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CHALLENGES FACING THE ADOPTION OF E-LEARNING IN BUSINESS EDUCATION IN TERTIARY EDUCATION INSTITUTIONS IN ACHIEVING NIGERIA'S VISION 20:2020

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Abstract

Electronic learning is the use of information and communication technology to support and promote learning and it covers a wide range of system, such as student using e-mail and accessing course work online on campus to academic programmes offered entirely online. The paper examined the concept of e-learning, x-rayed the state of tertiary education systems in Nigeria as well as e-learning in business education. The paper also reviewed Nigeria Vision 20:20:20 through e-learning and outlined the challenges facing the adoption of e-learning in business education for Nigeria tertiary education institutions. Based on the literature reviewed, it recommended among other things that appropriate staff development, disseminations of good practices and promotion of symbiotic dialogue between IT provider and tertiary education institutions would help to promote effective and efficient e-learning adoption in Business Education in tertiary education institutions in Nigeria.

Introduction

Different countries of the world are at different levels of integrating electronic learning into everyday practices including teaching and learning. This development has given rise to new educational policies as well as to new teaching methods and strategies necessary to improve the teaching-learning process most especially in tertiary education institutions in Nigeria.

Electronic learning is now becoming increasingly popular in tertiary education

...titutions all over the world with ...versities Colleges of Education and ...lytechnics making adequate provision ... more students signing up. But the ...tinent question is e-learning actually ...nging the way tertiary education ...titutions in Nigeria teach and students ...rn, or is it merely a case of students ...ing their work on computers and ...turers sending them course reading lists ... work assignments by e-mail. The idea at ... height of e-learning of students ...lowing entire course at a prestigious ...iversity from the comfort of their own ...me without the inconvenience and cost ... living campus for years has gradually ...led to materialized. In Nigeria today, ...dents are still glued to classroom for ...st part of the time, and growing ...satisfaction with e-learning has ...placed their earlier enthusiasm.

The disadvantages of e-learning ...erations in tertiary education ...stitutions in Nigeria have, at least ...tlived the benefits of widened and ...xible access to tertiary education, ...dagogic innovations and decreased cost ...at e-learning once embodied. ...niversities, colleges of education, ...olytechnics and colleges of technology are ...adually bringing e-learning into the ...ainstream of their educational ...rogramme and it is often an integral part ... a classroom-based course. Will this ...end continue? How would governments ...d tertiary education managers help ...ake further progress in e-learning and ...ap all its benefits?

Conceptual Framework

E-learning can be defined from different perspectives. There are specialists who consider that e-learning means any teaching process which integrates any form of technology, but there are others who claim that e-learning represents a teaching solution for distance education facilitated by the massive penetration of internet as a form of communication. Nichols (2003) defines the concept as the use of various technological tools that are web-based, web-distributed or web-capable for the purposes of education". As noted in the centre of Nichols' perspective, lies as a main component of the phenomenon of e-learning. Internet and web technologies, which allow the transfer of information at any time in any location, to as many people as needed. The American Society for Education and Development defines e-learning as any form of information transmitted, facilitated or provided by electronic technologies in order explicitly to support the process of leaning. A different approach in terms of participation in the process of e-learning is found in Jackson (cited in Partridge, 2005) who talks about two secondary concepts: technological distributed e-learning and e-learning facilitated by technology. The first situation arises in the case of distance education, while the second descries the process of traditional education using various technical means.

Bates (2003) defined e-learning as the delivery of content via all electronic media including the internet, intranets,

extranets, satellite broadcast, audio/video tape, interactive TV and CD-ROM. Downs (1998) said that e-learning is an internent-enable learning, or convergence of learning and the internet, including any use of computer and the internet to facilitate education, adding that the components of e-learning can include content delivery in multiple formats through the internet, management of the learning experience and a networked community of learners, content developers and experts.

E-learning refers to the use of information and communication technology to enhance and support learning in tertiary education institutions. This covers a wide range of systems, from students using e-email and accessing course work on online while following a course on campus to programme offered entirely online. It consists of adopting modern techniques and technology in higher education, but of creating educational programmes tailored to the consumer, the student. (OECD 2001, Bertea, 2009).

E-learning can be subdivided into different types. In all cases, a campus-based institutions offering the courses, but using e-learning tied to the internet or other online network to a different extent. Web-supplementation courses focus on classroom-based teaching but include elements such as putting a course outline and lecture notes online, use of e-mail and links to online resources. Web-dependent courses require students to use the internet for key elements of the programme such as online discussions, assessment, or online project/collaborative work, but without significant reduction in classroom time. From the above, we can say that e-learning covers a wide set of applications and processes such as web-based learning systems, computer-based learning systems, virtual and digital collaborative learning group ware packages. E-learning content is mainly delivered via internet, internet/extranet/LAN/WAN, audio and videotapes, satellite broadcast, interactive T.V, DVD and CD-ROM, and the Wireless Application Protocols (Clark, 2004).

