E-LEARNING AND EDUCATION IN NIGERIA, TRENDS, ISSUES, CHALLENGES AND PROSPECTS

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Abstract

In Nigeria one of the universities adopting e-learning is National Open University of Nigeria (NOUN). The paper investigates the e-learning in Nigerian educational system, its challenges and prospects. Information and Communication Technology (ICT) in education is an instrument that a nation can rely upon to bring self reliance. This study observed that Nigeria still experience a lag in its implementation, which poses a major challenge facing access to ICT facilities. Efforts geared towards integration of ICTs into the school system have not had much impact. Problems and challenges of e-learning in Nigeria include: Poor policy, project implementation strategies and information infrastructure and so on. The paper recommends among others that efforts should be made by government to post and provide teachers skilled in ICTs to teach the skills of e-learning, stabilized electricity supply etc. It also concluded that e-learning despite the roles. ICTs can play in education, school in Nigeria are yet to extensively adopt them in teaching and learning.

Key Words: E-learning, ICT, Education, National Open University of Nigeria (NOUN).

E-learning according to Haque (2000), is the use of electronic technology to deliver education and training applications, monitor learner's performance and report learner's progress. Jegede (2004), defines it as an innovative approach for delivering electronically mediated, well-designed, learner-centered and interactive learning environments to anyone, anyplace, anytime by utilizing the internet and digital technologies concerned with instruction design principles. It is all about learning with the use of computers. In this age, learning with the use of computer is simply online ways of acquiring knowledge through the internet or through the offline- CD-ROM. The online involves the use of Internet Explorer/Navigator. It may be in form of Audio, Visual and or Audio/Visual. The convergence of internet and learning, or internet enabled learning is called e-learning. The application and process of e-learning include computer-based learning, web-based learning, virtual classroom and digital collaboration where contents is delivered via the internet, intranet/extranet, audio and or video tapes, satellite TV and CD-ROM (Islam 1997).

Asoegwu (2009), described innovative as introducing of new things in the educational system. It is information of a new practice and change in establishment system and also the creation of new things in the system of education. The new thing could evolve aims and objectives, learning experience and content and instructional media. This implies that innovation in education, must cover all aspects of technological materials including adoption of e-learning practices as to meet the society needs and aspiration of the learners in the 21st century. It is evident that any erratic change in the educational system is not an innovation rather an innovation has to be carefully planned, practiced and has to be supported by a driving force to bring a desired goal with meaningful, productive and more functional relevant education using the adoption of e-learning (Olubadewo, 2011).

The electronic mail (e-mail) is a genetic name of non-interactive (online) communication of text, data, image, a voice message between a sender and a designed recipient (over a network) by systems utilizing telecommunication (Baribor, 2013). Users send message to individual recipients or several recipients or groups (broadcast) on the system. Of the recipient is online when the messages are being transmitted, a beep-will indicate there is a main. The protocol for email is called simple mail transfer protocol (SMTP) through various means for distributing discussion on a wide range of topics

Nwabueze (2011). These discussions bring together like minded individuals who use such for discussing common problems, sharing solution and arguing issues Yarson (2004).

Similarly, the e-learning is defined as an innovative approach for delivering electronically mediated, designed, learner-centered and interactive learning environment to anyone, anyplace, anytime by utilizing the internet and digital technologies in concern with instructional design principles (Michael 2004). E-learning is used in both informal and non-formal education settings for facilitating, instruction, interaction and more particularly for course delivery. E-learning, essentially computer network, enabled transfer of skills and knowledge. E-learning is teaching and learning that is technologies and media. Its application and processes include web-based learning , computer-based learning, virtual education opportunities and digital collaboration. Content is delivered in the internet, internet/extranet, audio and video tapes, satellite T. and CD-Rom. It can be self paced or instructor-led and includes media in form of text, images, animations, streaming videos and audio (Baribor, 2013).

