



## IMPROVING E-LEARNING AMONG BUSINESS EDUCATION STUDENTS IN PUBLIC UNIVERSITIES IN SOUTH-EAST NIGERIA.

<sup>1</sup> Dr. Ezeabii, I. C.

Department of Tech and Vocational Education  
(Business Education Unit),  
Enugu State University of Science and Tech. Enugu.  
Enugu, Nigeria.  
Ijeoma.ezeabii@esut.edu.ng

<sup>2</sup> Ile, C.M.

Nnamdi Azikiwe University, Awka.  
Anambra, Nigeria  
Ilechika2011@yahoo.com,  
cm.ile@unizik.edu.ng

Ezugwu, S.K.

Department of Technology and Vocational Education  
(Business Education Unit),  
Enugu State University of Science and Technology, Enugu.  
Enugu, Nigeria.  
Stellarita81@yahoo.com

### Abstract

The main purpose of the study was to determine the strategies for improving e-learning among business education students in public universities in South-East Nigeria. The study was guided by three research questions and three null hypotheses. A descriptive survey research design was adopted for the study. The population was 53 business education lecturers in public universities in South-East Nigeria. The population was manageable and as a result no sampling was carried out. The instrument used for data collection was a 22 item questionnaire which was validated by three experts. The reliability of the instrument was determined using Cronbach Alpha which yielded a reliability index of 0.87. Mean and standard deviation were used to answer the research questions and t-test was used to test the null hypotheses. The findings of the study showed the institution-related strategies to include: the provision of free internet services in the universities, facilitating electronic interactive classroom in universities among others. Also, the lecturers-related strategies found included giving assignments through the internet, participating in on-line classroom among others. Based on the findings, it was recommended that: university administrations should improve the institutions 'ICT facilities, provide free internet access and employ qualified and knowledgeable ICT staff for effective service delivery. Similarly, lecturers should be given periodic training to update their ICT knowledge and students should be involved in on-line and internet instructional activities.

**Keywords:** E-Learning, Business Education, E-learning Applications.

### Introduction

Innovation in technology has influenced all facets of human endeavour including education. The internet and particularly the social media have made education no longer limited to the four walls of school classrooms. This modern technology has launched the world into a knowledge based economy in which ideas and technological principles are used for better output (Mbah, 2016). Thus, advancement in technology according to Muhammed, Asua and Munnaza (2015) has compelled teachers and educators to utilize its benefits for the delivery of instruction and hence promote learning through e-learning.



Electronic learning popularly known as e-learning has been structured as a mode of distance learning. E-learning refers to using electronic applications and processes to learn. E-learning applications and processes includes Web based learning, computer based learning, virtual classrooms and digital collaborations. Instructional contents are delivered through Internet, satellite, T.V, extranet, Intranet and CD-ROM with multimedia capacities. According to Nwafor and Abuka (2015), e-learning is the application of the internet to support knowledge using holistic approach which may not be limited to a particular course. One of the major characteristics of electronic learning is the use of electronic machines and media to facilitate learning.

According to Perraton, Creed and Robinson (2002), electronic learning is also known for its capacity to make teaching process possible even when a substantial amount of instruction is offered by somebody far flung from the students. It is an open access learning that facilitates independent learning that is achievable. As the world has entered into the third millennium, education through internet, intranet or network represents great and exciting opportunities for both teachers and learners. Instructors in various institutions need to make adequate provision of e-learning resources so as to develop the needed skills in the contemporary world of work. Muhammed, Asua and Munnaza (2015), noted that the internet and World Wide Web have made the computer a dynamic resource in education, providing a new and interactive means of overcoming time and distance to reach learners.

Further, e-learning technologies offer learners control over content, learning sequence, pace of learning, time and often media, and allow them to tailor their experiences to meet their personal learning objectives. Educators use e-learning to improve the efficiency and effectiveness of educational interventions in the face of social, scientific and pedagogical challenges (Oloja, Adewunmi and Ajisola, 2012). As a computer assisted learning and pedagogy for students'centred and collaborative learning, e-learning could be used to enhance skills and knowledge acquisition in business education.

