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# AVAILABILITY AND EFFECTIVE UTILIZATION OF E-LEARNING FACILITIES IN TEACHING DELIVERY OF COLLEGE OF EDUCATION STUDENTS IN OYO STATE, NIGERIA

By

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## **Abstract**

*Electronic learning in no doubt is being embraced and becoming the most effective tool for learning and sharing of the desired academic knowledge and information. Many of the higher institutions of learning and especially the Colleges of Education in Nigeria and particularly Oyo State are planning to start e-learning academic delivery. It is imperative to consider the level of accessibility and effective usage of the facilities by the lecturers and the students. This study investigated availability and effective utilization of e-learning facilities in teaching delivery of College of Education students in Oyo State, Nigeria. A descriptive survey research method was used which was guided by four research questions. 150 lecturers in the Colleges of Education were purposively sampled for the study. E-learning facilities and utilization rating scale (E-LFURS) with reliability co-efficient of 0.72 was obtained using Cronbach Alpha statistical tool. The data collected were analyzed using frequency distribution and mean. The findings revealed that there were inadequacies in the available of e-learning facilities and only 51.5% are functional in teaching of students. E-teaching through the use of multimedia instructional facilities is mostly used with a percentage of 62.0%. It is also 60.2% for the use of internet facilities in teaching of students in the college. The use of e-learning facilities has contributed in no measure to professional development of teaches through training which makes teaching and learning more effective and efficient as well as reducing classroom boredom. This research therefore recommends that e-learning facilities should be provided in Nigeria tertiary institution as well as provision of adequate electricity, e-learning classroom and digital libraries for easy assessment of information and teaching-learning process.*

**Key words:** Availability, Development, E-learning, Institutions, Opportunities, Students, Teaching

## Introduction

Teaching delivery is the provision of education through activities such as lectures, tutorials, seminars, demonstrations, laboratory sessions, clinical/practicum sessions, field work, supervision, or other teaching methods, including teaching in equivalent ways and equivalent durations using technology through webs. E-learning is the delivery of educational materials, online courses, training and lesson through laptops, smart phones, and tablets. This allows students to receive necessary information anytime from any part of the world. It is a learning based on formalized teaching but with the help of electronic resources. Teaching can be done in or out of the classroom with the use of computers and internet facilities from the major components of e-learning. E-learning is referred to as a network enables transfer of skills, knowledge and the delivery of educations that is made to students at the same or different times. Electronic learning otherwise called e-learning was developed by Jay Cross in 1998 and it has continuing to grow rapidly till today (J'aashan, 2020). It is of the belief that with the rapid and current progress in technology and advancement in education system, e-learning is no doubt has been embraced by all in the society. The introduction of computer served as the foundation of the e-learning while the textbooks is gradually going into extinction because of replacement of electronic reading materials.

E-learning has again reveal its importance by proving to be the best mans in school organizations most importantly by providing to be the best means in the training programmes that are conducted for professionals across the world. This gives the right skills to be acquired while at different locations. The dynamic nature of the society has called for information communication technology (ICT) tools and adopted by all levels of education in the delivery and imparting knowledge into learners. Self-development is gotten effective means and use of e-learning to acquire more skills and academic values. Ibrinke (2015), opined that many educational institutions across the globe have almost accepted this emergent technology as a useful tool for education service delivery. Aboderin (2015) opined that e-learning enhances interactivity between students and the teacher which brings easy access to information and learning materials at any time and distance. In adopting e-learning as one of effective and convenient tool in Nigeria education system, there are challenges like no wide acceptability of e-learning acceptability and easy accessibility of e-learning tools and equipment, irregular electricity supply, digital library and e-learning classroom (Anene, Imam and Odumuh, 2014).

Skhephe and Matashu (2021) in their opinion said that technology has provided a lot of information in this 21<sup>st</sup> century than any one person could ever hope to acquire. Akanbi (2020) further explained that e-learning is the process of teaching and learning in the classrooms with the use of computer through the internet. Assessment is believed to be the heart of education (Ojerinde, 2014) At the same time, the availability and effective utilization of e-learning is of importance to entrepreneurs and academic administrators and most especially, at the tertiary institutions in Nigeria. E-teaching and e-learning has recently become a strong tool in the education industry with a mission to serve as a development for present day education system.

