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## E-LEARNING/ICT AS CONTEMPORARY ISSUE IN HIGHER EDUCATION IN NIGERIA: A REVIEW

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### **ABSTRACT**

*E-learning and Information and communication technologies (ICTs) have become vital elements in every aspects of human endeavor. This computer technology has fundamentally changed the activities and principles surrounding almost every forms of endeavor within business, governance, civil service, and NGOs. Transparency and swiftness have been guaranteed in many business transactions due to ICTs. The advent of multimedia technologies and the internet in teaching and learning has been identified as a medium for enhancing accessibility and quality of knowledge transfer between the teacher and learner especially in the higher educational system in Nigeria. E-learning in conjunction with ICTs has become new paradigm shift in educational sector for the goal of advancing the knowledge base. Though, the developed world has long embraced this technological advancement, but as it is commonly said: 'better to be late than never', the developing countries have followed suit since the beginning of 21st Century. The applications and benefits of e-learning/ICTs in the tertiary education institutions in Nigeria cannot be overemphasized. Globally, there has been many literatures on the use of e-learning/ICTs, the aim of this paper is to review the introduction of e-learning/ICTs in Nigerian educational institutions, the advantages and disadvantages, as well as the constraining/challenging factors affecting the adoption. This paper further recommended the best ways forward for a totally sustainable e-learning/ICTs development in Nigeria higher educational system.*

**KEY-WORDS:** *E-learning, ICTs, educational sector, tertiary education, Nigeria.*

## INTRODUCTION

The importance of education to human being cannot be over-emphasized. Education is a human right that should be provided to all human beings solely by reasons of being human. The need for higher education is partly since those with higher education qualifications have a better chance of securing a job in a tough market compared to those without higher educational qualifications. The delivery of education in Nigeria has suffered from frequent strikes staged by students, faculty and teachers. Much of the difficulty lies in the fact that the sector is poorly funded by the Federal, State, and Local Governments. These results in shortages of materials and human resources for education: lack of qualified teachers; a brain drain; few instructional inputs; and libraries. The physical conditions of most schools are also unconducive for proper teaching and learning. However, there are many contemporary issues in Nigerian higher education including technology (especially e-learning/ICT), social vices, economic issues, and so on but this paper will focus on e-learning/ICT. Prior to discussion on the e-learning/ICT and how it affects higher education in our country, this work will briefly define and highlight some related concepts in education. These are definitions and concepts of education, higher education, goals of higher education in Nigeria.

## DEFINITION OF EDUCATION

Education concerns the individual and society. It is the act of systematic development or training of the mind, capabilities or character through instruction or study. Education varies as widely in its forms, philosophy, contents and methods as there are different societies in the world.

Education is a life- long process that has interpretation in purpose, type and level. It is a means of socializing people into the community, for upholding customs and traditions as well as for the modification or changing of same in conformity with existing ideologies, ideological expansion or reformation.

According to Udokang(2006), Education is the provision of opportunity for a child to realise his/her potentials, goals and abilities in life. Education includes the acquisition skills, moral identity, and attribution to succeed in life and thereby improve the society.

Fareo,(2012). The yearnings need aspirations as well as the cultural heritage and environment of any society determine, to a large extent the kind of knowledge and skills to be acquired (Adebosin,2004) The National Policy of Education (2004) states that education has been adopted as instrument per excellence for effecting national development.

Education is an instrument for effecting national development. Education can be defined as a production of knowledge of peoples' ways of life (i.e. their culture) with the aim of preserving and maintaining the social structure that will be able to guarantee social order and changes in the society.

### CONCEPT OF HIGHER EDUCATION

The definition of higher education differs according to the context. Almost all definitions agree that higher education refers to post-secondary education (or study beyond the level of post-secondary education) where a degree, diploma, or certificate is awarded at the end of the study. Higher education builds on the level of competence, knowledge and skills normally acquired in secondary education. The exact definition of this level, of higher education institution or programme varies from one country to another. It is the education given after Post Basic Education in institutions such as University Centers such as the Nigeria French Language Village, Nigeria Arabic Language Village, National Institute of Nigerian Languages, Innovation Enterprise Institutions (IEIs) and Colleges of Education, Monotechnics, Polytechnics, and other specialised institutions such as Colleges of Agriculture, schools of Health and Technology and the National Teachers' Institutes (NTI).

### DEFINITION OF HIGHER EDUCATION

Higher education is regarded as an instrument of social, political, and economic development. The products of higher education in any nation will determine the development of such nation. Therefore, higher education contributes to national development through high level relevant manpower training; in order to acquire both physical and intellectual skills which enable individual to be self-reliant and useful members of the society (FRN,2004).

