



# **A**SSessment of the Extent of Utilization of E-Learning Opportunities for Effective Teaching and Learning in Business Education

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## **Abstract**

*The study was a survey meant to assess the extent of utilization of e-learning opportunities in the effective teaching and learning of Business Education in the tertiary institutions of Nigeria. The study aims at determining the teachers' usage of e-learning packages in their education delivery services; the teachers' competence in computer applications to the optimization of e-learning packages in effective teaching and learning of Business Education. Questionnaires were used to elicit answers to the three research questions that guided the study. The study revealed that Business Education in tertiary institutions utilize e-learning applications in most aspects of educational service delivery, such as, students assessment, research, lectures, etc. Furthermore, the study disclosed that Business Educators face problem of inadequate ICT infrastructures, paucity of fund, irregular electricity supply, and lack of trained professional. It was recommended that stake holders in the education sector should make internet connectivity and other e-learning resources such as computer, projectors, and scanners available to the tertiary institutions. It was further recommended that teacher training institutions should incorporate computer training programmes in their curriculum.*

## **Introduction**

It is evident that the development of information and communication technology is rapidly revolutionizing social economic and educational aspects of the developed countries. Developing countries such as Nigeria is no exception.

Face-to-face classroom environment type of teaching and learning has become inadequate as the world has turned into a global village. Students ought to access information from anywhere in the world, to meet up with the advancement of technology in the world today.

Information and Communications Technology (ICT) provides the teachers and students access to vast stores of knowledge beyond the school, as well as with multi-media tool to add to this store of knowledge.

According Ngwoke (2011), the huge growth of computers, the internet and other electronic devices provide global opportunities for education, especially for learning outside the school premises. They constitute powerful tools the development of quality teaching and learning of Business Education as well as catalysts for radical change in existing school practices and vehicle for service delivery in tertiary institutions. The ICT



has immensely facilitated quick delivery of learning and dissemination of knowledge and information in a way that were not previously possible.

It is in recognition of the importance of art E-learning or online learning that the Federal Government of Nigeria has directed the resource personnel of the National Policy on Education (2004) to set its standards, regulate framework for the deployment of ICT infrastructure at all levels of education in Nigeria.

### **The Concept of E-Learning**

E-learning refers to Electronic learning. E-learning as a product of internet has been variously defined. It comprises all forms of electronically supported learning and teaching. It is to the brick wall classroom learning, what mobile phone is to fixed analog. While brick wall classroom is situated at a place where students and teachers meet and interact face-to-face, e-learning takes place anywhere, anytime, without face-to-face interaction. It involves the use of network technologies to create, foster, deliver and facilitate learning. Ugwuoke (2011), added that it encompasses face-to-face, distance, mixed and blended delivery models that utilizes electronic means.

According to Hedge and Haward (2004) in Ikechukwu (2013) e-learning is an innovative approach to delivering electronically mediated, well-designed, learner-centred and interactive learning environment to anyone, anytime and anyplace by utilizing the internet and digital technologies in connection with instructional design principles. Similar to above, Nwokike (2010) defined e-learning as the use of computer as a key component of the education environment. For Asah (2011), e-learning is the use of Information and Communication Technology (ICT) which include computer networks, communication and mobile technologies to enhance and extend learning. These technologies help to deliver and make education and information accessible to whoever needs it. For the Wikipedia (2011), e-learning is essentially the computer and network - enabled transfer of skills and knowledge. It is an instruction delivered via an electronic media (Chitana, Makaza and Madizama, 2008). Tongsakul and Meejaleum (2009) refer to e-learning as comprising the combination, implementation and relationship of teaching and learning via different ICT Media such as computer, internet, multimedia projector, video tapes and CD Rom. From these definitions Anowor (2002) maintained that the concept Electronic learning comprises:

- the use of all forms of electronically supported learning and teaching;
- the use of technology to enable people to learn anytime and anywhere;
- the use of ICT in developing skills as well as concept-based knowledge;
- the use of instructional media in form of texts, images, animation, video and audio devices.



