

E-LEARNING AND EDUCATIONAL DEVELOPMENT IN NIGERIA: THE CHALLENGES AND PROSPECTS

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Abstract

The development of Information and Communication Technology (ICT) in administrative, education and production activities has advanced the viability of teaching and learning all over the world. This creates opportunity for the advancement of the educational sector and improvement of the socio economic system of the state. Different technological facilities have been made available for use in the teaching and learning process, although not without its challenges to the teaching and learning process. This study therefore examined e-learning and educational development in Nigeria. The main objective of this study is to examine the implications of the use of e-learning in educational development, as well as its challenges and prospects in Nigeria. The study adopted survey research design with the use of purposive sampling techniques to generate the sample for the study. The study made use of primary data from questionnaires and secondary data from journals, textbooks, ICT reports etc,. The primary data generated was analyzed with the use of statistical tables and criterion mean based on the four-point Likert rating scale. The systems theory was used as a framework for the study. The study conceptualized the issues of e-learning, and educational development. The study identified inadequate budgetary provisions, poor technological infrastructure and lack of government commitment to technological advancement etc., as some of the challenges of digital learning in Nigeria; and finally the study made some recommendations such that there is need for government and internet service providers to collaborate in order to solve some challenges associated with internet connectivity in Nigeria, government should encourage ICT companies in Nigeria to develop software and other applications needed for e-learning to be produced locally, government should provide the needed infrastructures to facilitate e-learning at various levels of the educational system in Nigeria, etc.

Keywords: E-learning, Educational development, Challenges, Prospects, Communication.

Introduction

Education is seen as one of the means or ways of transferring the beliefs and other ways of life of a people from one generation to another over the years. It is also a way through which a people can learn new ways of life, attitude, and tradition in a bid to further develop themselves and as well remain relevant in the present world. As one of the oldest industry and sector in the society, education is that tool which helps society to preserve, maintain and upgrade its social equilibrium (Ogbaji, 1996). This is as a result of its usefulness to man in general since the dark ages of the society. Fafunwa (1974) defines education as the different activities which each generation pass to their younger ones which in turn help them gain new attitudes, capabilities and norms which comprises the basic values in the society they live in. To Orji and Job (2013) education is basically adopted to develop the cognitive, psychology and psycho productive domains of human beings. This means that it is an approach through which learning takes place. Education is therefore a process by which a person can develop new skills and qualities. It is therefore apt to note that learning process can take place in any environment whether formal or informal in as much as new ideas, feelings, activities will be learnt. The growth and development of any society reflects the level or quality of education which the people access and which to a large extent influence them. Article 13 of the United Nations 1966 International Covenant on Economic, Social and Cultural Rights recognizes a universal right to education. By this, all nation state party to this covenant is shouldered with the task of providing quality and accessible education to their people.

The government of Nigeria on 29 July, 1993, became a signatory of this covenant with a promise to promote education advancement in Nigeria. A society that prioritizes education is bound to excel in all other sector of the society and this is based on the fact that education is the bed rock of any society. Every other unit of the society anchors on the educational sector to survive. But, the Nigerian society has been struggling in one way or the other to develop and advance the educational sector at different point in time which has led to the establishment of different policies in order to advance education in Nigeria. However, in many coastal areas, students find it difficult to access education because of the poor infrastructural facilities available for learning to take place and this has brought about slow rate of educational development. In October 2018, Dr. Hamid Bobboyi, Executive Secretary of the Universal Basic Education Commission (UBEC), stated that the number of out-of-school children in Nigeria has climbed to 13.2 million from 10.5 million (Joseph, 2018). Additionally, UNESCO estimates that an estimated 1.725 billion learners have been impacted by school cancellations as a consequence of the new corona virus pandemic outbreak in December 2020, representing about 99.9 percent of the world's student population as of April 13th, 2020. (UNESCO, 2020).