University is the highest level of education where the high-level manpower, intellectual and future leaders are developed. It is a place where students come together to pursue knowledge and it promotes the development of intellectual capacities of individuals to understand and appreciate their environments (Ajayi,2003). University therefore educate future leaders and develop the high-level technical capacities that underpin economic growth and development (Odekunle,2001). University education is at the centre of human resource development and advancement.

The World Bank/UNICEF (1999) reported that education in general, and university education in particular, is fundamental to the construction of the knowledge, economy and society in all nations. The report identified the potential of higher education system in developing countries to fulfil this responsibility is frequently thwarted by long-standing problems of finance, efficiency, equity, quality and governance. According to Ajayi (2002), higher

education and in fact university education in Nigeria is in travail, the system is riddled with crises of various dimensions and magnitude. For Nigeria Government to proud of quality educational development especially at university level, it should be able to proud of a viable, excellent and functional e-learning driven education in our universities.

## THE GOALS OF HIGHER EDUCATION IN NIGERIA

There are many benefits of higher education in Nigeria, and some of these goals are briefly outlined as follows:

- (a) Contribute to national development through high level manpower training;
- (b) Provide accessible and affordable quality learning opportunities in formal and informal education in response to the needs and interest of all Nigerians;
- (c) Provide high quality career counselling and lifelong learning programmes that prepare students with the knowledge and skills for self –reliance and the world of work;
- (d) Reduce skill shortages through the production of skilled manpower relevant to the needs of the labour market;
- (e) Promote and encourage scholarship, entrepreneurship and community service;
- (f) Forge and cement national unity;
- (g) Promote national and international understanding and interaction.

Higher Education shall pursue these goals through:

- (a) Quality student intake;
- (b) Quality teaching and learning;
- (c) Research and development;
- (d) High standards in the quality of facilities, services and resources;
- (e) Staff welfare and development programmes;
- (f) Provision of a more practical- based curriculum relevant to the needs of the labour market;
- (g) Generation and dissemination of knowledge, skills and competencies that contribute to national and local economic goals which enable students to succeed in a knowledge –based economy;
- (h) A variety of flexible learning models including full-time, part time, block- release, day –release, distant learning and sandwich programmes;
- (i) Access to training funds such as those provided by the Industrial Training Fund (ITF) Tertiary Trust Fund (TETFund);
- (j) Students Industrial Work Experience Scheme (SI WES) that is well structured, coordinated and supervised;

- (k) Maintenance of minimum educational standards through appropriate regulatory agencies;
- (l) An all-inclusive credible admissions policy for national unity;
- (m) Supporting affordable, equitable access to tertiary education through scholarship and students' loans;
- (n) Inter- institutional co-operation and linkages; and
- (o) Dedicated services to the community through extra –mural and extension services.

## **E-LEARNING/ICT AS CONTEMPORARY ISSUE IN HIGHER EDUCATION IN NIGERIA**

The development of telecommunications technology and personal computers provides what is considered to be the general timeline of e-learning. The time frame of greatest development in this area is thus within the last forty years. The early example of what might be defined as e-learning occurred in 1909, when Robert E. Peary, arctic explorer, radio-telegraphed: "I found the Pole". Combining the characteristics of communication technology with an explicit educational objective, the knowledge that he has found the North Pole, Peary inadvertently produced an e-learning occurrence for his listeners. However, as electronic devices advances, new products were developed and invented specifically the microprocessor and personal computer which change the scenario of learning, culminating into the current e-learning as of today. In addition, the history of e-learning runs parallel with the development of electronic equipment and the use of information and communication technologies (ICT). Globalization is focused on e-learning because e-learning technology has the potential to bring improved learning opportunities to a larger audience than ever previously been possible.

### *What is e-Learning?*

E-learning in learning and education refers to the use of modern technologies such as computers, digital technology, networked digital devices (e.g the internet) and associated software and course ware (Wikipedia,2014). E-learning as opposed to distance learning is a term that is used to refer to all ICTs, networks, internet and other forms of electronic media that can be used to enhance teaching and learning so as to transfer knowledge and skills (Kassa and Balunywa,2013)

E-learning is an inclusive term that describes educational technology that electronically supports learning and teaching (Wikipedia,2014). Parks (2013) suggested that "e-"should refer to "everything, everyone, engaging and easy" in addition to 'electronic'. Developments in internet and multimedia technologies are the basic enablers of e-learning, with consulting, content, technologies, services and support being identified as the five key sectors of the e-learning industry (European Commission,2000). Regardless of the educational level or stage of e-learning can be adopted, used or applied in the education for effective teaching and learning. E-learning is a learner-controlled, self-paced education environment where the learner has authority over the learning environment,

thereby allowing learners to work at their pace, convenience (Eke,2011). The changes in education have led to a paradigm shift from teacher centeredness through to learner centeredness (Kassa and balunywa,2013). The extent to which e-learning assists or replaces other learning and teaching approaches is varied ranging on a continuum from none to fully online distance learning (bates and Poole,2013). Daniel (2009) observed that e-learning plays an important role in professionalism development for adults in the workforce. As the world strives to meet development goals, there is increasing recognition of the potential of e-learning to meet growing educational challenges.

