ASSESSMENT OF AWARENESS OF E-LEARNING FACILITIES FOR RESOURCE SHARING AMONG BUSINESS EDUCATION STUDENTS IN TERTIARY INSTITUTIONS IN BAUCHI STATE, NIGERIA

By

Saleh Tafida,
Adamu Ibrahim

&

Umar Inuwa
Department of Vocational and Technology Education
Faculty of technology education
Abubakar Tafawa Balewa University Bauchi, Nigeria

Abstract
The study assessed the awareness of e-learning facilities for resource sharing among business education students in tertiary institutions in Bauchi state, Nigeria. As a guide, three objectives, three research questions and three null hypotheses were raised. The population of the study was 372 final year Business education students in three tertiary institutions offering business education in Bauchi State. Due to manageable size of the population, the researcher adopted Total Population Sample; hence the entire 372 students were used for the study. The instrument for the study was 5-points scale structured questionnaire. The instrument was validated by experts. Pilot study was conducted at Federal College of Education Kano, data collected from pilot study were analyzed using Cronbach's alpha and a reliability coefficient of 0.86 was obtained. The researcher assisted by two research assistants collected the administered the instrument. Data collected were analyzed using mean scores to answer the research questions and ANOVA was used to test the null hypotheses at the significant level of 0.05. The study revealed among others that the awareness of e-learning facilities for resource sharing among business education students in tertiary institutions in Bauchi state was low. Based on these, the researcher recommended among others that tertiary institutions in Bauchi state should as matter of urgency create awareness on the use of e-learning facilities for resource sharing.

Keywords: Assessment, Awareness, E-Learning, Facilities, Resource, Sharing

Introduction
Tertiary education is foundation of national development of any nation. As the climax of educational structure, it plays essential roles on human developmentin all spheres of life. Teachers, doctors, nurses, civil servants, engineers, humanities, entrepreneurs, scientist and myriad of personnel are produce by tertiary institutions. The quality of training and manpower development of tertiary institutions largely depends on availability of current and relevant learning resources. With the advent of globalization and information revolution, education is expected to create intellectual capacity on which knowledge production and utilization depends on. To achieve this, tertiary institutions need to prove adequate, current and relevant resources, the library for student and lecturer.

Empirical evidences from Omekwu (2004) disclosed that it is difficult for a single institution to have all the resources it requires to meet the information needs of its actual and potential clientele. The author proffers solution through resource sharing whereby people can share online databases, electronic journals, online reference tools, web resources, electronic books etc. Resource sharing as the process by which the resources or network of libraries are made available to the sum total of persons entitled to use any of the resources in those libraries. Nwalo (2008) defines resource sharing as a formal arrangement by a group of organizations those common interests, to pull their material and human resources together so as to meet clientele needs much more than they could have done if they were to depend on individual efforts. Resource Sharing enable students to have access to national and international educational resources that are not within their reach, improve rapid increase of literature and growth of publication in institutions, improve quality of resources in the libraries, helps to save the library space and avoids duplication of educational resources. Resource sharing can help both lecturers and students to have access to national and international educational resources from other institutions. Scholar in business education reported that e-learning platform will (i) provide access to information with the latest technologies to support professionalism in business education; (ii) 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, (iii) help to engage student in learning process and skills which will be useful in social life and in the world of work and (iv) promotes motivation of students and teachers to engage in research for indebt knowledge in business education, information communication technology and general education (Bupo & Ndinechi, 2015).

To ensure that tertiary institutions meet the global digital requirement, government and non-governmental agencies have invested financial resources in both federal and state government institutions in Nigeria. Despite the huge among of money invested in ICT facilities in Nigeria, the e-learning take up in service delivery is still unpopular. Odogwu (2008) posits that the problems that weaken African institutions include lack of resource sharing awareness. Earlier, Edom (2007) reported that most lecturers and students are not aware of the usage of internet facilities for resource sharing. Manir (2011) reported that even in this age of revolution made possible by computer, most lecturers and students still rely on and massively use outdated books. Osuchukwu and Ayeni (2017) also that most lecturers and students have limited computer awareness and skills needed for 21st century educational revolution. Ogbomo, (2010) the utilization of ICT and computer facilities in education sector is hampered by the level of ICT awareness among lecturers and students. The aforementioned citations, the researcher assess: (1) the extent to which tertiary intuitions are connected to internet services; (2) the extents to which tertiary institutes have e-learning facilities for resource sharing; (3)

the extent to which business education students are aware of e- learning facilities for resource sharing among Business education students in Bauchi State.