Historical Background of E-learning/Distance Learning in Nigerian Educational System

The history of e-learning/distance learning in Nigeria dates back to the correspondence education as a means of preparing candidates for General Certificate in Education, a prerequisites for the London Matriculation Examination. The first indigenous distance learning programme was the English by Radio programme of Nigeria Broadcasting Corporation that followed independence in 1960. The programme was primarily targeted at primary and secondary school levels and covered core courses at both levels with more emphasis placed on the teaching and learning of Science, Mathematics and English. The technology driven distance learning came into existence almost the same time with the first indigenous distance learning with the emergent of Educational Television programmes of the then National Television of Nigeria (NTV). There was also Schools Educational Broadcast of the Radio Nigeria stationed in Lagos and relayed all through the federation. All radio stations were required to hook at specific times of the day during school hours for broadcasting of programmes (Besser, 2004).

In the last 31 years, University education programmes in the country begin to witness a lot of changes in terms of instructional delivery mode in some of our tertiary institutions. The Correspondence and Open Studies Unit (COSU) of University of Lagos that started in 1974, which later changed to Correspondence and Open Studies Institute (COSI) and now known as Distance Learning Institute was the first attempt made to establish a distance education unit as part of a University in Nigeria. It began initially to offer programmes in science education at first degree level in Biology, Chemistry, Mathematics, Physics and Postgraduate Diploma in Education (PGDE) for degree holders that did not possess teaching qualifications (Boroffice, 2005). The National Teachers' Institute (Nil) started as a distance education institution in 1976 (as the first dedicated distance education institution) with the support of UNESCO. It began by training Grade Two Teachers (TC II). In 1990, the Nigerian Certificate in Education (NCE) programme was introduced when the expectation was that the minimum teaching certificate in Nigeria was expected to be NCE. The Institute also introduced the PGDE programme in the year 2005. Ahmadu Bello University (ABU) also started its distance education through a training programme known as Teachers-in- Service Education Programme (TISEP) for Grades Three and Two teachers and later the Nigerian Certificate in Education (NCR). Also in November, 1972, the University also established a University of the Air Programme for teachers in secondary schools and teacher training colleges. The Distance Learning Institute of the University of Ibadan which started in 1979 as External Degree Programme of the university is another institution which adopted the distance learning mode (Omolewa, 2002).

The National Open University of Nigeria (NOUN), was established in July, 1983, by an Act of the National Assembly as the first distance learning tertiary institution in Nigeria when it became clear to the Federal Government that the ever growing demand for education by her people cannot be met by the traditional means of face-to-face classroom instructional delivery. The institution was closed down few weeks after its establishment and the Act that established the University was suspended in 1984 by the then Federal Military Government that overthrew the civilian government. Many years after the closure, the compelling reasons that informed the earlier establishment of the

university as well as the need to fill the gap created by the Federal Government clamped down on mushroom outreach study centres of many conventional universities all over the country and the need to take advantage of emerging developments in the field of ICTs which have revolutionalized the techniques and methods of instructional deliveries in the distance learning mode necessitated the reactivation of the suspended NOUN Act of 1983 in 2002. This paved the way for the resuscitation of the NOUN (Olomo, 2001).

The e-learning is expected to transform the field of education in tertiary institutions if provided with adequate facilities and quality (Akindele, 2004). E-learning is usually suited to tertiary institution, but it can also be used in conjunction with face-to-face teaching in which the term blended in learning is commonly used. Some tertiary institutions globally have come to identify e-learning in their excitement and determination to be part of the revolution. It is also a type of education that appeals to the industry and private companies that believe they can save or make money by offering online training in their field (Michael, 2004).

Development of E-learning in Nigerian Schools

The development of e-learning in Nigeria could be traced back to the development of telecommunication which began in 1886 when e-cable connections was established by the colonial masters between Lagos and the colonial office in London to transmit information and receive feedback. By 1893, all government offices in Lagos were provided with telephone service for easy communication, feedback and easy access and later all other parts of the country were provided with telephone services (UNESCO, 2002).