#### *Advantages of E-learning*

Advantages of e-learning technologies according to Bhuasiri, Xaymoungkhoun, Jeung and Cigenek(2011) include:

- a: increase in accessibility to information, b: better content delivery,
- c: personalised instruction, d: content standardisation,
- e. accountability, f. on-demand availability,
- g. self-pacing, h. interactivity,
- i. confidence and, j. increased convenience.

The above advantages of e-learning are based on the benefits it provides to stakeholders in educational sector. Bhuasiri, et al, (2011) noted that , in developing countries e-learning is still in its infancy and early adoption stage and the countries experience challenges unique from developed countries.

#### **Challenges of E-learning/ICTs in Nigerian Universities and other higher educational institutions**

E-learning technologies development is faced with a lot of challenges in Nigerian Universities. One of these challenges is inability of teachers to assist the students develop the ability and knowledge necessary to make them use the e-learning effectively. In many e-learning projects, students face some challenges of bad perception during their studies; lack of pedagogy in their curriculum, lack of user torch and feel in their e-learning platform (Allen and seaman2003)

Also, some e-learning studies conducted in developing counties show lack of vision and framework in implementing e-learning lead to failure of these e-learning projects (Pal,2006, Kizito and Bijan,2006). Lack of both technical and social skills required for the implementation of e-learning in developing countries are:

1. connectivity: limited or lack of connectivity in many developing countries including Nigeria Universities impedes access to online learning e.g. (E-learning)
2. Equipment: E-learning requires equipment that can facilitate learning, but in some of Nigeria universities, the equipment such as computers, digital technology, and internet are not available from proper utilisation.
3. Software: software enables educators to design and develop learning content. This software's are costly and not available for use in some of our universities, to facilitate e-learning programme.
4. Training: No combination of connectivity, equipment and software will achieve anything if people are not trained to use them (Daniel, 2009). Some lecturers and students are not trained to make use of some of the e-learning equipment. This affect e-learning programme in our universities.
5. Inadequate securities for university Cyber Cafe.
6. Inadequate supply of electricity to e-learning centres for effective teaching and learning process.
7. Inadequate funding of the universities to buy e-learning technologies.

The challenges of students in e-learning classes are the following according to (Judith, 2004):

1. Many students lack confidence and experience with computers,
2. Many students lack skills in commonly used applications such as Microsoft words, Excel and Power point which affect their programme in e-learning classes.
3. Time management, skills, and self-motivation also influence students' performance in e-learning classes, etc.

## RECOMMENDATIONS

The following recommendations are made to promote and improve the development of e-learning education in Nigerian Universities:

- (a) Lecturers should be trained in appropriate skills in e-learning'
- (b) Power supply should be adequate or improve upon so as to enhance the use of e-learning in our universities,
- (c) Government should provide e-learning technologies to Nigeria universities to equip e-learning centres,



- (d) Government should release money to the universities for adequate funding of e-learning centres,
- (e) Universities should employ capable computers experts to train Nigerian universities lecturers on how to use e-learning technologies to deliver their lectures,
- (f) Lecturers should be given computers to enable them prepared their e-learning lectures and notes,
- (g) Private sectors, non-governmental and voluntary organisations should assist to equip universities e-learning centres,
- (h) Lecturers should be adequately motivated by the federal governments,
- (i) Computers engineers should be employed to help in the maintenance of the e-learning facilities in the universities
- (j) Both the government and the university administrators should provide enough security to e-learning centres in their institutions, to prevent looting of the computers by armed robbers.

## CONCLUSION

Nigerian universities were established to facilitate creation of new knowledge, innovation and technologies for the overall socio-economic empowerment of individual and national integration. The roles of e-learning in teaching and learning process cannot be overestimated, especially in Nigeria where emphasis in being placed on technological development. E-learning is a powerful tool that can be used to enhance and encourage teaching and learning process in universities. Through e-learning classes, students will be able to work independently and acquire more knowledge in their disciplines. Both the government and stakeholders should join hand together to ensure adequate provision of e-learning resources to our universities to facilitate technological advancement and to aid teaching and learning process.

Computers and ICT training is very important in raising the level of computer utilisation (Olatoye, 2011). Computer anxiety is also a major cause of under-utilisation of computers. One of the ways of overcoming computer anxiety is to possess a computer system (Ogunkola and Olaoye, 2008; Olatoye, 2009a, b). Continuous training in e-learning is important to improve the way staff use ICT facilities.

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