Research Questions
In line with the specific objectives, the following researcher questions were raised
1. To what extent are tertiary institutions in Bauchi state are connected to internet services?

2. To what extent do tertiary institutions in Bauchi state have e-learning facilities for resource sharing?

3. To what extent are business education students aware of e-learning facilities for resource sharing in Bauchi State?

Hypotheses
The study had the following null hypotheses
1. There is no significant difference among the mean responses of university, college of education and polytechnic students on the effect of internet connectivity in tertiary institutions of Bauchi State.

2. There is no significant difference among the mean responses of university, college of education and polytechnic students on the extent to which institution have e-learning facilities for resource sharing in Bauchi State

3. There is no significant difference among the mean responses of university, college of education and polytechnic students on the extent their awareness of e-learning facilities for resource sharing in Bauchi State.

Methodology
Descriptive survey design was used for study. Survey design is a procedure in quantitative research in which investigators administer a survey or questionnaire to describe the attitudes, opinions, behaviors, or characteristics of the population. The population of the study was 372 final year Business education students in three tertiary institutions in Bauchi State. The population was manageable; hence the researcher used the entire population for the study. This is line with Sekaran and Bougie (2013) who argued that an appropriate sample size is needed for any research because the large sample size provide more accurate mean value and provide a smaller margin of error.

The instrument for the study was a structured questionnaire. The instrument was structured in 5 points Likert Type Scale of very high extent (5), high extent (4), moderate extent (3), low extent (2) and very low extent (1). Adamu and Shago (2018) states that a five or seven scale are likely to produce better results. The instrument was validated by three experts. The essence of validation was to ensure that the instrument elicit the information it was designed for. Based on their recommendations and suggestion the items were restructured. In order to determine the reliability of the instrument, a pilot study was conducted with 40 business education students in Federal College of Education Kano. Data collected from pilot study were collected and subjected to statistical analysis which was used to establish the reliability using Cronbach's

alpha. A reliability coefficient of 0.86 was obtained.

The researcher assisted by two trained research assistants administered the instrument using direct contact approach. The approach enabled the researcher to retrieved high rate of completed instrument. The exercise lasted for three weeks. The data collected from the study were analyzed using Statistical Package of Social Science (SPSS, 21). The package was used to descriptive statistics (mean & standard deviation) and inferential statistics (Analysis of Variance) The

descriptive statistics was used to answer the research questions this is because mean and standard deviation have the greatest reliability than other measures of central tendencies and can be used to interpret achievement (Uzuagulu, 2012). The decision rule of the research questions was based on interval scale of very high extent to very low extent. Analysis of Variance (ANOVA) was employed to test all the null hypotheses at the significance level of 0.05. In the test of hypotheses, if $\alpha<0.05$, the hypothesis was rejected and if $\alpha \geq 0.05$ the hypothesis was retained.

Results
The results of research questions are presented in Table 2 to 7.

Research Question One
To what extent are tertiary institutions in Bauchi state connected to internet services?
The result of 10 of the questionnaire items used to answer research question one presented in Table 1 revealed the mean ranged 2.83 to 3.63 which were represented by low extent and moderately. The result indicated the responses of the items used to determine the internet connectivity were low extent to moderately extent. The grand mean obtained was 3.14 which indicated there is moderate internet connectivity in the tertiary institutions in Bauchi state.

Table 1: Mean of Final Year Business Education in Student on the Extent Tertiary Institutions in Bauchi State are Connected to Inter Service

S/no	Item	$\overline{X}$	Std. dev	Remark
1.	Our school is connected to internet service	3.24	0.81	ME
2.	Internet service provided by our institution is efficient.	3.03	0.76	ME
3.	Reliability of the internet services in our institution	3.19	0.80	ME
4.	Accessibility of internet service in the school using mobile phone.	3.16	0.79	ME
5.	Accessibility of internet service outside the school library	3.20	0.80	ME
6.	Accessibility of computer for my academic work	3.63	0.91	VHE
7.	The level of multimedia packages in the school library	3.07	0.77	ME
8.	Availability of white boards in classroom and lecturers halls	2.88	0.72	LE
9.	Available of computers as a learning resources	3.13	0.78	ME
10.	Availability of Digital Video Disk players in the classes	2.69	0.67	LE
	Grand mean	**3.14**		**ME**

Source: Fieldwork, 2020

Research Question Two

To what extent do tertiary institutions in Bauchi state have e-learning facilities for resource sharing?