A lot of changes have been witnessed in the telecommunication industry since 1886. The provision of telecommunication services was initially monopolized by the Nigeria Telecommunication (NITEL) until sometimes in 90's when the federal government of Nigeria commenced the liberalization policy of telecommunication industry. Four (4) private telephone service providers (Mtel — NITEL, Econet Now Vmobile, MTN and Communication Investment Limited — CIL) were initially licensed to provide General System for Mobile Services. CIL license was later revoked for inability to pay the license fee and was later given to Globacom (Gb) Nigeria.

With this development, more companies were licensed to provide internet services in Nigeria, and this led to improved access to the internet by Nigerians. The country has less than eleven ISPs in 2000, but by the year 2006, it has risen to above one hundred and many got connected to the information super-highway, through broadband VSAT connection (Markus, 2008).

In Nigerian schools, the commonest type of e-learning adopted is in form of lectures note on CD-ROM which can be played as at when the learners desire. The challenge of this method is that the numbers of students per computer in which these facilities are available are un-interactive as compared to when lectures are being received in the classroom. Some institutions adopted the use of intranet facilities; however, this is not well maintained because of incessant power problem and high cost of running generating set. Most students in Nigeria go to the cyber café but because there are people of diverse intension on the net at the same time, and the bandwidth problem, a multimedia interactive cannot be done. Despite all these and other challenges facing e-learning in Nigeria educational institution, institutions such as University of Ibadan, Obafemi Awolowo University, University of Benin, University of Abuja, University of Lagos, National Open University of Nigeria among others has the facilities for e-learning. The number seems very low (compared to other parts of the world and the usefulness of the e-learning in the economy development) because of location of most institutions, bandwidth issue and mostly the challenge of electricity. Though most of the educational institutions (private and public) have started setting up their ICT centres for internet services alone without actually taking into consideration other components of e-learning centre (Ikelegbe, 2007).

Need for Open and Distance Education in Nigeria

The need for Open and Distance Education (ODE) in Nigeria is an important issue for several cogent reasons. Firstly, the vast majority of the population lives below poverty level. They are unable

to attend urban based institutions and thus remain deprived of higher education despite their superior merit. Secondly, those who joined workforce without completing their studies or education due to family commitments are unable to combine their work with studies and very few of them who have strong desire for higher studies could not do so because of the limited offer in the traditional institution of higher learning. Thirdly, the tradition of childhood, early marriage and religious belief in the country deprives the majority of female population from higher education. Besides, there are some other usual factors like physical disabilities, remoteness of localities, exorbitant tuition fees in most privately owned Universities and so on. (Mgbere, 2016) These are some of the major issues responsible for why millions of Nigerians are deprived of higher education despite their keen interest and eligibilities. ODE provides avenues for higher education for such a vast under-privileged population. Nigeria is generously endowed with human resources that need to be well equipped with literacy and skills to contribute to economic development, which is badly needed for this country. Thus, it is clear that the way forward to embrace ODE using both hands and supported by all necessary financial and infrastructural commitments should be encouraged.

Role of National Open University or Nigeria (NOUN) in the Promotion of Distance Education in Nigeria

NOUN, a federal government - owned university, has emerged as the first dedicated University in Nigeria to introduce education through distance learning mode. The vision statement of the University is that the NOUN is to be regarded as the foremost University providing highly accessible and enhanced quality education anchored by social justice, equity, equality and national cohesion through a comprehensive reach that transcends all barriers (Yusuf, 2011). While the Mission statement is that NOUN is to provide functional cost-effective, flexible learning, which adds life-long value to quality education for all who seek knowledge. In addition to the broad vision and mission statements, the university has eight major objectives which are listed below: (Suleiman, 2012).

i.   provide a wider access to education generally but specifically in University education in Nigeria;

ii.   ensure equity and equality of opportunities in education;

iii.   enhance education for all and life-long learning;

iv.   provide the entrenchment of global learning culture;

v.   provide instructional resources via an intensive use of ICTs;

vi.   provide flexible, but qualitative education;

vii.   reduce the cost, inconveniences, hassles of and access to education and its delivery and

viii. enhance more access to education.