Technology has provided a range of opportunities at overcoming so many challenges brought by physical disruption in education (Tarman, 2019). Technology can provide the right channel for teachers I order to nature high level thinking in students, especially in this 21<sup>st</sup> century and that development of education in our society is inseparable from teaching (Halim, 2020). Ramna (2018) opined that e-learning as related to technology in education has really supported and used as source of information rather than a process based on knowledge construction. Akanbi (2020) also argue that technology has become one of the best means for

enhancing teaching and learning with or without school premises. Ibronke (2015), reiterated that many educational institutions all over the world have almost accept the emergence of e-learning as a tool for disseminating information programmes delivery. Due to its usefulness, college of education programmes in Nigeria which serve as avenue for development of manpower and economic growth in the country.

### **Statements of the Problem**

The availability and effective utilization of e-learning facilities in the delivery of educational programmes in tertiary institutions and other levels of educational is a serious issue to nation development. This has given educational stakeholders very serious concern and has required feedback and timely information that is needed for proper adjustment for effective learning outcomes which will enhance productive and implementation of further better programmes. Since the adoption of e-learning facilities in the various institutions of learning as one of the innovative approaches to effective teaching learning process in Nigeria education system, there have been various hindrances and challenges to its effectiveness such as inadequate and shortage of device, digital classrooms which serves as impediment to the actualization of education programmes. Teaching and delivery of educational programmes in our various institutions of learning has also confronted with challenges like provision of new technologies and its usage. Some of the tertiary institutions in Nigeria who claimed they have operationalized e-learning have not been effectively using it as expected. It is therefore important to make sure that appropriate learning facilities are provided which will remove the barrier and challenges that confronts education in the provision of new technologies and its usage. Some of the tertiary institutions in Nigeria who claimed they have operationalized e-learning have not been effectively using it as expected. It is therefore important to make sure that appropriate teaching facilities and strategies are used in order for the students to achieve the target goals and to overcome the hindrances to their learning activities (Tiamiyu, Ajiferuke, Longe, Nwagwu, Ogunsola, Opesage and Olatokun, 2012).

### **Research Questions**

The following research questions were formulated for the study.

1. What are the e-learning facilities available for teaching of students in the colleges in Oyo State?
2. What is the level of e-learning facilities available and effectively used in the teaching of students?
3. Do lecturers effectively use e-learning facilities for teaching of students in the colleges?
4. What are the usefulness of e-learning facilities to the teaching of students in the colleges in Oyo State.

### **Scope of the study**

This research is limited to the availability and effective utilization of e-learning facilities in teaching of college of education students in Oyo State. The study covered federal, state and private colleges in the state. The academic staffs in the six departments of the colleges were the respondents of this study.

## Research Methodology

### Research Design

This study adopted a descriptive survey design in which the existing issues are not manipulated and it used for the collection of data. All the lecturers in the six departments in the colleges of Federal college of Education (Special), Oyo, Oyo State College of Education, Lanlate, and Best Legacy College of Education, Ogbomoso were sampled.

### Sample and sampling Technique

Three colleges of Education in which one federal, one state and one private were purposively sampled due to the importance of e-learning in the various institutions of learning. A total in the various institutions of learning. A total of 150 academic staffs were used for this study.

### Method of Data Collection

The appropriate quarters and departments were consulted and permission was granted in order to carry out this research work. The researcher and assistance researchers were involved in the distribution and monitoring of collective of the research instrument based on the availability of lecturers in the school of education.

### Method of Data Analysis

A descriptive statistical tool like frequency count, percentage and means were used for data analysis. The data analysed were later used for the discussion and findings of the study. The respondents are measured based on acceptability benchmark at 2.50 and 2.50 were not accepted in the decision making.

## Results

Research Question 1: What are the e-learning facilities available for teaching of students in the colleges in Oyo State?

Table 1: Lecturers responses to the availability and effective utilization of e-learning facilities for teaching of students in the college of education programmes.

S/N	Items	Available and effective	Available and not effective	Not available (NA)
1	E-learning facilities	-	87 (58.0)	60 (40.0)
2	Laptop/Desktop computers laboratory	70 (46.7)	80 (53.3)	-
3	Laptop for lecturers	3 (2.0)	147 (98.)	-
4	E-learning laboratory, server	5 (3.0)	145 (97.)	-
5	Multimedia projector	6 (4.0)	79 (52.7)	65 (43.3)
6	E-learning soft ware packages	7 (4.6)	143 (95.4)	
7	Digital Library	2 (1.3)	148 (98.7)	
8	Photocopier machines	9 (6.0)	101 (67.3)	40 (26.7)
9	Flash Drives	70 (46.7)	80 (53.3)	
10	E-mail facilities	20 (13.3)	130 (86.7)	
	% Average	83%	80.7%	11%

From the table above (table 1), it is observed that 80.7% of the study population responded that a good numbers of e-learning facilities are much available in the college of education but not adequate.