Arising from the above, it becomes apt that Nigeria fully adopts the different channels of e-learning so as to help advance and develop the standard of education to the level experienced in other advanced societies of the world. With the growth in Information Communication Technology (ICT) there is need for us to advance our education through e-learning channels. Adeyinka and Olusola (2009) added that the adoption of ICT enhances the learning processes, organisational structure, and administration of educational institutions. And that the internet is seen as a strong force that has contributed significantly to the advancement of development and new practices.

Information Communication Technology avails Nigeria the opportunity to enhance their education by picking from different e-learning channels available to them. To Fry (2001), e-learning is the manipulation of the internet or any other technology to develop learning packages, transfer knowledge to learners and also monitor the activities of organizations. E-learning helps educationist and students alike to use information and communication technology to enhancing the exchange of knowledge between teachers and learners at all levels, and that constitutes a huge stride.

Also, with the availability of e-learning platform, it will be possible to defeat the challenges of learning such as distance, huge cost of education and it will enrich academic content and learning materials will be easily accessible especially within this covid-19 era. In quest to achieve proper educational development and research advancement, it becomes imperative for the Nigerian government to adopt e-learning mechanism and other technological platforms in a bid to enhance the learning process and standard of students in her academic institutions. However, it appears in academic institutions in Nigeria have a lot of challenges facing the use of e-learning in the educational development of the nation Hence, the essence of this study is to understand the role of e-learning in the development of education in Nigeria as well as its challenges and prospects.

Research Questions

1. What are the possible challenges affecting the use of e-learning mechanisms in educational development in Nigeria?
2. What are the prospects of using e-learning platforms in educational development in Nigeria?

Objective of the study

The main objective of this study is to examine the implications of the use of e-learning in educational development, as well as its challenges and prospects in Nigeria.

Scope of the study

The time frame of this study is 2000 – 2021. The choice of this period is to explain the issues of e-learning and its implications in the educational system of Nigeria in the post Covid 19 era. The geographical area of the study covers Abia state, Ondo State and Rivers State, Nigeria. The basic variable of this study is e-learning, education and educational development.

Literature Review

E-learning

The growth in Internet activities and technology has brought about different channels to make available resources for research and learning for both instructors and learners at different levels so as to help in sharing of information (Richard & Haya 2009). As the world advances in technology, there are innovations which help both learners and educators to interact and share knowledge at their convenience.

The concept of e-learning according to Oblinger & Hawkins (2005) has no one globally or generally acceptable definition. But from whatever perspective you define e-learning, it connote the activities or interactions that take place without necessarily bringing learners and instructors together physically. Holmes and Gardner (2006) also confirm that the concept of

e-learning has being explained by different scholars with different academic explanations given to the concept. To Fry (2001), e-learning is the manipulation of the internet or any other technology to develop learning packages, transfer knowledge to learners and also monitor the activities of organizations. Rossi (2009) sees e-learning as that which covers wide range of applications, learning methods and processes that can be adopted for virtual learning to take place. Arising from the above definitions, we can say therefore, that e-learning is a computerized instructional medium which enables learning to take place at any given point in time in any selected location without out any hindrance.

In today's digital age, learning mostly take place via the internet, unlike what happened in the early days of man where people must assemble together physically before exchange of ideas could take place. According to scholars like Oblinger & Hawkins (2005) e-learning has evolved from a fully-online learning to using technology in delivering courses in part or full not minding the time and place. Meaning, with the availability of technological devices and gadget, learning can take place at any point in time. Distance to learning is no longer a barer as scholars can now access learning aids prepared and uploaded online by their teachers. Abad et al., (2009) defined e-learning as any learning that is enabled electronically. E-learning activities usually take place via electronic channels such as radios, televisions, computers, ipad, podcast etc. For them, e-learning constitutes any learning that is empowered by the use of technology to promote leaning activities.

Also, Gotschall (2000) posits that e-learning came into existence because of distance learning activities. Therefore it is the transfer of knowledge from one point to another distant or closed location by way of video or visual presentations. This paper therefore, aligns with the definition given by Wentling et al., (2000) which state that e-learning is that type of learning that is basically generated and distributed via any electronic means. To them, e-learning takes place via digital computers and other electronic connections; but it is likely it will evolve into different systems made up of different channels such as wireless and satellite, and technologies such as cellular phones.

