EXTENT OF UTILIZATION OF E-LEARNING RESOURCES BY BUSINESS EDUCATION STUDENTS IN PUBLIC TERTIARY INSTITUTIONS IN ENUGU STATE

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Abstract
The study ascertained the extent of utilization of e-learning resources by business education students in public tertiary institutions in Enugu State. Two research questions were posed and four hypotheses tested. A total of 1407 business education students in four public tertiary institutions in Enugu State made up the population of the study, out of which 312 students were used as sample. The research instrument was a structured questionnaire titled "The Extent of Utilization of E-learning Resources by Business Education Students" (EUERBES). Three experts validated the instrument and a reliability test using Cronbach alpha method yielded correlations of 0.87 and 0.76 B1-B2 of the instrument respectively. Mean rating was used to answer the research questions while z-test was used to test the hypotheses at 0.05 level of significance. The findings of the study revealed among others that business education students in public tertiary institutions utilized e-learning resources for peer tutoring to a high extent and they moderately utilize e-learning resources for class discussions. To encourage the utilization of e-learning by business education students, it was recommended, among others, that the management of public tertiary institutions in Enugu State should provide e-learning resources like digital libraries and free wireless internet connections on the campuses.

Key words: Utilization, e-learning resources, business education students, public tertiary institutions.

Introduction

The changes in education have led to a paradigm shift from teacher centeredness to learner centredness. This implies that the teacher can no longer decide what should be learnt, instead, the learner's interest determines what and how students should learn. This situation is popular on electronic learning (e-learning). Electronic learning exploits interactive technologies and communication

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systems to improve learning experiences. It has the potential to transform the way teaching and learning take place across the board. E-learning therefore, is a learner-controlled self-paced education environment where the learners have authority over the learning environment, thereby allowing the learners to work at their pace, convenience access and assessment (Eke, 2011).

E-learning is a term that is used to refer to all Information and Communication Technologies (ICTs), networks, internet and other forms of electronic media that can be used to enhance teaching and learning so as to transfer knowledge and skills (Kassa & Balunywa, 2013).The integration of ICT in education has revolutionized and transformed the education sector worldwide and created positive impacts in teaching and learning (Intel, 2012). E-learning resources take various forms. For instance, it can be web-based, computer-based, virtual classrooms and content delivery via e-networks, audio or video tape, satellite TV, video conferencing, CD-ROM, i-pods, e-mails, wireless and mobile technology among others (Eke, 2011). The growth in internet characterized by the decreasing costs and increasing bandwidth has facilitated the expansion and increased use of e-learning to offer formal as well as informal educational opportunities that were previously not possible to hundreds of learners (Bonk, Lee & Reynolds, 2009).

E-learning literally means electronic learning, (learning by electronic means and through electronic devices). E-learning is an inclusive term that describes educational technology that electronically or technologically supports learning and teaching. Parks (2013) suggested that "e-" should refer to "everything, everyone, engaging and easy" in addition to 'electronic'. Developments in internet and multimedia technologies are the basic enablers of e-learning, with consulting, content, technologies, services and support being identified as the five key sectors of the e- leaning industry (European Commission, in Olatoye, 2015). Regardless of the educational level or stage, e-learning can be adopted, used or applied in education for effective teaching and learning. E-learning is a learner-controlled, self-paced education environment where the learner has authority over the learning environment; by allowing learners to work at their pace and convenience (Eke, 2011). The extent to which e- learning assists or replaces other learning and teaching approaches is varied, ranging on a continuum from none to fully online distance learning (Bates & Poole, 2013).

The integration of e-learning in tertiary institutions is witnessing rapid growth in developed countries. Most tertiary institutions in developed countries have websites from which students can take online lectures and participate in other educational activities. Omo-Ettu in Okereke (2005) reported that in developed countries, electronic mail, real time text conferencing, peer tutorials, and online tutorials have been used in the teaching and learning process for several years. Through the provision of the internet by the schools, students who are stuck at home

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due to bad weather or sickness can complete their assignments. Some schools allow students to retrieve textbook information, check and complete assignments from their personal computers. Students get 24 hours access to classroom assignments, study guides, daily worksheets and their teachers through e-mail.