Business education programme according to Okoli (2010) is concerned with the teaching of skills, attitudes, competencies and knowledge necessary for a successful business career. It is also designed to develop special emphasis on marketable business skills and distributive occupations (Etuk, 2015). It is pertinent to state that the development of business skills and knowledge in contemporary society could be achieved better through the use of electronic learning facilities.

The integration of e-learning into business education programme can catalyse the shift towards applying adult learning theory, where educators no longer serve mainly as the distributor' of contents but become more involved as facilitators of learning and assessors of competency. It is evident that the internet and digitalization of business activities has affected the skills and knowledge required to work in such environment. Students of the business education programme need to be exposed to ICT facilities and other body of knowledge through e-learning in order to be competitive in the world of work. It is equally imperative to note that e-learning innovations according to Oloja, Adewunmi and Ajisola (2012), point towards a revolution in education, that allows learning to be individualized (adaptive learning) enhance learner's interactions with others (collaborative learning), and transform the role of the teacher.

E-learning is supposed to be used by business education students in public universities especially in South-East Nigeria. South-East is one of the geo-political zones in Nigeria. It has five States, of Anambra, Abia, Ebonyi, Enugu and Imo. These States collectively have six Federal and State Universities that offer business education programme. Federal universities are the universities owned, funded and controlled by the federal government, while State universities are owned, controlled and funded by the State governments. These Federal and State government owned universities are known as public universities. In South-East States of Nigeria, it seems that there are



constraints to the use of e-learning as most of the tertiary institutions seem not to be making proper use of these e-learning resources in teaching (Oloja, Adewunmi and Ajisola 2012). Similarly, despite the laudable benefits of e-learning, educators and students in universities are still working with obsolete and crude methods of teaching, use of chalkboard, conventional method of learning, outdated e-learning facilities even in this 21st century. These universities are expected to be equipped with varieties of facilities for training the students as they are government owned, in order to provide quality and affordable education to the people. Eze (2016) opined that public universities administrators have roles to play in improving the use of e-learning facilities in teaching. Universities can help provide e-learning facilities for teaching and learning of business education.

Lecturers and students are supposed to upgrade their skills in the use of modern computer facilities like projectors, educational video devices, and computer software among others. They should also be skilled in the use of network connectivity of the available computer resources which will help in improving e-learning in universities in Nigeria. Lecturers and students need to equally contribute their quota to the effective use of e-learning facilities in teaching and learning by doing assignments through internet, learning through computer aided instruction and other e-learning facilities so as to meet up with the pace of technological advancement.

Stephen (2013) noted that Nigeria is unfortunately behind other developed nations in information and communication technology (ICT) use as it relates to educational delivery. There is need for improvement. Improvement according Hornby (2006), is the process of making something better; change that make something better or more valuable. The use of e-learning in teaching by students and lecturers need to be improved in various universities in South-East Nigeria. This is imperative if e-learning is to promote learning everywhere and at all times. Nevertheless, a lot of challenges are witnessed in the utilization of e-learning in public universities. Okeke (2016), hinted that most lecturers and students of business education have not been making effective use of e-learning resources in their academic work. The hindrances/constraints come as a result of manpower shortage/wastage, shortage of technological facilities for e-learning, lack of knowledge and use of computer aided instruction (Okafor, 2013). According to research findings by Okeke (2016) and Eze (2016) there is low level of e-learning awareness in most institutions in Nigeria.

If students are not properly trained and equipped with the needed novel ICT facilities, they would perform below expectation in the digitalized world of work. These lead to incompetence on the part of students after graduation. Therefore, this study is designed to determine the strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.

### **Purpose of the Study**

The main purpose of the study was to determine the strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria. Specifically the study sought to determine;

- the institution-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.
- the lecturers-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.
- the students-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.



### Research Questions

The following research questions guided the study:

- What are the institution-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria?
- What are the lecturers-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria?
- What are the students-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria?

### Hypotheses

The following null hypotheses were tested at .05 level of significance.

- There is no significant difference between the mean responses of lecturers in federal and state universities regarding institution-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.
- A significant difference does not exist in the mean ratings of lecturers in federal and state universities regarding the lecturers' related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.
- There is no significant difference between the mean ratings of lecturers in federal and state universities regarding the students-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.