From the above, e-learning channels comprises but are not restricted to the use of radios, televisions, computers and other gadgets in the transmission of learning activities from one person to another at different locations. However, Liu and Wang (2009) assert that the advancement of communication technology, notably the internet, has resulted in the transformation of remote learning into e-learning. The model adopts different educational technologies that help in the improvement and development of education standard globally and therefore will help in the educational sector in Nigeria because it avails students and lecturers the opportunity of familiarizing with latest technologies.

Educational Development

Todaro and Smith (2011, p.359) argue that education is a component of development since it is critical for the development of human ability, research, and development, all of which contribute to social progress. Education is critical for the growth of every civilization since it enables individuals to acquire a variety of abilities. There is therefore the need to develop the Nigerian education sector so as to compete with other advanced nations of the world. Educational development is the process of helping those who teach to get better understanding of what they do through workshops or other avenues.

Educational development comprises the advancement of every aspect of the academic sector in any society. It covers the development of teachers, students and every actor in the educational sector. It also looks at the *modus operandi* of the different educational institutions; their teachings contents, their research methodology, their mediums of teaching and how well the students are captured. Kremer (2003) posits that investment in education is a vital tool for development as a result of the different roles it plays in social cum economic development. Educational development has positive effects on both the economy, human capital and other sectors of the society. Todaro and Smith (2011) think that education improves individual by allowing them to read, communicate, argue, and make better informed choices, as well as being taken more seriously by others. Education include improved decision-making, increased involvement in the political process, and beneficial spillover effects on others who work with the educated individual. As a consequence of this rise in human potential, education is an important area to address due to the critical role it plays in society and its critical role at the core of development.

To Asiegbu et al., (2021) educational development is very important in every society, reasons being that when people are educated and aware society experience rapid development which opens doors and expands opportunities and freedom. Educational development also comprises of the drafting of good educational policies that will help in standardizing the sector for better performance. When government comes up with the right policies, it encourages the advancement of the educational sector. Educational development gives room for the purchase of the requisite tools for instructors and learners to meet with the introduction of technology and others like moral, cultural values in schools so as to help improve the standard of education.

E-Learning and its prospects in educational development in Nigeria

The Nigerian education sector was designed to take care of the needs of every student. The Nigerian curriculum of education emphasized the use of both technology and other formal education learning process that is required to meet educational need of the students in the 21st century. The continuous growth of multimedia and other internet learning mediums for passing knowledge has brought about a paradigm shift in traditional ways of teaching (Wentling et al., 2000). With the wave of technological advancement spreading rounding the globe via technological advancement, educationist and others now has teaching and learning mediums. Almost every school and educational institution has realised the potential for e-Learning to alter individuals, their knowledge, skills, and performance (Henry, 2001). With the outbreak of the novel Corona virus in December 2020, many Nigerian institutions are gradually adopting different e-learning strategies in other to keep their students going. The Federal government through the Ministry of education instructed all schools to key into their e-learning platforms so as to continue with the academic calendar even as the pandemic continues to ravage the world and Nigeria (Adedigba, 2020).

The use of e-learning has become necessary in Nigerian so as to enable educationist and students advance our system of education from analog to digital mediums of learning. With e-learning comes the opportunity to switch from the analog system of teaching to a more digitalized pattern of teaching. This is because with e-learning, institutions will initiate several positive changes that will develop the system. The use of E-learning in education,

especially for tertiary institutions has several benefits, and thus it is considered among the best mediums of education.

