AWARENESS AND UTILIZATION OF E-LEARNING TECHNOLOGIES IN TEACHING AND LEARNING OF BUSINESS EDUCATION COURSES IN UNIVERSITIES IN KWARA STATE

BY

Oladeji, Ayinde Dauda (PhD): Business Education Department, Emmanuel Alayande College of Education, Oyo, Oyo State

&

Sikiru Issa, Nuhu: Department of Business and Entrepreneurship Education, College of Education, Kwara State University, Malete

Abstract

Education is seen and globally accepted as a veritable tool for the development of any nation. This study examined the awareness and utilization of e-learning technologies in teaching and learning of Business Education courses in universities, Kwara State. Two research purposes were formulated to guide the study from which two research questions and two hypotheses were raised. Descriptive research designwas used in this study. 300 lecturers and students made up the population for the study. There was no sampling as the population of the study was not much. A structured questionnaire tagged 'Availability and Utilization of E-Learning Technologies in Teaching and Learning Questionnaire' (AUETTLQ) was used for data collection. The questionnaire was subjected to face and content validation and it was equally pilot tested which yielded a reliability coefficient of 0.78. This shows that the instrument is high enough to be reliable. The data collected from the study were statistically analyzed using mean and standard deviation to answer the research questions. The null hypotheses were tested at 0.05 level of significance using independent t-test. The findings of this study showed that lectures and students are aware of synchronous e-learning technologies in teaching and learning of business education courses. It was concluded that lecturers and students are aware of both synchronous and asynchronous e-learning technologies in teaching and learning of business education courses but often utilize the synchronous e-learning technologies. It was recommended among othersthat lecturers and students should be sensitized through seminars and workshops on the need to maximally utilize available e-learning technologies in teaching and learning in Universities.

Keywords: Availability, Utilization, E-learning technologies, Teaching, Learning and Business Education

Introduction

Education has been seen and accepted as the key factor for the development of every nation. It involves teaching and learning which can be facilitated through effective use of adequate and relevant instructional materials. There are low quality of education and narrow possibilities of attending schools in rural areas because of far distances and differences in school settings. Educationis also accepted as a veritable tool of productivity and satisfactory development all over the world. It is also n instrument and a powerful tool for economic development. Teaching refers to the process of imparting knowledge and skills by a teacher to a learner. It encompasses the activities of educating or instructing. It is an act or experience that has a formative effect on the mind, character or physical ability of an individual. Teaching is basically the art of educating; it usually requires a passion for learning and a deeper passion for education itself. Teaching is a profession that only those who are dedicated and committed are meant to survive it. According to Gage (2003), teaching is a form of interpersonal influence aimed at changing the behaviour potential of another person. Edmund, Ned and Flanders (2001) defined teaching as an interactive process, primarily involving class-room talk which takes place between teacher and pupil and occurs during certain definable activity. Ambrose and Flanders (2010) defined learning as change in knowledge, beliefs, behaviour or attitudes. This change requires time, particularly when one is dealing with changes in beliefs, behaviours and attitudes. In line with this the learning of business education deals with change in behaviour and attitude.

Osuala in Onojetah (2010) defined business education as a program of instruction that consists of two parts, namely; office education-a vocational program for office careers, and general business education-a program which provides the recipients with competencies and skills needed in managing personal business affairs using the services of business world. In other words, business education teaches knowledge and competencies required in business. Business education is considered as the pedagogical knowledge and business competencies necessary for teaching business attitude, concept, skills and knowledge. This could be for personal or vocational usage or career as an administrator, manager or teacher. In researcher'sview, Business education as a program designed to inculcate and develop an individual in strengthening and changing his/herbelief positively, to be able to survive either in business environment or natural environment. Business education is seen as a programme that has promoted skills which enable an individual to function effectively and efficiently, as an employee or employer.