### **Statement of Problem**

Higher, institution students in Nigeria have been finding education processes and research difficult because of the traditional educational delivery system still in practice. In this system, distance is identified as a problem to both the undergraduates and post graduate students of institutions and also contribute to the over stay of students in school. These call for a new innovation in education that will help to eliminate these problem

Lack of teacher competence orchestrated by inadequate or inappropriate training has bedeviled e-learning in business education. There are also problems associated with erratic power supply, weak and inadequate ICT infrastructures, poor education funding, absence of experts, cost associated with purchase of hardware and software, shortage and inappropriate teaching materials. Slow internet connection, inadequate bandwidth, inadequate dial-up links to the internet, insufficient computer system, low literacy, etc. the existence of these problems challenge the full utilization of e-learning opportunities in business education service delivery in the Tertiary Institutions.

### **The Purpose of the Study**

The major purpose of the study is to determine the extent Business Educators in tertiary institutions utilize e-learning in the best possible way to teach students.

Specifically, this study seeks to:

1. Determine the extent Business Educators utilize e-learning in delivering lecture packages in Business education
2. Ascertain the computer and web competencies required by the Business Educators in service delivery.
3. Proffer solutions to the problems faced by Business educators in proper utilization of e-learning packages.

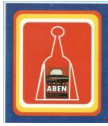
### **Research Questions**

1. To what extent do Business Educators in Nigeria Tertiary Institutions need to utilize e-learning in their teaching for effective learning?
2. What are the computer and web competencies required by the Business Educators for utilization of e-learning for effective teaching and learning of business education in Tertiary Institutions in Nigeria?
3. What are the solutions to the problems faced by Business Educators for effective utilization of e- learning applications in teaching and learning of Business education in tertiary Institutions of Nigeria?

### **Methodology**

The study adopted the descriptive research design. The population of this study consisted of teachers in four tertiary institutions in Imo State.

The four tertiary institutions include:



- Alvan Ikoku Federal College of Education
- Imo State University
- Federal Polytechnic Nekede
- Imo State Polytechnic

Questionnaires for the study was developed based on the three research questions of the study. The questionnaire was titled E-learning and Effective Teaching and Learning Process Questionnaire (ETPQ). The questionnaire was used in data collection. The questionnaire had four point response scale option of Very High Extent (VHE), High Extent (HE), Very Low Extent (VLE) and Low Extent (LE). The instrument was face validated by two experts in ICT and measurement and evaluation. Thereafter, it was subject to content reliability split half method. The Cronbach's alpha was also used to measure the internal consistency. The reliability co-efficient of 0.78 was obtained, this was considered sufficient for the study. The instrument was distributed by the researcher. Ninety copies of the questionnaire was filled and collected. The research questions were answered using Means and standard deviation. A mean of 2.5 and above indicated that the respondent was in agreement with the item while a mean of 2.49 and below indicated that the respondents disagreed with the item.

## **Results**

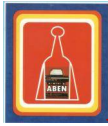
The results presented according to the research questions. Mean and Standard Deviation (SD) of Business Educators optimization of e-learning in delivering lecture packages to the students are presented in the tables.

### **Research question 1**

To what extent do Business Educators in Nigeria Tertiary Institutions need e- learning in their teaching for effective learning?

**Table 1: Mean response on the Business Educators utilization of e-learning in their teaching for effective learning.**

S/N	ITEM	N	MEAN X	SD	DECISION
1.	Business Educators need to Use e-learning for pre-class preparation (sourcing material for preparing e-lessons notes, e-lesson note development, etc).	90	3.55	0.88	V H E
2.	Use Power point to deliver lessons.	90	2.68	0.66	H E
3.	Use multimedia projectors to deliver lessons.	90	2.56	0.60	H E
4.	Use e-learning to empower students with skills and prepare them for global competitiveness.	90	3.73	0.94	V H E
5.	Use e-learning to create, give, receive and grade student assignment and test, on-line.	90	2.88	0.77	H E
6.	Use to keep students records and grades using	90	3.85	0.98	V H E



	computer database.				
7.	Use to prepare and submit students' result on-line.	90	3.82	0.91	V H E
8.	Use to receive students' projects on-line.	90	3.74	0.90	V H E
9.	Use e-learning for effective communication and to collaborate research work (share insight with colleagues).	90	3.66	0.84	V H E
10.	Use e-learning for distribution of class materials, tasks and others.	90	3.53	0.78	V H E
11.	Use e-learning to review, assess and improve the effectiveness of curricular programmes.	90	3.58	0.78	V H E
12.	Use to assess education outcomes of students for promotion, placement, certification, etc. through e-learning packages.	90	3.88	0.96	V H E
13.	Use to provide counseling for the students on-line.	90	2.50	0.61	H E
14.	Use to access e-library, e-textbooks that are designed according to learning ability and learning style of students.	90	3.67	0.75	V H E
15.	Reduce students' time-table conflict.	90	3.53	0.72	V H E
16.	Access e-learning resources on-line for course remediation, enrichment and credit recovery.	90	2.63	0.65	H E