Table2: Weighted Mean Score used to Answer Research Question Two

S/no	Items	$\overline{X}$	Std. dev	Remark
11	The extent to which our institutions is connected to Internet for browsing software	3.51	0.88	HE
12	The extent to which our school have Data Base Software	3.20	0.80	ME
13	The level of availability of e-electronic books Software in our school	3.24	0.81	ME
14	The level of digital library in our institution	3.39	0.85	ME
15	The level of educational materials for accessing website.	2.59	0.65	LE
16	Availability of links to educational resources websites and e-journals in our the institution	3.26	0.82	ME
17	Availability of E-books in our e-library	3.20	0.80	ME
18	Available of computers for accessing e-books in the library	3.34	0.84	ME
19	Internet connectivity in our schools library	3.05	0.76	ME
20	Availability of online Tutorial facilities in our institution	3.33	0.83	ME
21	The level of Multimedia Projector E-learning in our school	3.22	0.80	ME
	Grand mean	**3.10**		**ME**

Source: Fieldwork, 2020

The result the 12 questionnaire items used to research question two is as presented in Table 2. From the Table the mean score of one of the items was 2.59 (low extent) while the mean scores of 11 items were found to be within the mean score of moderate extent. The grand mean of 3.10 obtained suggested that institutions in Bauchi state have moderate e-learning facilities for resource sharing.

Research Question Three

To what extent are business education students aware of e-learning facilities for resource sharing in Bauchi State?

Table 3: Weighted Mean Score used to Answer Research Question Three

S/N	Items	$\overline{X}$	SD	Remark
22	My level of awareness of internet service provided by our institution.	2.62	0.66	LE
23	My level of awareness of computers in our school library	2.65	0.66	LE
24	My level of awareness of availability of e-books in the library	3.29	0.82	ME
25	My level of aware of access to e-learning materials	2.97	0.74	ME
26	My level of usage of internet service to download e-books in the school	2.39	0.60	ME
27	The extent to which I see students using school internet connectivity to access books.	3.17	0.79	ME
28	The extent to which students are aware of e-books in the library	2.30	0.57	LE
29	My awareness of using internet facilities for resource sharing	2.29	0.57	LE
30	the extent to which you are aware of the role search engine to access books form	3.62	0.90	HE
31	The extent to which you are aware of availability of e-books in the library	3.50	0.87	HE
	Grand mean	**2.93**		**LE**

Source: Fieldwork, 2020

The result of 10 questionnaire items used to answer research questions three are as presented in Table 3. From the Table, the mean scores of 4 items (22, 23, 28 and 29) were under the index score of low extent. The mean scores of items 2 (4, 25, 26 and 27) were under the benchmark of moderate extent while item 30 and 31 have scores that fall under high extent. The grand mean of 2.93 obtained shows the level of business education students' awareness of e-learning facilities for resource sharing in Bauchi State was low.

Results of the Hypotheses
The results of hypotheses are as presented in Tables 4 to 7.

Results of Hypothesis One
There is no significant different among the mean responses of university, college of education and polytechnic students on the effect of internet connectivity in tertiary institutions of Bauchi State.

Table 4: ANOVA of difference on the internet connectivity in tertiary institutions of Bauchi State

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.098	2	.049	.102	.903
Within Groups	153.475	320	.480		
Total	153.573	322			

The result of analysis of variance used to test null hypothesis one in Table4 revealed the F (2, 320) was .102 and *p = .903*. The p-value was greater than the alpha value (.903<0.05). The result of the analysis indicated that there was no significant difference among the mean responses of university, college of education and polytechnic students on the internet connectivity in tertiary institutions of Bauchi State. The hypothesis was therefore retained.

Results of Hypothesis Two

There is no significant different among the mean responses of university, college of education and polytechnic students on the extent to which institution have e-learning facilities for resource sharing in Bauchi State

Table 5: ANOVA of difference on the extent to which institution have e-learning facilities for resource sharing in Bauchi State

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.003	2	.502	.984	.375
Within Groups	163.102	320	.510		
Total	164.105	322			

The statistical result of analysis of variance presented in table 5 revealed the F (2,320) = .984. The p-value obtained was greater than the 0.05 level of significance (.375>0.05). The result obtained suggested that there was no significant difference among the mean responses of university, college of education and polytechnic students on the extent to which institution have e-learning facilities for resource sharing in Bauchi State. The hypothesis was therefore retained.

Results of Hypothesis Three

There is no significant different among the mean responses of university, college of education and polytechnic students on their awareness of e-learning facilities for resource sharing in Bauchi State.