### Methods

Descriptive survey research design was adopted for the study. Descriptive survey research design according to Nworgu (2015) is one in which a group of people or items are studied by collecting and analysing data from only a few people or items considered to be representative of the entire group. The design was found suitable because the result got from the study sought to get the views of business educators regarding the strategies for improving e-learning among business education students in public universities.

The population for the study was 53 lecturers of business education in universities in South East Nigeria. The entire population was used due to the manageable size of the population. The area of the study was public universities in South-East Nigeria offering business education.

The instrument used for data collection was a 22 item questionnaire validated by three experts, from the Department of Technology and Vocational Education Enugu State University of Science and Technology, Enugu. Based on their criticisms and suggestions, corrections were made and effected in the instrument. Copies of the questionnaire were administered to business education lecturers in a university in South-South Nigeria. The reliability index of 0.87 was obtained using Cronbach Alpha, which indicated high internal consistency of the instrument.

Out of 53 copies of the questionnaire administered, 98.1% were properly filled and used for data analysis. Mean and standard deviation were used to answer the research questions and t-test statistics was used to test the null hypotheses at .05 level of significance. The item by item was based on the principle of upper and lower limit of the mean scores.

Strongly agree(SA)	-	3.50	4.00
Agree(A)	-	2.50	3.49
Disagree(D)	-	1.50	2.49
Strongly disagree(SD)	-	1.00	1.49

The null hypothesis was rejected if the t-calculated value was more than the t-table value otherwise, the null hypothesis was not rejected.

## Results

The results of the study are presented according to the research questions and null hypotheses that guided the study.

### Research Question 1

What are the institution-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria?

**Table1.** Mean ratings and standard deviations of federal and state university lecturers on the institution related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.

S/N	Item Description: The institution-related strategies for improving e-learning include:	Federal N=36		State N=16		Overall		Decision
		X	SD	X	SD	X	SD	
1.	Improving the ICT facilities in the universities	3.19	0.64	3.28	0.54	3.24	0.59	Agreed
2.	Provision of free internet access in the universities.	3.15	0.61	3.54	0.57	3.35	0.60	Agreed
3.	Procurement of modern computers in universities.	3.35	0.49	3.50	0.59	3.43	0.54	Agreed
4.	Digitalization of university administrative offices.	3.42	0.70	2.97	0.98	3.20	0.84	Agreed
5.	Provision of e-library for students in universities.	3.38	0.54	3.36	0.58	3.38	0.57	Agreed
6.	Facilitating electronic interactive classroom in universities.	3.54	0.63	3.27	0.79	3.41	0.71	Agreed
7.	Employing qualified and knowledgeable staff in ICT.	3.31	0.62	3.18	0.75	3.25	0.69	Agreed
8.	Improving electricity generation in the university.	3.23	0.59	3.27	0.65	3.26	0.62	Agreed
<b>Grand Mean/S.D.</b>		<b>3.32</b>	<b>0.60</b>	<b>3.30</b>	<b>0.68</b>	<b>3.32</b>	<b>0.65</b>	<b>Agreed</b>

The result of data analysis in Table 1 shows that the mean ratings of the respondents range from 3.20 to 3.43, indicating that the respondents agreed that all the items are institution-related strategies for improving the utilization of e-learning among business education students in public universities. The low standard deviation of 0.65 indicates that the respondents have consensus opinion in their responses to the items.

### Hypothesis 1

There is no significant difference between the mean responses of lecturers in federal and state universities regarding institution-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.

**Table 2:** t-test statistics on the mean ratings of federal and state university lecturers regarding institution related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria

Variables	X	SD	N	P	Df	t-cal	t-tab	Decision
Federal	3.32	0.60	36	0.05	50	0.822	2.009	Not Significant
State	3.30	0.68	16					

$t\text{-cal} (0.822) < t\text{-tab} (2.009)=NS$

The result of t-test analysis shows that the t-calculated at .05 level of significance and 50 degree of freedom is 0.822 while the t-table value is 2.009. Since the t-calculated is less than the t-table value the null hypothesis is not significant. This implies that there is no significant difference between the mean ratings of lecturers in federal and state universities regarding institution-related strategies for improving e-learning among business education students in public universities in South-East Nigeria.

**Research Question 2**

What are the lecturers'-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria?

**Table 3:** Mean ratings and standard deviation of lecturers in federal and state Universities regarding lecturers-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.