In Nigeria, the integration of e-learning in tertiary institutions has witnessed slow growth which may be as a result of mass unawareness. Manir (2011) noted that awareness to ICT in Nigeria started gathering momentum two decades ago. The early exposure came through lecturers, researchers, academics and students who studied abroad and had opportunities of attending conferences on ICT. However, Manir posited that a large number of people are still not aware of the use of these ICTs in education. This is because Nigeria had no specific policy on e-learning until February 2007 when the ICT department of the Federal Ministry of Education was created (Manir, 2011).

The utilization of e-learning by business education students is pivoted by their level of computer literacy. Computer literacy has to do with the degree of proficiency of students in basic computer oriented operations. Olusegun, Oluwafemi and Sushil (2006) noted that the utilization of e-learning resources is affected by the level of computer literacy of the students. This is because when students are knowledgeable in the usage of e-learning resources, they will be able to communicate electronically with their peers, be able to carry out their research work, as well as complete assignments and engage in class discussions. Students who are not competent in the general use of computers will not be able to utilize them for educational purposes, and hence they will discourage the new phenomenon of utilizing electronic devices for education.

Peer tutoring is a flexible, peer-mediated strategy that involves students serving as academic tutors and tutees; such that higher performing student is paired with a lower performing student to review critical academic or behavioural concepts (Hott & Walker, 2012). They listed higher academic achievement, improved relationship with peers, improved personal and social development and increased motivation as benefits of peer tutoring. Productive classroom discussions are those that enable students to invent, create, imagine, take risks and dig for deeper meanings but can only take place in climate in which students feel safe to offer their ideas. Teachers can create such a climate by being mindful of the essential conditions of interactive teaching, in which e-learning can provide.

Utilization of electronic learning among university students most especially business education students would determine to a great extent, if Nigeria could have more independent learners, who are problem solvers and who can contribute positively in improving the way things are done in Nigeria and other nations of the world. Today, students have cell-phones and other digital technologies that are internet enabled, and many have access to the internet-enabled computers. Prensky

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(2001) found that young people of the digital native generation possess sophisticated knowledge of and skills with information technologies. Whether Nigerian students use these resources, knowledge and skills for e-learning is yet to be empirically ascertained.

Gender can be an influencing factor to the utilization of e-learning by business education teachers and students. Summer in Agboola (2006) suggested that male students experience less anxiety about ICT and make more frequent use of it. The type of institution could influence the success of e-learning integration. Wagner, Hassanein and Head (2008) pointed out success in the utilization of e-learning is influenced by the stakeholders. The authors also noted that budgetary factors in a country could make the procurement of e-learning resources by institutions difficult or easy, as the case may be. The utilization of e-learning resources in colleges of education and universities might differ. It is possible that the management of tertiary institutions can view the utilization of e-learning from different perspective. The federal government-owned and state government-owned institutions may differ in the e-learning resources provided to their students (Leem and Lim, 2007). Eke (2011) and Okiki (2011) also noted that the use of e-learning resources has begun in some federal government owned tertiary institutions. This may not be the case in state-owned institutions, hence this study.

The modern trends in business which include the digitalization of business operations; e-banking; e-commerce; Management Information Systems (MIS) among others, form the basis for encouraging the use of e-learning in today's business education training programme. Students who undergo the business education programme should therefore be able to utilize e-learning resources in education for peer tutoring and class discussions, among others. As the move towards e-learning in higher education continues to grow, the more important it becomes to examine the utilization of electronic learning among business education students in Enugu State public tertiary institutions. This drive to find out how business education students in Enugu State public tertiary institutions utilize e-learning resources, necessitated this research.

Statement of the Problem

Though the importance of e-learning is enormous, it seems that its utilization in instruction and learning in Nigerian tertiary institutions is rather unknown. This is so, because, research in the area of using e-learning resources for peer tutoring and class discussions is scanty.

Furthermore, there appears to be lack of computer culture among business education students in public tertiary institutions which, according to Manir (2011), tends to impede the rapid diffusion of the new technologies. There seems also the issue of lack of computer technology literacy among students. When students are not

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computer literate, they would find it difficult to adapt to the use of e-learning resources in education.

Purpose of the Study

The major purpose of this study was to determine the extent of utilization of e-learning resources by business education students in public tertiary institutions in Enugu State. Specifically, the study determined the extent business education students in Enugu State public tertiary institutions utilized:

1. e-learning resources for peer tutoring.
2. e-learning resources for class discussions.