In NOUN, Study Centres are the main contact place for students learning activities. These centres are thus the backbone of the distance learning methodology of the University. Presently, NOUN has twenty eight (28) study centres spread across the length and breadth of the country as against the initial temporary study centres approved by the Federal Government for takeoff of the University in the year 2002 (Zheng, 2008). In addition, the university has special study centres which cater for specialized groups, such as the Prison inmates and Aimed Forces personnel. The projection of the university is to have a study centre in every state capital and at every local government of the federation. This will enable the university to achieve its stated objectives (Erah, 2006).

Academic Programmes

NOUN students enrolment hits 254,000 according to Professor Abdalla Uba Adami, Vice Chancellor of the National Open University of Nigeria (NOUN). National Open University of Nigeria (NOUN) is open distance learning (ODL) institution. The idea is that you can stay anywhere and study, whether your home or office and earn your degree. All academic programmes has been accredited by the National University Commission (NUC). The current enrolment of NOUN is Two Hundred and Fifty Four Thousand (254,000). Ten thousand and twenty-six (10,026) students enrolled for the 2003/2004 academic session in various schools as shown below, Sixteen Thousand Nine Hundred and Eighty Seven (16,987) students enrolled for 2005/2006 academic session, Sixteen

Thousand Two Hundred and Forty One (16,241) students enrolled for 2007/2008 academic session, forty thousand two hundred and sixteen (40,216) students enrolled for 2009/2010 academic session, forty one thousand six hundred and eighty (41,680) students enrolled for 2011/2012 academic session, forty two thousand seven hundred and forty six (42,746) students enrolled for 2013/2014 academic session, forty two thousand nine hundred (42,900) students enrolled for 2015/2016 academic session while forty three thousand two hundred and four (43,204) students enrolled for 2017/2018 academic session (Horton, 2005).

NOUN provides higher education and professional training in wide areas such as arts, business, education, social sciences, science and technology. The institution offers several formal academic programmes from Certificate to Masters Level under four academic schools and a Centre for Continuing Education and Workplace Training (CCE & WT). are shown in table one below.

Table 1: NOUN Academic Programmes

School	Formal Programmes	Level
CCE & WT	1. Certificate Courses 2. Diploma Courses	Certificate Diploma
School of Arts and Social Sciences (SASS)	1. Certificate in French 2. Diploma in French 3. Postgraduate Diploma in Theology 4. Bachelor of Arts (BA) 5. Masters in Arts (MA)	Certificate Diploma Diploma Bachelor Masters
School of Business & Human Resources Management	1. Post-Graduate Diploma 2. Bachelor of Science (B.Sc Hotel & Catering Management, Tourism studies, Co-operative Management, Entrepreneurial & Small Scale Business Management 3. Masters of Science (M.Sc) Business Administration 4. Masters of Science (M.Sc).	Diploma Bachelor Masters Masters
School of Education	1. Post-Graduate Diploma in Education 2. Bachelor of Arts (Education) 3. Bachelor of Science (Education) 4. Masters of Education (M.Ed) 5. Masters of Science (M.Sc. Ed.)	Diploma Bachelor Bachelor Masters Masters
School of Science & Technology	1. Post-Graduate Diploma 2. Bachelor of Science (B.Sc) Agric, Extension, Environmental Studies, Computer Studies, Mathematics, Physics/Computer Science, Communication Technology. 3. Masters of Science (M.Sc) Information Bachelor Technology.	Diploma Bachelor
School of Law	1. LL.B Law	Bachelor