S/N	Item Description:	Federal N=36		State N=16		Overall		Decision
		X	SD	X	SD	X	SD	
9.	Doing assignment through internet.	3.24	0.78	2.65	0.99	2.95	0.89	Agreed
10.	Participating in on-line classroom.	3.14	0.82	2.89	1.10	3.02	0.96	Agreed
11.	Communicating with classmates through social media.	3.25	0.74	3.05	0.93	3.15	0.84	Agreed
12.	Using electronic mails in submitting assignments.	3.35	0.70	3.03	0.73	3.19	0.72	Agreed
13.	Using e-library facilities.	2.87	0.82	3.16	0.91	3.02	0.87	Agreed
14.	Forming a group learning platform through internet.	3.18	0.91	3.05	0.93	3.12	0.92	Agreed
15.	Participating in computer aided instructional programmes.	3.24	0.78	3.17	0.68	3.21	0.73	Agreed
<b>Grand Mean/S.D.</b>		<b>3.18</b>	<b>0.79</b>	<b>3.00</b>	<b>0.89</b>	<b>3.09</b>	<b>0.85</b>	<b>Agreed</b>

The result of data analysis presented in Table 3 indicates that the overall mean ratings range from 2.95 to 3.21 indicating agreed. This implies that the respondents agreed to the items as lecturers related strategies for improving the utilization of e-learning among business education students in public universities. The low standard deviation of 0.85 submits that the respondents' opinions did not differ remarkably.

### Hypothesis 2

A significant difference does not exist in the mean ratings of lecturers in federal and state universities regarding lecturers-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.

**Table 4:** t-test statistics on the mean ratings of lecturers in federal and state universities regarding lecturers-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria

Variables	X	SD	N	P	Df	t-cal	t-tab	Decision
Federal	3.18	0.78	36	0.05	50	0.646	2.009	Not Significant
State	3.00	0.98	16					

$$t\text{-cal} (0.646) < t\text{-tab} (2.009) = NS$$

The result of t-test statistic indicates that the t-calculated at .05 level of significance and 50 degree of freedom is 0.65. Since the t-calculated is less than the t-table value of 2.01, the null hypothesis is therefore not significant. The implication is that no significant difference exists in the mean ratings of lecturers in federal and state universities regarding lecturers-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.

### Research Question 3

What are the students-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria?

**Table 5:** Mean ratings and standard deviation of lecturers in federal and state university regarding students-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.

S/N	Item Description: The lecturers-related strategies for improving the utilization of e-learning includes:	Federal N=36		State N=16		Overall		Decision
		X	SD	X	SD	X	SD	
16.	Engaging in ICT training for update.	3.09	0.98	3.58	0.61	3.34	0.80	Agreed
17.	Designing their instruction to be computer aided.	3.25	0.82	2.95	1.11	3.10	0.97	Agreed
18.	Adopting distance learning approach in teaching the students.	3.45	0.81	3.03	0.90	3.24	0.86	Agreed
19.	Given students assignment using electronic mails.	3.11	0.84	3.27	0.57	3.19	0.71	Agreed
20.	Assigning students to discovery learning through internets.	2.98	0.93	3.08	1.01	3.03	0.97	Agreed
21.	Utilization of ICT facilities in teaching the students.	3.10	0.87	3.03	1.02	3.07	0.95	Agreed
22.	Delivering instruction-through electronic aided classroom.	3.14	0.78	3.13	0.89	3.14	0.84	Agreed
<b>Grand Mean/S.D.</b>		<b>3.16</b>	<b>0.86</b>	<b>3.15</b>	<b>0.87</b>	<b>3.16</b>	<b>0.87</b>	<b>Agreed</b>

The data presented in Table 5 show that the respondents mean rating ranges from 3.03 to 3.34 indicating agreed response. This means that the itemized are the students-related strategies for improving the utilization of e-learning among business education students in universities in South-East Nigeria. The grand mean of 3.16 further shows that the respondents concurred to that. The low standard deviation of 0.87 implies that the respondents have homogeneous opinion in their responses.

### Hypothesis 3

There is no significant difference between the mean ratings of lecturers in federal and state universities regarding students-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.