Research Questions

To what extent do business education students in Enugu State public tertiary institutions:

1. utilize e-learning resources for peer tutoring?
2. utilize e-learning resources for class discussions?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

1. Gender has no significant influence on the mean responses of business education students in Enugu State on their extent of utilization of e-learning resources for peer tutoring.
2. There is no significant difference in the mean responses of business education students from universities and colleges of education in Enugu State on their extent of utilization of e-learning resources for peer tutoring.
3. Gender has no significant influence on the mean responses of business education students in public tertiary institutions in Enugu State on their extent of utilization of e-learning resources for class discussions.
4. There is no significant difference in the mean responses of business education students from universities and colleges of education in Enugu State on their extent of utilization of e-learning resources for class discussions.

Method

The study adopted descriptive survey design.The study was carried out in Enugu State which is located in the South Eastern part of Nigeria with Enugu as its capital.Thepopulation for this study consisted of all the 1407 business education

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students in the four tertiary institutions offering business education in Enugu State. The institutions are, University of Nigeria, Nsukka; Enugu State University of Science and Technology, Agbani; Enugu State College of Education (Technical), Enugu and Federal College of Education, Eha-Amufu.The sample size for the study was312 obtained using the Taro Yamane formula. Consequently, business education students were selected using proportionate stratified random sampling technique. Proportionate stratified random sampling technique is used by a researcher to divide the population of a study into sub-groups or strata depending on the number and type of sub-groups that exist in the population (Akuezuilo & Agu, 2007).

The data for this study were collected through the use of a structured questionnaire titled (EUERBES), developed by the researcher from the review of related literature. It consisted of two parts – A and B. Part A of the questionnaire focused on respondents' personal data such as gender and institution type, while part B was made up of two clusters of B1-B2 containing a total of 31 items. Cluster B1 has 6 items on the utilization of e-learning resources for peer tutoring while cluster B2 has 8 items on utilization ofe-learning resources for class discussions. The instrument for data collection was subjected to face validation by two experts in business education and one in measurement and evaluation, from Nnamdi Azikiwe University, Awka. To establish the reliability of the instrument, the instrument was subjected to reliability test using a pilot test. Copies of the questionnaire were distributed to 20 randomly selected business education students in Anambra State. Data collected were analysed using Cronbach alpha and the reliability coefficients of 0.87 and 0.76 were obtained for clusters B1-B2 respectively. The overall reliability coefficient obtained was 0.82.Copies of the instrument were administered to the respondents by the researcher with the help of three research assistants from the public tertiary institutions selected for the study. The data collected were analyzed using mean ratings and standard deviation for the research questions and z-test for the hypotheses. The data were analyzed using SPSS Version 20. The decision rule was to accept the null hypothesis where the calculated p-value is greater than or equal to 0.05 level of significant. The null hypothesis was rejected where the calculated p-value is less thanthe alpha level.

Results

Research Question 1: To what extent do business education students in Enugu State public tertiary institutionsutilize e-learning resources for peer tutoring?

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Table 1: Mean responses of respondents on the extent business education students in Enugu State public tertiary institutionsutilize e-learning resources for peer tutoring

S/N	Items	Mean	SD	Remarks
3	I utilize laptops and smart phones for peer tutoring	4.10	1.16	High Extent
4	Internet facilities aid me in peer tutoring	4.17	1.01	High Extent
5	I use email facility in synchronous e-learning for peer tutoring	3.67	1.14	High Extent
6	Digital library in my school assist me for peer tutoring	3.29	1.16	Moderate Extent
7	I use e-journals and e-books for peer tutoring	3.14	1.24	Moderate Extent
8	I participate in online forum for peer tutoring	2.94	1.18	Moderate Extent
	Cluster	**3.55**		**High Extent**

Data in Table 1 indicated that outof six items on the extent of utilization of e-learning resources for peer tutoring; the respondents rated three items high extent and the other three items moderate extent. The cluster mean score of 3.55 indicates that on the whole, business education students in Enugu State rated utilization of e-learning resources for peer tutoring to a high extent. The standard deviations show homogeneity of their responses, which means that the students have similar views.

Research Question 2: To what extent do business education students in Enugu State public tertiary institutions utilize e-learning resources for class discussion?

