google Scholar	-	-	-	400(10	2.5	1.0	2.6	Rejected
9	Social Media	-	22(5.5)	50(12.5	328(82		1.2	3.2	Rejected
10	Blogs	-	-	-	400(10		1.0	3.4	Rejected
11	Computers/Laptop	5(1.3)	19(4.8)	76(19)	300(75		1.3	2.5	Rejected
12	E-books	-	-	-	400(10		1.0	8.3	Rejected
13	Online collaboration/teleconferencing	-	-	-	400(10		1.0	1.7	Rejected
14	E-mail	22(5.5)	129(32.	241(60.	80(20)		2.6	4.9	Accepted
15	Webpages	52(13)	280(70)	40(10)	28(7)		2.9	0.6	Accepted
	Weighted mean score = **1.6 ≤ 2.5**								**Very low**

Table 2. shows the analysis on extent of utilization of e-learning resources by undergraduates of the University of Port Harcourt. The respondents accepted items 4, 5, 14, and 15 (internet 3.0, OPAC 2.8, e-mail 2.7, and web pages 2.7) as e-learning resources they utilize. While item number 1, 2, 3, 6, 7, 8, 9, 10, 11, 12, and 13 (databases 1.2, e-reference 1.0, film show/video 1.0, repository system 1.2, wikis 1.0, Google scholar 1.0, social media 1.0, blogs 1.0, computers/laptops 1.5, e-books 1.0, and online collaboration/teleconferencing 1.0,

respectively.) were rejected. The weighted mean score was obtained as 1.5 which is below 2.5. The weighted mean shows that e-learning resources are under-utilized. It was observed that the internet is highly utilized, this may be attributed to the illusion of self-sufficiency created in students by the content of the internet/web. To this end, Ozoemelem (2009) stated that informed library users know that libraries have resources that are more comprehensive and scholarly than most web sites provide, but the problem is that these resources are not straightforward like that on the webs.

Table 3. Extent of utilization of e-learning resources by undergraduates.
N=400

SN	ITEMS	SA	A	D	SD	CM	M	SD	Decision
1	Databases	7(1.6)	14(3.2)	41(9.3	338(86.		1.2	1.8	Rejected
2	E-reference	-	-	-	400(100		1.0	4.2	Rejected
3	Film show/Video	-	-	-	400(100		1.0	1.3	Rejected
4	Online Public Access Catalogue	56(14.	240(60.	86(21.	18(4.5)		2.8	2.6	Accepted
5	Internet	26(6.5	353(88.	21(5.3	-		3.0	2.4	Accepted
6	Repository system	2(0.5)	22(5.5)	29(7.3	347(86.		1.2	3.2	Rejected
7	Wikis	-	-	-	400(100		1.0	2.6	Rejected
8	Google Scholar	-	-	-	400(100	2.5	1.0	2.2	Rejected
9	Social Media	-	-	-	400(100		1.0	2.4	Rejected
10	Blogs	-	-	-	400(100		1.0	2.3	Rejected
11	Computers/Laptop	22(5.5	29(7.3	41(10.	351(87.		1.5	2.1	Rejected
12	E-books	-	-	-	400(100		1.0	2.6	Rejected
13	Online collaboration/teleconferencing	-	-	-	400(100		1.0	2.4	Rejected
14	E-mail	20(5.0	284(71.	49(12.	47(11.8		2.7	3.1	Accepted
15	Website	26(6.5	283(70.	21(5.3	70(17.5		2.7	2.7	Accepted
	Weighted mean score = **1.5 ≤ 2.5**								**Very low**

The main aim of this study is to examine the degree of relationship between the accessibility and utilization of e-learning resources and attainment of academic goals of undergraduate students of the University of Port Harcourt. Using correlation statistical method, the finding showed that individually, attainment of academic goals was correlated with accessibility of e-learning resources at 0.547 coefficient of relationship and presented in Table 3. This portrayed a high relationship degree between the two variables - accessibility of e-learning resources and the attainment of academic goals. The result also, showed that utilization correlate with attainment of academic goals at 0.647, this also, is a high degree level of relationship, and thus, established that accessibility and utilization have a significant relationship with the attainment of academic goals. This finding further establishes the impact of e-resources in the academic arena as shown in Table 4. Considering the position of Emasealu (2016), that accessibility and utilization of e-resources have significant impact on learning and research outcome. Also, most Universities in Nigeria acclaimed that e-resources have positive impact in teaching, learning, and research outcome (Umeozor and Emasealu, 2018; and Scott, 2016).

Table 4. Relationship between Accessibility and Utilization of e-learning resources and Attainment of academic goals.

Items		Attainment of academic goals	Accessibility	Utilization
Attainment of academic goals	Pearson Correlation	1	-.547[**]	-.645[**]
	Sig. (2-tailed)	400	.000	.000
	N		400	400
Accessibility	Pearson Correlation	-.547[**]	1	.940[**]
	Sig. (2-tailed)	.000	400	.000
	N	400		400
Utilization	Pearson Correlation	-.645[**]	.940[**]	1
	Sig. (2-tailed)	.000	.000	400
	N	400	400	

5. Conclusion

Information has been described as a veritable instrument in the attainment of overall developmental goals of individuals. Libraries are, therefore, established to cater for the information needs of all. Academic libraries are established to support the academic goals of its parent institution. The world as a global village is revolutionized by the intricacies of information communication technology. Therefore, academic libraries offer such services that incorporate the intricacies of these wonder tools of communication to aid research and learning in line with global development and information needs. Hence, the provision of electronic learning resources (e-learning

resources). The role of e-learing resources was clearly established in the literature, and thus, cannot be relegated to the background as, it not only builds students' knowledge-base, but also aids the overall achievement of academic goals. Based on this realization accrued from the findings of this study, the study concludes that e-learning resources in academic libraries plays an assistive role in the teaching, learning, and research activities in the education system. And recommend that efforts should be made by educationists and managements of higher institutions to provide adequate e-learning resources to aid learning. However, availability does not equate accessibility and utilization. It is therefore the role of the librarian to strategize to promote reasonable accessibility and utilization of these advantageous resources of learning.

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