Data in table 1 show that based on the 2.50 benchmark mean that there is need for Business educators to utilize all the items in the table for effective teaching and learning of Business education

### **Research Question 2**

What are the computer and web competences required by the Business Educators for utilization of e-learning packages for effective teaching and learning of Business education in Tertiary Institutions in Nigeria?

**Table 2: Mean Response Rating on the Computer and Web Competences of Business Educators.**

S/n	ITEM	N	MEAN X	SD	DECISION
	<b>The teachers require competencies on the:</b>				
17.	Use of discussion boards for students' team debates.	90	2.77	0.67	H E
18.	Use of training software's that adapt to learners' individual needs.	90	3.64	0.82	V H E
19.	Use of user interactive training software in teaching.	90	3.55	0.88	V H E
20.	Use of multimedia computer	90	3.73	0.73	V H E



21.	Use of simulation in teaching.	90	2.66	0.91	H E
22.	Use of software in CD-ROM in teaching	90	3.4	0.92	H E
23.	Use of animation in teaching	90	3.02	0.91	H E
24.	Use of guided drill and practice	90	2.88	0.69	H E
25.	Use of message board forum in teaching	90	2.76	0.66	H E
26.	Use of multi-media computer projectors in teaching.	90	3.29	0.77	H E
27.	Use of the gaming method in teaching.	90	2.41	0.91	L E
28.	Use of interaction through electronic mails in teaching.	90	2.94	0.91	H E
29.	Use of smart boards in teaching.	90	3.47	0.91	H E
30.	Use of e-mail for learning through role playing.	90	3.00	0.91	H E
31.	Use of chat software for discussion in class.	90	2.76	0.66	H E
32.	Use of on-line spreadsheets and data analysis software for sharing and analyzing data.	90	3.29	0.77	H E
33.	Use of synchronous cameras for mentor/mentee discussion to ensure mentoring.	90	3.16	0.91	H E
34.	Use of RSS Reeds, webcast and podcast.	90	2.00	0.12	V L E

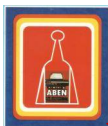
From table 2 all the items except item 27 and 34 have the Mean Response Rate (MRR) which is below the cut-off mark of 2.50. This means that Business teachers do not require being competent in making use of them in their teachings.

### **Research Question 3**

What are the problems that can be faced by Business Educators in effective utilization of e-learning applications in teaching and learning of Business in tertiary institution in Nigeria?

**Table 3: Mean Response Rate (MRR) on the problem faced by Business Educators in utilization of e-learning in teaching and learning of Business.**

S/n	ITEM	N	MEAN X	SD	DECISION
	<b>The problems that can be faced by Business Educators in utilizing e-learning are:</b>				
35.	Inadequate ICT infrastructure e.g. computer softwares and computer accessories.	90	3.93	0.84	V H E
36.	Lack of fund	90	4.10	0.88	V H E
37.	Lack of ready access to internet, (insufficient bandwidth)	90	3.02	0.91	H E
38.	Lack of time to spend in utilizing ICT gadgets due to teaching workload.	90	2.06	0.49	V L E
39.	Lack of update computer packages readily available for application.	90	3.64	0.82	V H E