Table 2:Mean responses on the extent business education students in Enugu State public tertiary institutions utilize e-learning resources for class discussion

S/N	Items	Mean	SD	Remarks
9	I utilize phone applications in class discussions	3.84	1.29	High Extent
10	I utilize internet facilities for class discussions	3.75	1.19	High Extent
11	I participate in online class discussion	3.18	1.27	Moderate Extent
12	I utilize collaborative software during class discussions	2.82	1.15	Moderate Extent
13	I reference e-mails for class discussions	2.78	1.23	Moderate Extent
14	I utilize Microsoft Word application in class discussion	2.77	1.31	Moderate Extent
15	I make use of Power Point during class discussions	2.94	1.24	Moderate Extent
16	I use MS Excel during class discussion	2.78	1.38	Moderate Extent
	Cluster	**3.11**		**Moderate Extent**

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The item by item analysis in Table 2showed that all items achieved mean scores ranging from 2.77 to 3.18. Two items indicate high extent while the other six items show moderate extent on the extent of utilization of e-learning resources for class discussion. The cluster mean score of 3.11 indicates that on the whole, business education students in Enugu State rated utilization of e-learning resources for class discussion to a moderate extent. The standard deviations show homogeneity of their responses. Again, the opinions of the students were not wide spread.

Hypothesis 1

Table 3: The z-test summary of the difference between the mean ratings of business education students on their extent of utilization of e-learning resources as a result of gender (Male or Female) for peer tutoring

Gender	N	X	SD	P-val	df	z-crit	Remarks
Male	121	21.50	4.94				
				.513	292	1.960	Not Significant
Female	173	21.15	4.13				

The z-test in Table 3 showed that there is no significant difference in the mean responses of business education students in public tertiary institutions Enugu State on their extent of utilization of e-learning resources for peer tutoring as a result of gender. The analysis shows mean scores of21.50and21.15 for males and females respectively. It also shows the p-value of 0.513 which is greater than 0.05 level of significance at 292 degrees of freedom. The null hypothesis of no significant difference between the two groups is upheld.

Hypothesis 2

Table 4: The z-test summary of the difference between the ratings of business education students in university and their counterparts in colleges of education in Enugu State on their extent of utilization of e-learning resources for peer tutoring

Institution	N	X	SD	P-val	df	z-crit	Remarks
University	140	20.41	4.69				
				.001	292	1.960	Significant
College	154	22.11	4.12				

Business education students in universities in Enugu state, as shown in Table 4, recorded a mean score of 20.41on their extent of utilization of e-learning for peer

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tutoring while those in colleges of education recorded a mean score of 21.11. The p-value is 0.001 which is less than 0.05 alpha level at 292 degree of freedom. The null hypothesis is therefore rejected meaning that there is significant difference on the extent of utilization of e-learning resources for peer tutoring by business education students in universities and their counterparts in colleges of education in Enugu State. The difference can be said to be negligible.

Hypothesis 3

Table 5: The z-test summary of the difference between the mean ratings of business education students on their extent of utilization of e-learning resources as a result of gender for class discussions

Gender	N	X	SD	P-val	df	z-crit	Remarks
Male	121	24.47	5.75				
				.405	292	1.960	Not Significant
Female	173	25.11	6.92				

As shown in Table 5, the p-value (0.405) is greater than the alpha level of (0.05) at 292 degree of freedom. The results indicate that male business education students in EnuguState public tertiary institutions with a mean score of 24.47, and female business education students with a mean score of 25.11 do not differ on their extent of utilization of e-learning resources for class discussions. The null hypothesis is therefore retained that there is no significant difference in the mean ratings of business education students in Enugu State tertiary institutions on their extent of utilization of e-learning resources for class discussions as a result of gender.

Hypothesis 4

Table 6: The z-test summary of the difference between the mean ratings of business education students on their extent of utilization of e-learning resources as a result of type of institution for class discussions

Institution	N	X	SD	P-val	df	z-crit	Remarks
University	140	23.34	6.97				
				.000	292	1.960	Significant
College	154	26.21	5.65				

Data in Table 6 indicated that business education students in universities in Enugu State had a mean score of 23.34 in their extent utilization of e-learning resources for class discussions while those in the colleges of education had a mean score of 26.21. The p-value of .000 is less than the alpha level of 0.05 at 292 degree

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of freedom. Since the p-value is less than the significant value, the null hypothesis is rejected. This implies, therefore, that there is significant difference between the mean ratings of business education students in Enugu State tertiary institutions on their extent of utilization of e-learning resources for class discussions as aresult of type of institution.

Discussions of the Findings

Findings of the study regarding the research question 1 revealed that business education students in Enugu State public tertiary institutions utilized e-learning resources for peer tutoring at a high extent and that they have knowledge of various aspects of e-learning resources. This is in line with Okiki (2011) who noted that there is an increasing utilization of information and communication technologies (ICTs) in the teaching and learning process.