The use of information and communication technology as a means of improving the efficiency and effectiveness in Business education is not in doubt. According to Omolade in Olumese (2008) the methods that can be used in teaching business education are through formal education and informal education. E-learning, can be described as a "virtual classroom". The participants enrol by sending though electronic means to the instructor. E-learning according to Markus (2008) can be defined as a learning process created by interaction with digitally delivered content, network-based services and tutoring support. E-learning is any technologically mediated learning using computers whether from a distance or in face-to-ace classroom setting (computer assisted learning). It is a shift from traditional education or training to ICT-based personalized, flexible, individual, self-organized, collaborative learning based on a community of learners, teachers, facilitators, experts. E-learning is the use of Internet technologies to enhance knowledge and performance.

E-learning technologies offer learners control over content, learning sequence, pace of learning, time, and often media, allowing them to tailor their experiences to meet their personal learning objectives, to manage access to e-learning materials, consensus on technical standardization, and methods for peer review of these resources. E-learning as a sub-system within ICT, is the electronic process which enhances the delivery and administration of learning opportunities and support via computer, networked and web-based technology to help individual performance and development. The basic principle of e-learning is connectivity— the process by which computers are networked to share information which can connect people. This is provided for by what is often called the e-learning landscape or architecture, which refers to the hardware, software and connectivity components required to facilitate learning (Okure, 2008).

According to the National Policy on Education (FRN, 2004) emphasis were placed on the provision and utilization of information and communication technology (ICT) when it states that "in recognition of the prominent roles of information and communication technology in advancing knowledge and skills necessary for effective functioning in the modern world, there is urgent need to integrate information and communication technology (ICT) into education in Nigeria". The introduction of ICT in the educational system has led to the development of e-learning. E-learning literally means electronic learning, i.e. learning by electronic means and through electronic devices. Awareness means having knowledge of the existence and usefulness of something. Business education lecturers and students may not be able to utilize e-learning effectively except they are aware of the different e-learning activities. Teachers and students need to be aware of available e-learning tools that can be utilized in the teaching/learning process. Utilization of e-learning facilities depends on its level of awareness and the readiness of both lecturers and students to utilize it effectively in teaching and learning process. Utilization of e-learning facilities depends on its level of awareness and the readiness of both lecturers and students to utilize it effectively in teaching and learning process. Ipaye (2011) lists some of these tools to include websites, wikis, blogs, Second Life, e-mail, twitters, Course Management systems, video/audio podcasts, facebook, threaded discussion lists, video/audio text chat, and videoconferences software.

Synchronous learning tools, such as threaded discussions, instant messaging and blogs, play an important role in humanizing online courses by replicating the classroom experience of information exchange and social construct, not just between learners and instructors but among the learners as well. People might just know it by reference to a particular vendor, tool or software program that enables the creation and delivery of synchronous e-Learning. Synchronous e-learning is live, real-time (and usually scheduled), facilitated instruction and learning-oriented interaction. In this type of learning, learning experiences are live and real-time. It is against this background that this study was conducted to determine the awarenessand utilization of e-learning technologies in teaching and learning of business education courses in universities in Kwara State.

Statement of the Problem

The world has advanced technologically and this is attributable to the influence of Information and Communication Technology particularly in the education sector. E-learning is fast becoming popular in instructional delivery methods, most especially in tertiary institutions in developed countries. In Nigeria, its usage as instructional method of teaching and learning needs to be emphasized in line with what is obtainable in other parts of the world (Ada, 2014). Over the years, studies have shown that educational programmes in Nigeria are yet to fully adopt the e-learning system of which Business education is not exempted. Aginam as cited in Uchendu (2012) reported that the level of application of ICT in Nigerian universities is less than five per cent.It is observed that there has been no comprehensive studyon awareness and utilization of e-learning technologies in teaching and learning of Business education courses in universities in Kwara State. In line with the above observations, the researcher was very inquisitive to investigate the awareness and utilization of e-learning technologies in teaching and learningof Business Education courses in universities in Kwara State. Theseissues in e-learning is obviously a problem which will necessitate the need to determine the awareness andutilization, possible benefits, problems and prospectsof e-learning technologies in teaching and learning of Business education courses in universities. It is against these reasons that this study was to determine the awareness and utilization of e-learning technologies in teaching and learning of business education courses in universities in Kwara State.