It is also observed that digital library though not adequate is the most available at 98.7% and this is followed by laptops for lecturers which are 98.0%. Meanwhile, most of the laptops are provided by lecturers themselves in order to make teaching more effective and relevant in the class. It is also observed that only 8.3% of the e-learning facilities were available for teaching of students in the college.

**Research Question 2:** What is the level of e-learning facilities available and effectively used for teaching of students in the college of Education in Oyo State?

Effective usage of e-learning facilities for teaching of college students in Oyo State.

s/n	Items	Very effective	Partially effective (PE)	Seldom Effective (SE)	Not Effective (NE)
1	Interactive boards	90 (60.0)	53 (33.0)	10 (7.0)	
2	Digital Library		90 (60.0)		60 (40.0)
3	Photocopier machines	72 (48.0)	76 (50.7)	2(1.3)	
4	Flash Drives	80 (53.3)	70 (46.7)		
5	Institution laptops/desktops/computers	72 (51.3)	73 (50.7)	2 (1.3)	
6	E-mail facilities	77 (51.3)	73 (48.7)		
7	Video cameras	5 (3.1)	79 (52.7)	66 (54.3)	
8	C.D Drive	60 (40.0)	82 (54.7)	8 (5.3)	
9	Projectors	3 (2.0)	60 (40.0)	87 (58.0)	
10	Photograph Camera		84 (56.0)	2 (1.3)	64 (42.7)
	Average (%)	25.8%	51.3%	14.6%	8.3%

Table 2 above presented the effective utilization of e-learning facilities for teaching of students in the college. It was shown that 51.3% of the e-learning facilities were partially functions with an average meant score of 2.96. From the result, it was revealed as being very effective; 40.0% of the C.D Drive considered to be very effective; 56.0% of the photography camera is partially effective, 54.7% of the C.D Drive is partially effective, 52.7% video cameras available was partially effective; 60.0% of interactive board was very effective while e-mail facilities takes 51.3% which was very effective and 48.7% was partially effective. The average mean score of 2.96 shows that there was acceptability in the level of e-learning facilities that is being used in the college of education in teaching the students.

Research Question 3: Do lecturers effectively use e-learning facilities to teach the students in the college of Education in Oyo State?

Table 3: Effective use of e-learning facilities by the lecturers in teaching of college students in Oyo State.

S/N	Items	Regularly used	Averagely used (Au)	Seldomly used (Su)	Not used (Nu)	Mean	Total (%)
1	Use of internet facilities for teaching of students	35 (23.3)	100 (66.7)	15 (1.0)		3.10	62.0
2	Supervision of students projects by the lecturer	30 (20.)	40 (26.7)	41 (27.3)	39 (26.4)	2.30	(46.)
3	Team teaching to the students through e-learning facilities	20 (13.3)	40 (25.7)	10 (6.3)	80 (53.7)	2.40	(48.0)
4	Online assignment for students based on their subjects	70 (46.7)	75 (50.0)	5 (3.3)		3.00	(60.0)
5	E-teaching through the use of multimedia instructional facilities	90 (60.0)	30 (20.)	30 (20.0)		3.01	(60.2)
6	Use of e-learning facilities to do test and exams for the students	35 (23.3)	40 (26.7)	60 (40.0)	15 (33.3)	2.46	(49.2)
7	Use of e learning facilities to seminar and workshops for the students	45 (30.3)	30 (20.0)	90 (60.0)	10 (6.3)	2.45	(49.0)
8	Use of projector to teach students in the class	20 (13.3)	30 (20.0)	90 (60.0)	10 (6.3)	2.45)	49.0)

The table 3 above showed that effective use of e-learning facilities by the lecturers in teaching of college students in Oyo State s follows. Item 1 analysed the use of internet facilities for teaching of students with a mean score 3.10 (62.0%); item 2 stated the supervision of students projects online by the lecturers with a mean score of 2.30 (46.0%); item 3 explained team reaching to the students using e-learning facilities with a mean score of 2.4 (48.0%). It is observed that with a benchmark mean score of 2.50 was determined with a decision rule and therefore indicates that the lecturers are making use of e-learning facilities for teaching of students in the college. Online supervision of project by the lecturers and team teaching of students by the lecturers are also done using e-learning facilities but there are some hindrances which affect e-teaching using multimedia instruction facilities (x-3.01



(60.27); the use of e-learning facilities to do test and exams for the students 2.45 (49.0%) and use of e-learning facilities to give online assignment to the students based on their subjects, 3.00 (60.0%)

Research Question 4: What are the usefulness of e-learning facilities to the teaching of students in the college in Oyo State?