The business education students rated usinglaptops, smart phones, internet facilities, e-journal and participation in online fora as part of e-learning resources for peer tutoring. This could be because these resources have been made part of the educational process. For instance, students must have discussed some group work or assignment among themselves in an online forum on the internet. This contradicts the views of Manir (2011) who noted that students and lecturers fairly utilized e-learning resources in the educational process.

However, Leem and Lim's (2007) findings revealed that both teachers and learners alike, lacked meaningful support systems and opportunities to actively participate in e-learning programs. The authors posited that such lack of support was found to be endemic and to be more acute in private universities, private colleges, universities of education, than mid-sized, small-sized, and provincial universities and colleges.

The test of the firsthypothesis revealed that there was no significant difference in the mean responses of business education students in Enugu State public tertiary institutions on the extent of their utilization of e-learning resources for peer tutoring as a result of gender. This means that the male and female students did not differ in their extent of utilization of e-learning resources. No gender is disadvantaged in the utilization of e-learning resources. This is in contrast with the findings of Summer in Agboola (2006) which suggested that male students experienced less anxiety about ICT and make more frequent use of it, while female students are assumed to show lower confidence or knowledge ability than males about using e-learning resources.

However, the test of the second hypothesisrevealed that there was significant difference in the mean responses of business education students in universities in Enugu State and their counterpartsin colleges of education on their extent of utilization of e-learning resources for peer tutoring. This means that business

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education students in public universities in Enugu State differed significantly on their extent of utilization of e-learning resources for peer tutoringas a result of institution type. This finding is in line with the findings of Leem and Lim (2007) who discovered differences in support and opportunity to actively participate in e-learning programs among Korean tertiary institutions.In line with this, the result of this study showed that business education students in public universities in Enugu State differ significantly from their counterparts in colleges of education.

Findings of the study on the research question 2, revealed the utilization of e-learning resources for class discussionsby business education students in Enugu State public tertiary institutions. The findings showedthat the students utilized e-learning resources for class discussions at a moderate extent. This proves that majority of the students did not use e-learning resources during teaching and learning in the classroom. This is in contradiction with Abubakar (2010), and Ajadi, Salawu and Adeoye (2008) who pointed out that students do not have access to computers and the internet.

The test ofthe third hypothesis revealed that there was no significant difference in the mean ratings of business education students in Enugu State public tertiary institutions on their extent of utilization of e-learning resources for class discussions as a result of gender. This means that male business education students in Enugu State public tertiary institutions do not differ from the female students in how often they utilized e-learning resources for class discussions. Gender, therefore, is not a factor in the effective integration of e-learning in the educational process. This contradicts the views of Murphy and Greenwood (1998) who reported that age and gender effects could be factors in determining the extent of low student ICT uptake.

However, the test of the fourth hypothesis revealed that there was a significant difference in the mean responses of business education students in Enugu State public tertiary institutions on the extent of utilization of e-learning resources for class discussions as a result of institution type. This means that university business education students in Enugu State public tertiary institutions differed from the college of education students on the extent they utilized e-learning resources for class discussions. Wagner, Hassanein and Head's (2008) study is in agreement with this finding because they did submit that type and ownership of tertiary institution could influence the success of e-learning integration. Wagner et al. pointed out that the success of the utilization of e-learning resources is influenced by the stakeholders.

Conclusion

Based on the findings of the study, it is concluded that business education students in public tertiary institutions in Enugu State utilized e-learning resources for peer tutoring, class discussion, research purposes and in class assignments. Similarly, students can access the internet and other e-learning resourcesthrough

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their mobilephones, personal laptops, digital libraries and computer studios provided by the institutions.

Recommendations

Based on the findings, the following recommendations were made:

1. That since business education students utilise e-learning for peer tutoring, management of public tertiary institutions in Enugu State should provide e-learning resources in their institutions to enable the students access and utilize them better.
2. Lecturers should provide enabling environment to encourage class discussions with the use of e-learning resources.
3. Administrators of public tertiary institutions in Enugu state should provide e-learning resources to facilitate qualitative research among students.
4. Business educators should give students class assignments to be done and submitted through any of the e-learning platforms.
5. There should not be disparity in provision of e-learning resources to male and female students. This is because gender does not matter.

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