Different scholars like Orji & Job (2013) states that any society that deploys the use of e-learning channels in their education sector will derive huge societal benefits. Society in general will grow fast and the people will be driven by technological changes advancement that comes with it. The flexible nature of e-learning gives everyone privilege of choosing the point where learning can take place. When students learn at their convenience, it gives them the chance of improving their learning speed thus, instructors and students need not meet physically before learning can take place. Mba (2019) asserts that a strong primary school education is critical for a country's economic success. However, due to a lack of technical infrastructures in Nigeria, the number of public elementary schools and instructors available for basic education are both grossly insufficient. This is aggravated further by the deplorable state of many higher and elementary schools' infrastructures. In 2018 World Bank assessment of 435 private and public postsecondary and elementary schools in Nigeria, which included 2,968 instructors, some teachers missed nearly 25% of planned teaching time. As a consequence of the inadequate learning environment, this reduced instruction time by an average of less than 33%. (Mba, 2019).

Most Nigerian academic institutions are crowded and over populated. This situation affects both the instructors and learners as learning might not be effective. There will be too many distractions affecting the learning process but e-learning is flexible enough to capture everyone from their different positions with all achieving the essence of learning. Smedley (2010), states that e-learning avails both institutions and learners the much flexibility of learning at any point and time of the day effectively without physical distraction. Education will become more flexible and accessible by all in Nigeria when e-learning is adopted. Another problem we face is that most times researchers and students find it difficult to access needed information or documents to enhance their study. When institutions adopt e-learning, it will enhance the standard of learning as people can now access different learning information from where ever they are. More so, students can carry out research and development studies which will in turn translate to national advancement and growth of both the economic and political sectors of the society.

E-learning create avenue for discussion between learners and teachers. It therefore helps in eliminating different barriers in learning this is because it promotes academic engagement between student's teachers. With the use of e-learning research students exchange ideas and share their views on different phenomenon. The use of e-learning for teaching will help reduce the work load from our teachers. The system of learning in Nigeria is built in such as way that the teachers play about 80% roles in the learning process of the student. But with e-learning, the student is given the chance to build themselves better. It gives them the confidence that they can fit into the society. It prepares the learners for the journey of life. To Wagner et al. (2008), e-Learning provides additional opportunities for interaction between learners and instructors throughout material delivery.

E-learning saves cost for students. It breaks the distance barriers for students who wish to travel long distance in other to access education. As students can have access to the internet at their convenience. A Report given by Al Jazeera in 2018 revealed that millions of Nigerian

students had no access to their class rooms because of the ongoing Boko Haram attacks. This is because about 1,400 school buildings in Borno have been brought down by the insurgent's eight-year rebellion with more than 50 percent learning centers unable to open due to danger and the unsafe nature of the environment (UNICEF report, 2007). In situations as this, the government can use any of the e-learning mediums to teach the reach and teach school children so as to keep the school calendar running amidst the war Attacks. Therefore students need not gather physically to learn but can do same virtually. Also, e-learning accommodates a higher number of students on course of the learning process. With the availability of internet services, computers can be inter-connected at different point for learners to learn from. E-learning also accommodates the learning pace of every students and this is because students have opportunity to be taught according to their understanding. With the availability of recorded voice lessons, PDF documents, video teaching aids, students can learn again and again unlike the conventional pattern where the teacher gives room for questions only after the topic or class is ended. It can also help the government in times of shortage of academic manpower.

Theoretical framework

Systems Theory

The systems theory in political science is credited to David Easton, who is credited with attempting to understand politics from a systems approach in his 1953 book political system. His study, which is credited with laying the groundwork for the behaviourist revolution in political science, established eight distinct traits. He defined a political system as an interaction that happens in every community and is used to make and execute authority allocations in the form of policies and decisions. The system theory views society as a system composed of distinct sub-units that work together for the greater good of the whole. System theory makes use of a variety of ideas, including inputs (demands), values, outputs (decisions), feedback loops, and the political context. To systems theory, public policy is defined as the political system's reaction to external pressures. The political system is comprised of those institutions that exercise authoritative authority over the society's values, such as the economic, social, cultural, and international systems that form political processes and are impacted by them.