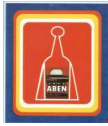


40.	Lack of time administrative support in providing ICT Materials.	90	3.57	0.68	V H E
41.	Irregular electricity supply hampering the utilization of e-learning.	90	4.52	0.99	V H E
42.	Lack of technical support from ICT technologists	90	3.75	0.91	V H E
43.	High expensive cost of maintenance and repair of ICT gadgets.	90	3.07	0.73	H E
44.	Lack of internet service knowledge on the part of some Business teachers.	90	3.86	0.82	V H E
45.	Lack of adequate training to teachers on how to integrate e-learning gadgets.	90	3.61	0.86	V H E
46.	The high cost of personal computer, laptop, software, internet and their technical support.	90	3.87	0.88	V H E
47.	Inability to design didactic rules in e-learning.	90	3.58	0.78	V H E
48.	Lack of motivation in the part of the Business teachers.	90	2.07	0.63	V L E
49.	Corruption of the data entry operators.	90	2.57	0.47	H E
50.	Unwillingness to change to the new method of computer literacy among lectures and students is still low.	90	3.39	0.62	H E
51.	Computer literacy among lecturers and students is still low.	90	3.87	0.88	V H E

From table 3, all the items from 35 to 51 except item 38 and 48 have Mean Response Rate (MRR) which are above the cut-off mark of 2.50. Item 48, has the MRR of 2.07. The respondents did not accept this as a problem challenging utilization of e-learning. So lack of motivation to the teachers of Business did not constitute problem to utilization of e-learning applications.

### **Discussion**

The results obtained from table 1 show that Business educators in Nigerian tertiary institutions need to utilize e-learning for pre-class preparations (sourcing materials for preparation e-lesson notes, e-lesson planning, etc)to deliver lesson using power point, to deliver lessons using multimedia projector; to empower students with skills and prepare them for global competitiveness; to create; give, receive and grade students assignment and test on-line; to keep students records and grades using computer database programme; to prepare and submit student's result on-line; to receive students projects on-line, for effective and to collaborate research work (Share insight with colleagues); for distribution of class material; tasks and others; to review assess and improve the effectiveness of curricular programmes; to assess education outcomes of



students for promotion, placement, verification, etc; to provide counseling for the students; to access e-library, e-textbooks that are designed according to learning ability and learning style of students, to reduce students time-table conflict, to access e-learning resources on-line for course remediation, enrichment and credit recovery and to communicate with and monitor students e-learning discussing group. These findings are agreed with the opinion of Ezeahurukwe and Johnson (2011) that e-learning is generally used as part of teaching and learning to deliver lessons, effectively communicate and to collaborate research works and it has provided teachers and students with new teaching and learning tools.

Irrespective of the benefits of e learning tools, any lecturers are still not good at booting their laptops, composing and sending e-mails, accessing mails, attaching files and those other peripheral issues. Ikechukwu (2011) also pointed out that poor e-learning technology designed environment is another challenges to the implementation of e-learning technology in religious studies. There is an improper designed didactic rule in clearing platform and lack of expert e-learning environment designers and poor resources availability. All these hamper proper utilization of e-learning in Nigerian Tertiary Institutions. Again the findings agreed with the opinion of Asogwa (2011) that corruption is another major challenge of optimizing e-learning, the data entry operator might already be making business, selling grades. This could be because whatever was entered was to be believed as data and fact.

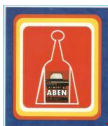
### **Conclusion**

The study further revealed that Business Educators are faced with a lot of challenges that is an impediment to effective utilization of e-learning, some of these problems include inadequate ICT infrastructure, paucity of fund, irregular supply of electricity, lack of trained ICT professionals, inadequate training given to teachers on how to integrate e-learning gadgets. From the findings, it can be rightly concluded that while business educators may try to utilize e-learning for education deliveries, many of them still lack the pre- requisite skills in e-learning applications, hence the need to assess the extent of utilization of e- learning opportunities for effective service delivery.

### **Recommendations**

Based on the findings the following recommendations are made:

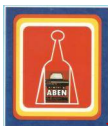
1. Government should liaise with other stakes holders in the society to put in place a workable ICT policy for tertiary institutions.
2. Teacher preparation institutions should incorporate computer mediate communication strategy in the relevant areas of the curriculum units and expose teachers to this strategic learning.



3. Government should map out special ICT intervention fund for the management of e-learning education.
4. There should be adequate creation of on the importance of e-learning programme to the teachers in Tertiary Institutions in Nigeria.
5. In-service training and workshops in Information and Communication Technology (ICT) should be made compulsory for Business Education teachers
6. Business education curriculum should be innovated to include e-Learning in the delivery method.
7. Computers should be made available to every lecturer to enable them prepare their e-learning lectures.

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