Table 6: ANOVA of difference on students' awareness of e-learning facilities for resource sharing in Bauchi State.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.754	2	.377	.735	.480
Within Groups	164.242	320	.513		
Total	164.997	322			

The analysis of variance used to determine the difference among the three groups of respondents presented in Table 6 revealed the F (2,320) = .735and p=.480. The p-value obtained was found to be greater than probability value (.485> 0.05). The result obtained suggested that there was no significant difference among the mean responses of university, college of education and polytechnic students on their awareness of e-learning facilities for resource sharing in Bauchi State. The hypothesis was therefore retained.

Discussion of the Findings

The result of research question one revealed that there is moderate internet connectivity in the tertiary institutions in Bauchi state. The result of the hypothesis one suggested that there was no significant difference among the three groups of the business education students. The result of the study agreed with the earlier study conducted by Salawudeen (2006) which reported that internet service providers that provide internet gateway services to Nigerians are few. The author added that, in most tertiary institutions in Nigeria, especially those in rural areas, internet facilities are absent.There is the limited provision of efficient internet services in most tertiary institutions (Ureigho et al., 2006) in developing countries. Muniandy (2010) commented that the adoption of the internet would be meaningless in the educational settings without appropriate internet facilities. Similarly, Atsumbe (2012) reported that bandwidth use and connectivity that involved engaging content requires a rich combination of multimedia and connectivity limitations downloading of engaging content to the learners is low.

The result of research question two indicated that the extent to which institutions have e-learning facilities for resource sharing in Bauchi State was moderate. The test of null hypothesis two further shows that there was no significant difference among the mean responses of the business education students' base on their institutions. The result of the study agreed with earlier submission of Adamu and Kabir (2013) whose study reported that tertiary institutions in Nigeria are facing problem of limited ICTs (e-learning) facilities. The authors emphases that limited fund available to higher institutions have hindered the provision if needed facilities and infrastructure to promote e-learning usage. The study of Azih and Nwosu (2012) on availability and utilization of e-learning facilities in tertiary institutions offering business courses in Ebonyi state also reported that that the tertiary institutions do not have the necessary E-learning facilities needed for teaching and learning business education. The authors stressed that, most facilities of education and schools of education in Nigeria do not have dedicated laboratory

for e-learning training. Classroom for e-learning s are equally not equipped usage.

The study of Atsumbe (2012) on the availability and utilization of e – learning infrastructures in Federal University of Technology, Minna also disclosed that e-learning infrastructures are not adequate in the university for teaching and learning and management's efforts towards the development of Information and Communication Technology (ICT) is mainly for administrative purposes. Olusesan, Shadrack and Manuel (2014) in their study on availability and utilization of e-learning infrastructures for teaching and learning at the University of Ibadan shows that e- learning infrastructures are not adequate in the higher institution of learning. Similarly, Gabadeen, and Alabi (2015) conducted a study on the adequacy of the available e-learning technological tools, their accessibility and utilization at the Nigerian public senior secondary schools. The findings of the study revealed that e-learning technologies were relatively inadequate for teachers and students, reasonably accessible and adequately accessible to students and teachers, respectively, and fairly utilized by both.

The result of research question three shows that the level of business education awareness of e-learning facilities for resource sharing in Bauchi State was low. The result of test of corresponding null hypothesis shows that there was no significant difference among the mean responses of the students base on their awareness on e-learning facilities for resource sharing. The outcome of the study is similar with that of Adamu and Kabir

(2013) who identified the following as constraint or challenges of e-learning implementation in Nigerian higher institutions lack of awareness of the effectiveness of e-learning; generally, there is still lack of awareness amongst the population (educators and students) especially parents about the effectiveness of e-learning. Many still feel the traditional learning mode is better. The study conducted by Adamu and Amoor (2013) on the challenges and prospects of e-learning at the National Open University of Nigeria (NOUN) disclosed that the challenges included lack of enough computers, shortage of Internet facilities, students' lack of access to eLearning facilities and tools, high cost of software and erratic power supply (a major challenge).

Conclusion
The study was on assessment of utilization of e-learning facilities for resource sharing among business education students in tertiary institutions in Bauchi state, Nigeria. From the literature reviewed, it was found that business education students awareness of e-learning facilities for resource sharing was low. Based on these, students utilization of electronic materials such as E-Journals, E-books and E-Conferences will be hampered by their awareness. Consequently, business education students in Bauchi state will not reapthe role of e-learning facilities in academic settings which provides access to global sources of information that permits students to discuss and share experiences. By implication, the business education students in Bauchi state will not gain effectively from the contribution of

technology integration into the learning process which improves learning and prepare students to effectively participate in the twenty-first-century resource sharing.