By using a systems approach, it is considered that public policy and environmental factors are in a state of interaction (Abdulsalami, 1987). When studying this research, we refer to Nigeria as a system comprised of several subsystems, including the economy, religion, politics, culture, and education. For there to be educational development with the application of e-learning, every other unit of the society must function adequate because there is interdependence amongst the sub system. The economy as a sub system must thrive so as to provide the financial requirements for e-learning to take place. There must be political will by government to implement the e-learning policy. For e-learning to therefore be adopted, there must be an agreement between the political system and every other sub unit of the society by them working together to have a paradigm shift from analog to digital learning process. If this doesn't happen, the use of e-learning as a means of teaching will continue to witness the identified challenges.

Methodology

The population of this study is the entire staff and students in universities in the 36 States of Nigeria. Although, sample size is drawn from three (3) states, namely Abia in South East Nigeria, Ondo in North West Nigeria and Rivers in South-South Nigeria. The sample sizes were purposively selected from the staff and students in the three identified states in Nigeria based on their knowledge e-learning and educational development in Nigeria. Crossman (2020) argued that purposive sampling is a non-probability sampling that is selected based on the character of a population and the objective of the study. The study administered 300 questionnaires to staff and students in universities within the three selected states with a total of 18 questionnaire items raised on the subject matter. Both Primary and secondary data were used to achieve the objectives of the study. The primary data generated from the respondent's responses were analyzed with the use of statistical tables and criterion mean based on the four-point Likert rating scale. Also, Likert scale method (on a 4-point scale) was used to generate the mean and the standard deviation. The results of the analysis were used to agree or disagree with the questionnaire items of the study. A criterion mean is determined as follows: SA= 4; A = 3; D =2; SD = 1

$$\text{Hence; criterion mean} = \frac{\text{Weighted total}}{\text{Sample size}}$$

And;

$$\text{This } \frac{4 + 3 + 2 + 1}{4} = \frac{10}{4} = 2.5$$

Hence, the sum of the scores is divided by the total number of options, thus 2.5 becomes the criterion mean. Any questionnaire item that has a mean score which is below 2.5 is regarded as negative and therefore disagreed, while any mean from 2.5 and above is regarded as positive and therefore agreed. The secondary data were collected from journals, newspapers, online materials, and textbooks bothering on the subject matter and analyzed with the use of content analysis.

Data presentation and discussion of findings

Table 1: Questionnaire Distribution

S/N	Sampled Universities	State/ Region	Number of Questionnaires Distributed.	Number of Questionnaires with errors	Number of Questionnaires Retrieved without errors and were used
1	Abia State University, Uturu	Abia (South East)	100 copies	20	80 copies
2	Ondo State University of Science and Technology, Okitipupa	Ondo (South West)	100 copies	10	90 copies

3	Rivers State University, Nkpolu	Rivers (South-South)	100 copies	12	88 copies
	Total		300	42	258

Source: Field Work, 2022

From the table 1 above, it is clear that the study selected one university each from form three geographical regions within Nigeria.

The universities are Abia State University, Uturu, Ondo State University of Science and Technology, Okitipupa and Rivers State University, Nkplou-Oroworukwo. Each of the universities were sampled, and 100 copies of research questionnaires were administered to each of them, totaling 300 copies of the questionnaires administered for the study. A total of 258 copies of the questionnaire were retrieved successfully and used for the study. This represents 80 copies from Abia State University, Uturu, 90 copies from Ondo State University of Science and Technology, Okitipupa and 88 copies from Rivers State University, Nkpolu. This implies that a total of 42 copies of the questionnaires were not retrieved and were not used for the study.

Research Question 1: What are the possible challenges affecting the use of e-learning mechanisms in educational development in Nigeria?

To answer the research question one above, data were collected from the respondents' responses on the possible challenges affecting the use of e-learning mechanisms in educational development in Nigeria as shown in table 2 below.