Purpose of the Study

The major purpose of this study is to determine the awareness and utilization of e-learning technologies in teaching and learning of business courses in Kwara state universities. Specifically, the study sought to:

- 1. Ascertain lecturers and students aware of synchronous e-learning technologies in teaching and learning of business education courses in universities in Kwara State?
- 2. Determine lecturers and students utilizing synchronous e-learning technologies in teaching and learning of business education courses in universities in Kwara State?

Research Ouestions

For the purpose of this study, the following research questions are formulated to guide the researcher.

- 1. To what extent are lecturers and students aware of synchronous e-learning technologies in teaching and learning of business education courses in universities in Kwara State?
- 2. To what levelare lecturers and students utilizing synchronous e-learning technologies in teaching and learning of business education courses in universities in Kwara State?

Research Hypotheses

The following hypotheses were formulated and tested.

H₀₁: There is no significant difference between the mean responses of the lecturers and students regarding the extent of awareness of synchronous e-learning technologies in teaching and learning of business education courses in universities in Kwara State.

 H_{02} : There is no significant difference between the mean responses of the lecturers and students regarding the level of utilization of synchronous e-learning technologies in teaching and learning of business education courses in universities in Kwara State

Methodology

The researcher used descriptive survey research design for the study. A questionnaire was used to collect data from the population who are located at various points in the study areas. Descriptive survey design gives the accurate assessment of the characteristics of the whole populations of people. It is also more realistic than the experiment in that it investigates phenomena in their natural setting. This research design also focused on people, their beliefs, opinions, altitude and behaviour. The population of the study comprised of business education lecturers and students in Universities in Kwara State. There are 38 lecturers and 262 students in Universities offering Business education in Kwara state as at the time of writing this report. The breakdown of the population of the study is given in table 1.

Table 1: Populations of the Study

S/N	Name of Inst. No.	of Students (200L-30	00L) No. of Lecturers	Total	
1	Kwara State University	70	10	80	
2	University of Ilorin	181	26	207	
3	Al-Hikmah University	11	2	13	
	Total	262	38	300	

Source: Departmental office of each University (2019).

The researcher used the entire population of three hundred (300) business education lecturers and students in all the three universities in the study area. The reason for this was because the population of the study is small, manageable and sizeable. Okoli and Ifeakor (2011) asserted that where the population of the study is small, the entire population can be used. A questionnaire developed by the researcher titled: 'Awareness and Utilization of E-learning Technologies in Teaching and Learning Questionnaire (AUETTLQ). The questionnaire was made up of questions arranged systematically based on the research questions to gather data from both students and lecturers of business education department in the (3) three universities in the area of the study. The questionnaire was divided into two sections of A-B. Section A consists of 10 items relating to extent of awareness of synchronous e-learning technologies in teaching and learning of business education courses in Universities in Kwara State. Section B consists of 10 items on the level of utilization of synchronous e-learning technologies in teaching and learning of business education courses in Universities in Kwara State.

Questionnaire items were developed with response categories as follows:

For section B and D		For section C and E	
High Extent	(HE)	Highly Utilized (HU)	
Moderate Extent	(ME)	Utilized (U)	
Low Extent	(LE)	Occasionally Utilized (OU))
Very Low Extent	(VLE)	Not Utilized (NU))

The reliability of the instrument was determined by the statistical analysis of the data collected from the pilot study. The split half method was used to determine the reliability of the instrument; the instrument was divided into halves of odd and even numbers. The spearman rank order correlation coefficient was used to calculate the reliability estimate of one-half (odd number) and spearman Brown prophecy formula was used to calculate reliability estimate of the instrument which was 0.78. Therefore, the instrument is reliable and stable. The data collected was analysed using frequencies and percentage for personal data of the respondents. Frequencies, percentage mean and standard deviation were adopted to analyse the research questions. Independent t-test statistic was used to test null hypotheses at (0.05) level of significance. The level of acceptance or rejection of each questionnaire items were determined based on the mean ratings of items interpreted relative to real limits of numbers as shown below:

Response Category	Rating	Real Number Limits
High Extent	4	3.5 - 4.00

AL-HIKMAH JOURNAL OF EDUCATION, VOL. 8, NO. 1, JUNE, 2021					
		E-ISSN 2705-2508			
3	3	2.5 - 3.49			
2	2	1.5 - 2.49			
1		1.0 - 1.49			
I	Rating	Real Number Limits			
4	_	3.5 - 4.00			
3		2.5 - 3.49			
2		1.5 - 2.49			
•	3 2 1 1	3 2 1 Rating			

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If the t-cal is therefore greater than critical-t (p<0.05) the null hypotheses was rejected, otherwise the null hypotheses was retained.