**Table 6:** t-test statistics on the mean ratings and standard deviation of lecturers in federal and state universities regarding students-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.

Variables	X	SD	N	P	Df	t-cal	t-tab	Decision
Federal	3.16	0.86	36	0.05	50	0.0385	2.009	Not
State	3.15	0.87	16					Significant

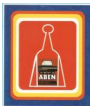
$$t\text{-cal} (0.0385) < t\text{-tab} (2.009) = NS$$

The result of t-test analysis shows that t-calculated at 0.05 level of significance and 50 degree of freedom is 0.0385 where the t-table value is 2.009. Since the t-calculated value is less than the t-table value, the null hypothesis is not rejected. This mean that there is no significant difference between the mean ratings of lecturers in federal and state universities regarding students related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.

### Discussion of Findings

The findings of the study according to the first research question showed that the respondents agreed on the eight items as the institution- related strategies for improving e-learning among business education students in public universities. Some of the identified institution related strategies include;-improving the ICT facilities in universities, provision of free internet access in the universities, procurement of modern computers, digitalization of university administrative offices, provision of e-libraries, facilitating electronic interactive classrooms, and others. The result of the study implies that educational institutions have a role to play in improving e-learning among students. The findings are in line with the findings of Stephen (2013) which held that e-learning utilization is dependent on the school and its administrative skill. Stephen noted that the employment of qualified and knowledgeable staff in ICT and free internet access would help to improve the staff and students' e-learning capabilities. The null hypothesis indicated that there was no significant difference between the opinions of lecturers in federal and state universities regarding the responses to the items under the institution related strategies for improving e-learning among business education students in public Universities in South-East Nigeria.

The result of the study with respect to the second research question identified the lecturers related strategies for improving the utilization of e-learning among business education students to include engaging in ICT training for update, designing instruction to be computer aided, adopting distance learning approach in teaching the students, giving students assignments using electronic



mails, assigning students to discovery learning through internet and many more. The findings showed that these strategies could be used to improve the utilization of e-learning as Okeke (2016) noted that lecturers' utilization of ICT facilities promote learning as most students continue learning with or without the lecturers. The study deduced that delivering instruction through electronic aided classroom improved the utilization of e-learning by the students. The test of the second null hypothesis showed that no significant difference existed in the mean ratings of lecturers in federal and state universities regarding lecturers-related strategies for improving the utilization of e-learning among business education students.

The findings of the study with respect to the third research question identified seven students-related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria. The students-related strategies according to the findings include; doing assignments through internet, participating in on-line classroom, communicating with classmates through social media, using e-library facilities and so on. The result of the study showed that the students have a role to play in ensuring effective utilization of e-learning. The findings of the study are also in agreement with the findings of Oloja, Adewunmi and Ajisola (2012) that e-learning utilization can be improved through the students' participation in computer aided instructional programmes. The findings are also supported by Eze (2016), who opined that students participation in online classes and use of e-learning can improve the e-learning capability. The null hypothesis showed that there was no significant difference in the mean ratings of lecturers in federal and state universities regarding the items under the students related strategies for improving the utilization of e-learning among business education students in public universities in South-East Nigeria.

### **Conclusion**

E-learning has been identified as key in teaching contemporary concepts, imparting knowledge and skills to the students. It helps in promoting all time and all place learning as distance barrier to learning is eliminated. The utilization of e-learning should be improved through the identified strategies to enable students improve in their learning at all time. The result of the study showed that the institutional related strategies are key to improving e-learning among the students. This means that making the university environment to be ICT friendly would help in achieving good digital migration. The lecturers' related strategies and students related strategies could as well be used to improve the utilization of e-learning among the students.

### **Recommendations**

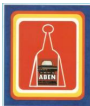
Based on the findings of the study, the following recommendations are made:

Universities should improve their ICT facilities and provide free internet access. To enable digital instruction and learning between business teachers and the students.

Qualified and knowledgeable ICT staff should be employed to take care of the digital facilities acquired to facilitate the e-learning activities of universities.

Lecturers should be given periodic training for updating their ICT knowledge. This will make them better qualified and suited to promote the digital learning activities of educational institutions.

Students should be involved in on-line and internet instructional activities. This will make them better prepared for the digital work place and make them better suited for the digital world of today and tomorrow.



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