Table 2: Respondents' responses on the possible challenges affecting the use of e-learning mechanisms in educational development in Nigeria

S/N	Possible challenges of e-learning in Nigeria	SA	A	D	SD	TOTAL	MEAN	DECISION
1	Inadequate budgetary provisions	78 (312)	95 (285)	26 (52)	59 (59)	258 (708)	2.74	Accepted
2	Weak network services	89 (356)	69 (207)	23(46)	77 (77)	258 (686)	4.0	Accepted
3	Poor educational curriculum and content	96 (384)	67 (201)	39 (78)	56 (56)	258 (719)	2.78	Accepted
4	Lack of students commitment to learning process	29 (116)	62 (186)	98 (196)	69 (69)	258 (567)	2.19	Rejected
5	High cost of data and poverty	98 (392)	66 (198)	25 (50)	69 (69)	258 (664)	2.57	Accepted
6	Lack of government commitment to technological advancement	70 (280)	96 (288)	32 (64)	60 (60)	258 (692)	2.68	Accepted
7	Poor technological infrastructure	83 (332)	82 (246)	36 (72)	57 (57)	258 (707)	2.74	Accepted
8	Inadequate power supply	79 (316)	88 (264)	31 (62)	60 (60)	258 (702)	2.72	Accepted

Source: Field work, 2022

Table 2 above had eight (8) questionnaire items on the subject matter and was interpreted based on the frequency of the respondents' responses with different degree of mean score on each as discussed below.

The result from table 2 above shows that the use of e-learning mechanisms and its platforms for the development of education in Nigeria is faced with a lot of challenges. Data gathered shows that the sampled respondents accepted research questionnaire items numbers 1 which has inadequate budgetary provisions with a mean frequency of 2.74. What this means is that over the years the Nigerian government has not made sufficient financial allocation towards the educational sector and this hampers the efficient use of e-learning for educational development in Nigeria. More so, respondents accepted items number 2 with a mean score of 4.0; items number 3 with a mean frequency of 2.78 but rejected item number 4 with a mean frequency of 2.19 which is below the 2.50 criterion mean standard. What this means is that weak network services and poor educational curriculum and academic content all pose as challenges to the use of e-learning mechanism in our universities. Olunloyo (2002) stated that one of the challenges confronting the use of e-learning and educational development in Nigeria is poor design of appropriate curriculum for technological education in Nigeria and the high rate of theoretical teachings and less of practical's in our universities. Furthermore, respondents accepted questionnaire items number 5 with a mean frequency of 2.57, questionnaire items 6 with a mean frequency of 2.68, questionnaire items 7 with a mean frequency of 2.74 and questionnaire item number 8 with a mean score of 2.72. It is important to note that all of the mean frequencies in item numbers 1,2,3,5,6, 7 and 8 went above the 2.50 criterion mean standard meaning they are all accepted.

Research Question 2: What are the prospects of using e-learning platforms in educational development in Nigeria?

To answer the research question two above, data were collected from the respondents' responses on the prospects of using e-learning platforms in educational development in Nigeria as shown in table 2 below.

Table 3: Respondents' responses on the prospects of using e-learning platforms in educational development in Nigeria?

S/ N	Prospects of technical education on educational	SA	A	D	SD	TOTAL	MEAN	DECISION
9	E-learning has no prospects in Nigeria	30 (120)	50 (150)	92 (184)	86 (86)	258 (540)	2.09	Rejected
10	E-learning promotes sustainable educational development	88 (352)	79 (237)	25 (50)	66 (66)	258 (705)	2.73	Accepted
11	E-learning has the capacity to improve general academic development	91 (364)	89 (267)	21 (42)	57 (47)	258 (720)	2.79	Accepted
12	E-learning cannot help to identify academic inadequacies	84 (336)	92 (184)	23 (46)	59 (59)	258 (625)	2.42	Rejected

13	E-learning supports technological advancement	96 (384)	67 (201)	39 (78)	56 (56)	258 (719)	2.78	Accepted
14	E-learning reduces financial burdens	93 (374)	85 (255)	30 (60)	50 (50)	258 (739)	2.86	Accepted
15	Guarantees learning flexibility at any time	81 (324)	96 (288)	20 (40)	61 (61)	258 (713)	2.76	Accepted
16	Eliminates different educational/ academic barriers	79 (316)	88 (264)	31 (62)	60 (60)	258 (702)	2.72	Accepted
17	Promotes scientific research and development	98 (398)	79 (237)	31 (62)	50 (50)	258 (741)	2.87	Accepted
18	Enrich academic content and learning materials	70 (280)	96 (288)	32 (64)	60 (60)	258 (692)	2.68	Accepted

Source: Field work, 2022

Table 3 above had ten (10) questionnaire items on the subject matter and was interpreted based on the frequency of the respondents' responses with different degree of mean score on each as discussed below.