1.0 - 1.49

Results

Not Utilized

Research Question One: To what extent are lecturers and students aware of synchronous e-learning technologies in teaching and learning of business education courses in universities in Kwara State?

Table 2: Mean and standard deviation of responses on the extent of awareness of synchronous elearning technologies in teaching and learning of business education courses in universities

S/N	Item Statements	\overline{X}	SD	Remark
1.	Interactive whiteboard	2.64	1.11	Moderate Extent
2.	Video conferencing	2.77	1.09	Moderate Extent
3.	Chat room	2.71	1.16	Moderate Extent
4.	Live broadcasting	2.64	1.11	Moderate Extent
5.	Instant messaging	2.72	1.01	Moderate Extent
6.	Web conferencing	2.77	1.09	Moderate Extent
7.	VoIP (voice over internet protocol) Skype, video call, etc.	2.68	1.00	Moderate Extent
8.	Email	3.25	0.94	Moderate Extent
9.	Multimedia (computer, projector, mobile phone, etc.)	3.25	0.94	Moderate Extent
10.	Internet	3.25	0.94	Moderate Extent
Weig	hted average	2.87	1.04	Moderate Extent

respondents, N_s = Number of Student respondents

Table 2 revealed that the respondents indicated that they are aware of interactive whiteboard to moderate extent (mean = 2.64), the same way they are aware of video conferencing to moderate extent (mean = 2.77). In addition, the respondents stated that they are aware of chat room to moderate extent (mean = 2.71), and live broadcasting to moderate extent based on the responses of the respondents (mean = 2.64). the respondents also stated that they are aware of instant messaging as a synchronous e-learning technology in teaching and learning business education courses to moderate extent as perceived by both lecturers and students (mean = 2.72). Also, the respondents indicated moderate extent for web conferencing awareness (mean = 2.77) and Voice Over Internet Protocol (VOLP) to moderate extent (mean = 2.68). Same way they are aware of Email to moderate extent (mean = 3.25) and multimedia such

as computer, projector, mobile phone etc (mean =3.25 as well as internet to moderate extent (mean =3.25). All the 10 items have their standard deviation between 0.94 and 1.16 which are all below the fixed value of 1.96. This means that the responses of the respondents are not wide spread as it is close to the mean. With an average mean of 2.87, it implies that lecturers and students are aware of synchronous elearning technologies in teaching and learning of business education courses in universities in Kwara State. On the overall, all the constructs in Table 2 indicate awareness of synchronous e-learning technologies to a moderate extent by the lecturers and students in teaching and learning of business education courses in universities. This means that lecturers and students are aware of synchronous e-learning technologies in teaching and learning of business education courses in universities in Kwara State with average mean (mean = 2.87, SD = 1.04).

Research Question Two: To what level are lecturers and students utilizing synchronous e-learning technologies in teaching and learning of business education courses in universities in Kwara State?

Table 3: Mean and standard deviation of responses on the level of utilization of synchronous elearning technologies in teaching and learning of business education courses in universities

		$N_{\rm L}$	z = 37 an	$d N_s = 261$
S/N	Item Statements	\overline{X}	SD	Remark
1.	Interactive whiteboard	1.86	0.76	Occasionally Utilized
2.	Video conferencing	1.88	0.80	Occasionally Utilized
3.	Chat room	1.87	0.97	Occasionally Utilized
4.	Live broadcasting	1.78	0.86	Occasionally Utilized
5.	Instant messaging	3.22	0.89	Occasionally Utilized
6.	Web conferencing	1.71	0.83	Occasionally Utilized
7.	VoIP (voice over internet protocol) Skype, video call, etc.	2.90	0.96	Occasionally Utilized
8.	Email	2.90	0.96	Occasionally Utilized
9.	Multimedia (computer, projector, mobile phone, etc.)	2.90	0.96	Occasionally Utilized
10.	Internet	2.90	0.96	Occasionally Utilized
Weig	thted average	2.39	0.90	Occasionally Utilized