Recommendations

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

1. Tertiary institutions in Bauchi state should as matter of urgency try and improve on the network connectivity in campus.
2. Tertiary institutions in Bauchi state in collaboration with NGOs and other institutions should improve the supply needed facilities needed e-learning resource sharing in state.
3. Libraries in the tertiary institutions should organize orientation programme that will education students on the availability of e-learning facilities needed for resource sharing in Bauchi state.

References

Adamu, I. and Amoor S.S. (2013). Quality of Business Education Programme in National Open university (NOU) in Nigeria. *Journal of Technology and Educational Research (JOTER)*, *6 (2) 8-17*

Adamu, I. and Kabir I.D. (2013). Assessment of Views of Business Education Graduates on the Effect of Technology Advancement on their Employability Skills in Nigeria Labour Market. International *Journal of Academic Research in Progressive Education and Development,2 (3) 192-202*

Atsumbe B. N.(2012) Availability and Utilization of e-Learning Infrastructures in Federal University Of Technology, *Minna Journal of Education and Practice ISSN 2222-1735 (Paper) ISSN 2222-288X (Online)Vol 3, No 13, 2012*

Azih, N. (2012).Availability and utilization of E-Learning facilities in Tertiary Institutions in Ebonyi State.Business Education Journal 8 (2).

Bupo G. O, Ndinechi G. I. (2015) Business Education students' utilization of e-learning in Anambra state tertiary institutions *international journal of scientific research and innovative technology ISSN: 2313-3759 vol. 2 no. 4; April 2015*

Edom, B. O. (2007). An assessment of the problems of the use of ict facilities information sourcing and retrieval by the academic staff in Nigerian University.*The Information Technologist*. Vol. 4 (2): 113-127.

Gabadeen, W. O, AlabI, A. T.&Akinnubi, O. P. (2015) Availability, Accessibility and Utilization of E-learning technologies for sustainable secondary education in federal capital territory, Abuja-Nigeria*Asia Pacific Journal of Education, Arts and Sciences*, Vol. 2 No. 2, April 2015

Manir, K. A. (2011). Implication of ICT's in libraries of higher education institutes: A panacea catapultinglibrary development in Africa. *DESIDOC Journal of Library & Information Technology, 31*(1), 65-71.

Muniandy, B., (2010). Academic use of internet among undergraduate students: a preliminary case study in a Malaysian university. Int. J. Cyber Soc. Educ. 3 (2), 171-178.http://academic-pub.org/ojs/index.php/IJCSE/article/view/916

Nwalo K.I.N. (2008) Consortium building for effectiveness and sustainability of academic and research libraries'

services in Nigeria.*A paper presented at the International* Conference*oneducation in the information age: global challenges andenhancement Strategies,* held at Faculty of Education, University of Nigeria Nsukka, 17-21 June

Odogwu, N. J. (2008) Public private partnership initiatives in libraries and information sector, *Abuja Infolib,* 4(1)55-61

Okoli, J. N. &Ifeakor, A. C. (2011). Appraisal of utilization of E-Learning Technology in Science Teacher's preparation: A study of Universities in South East Nigeria. Orient Journal of Education 6 (1 & 2). 136 – 144.

Olusesan A. A, Shadrack J. A &manuel O.A. (2014) The Availability and Utilization of E-Learning Infrastructures for Teaching and Learning *Mediterranean Journal of Social Sciences MCSER Publishing, Rome-Italy5 (23) November 2014* pp. 207-216.secondary schools in Nigeria: Problems and prospects. *Educational Technology society,* 8 (1) 104-112.*Technology Magazine*, *2*, 5.

Omekwu, C.O. (2004) Planning for library and information centre computerization in developing countries In Madu, E.C.(ed) *Technology for Information Management and Service: modernlibraries and information centres in developing countries.* Ibadan:

Osuchukwu, N. P. &Ayeni, P. O. (2017).The roles of libraries and librarians in integrating national development in South-East Nigeria. Paper presented at the 55th National Conference of Nigerian Library Association. Theme: Libraries in promotion of national integration for development at University of Lagos Multipurpose Halls, Akoka, Lagos State.

Salawudeen, O.S. (2006). *E–Learning technology: The Nigeria experience.* XX111 FIG

Sekaran, U., &Bougie, R. (2013).*Research methodology for business: A skill building approach*. Chichester: John Wiley & Son Ltd,

Uzuagulu, A. E. (2012). *Principal Guide to Writing Research project in tertiary Institution.* Enugu John Jacobs classic.