Results from the table 3 above; shows that respondents rejected questionnaire items number 9 which has e-learning has no prospects for educational development in Nigeria with a mean score of 2.09 because it is below the 2.50 criterion mean standard. This proves that respondents understand the benefits and opportunities that come with the use of different e-learning platforms for educational development in Nigeria. Akpan (2002) opines that e-learning state provides the necessary knowledge, skills and competencies needed for educational research and development. What this means is that e-learning will serve as a path way to unearthing the innovative attitude of the Nigerian students. Furthermore, respondents accepted questionnaires item 10,11,12,13,14,15, 16, 17 and 18 with mean frequencies all above the 2.50 criterion mean standard. The results means that to a large extent, e-learning promotes sustainable educational development, scientific research and development and guarantees learning flexibility at any time while expanding the educational horizon of Nigerian students and their ability to become innovative especially in the Aftermath of the Covid 19 era when nations of the world are coming up with strategies to overcoming the catastrophe caused by the pandemic.

Conclusion

With the emergence and spread of information communication technology (ICT)round the globe, educational sector have the opportunity of improving for the better. Technological facilities have been made available for use in the teaching process. We now have different mediums of e-learning which we can use in teaching and learning at our own convenience. The use iPad, radios, computers, television and the internet for e-learning is a welcome development. For education to advance in Nigeria, it is time we switch fully to the use of e-learning materials and mediums in our institutions. Our educational institutions must be encouraged to adopt the electronic ways of teaching in this 21st century like it is done in advanced nations.

In advanced nations, students need not meet physically with their lecturers in order to hold classes. And this has reduced academic corruption and inefficiency in their system. Nigeria can adopt these mediums as it will help in advancing our system by way of getting students and teachers more engaged, management can monitor academic performance directly without bias, students can learn and improve at their pace, academic management, it can as well save cost for government and school owners. E-learning to Zeitoun (2008) helps different societies to interconnect globally so as to make for a better learning process. With the availability of different technological gadgets, people now have the opportunity to access the internet to gather information. Nigeria has a lot to gain if and when we adopt e-learning into our educational system. This is because it will open up Nigeria to connect with other advanced nations of the world and thereby bringing about continuous development.

The benefits of electronic learning mediums abounds and they have proven to be of help in the present and ever changing world and in the educational sector. Electronic learning process when opted, will prepare Nigeria to compete with others in the world.

Recommendations

The study made the following recommendations;

- i. Access to data is key for e-learning to succeed in Nigeria. Telecommunication service providers must reduce the cost of purchasing data and if possible provide students with free access data and codes to educational sites in order to encourage them. The government should as well subsidize the purchase of data to enable students enjoy the internet.
- ii. For e-learning to be effective, there must be collaboration between government and telecommunications providers in solving some challenges associated with internet connectivity. Government must encourage ICT companies in Nigeria to develop software and other applications needed for e-learning to be produced locally. This is because foreign soft wares and applications like Blackboard Learn, Canvas, Moodle, CertCentral and others can be said to be expensive.
- iii. Government must build on infrastructures. For e-learning to succeed the nation must improve in infrastructures like power supply. The power companies must improve in the supply of electricity. Network providers must also improve in their service provisions. Poor network affects digital services therefore telecommunication providers must up their game and endure adequate service delivery both in the cities and at the coastal areas.
- iv. There must be commitment by government. The government must have strong political will to implement electronic learning into our institutions. This political commitment will encourage them to make financial commitments towards the success of e-learning. Students from primary to tertiary institutions must be taught how to use smart gadgets for learning. They must be given orientations on how to surf the internet for educational materials.

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