Source: Learners Support Service Unit, NOUN

Prospect of E-learning in Nigerian Education

The e-learning has several advantages as state below:

➤ It can Improve the quality of the learning experience by extending to the reach of every lecturer and tutor;

➤ E-learning offers a wide range of tools to enable teachers and learners to be innovative, creative and resourceful in all learning activities. E-learning can provide an individualized learning experience for all learners including those who are disadvantaged disabled, exceptionally gifted or who live in remote or faraway places from their usual place of learning;

➤ It can reduce travel cost to and fro to different schools;

➤ Successful completion of on-line or computer-based courses build self confidence and encourages students to take responsibility for their learning and

➤ It promotes a better content delivery and increases one's accessibility to information.

Challenges of E-learning in Nigeria Education

There are numerous challenges to the management, of e-learning facilities in universities, some are identified below:

(1)   *Fund inadequacy:* Inadequate fund or finance is a major challenge to the management of e-learning facilities because it takes money to maintain these facilities. Nwabueze (2011) says inadequate funding of educational system has resulted in non-payment of salaries which led to uncountable strikes by lecturers as it is the case in Niger Delta University (NDU) presently. It is the government's responsibility to provide facilities such as learning materials s computers etc.

(2)   *Lack of skilled and trained personnel:* lack of skilled and trained personnel-stands as a barrier to adequate utilization and maintenance of e-learning facilities. These e-learning facilities can only function when they are being managed by skilled persons.

(3)   *Corruption and greed:* funny and alarming -as this may sound, the problem of corruption and greed from the grass root to the top in the system is a general problem. Most times, these e-learning facilities that are needed to improve the learning standards of our students are made available by the government but some are diverted for personal purposes due to greed and corruption.

(4)   *Lack of workmanship:* inability of school authorities or the government to organize workshops, conference and seminars on facilities management for lecturers is also a barrier

(5)   Indiscipline among lecturers and students in the use of e-learning facilities in University is a serious challenge to administrators on how to manage these facilities. Indiscipline according to Yarson (2004), is the breaking of rules and regulations of an institution. It is also the lack of controlled behavior of people which makes them behave badly. Utilization of e-learning facilities require discipline, but unfortunately majority of students in public universities are not disciplined and are in the habit of over-using and misusing these facilities and that is why they don't last long as it ought to.

(6)   *Internet connectivity:* The cost of accessing the internet in Nigeria is still on the high side. Aduke (2008) suggested that the government should make internet connectivity a priority for higher education to be able to leverage on promises and opportunities ITC presets.

Conclusion

The survival of tertiary education institutions in the 21st century will increasingly rely on various forms of electronic delivery and communication inside a market place that requires education to be flexible. E-learning is now widely used in most of the developed countries to promote distance education (DE) and life-long learning in an effective way. In Nigeria, the recent developments and awareness of the Government on ICT have opened an opportunity to adopt e-learning to deliver distance education for educating mass of its uneducated or less educated peoples. Considering the recent expansion of ICT in the country, NOUN could introduce some modern ICT like e-mail, web-based learning (e.g. open course wares), CD-ROM for delivering its course materials through e-learning for its learning. However, before going to introduce an advanced ICT in NOUN, it is suggested that enough research be conducted on learner's access, cost and other related parameters essential for it.

Recommendation

Based on the study, the following observations were made:

(1)   The various shareholders should be sensitized on the need to assist in the provision of e-learning facilities at all levels of the educational system that will enhance the growth and development of the economy.

(2)   Higher Institution of learning should see the need to integrate -taming into classroom activities and also improve the capacity and level of adoption (ICT)

(3)   Training on the use of information and communication technology (ICT) should be made mandatory at the primary level of education so as to equip them with the use of thee facilities early in life.

(4)   Shareholders in education who make provisions for e-learning facilities should monitor the release of funds for the purchase and maintenance of these facilities, to ensure they are channeled to the right offices and persons for usage.

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