Source: Field Survey, 2019

Table 3 revealed that the respondents indicated that they occasionally utilize interactive whiteboard for teaching and learning (mean = 1.86), the same way they occasionally utilize video conferencing for teaching and learning (mean = 1.88). In addition, the respondents stated that they occasionally utilize chat room (mean = 2.71), and live broadcasting for teaching and learning business education courses based on the responses of the respondents (mean = 1.78). The respondents also indicated that they occasionally utilize web conferencing for teaching and learning business education courses (mean = 1.71). They also occasionally utilize instant messaging as a synchronous e-learning technology in teaching and learning business education courses as perceived by both lecturers and students (mean = 3.22). Also, the respondents indicated that they occasionally utilize Voice Over Internet Protocol (mean = 2.90). Same way they occasionally utilize Email, multimedia such as computer, projector, mobile phone etc., as well as internet for teaching and learning business education courses (mean = 2.90, 2.90, 2.90 respectively).

All the 10 items have their standard deviation between 0.76 and 0.97 which are all below the fixed value of 1.96. This means that the responses of the respondents are not widely spread as it is close to the mean. On the overall, all the constructs in Table 3 indicate utilization of synchronous e-learning technologies are occasionally utilize by the lecturers and students in teaching and learning business education courses in universities. This means that lecturers and students do not utilize the synchronous e-learning technologies in teaching and learning business education courses in universities in Kwara State adequately, with average (mean = 2.39, SD = 0.90).

Test of Hypotheses

The two null hypotheses of the study were tested using independent t-test to find the significant difference between the mean responses of lecturers and students. The null hypotheses were tested at 0.05 level of significance. The summary of the test of hypotheses are presented in Tables 4 and 5 as follows:

H₀₁: There is no significant difference between the mean responses of the lecturers and students regarding the extent of awareness of synchronous e-learning technologies in teaching and learning of business education courses in universities in Kwara State.

Table 4: Summary of t-test on the difference between the mean ratings of lecturers and students on the extent of awareness of synchronous e-learning technologies in teaching and learning of business education courses in universities

Group	N	Mean	SD	t-cal	Df	p-value	Decision	
Lecturers	37	2.46	0.15					
				11.06	296	0.000	S	
Students	261	2.93	0.25					

Source: Field survey, 2019 P<0.05 The data in Table 4 revealed that there are 37 lecturers and 261 students. The lecturers and students

response showed that the extent of awareness of synchronous e-learning technologies in teaching and learning of business education courses is moderate ($\overline{X} = 2.46$; SD = 0.15) and ($\overline{X} = 2.93$; SD = 0.25). Their response was close to the mean as the standard deviation is very low. The table revealed that there was significant difference between the mean responses of lecturers and students on the extent of awareness of synchronous e-learning technologies in teaching and learning of business education courses ($t_{296} = 11.06$, P<0.05). Therefore, the null hypothesis that states that there is no significant difference between the mean responses of the lecturers and students regarding the extent of awareness of synchronous e-learning technologies in teaching and learning of business education courses in universities in Kwara State was not accepted. This implied that lecturers and students differ in their responses regarding the extent of awareness of synchronous e-learning technologies in teaching and learning of business education courses. Their responses showed that students rated the extent of awareness of synchronous e-learning technologies higher than the lecturers did (mean difference = 0.47).

H₀₂: There is no significant difference between the mean responses of the lecturers and students regarding the level of utilization of synchronous e-learning technologies in teaching and learning of business education courses in universities in Kwara State.