Table 4: Usefulness of e-learning facilities to the teaching of students in the college in Oyo State.

S/N	Item	Strongly Agree (SA)	Agree (A)	Disagree (D)	Strongly Disagree (SD)	
1	There is an improvement in the provision of education	30 (20.0)	80 (53.4)	20 (13.3)	20 (13.3)	3.12
2	The use of internet facilities has given opportunities to students to search information themselves	70 (46.7)	50 (33.3)	30 (20.0)		2.95
3	The use of e-teaching has drastically reduced stress of students face-to-face contact by the lecturers	40 (26.7)	50 (23.3)	40 (26.7)	20 (13.3)	2.65
4	Students freely discuss their academic problems via the use of e-learning facilities	30 (20.0)	35 (23.3)	40 (26.7)	45 (30.0)	2.46
5	There are improvement ins students performance when using e-learning	21 (14.0)	24 (16)	60 (40.0)	45 (30.0)	2.35
6	There is professionalism in the teaching of students by the lecturers when using e-learning facilities	63 (42.0)	41 (27.3)	44 (29.3)	21 (1.4)	3.85
7	Adequate and enough information are supplied to the students while using e-learning facilities	85 (56.7)	50 (33.3)	15 (10.0)		3.65
8	Test and examination are easily conducted and marked by lecturers when using e-learning facilities	60 (40.0)	70 (46.7)	20 13.3)		3.42
9	Students perform better when they use e-learning facilities for their studies	90 (60.0)	35 (23.3)	25 (16.7)		3.31
10	Team teaching made easy when using e-learning facilities by the lectures in the college.	50 (33.3)	60 (40.0)	40 (26.7)		3.12
	Average %	60.3%		39.7%		

Table 4 explained the acceptability mean rating of 3.12, 2.95, 3.85, 2.65, 3.42, and 3.13 were recorded which is recorded against item 1, 2, 3, 6, 7, 8, 9, and 10 respectively because, they fall above the 2.50 level. Again, on the average 60.3 agreed that e-learning facilities greatly contributed to usefulness of e-learning facilities to the teaching of students in the colleges of education in Oyo State, Nigeria in contrary to 39.7% who disagreed. The responses from items 4 and 5 fall below the acceptance level. It is then conclude that the usefulness of e-learning facilities to the teaching of students in the colleges in Oyo State in very high.

### **Discussion of Findings**

The findings from the above results showed that most of e-learning facilities noticed in the study are available, but they are not adequately supplied or provided.

The findings above showed that most of higher institutions of learning have embraced the use of e-learning for the discharging the teaching. This is supported by Ibrinke (2015) that ICT facilities like digital library, e-learning laboratory, e-learning software packages in many institutional in Nigeria are adequate and were available and functional. The study further discussed the supervision of students' projects via e-learning facilities, team teaching to the students through e-learning facilities by the lecturers and the use of e-learning facilities to do test and examinations. E-learning facilities have brought rapid growth to the education sectors. Therefore it is pertinent to draw attention to the availability and effective usage of e-learning facilities in this era of 21<sup>st</sup> century where 100% teaching and learning almost g on digital.

### **Conclusion**

Currently, e-learning is playing very crucial roles in the development of education especially the higher institutions of learning. The existence and survival of higher institution of learning especially the college of education in Nigeria rests on electronic delivery of teaching in this new era of 21<sup>st</sup> century. The adoption of e-learning as a tool into the in the operation of school has positively impact the required skills and innovation needed in the education industry. It is evident from the findings of this study that e-learning facilities is very useful and highly needed for better and quick delivery of teaching and easy access of information for students at various levels of learning

### **Recommendations**

For e-learning to achieve the purpose at which it is setup for in the teaching-learning activities, the following recommendations should be looked into:

1. Government at all levels in the country should provide institutions with required and needed e-learning facilities so as to improve students learning activities
2. The lecturers in the college of education be provided with enough e-learning facilities so as to facilitate easy an better teaching
3. Digital libraries with functional server for storage, retrieval and downloading of relevant information for students academic work
4. Training and re-training of lecturers in the area of usage of the e-learning facilities
5. There should be regular supply of electricity in the institution for effective usage of e-learning facilities.



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