Table 5: Summary of t-test on the difference between the mean ratings of lecturers and students on the level of utilization of synchronous e-learning technologies in teaching and learning of business education courses in universities

Group	N	Mean	SD	t-cal	Df	p-value	Decision	
Lecturers	37	3.45	0.17					
				15.28	296	0.000	S	
Students	261	2.24	0.47					

Source: Field survey, 2019 P<0.05

The data in Table 5 revealed that there are 37 lecturers and 261 students. The lecturers and students response showed that the level of utilization of synchronous e-learning technologies in teaching and learning of business education courses is low ($\overline{X} = 3.45$; SD = 0.17) and ($\overline{X} = 2.24$; SD = 0.47). Their response close to the mean as the standard deviation very low. The table revealed that there was significant difference between the mean responses of lecturers and students on the level of utilization of synchronous e-learning technologies in teaching and learning of business education courses ($t_{296} = 15.28$, P<0.05). Therefore, the null hypothesis that states that there is no significant difference between the mean responses of the lecturers and students regarding the level of utilization of synchronous e-learning technologies in teaching and learning of business education courses in universities in Kwara State was not accepted. This implied that lecturers and students differ in their responses regarding the level of utilization of synchronous e-learning technologies in teaching and learning of business education courses. Their responses showed that lecturers rated the level of utilization of synchronous e-learning technologies higher than the students did (mean difference = 1.21).

Discussion of Findings

Findings in Table 2 revealed that the lecturers and students are aware of synchronous e-learning technologies in teaching and learning of business education courses in universities in Kwara State with moderate extent. This finding as a result of improving e-learning technologies in schools has been a high priority in Nigeria, as in other countries of the world. This is in dissonance with the report of Ndinechi and Bupo (2015) which stated that in Nigeria, the integration of e-learning in Nigerian tertiary institutions has witnessed slow growth which may be as a result of mass unawareness.

Findings in Table 3 also revealed that lecturers and students occasionally utilize synchronous e-learning technologies in teaching and learning of business education courses in universities in Kwara State. This finding is in line with that of Bupo and Ndinechi (2015) which revealed that business education students often utilize e-learning in the educational process. This finding updates the findings of Ajadi, Salawu & Adeoye (2008) who, at the time of their research, argued that there was gross underutilization of e-learning in Nigerian tertiary institutions. The study also supports the finding of Nwagbo and Ugwuanyi (2011) cited in Agboeze, Ugwoke & Onu (2012) which lamented that the pace of development and utilization of e-learning technologies and application for educational purposes, including the teaching and learning of business education in developing countries like Nigeria, is still very low.

Furthermore, the first hypotheses (H_{01}) tested at 0.05 level of significance revealed that lecturers and students differ in their responses regarding the extent of awareness of synchronous e-learning technologies in teaching and learning of business education courses in universities. This study therefore updates the report of (Ndinechi & Bupo, 2015) which stated that in Nigeria, the integration of e-learning

in Nigerian tertiary institutions has witnessed slow growth which may be as a result of mass unawareness. The second hypotheses (H_{02}) tested at 0.05 level of significance revealed that there was significant difference between the mean responses of lecturers and students on the level of utilization of synchronous e-learning technologies in teaching and learning of business education courses.

Conclusion

The findings of this study have clearly shown that the success of the new technological methods of teaching and learning in the universities is largely determined by awareness and utilization of such technologies. If nothing is done to make both lecturers and students 'aware and utilize e-learning technologies, our educational system will still remain standby and won't meet up with the trends in education. E-learning environments play an important role in helping tertiary institutions to optimize the benefits of globalization. This will expand the capacity of business courses and business educators to continue to fulfil their mission which includes the training of necessary manpower to meet up the current needs of the labour market. However, it is appropriate to say that e-learning has come to stay under the preview of business education and the only option is to embrace it. Therefore, it was concluded that lecturers and students are aware of synchronous e-learning technologies but often utilized them in teaching and learning of business education in universities in Kwara State. These e-learning technologies have positive influence on the academic performance of the students offering business education. Since, this is the case; it means that there is hope that academic performance of the students can still be improved if lecturers adopt the usage of relevant technologies in teaching and learning of business education. This will in turn reposition the educational system of the state, and the country at large and also go a long way to help both lecturers and students to acquire relevant 21st century skills to be successful in the present technology driven economy.

Recommendations

Based on the findings of the study and the conclusions derived from the study, the following recommendations were made;

- 1. The management of tertiary institutions should introduce platforms for e-learning usage. Such platforms, like learning management systems, open courseware. This will create the opportunity for administration, documentation, examination, feedback, giving and reporting of classroom and online events.
- 2. Business education lecturers should apply different forms of e-learning methods in their teaching so as to make students competent in the awareness and use of synchronous e-learning modules.
- 3. Lecturers and students should be sensitized through seminars and workshops on the need to maximally utilize available e-learning technologies in tertiary institutions.
- 4. Stakeholders in education, such as Ministry of Education and non-governmental agencies should formulate, legalize and implement specific ICT policies on e-learning technologies to enable the Nigerian tertiary educational system to fast-track socio-economic transformation of Nigeria as encapsulated in the Vision 20:20 documents.

References

- Ada, A. (2014). Assessment of availability and utilization of e-Learning technologies in business Education programme in tertiary institutions in Delta State. (M.Sc. Project), Delta State.
- Ajadi, T. O., Salawu, I. O. & Adeoye, F. A. (2008). E-learning and distance education in Nigeria. *Turkish Online Journal of Educational Technology*, 7(4), 1-7.
- Ambrose, S.A., Bridges, M. W., Dipietro, M., Lovett, M. C. & Norman, M. K. (2010). How learning works: seven research-based principles for smart teaching. Nigeria.
- Agboeze, M. U., Ugwoke, E. O., & Onu, F. M. (2012). Utilization of e-learning technology resources in accounting education instructional delivery methods in Nigerian universities. *International journal of educational research*, 12(1), 26 38.

- Edmund, N. & Flanders, A. (2001). *The roles of the Teacher in classroom*. Minneapolis: Paul Amidon and associates.
- Federal Republic of Nigeria. (2004). *National Policy on education*. Lagos: Revised, NERDE Press and management of Higher Education in South East European, Bucharest, UNESCO.
- Gage, N. L. (2003). The handbook of research on teaching. Chicago, IL, USA: Rand McNally.
- Ipaye, B. (2011). *E-Learning in a Nigerian open university*. Retrieved on June 16, 2011, from http://linc.mit.edu/linc2010/proceedings/session1Ipaye.pdf
- Markus, B. (2008). Thinking about e-Learning sharing good practices: E-learning in surveying, geo-information Sciences and land administration. FIG International Workshop 2008 Enschede, The Netherlands, 11-13 June 2008
- Ndinechi, G. I., & Bupo, G., O. (2015). Awareness of e-learning among business education students in Anambra State tertiary institutions. *International Journal of Educational Research and Development*, 5(1), 101 108.
- Nwagbo, C. R., & Ugwuanyi, C., S. (2011). Assessment of the level of lecturers' information and communication technology (ICT) competence for the adoption of e-learning in Nigerian universities. *International Journal of Educational Research*, 11(1) 39 47.
- Nworgu, B. G. (2006). *Educational research: Basic issues and methodology* (2nd Edition), Nsukka University Trust Publishers.
- Okoli, J. N. & Ifeakor, A., C. (2011). Appraisal of utilization of e-learning technology in science teacher's preparation: A study of universities in South East Nigeria. *Orient Journal of Education*, 6(1 & 2), 136 144.
- Okure, S. J. (2008). Using e-learning (of ICT) technologies: Towards sustainable development in Nigeria. In J. Babalola, S. Akpa, O. Hauwa, & A. Ayeni, (Eds.): *Managing education for sustainable development in developing countries.* (303) Ibadan: Nigerian Association for Educational Administration and Planning (NAEAP).
- Olumese, H. A., (2008). Information and communication technologies and business education development in Nigeria. *Technical and Vocational Education Journal*, 1(2), 56 62.
- Onojetah, S. O., (2010). Towards funding research in business education in Nigeria. *Book of Reading in Business Education 1(10)*, 17-23.
- Osuala, E. O. (2005). *Introduction to research methodology* (3rd ed.) (pp. 218-235). African FepPublishers Limited.
- Uchendu, C. C. (2012). Information and Communication Technology (ICT): A modern tool for educational management in Nigerian Universities. *Journal of African Studies in Educational Management and Leadership*, 2(1), 7-15.