From the student point of view according to Bertea (2009), e-learning is a form of education which implies involvement, motivation and efficiency in communication. The lack of human interaction strongly influences his performance in education. The student communicate frequently with his colleagues and teachers so as to be able to accomplish all assignments, he has to find internal resources as stimulus to overpass the difficulties of a socially isolated environment. The impact of e-learning development and its introduction as an educational system can be assessed in the light of students' characteristics.

Traditional Instruction versus E-Learning

The design and format of an e-learning environment is quite different from the traditional classroom instruction. Until recently, traditional instruction treats learning as a closed system that take place within the confines of a given classroom or

school environment. However, e-learning does not see classroom taught course as necessarily closed system, rather it engage students in various learning activities far beyond the confines of the classroom such as at home or in work places. It is also a flexible form of learning that creates options for the learners in terms of where and when they can learn. As McGee (2005) has identified many differences between traditional education and e-learning. The differences are summarized in the table below.

Traditional instruction	E-learning
Teacher controlled instruction	Student-centered instruction
Correct answer oriented	Interactive and collaborative learning
Evaluative and testing and reproduction of knowledge	Evaluation as peer review, and reflection on portfolio contents
Use a rich mixture of speech delivery, posture and other body language to convey meaning and emotion	Use written text only so meaning and emotion can only be conveyed by the writing skill of the teacher
Technology for drilling and skill practicing	Technology for access to and processing of information transformed into knowledge by reflection in learning activities

Tertiary Education System in Nigeria

In Nigeria today, tertiary education offered, mainly in the Colleges of Education,. Polytechnics, Colleges of Technology and Universities are regarded as higher education (NERDC, 2004). In the last three decades, there have been significant changes within the tertiary education system in Nigeria. For instance at the university level, there has been significant increase in the number of universities and programmes offered in these institutions and explosion in students population as well as the number aspirations and explosion in students population as well as the number aspirants seeking admissions into the university. According to Okebukola (2003), the total student's enrolment in all Nigerian universities rose from over 2000 in 1962 to over 1,105,734 in 2008. Other noticeable change in the tertiary education institutions include inter-alia.

- the development of Benchmark and Minimum Academic Standards
- the enforcement of carrying capacity for universities,
- establishment of the National Open University of Nigeria to create more access to students,
- establishment of the private state universities,
- establishment of the Nigeria Experts and Academics in the Diaspora Scheme
- increase funding of universities
- rehabilitation of infrastructures

The Federal Republic of Nigeria 1979 constitution allowed state governments to establish private universities. At the moment, there are 32 such state universities in Nigeria. Private sector participation in university education commenced with the promulgation of Decree 9 of 1993 which allowed the establishment of private universities and set out eighty-seven universities in Nigeria made up of 28 federal, 32 states and 29 approved private universities.

The Colleges of Education sector has also witnessed remarkable changes in the large number of students admitted. According to NCCE (2008), the mission of Colleges of Education in Nigeria is to produce highly motivated and skilled NCE teachers worthy in learning and character through effective teaching, research and public service for the basic education system. In other to ensure uniformity in standards in the colleges, minimum standards have been developed for each programme or subject area. At the teacher education level, the professionalization of teaching is a new dimension in teacher education in Nigeria. The Teachers Registration Council of Nigeria (TRCN) was mainly established to regulate the profession and give it a pride of place by providing new code of conduct for teachers and also make arrangements for their continued professional growth and development.

The need for adequate qualified teachers in Nigeria has received attention because it is considered that teacher education is the means of not only producing teachers with the necessary skills and knowledge needed to adequately carry out their teaching jobs but also for their professional growth. Teacher education programmes in Nigeria are under the supervision and control of governmental agencies. The National Commission for Colleges of Education (NCCE) has responsibility for teacher education in Nigeria with respect to Colleges of Education. In Nigeria today, there are 67 Colleges of Education of which 20 are owned and funded by Federal Government, 40 are owned and funded by state governments and 7 are approved and owned by private agencies (Okoduwa and Onoyovwi, 2012).

Also, at the Polytechnic level, one major reform that has been approved is the need to restructure the National Diploma Programme so that it covers a total period of three years, to provide for a one-year industrial attachment following two years of academic work.

Table 2: List of tertiary institutions running teacher education programme in Nigeria

Tertiary education institutions	Number
Universities with Teacher Education Programme	46
Polytechnics with NCE programmes	9
Private Colleges of Education	7
State Colleges of Education	40

Federal Colleges of Education (Special)	1
Federal Colleges of Education (Technical)	8
Federal Colleges of Education (Regular)	11

Some E-learning Educational Provisions in Nigeria

The Nigerian government recognizes the importance of e-learning in improving the quality and quantity of education when she articulated the e-education (e-learning) initiatives with the objective of among others (FME, 2004, Agomuo, 2007, Okolocha 2010)

- enhancing access to quality education for all learners
- improving the education delivery system using ICT tools in the teaching/learning process
- ensuring global competitive educational system using ICT as delivery system as being radicalized in developed and developing countries.

Recently, there have been a few e-learning educational provisions in Nigeria. These initiatives are either being undertaken by government, civil society or the private sector. Omwenga (2003) listed the Government e-education initiatives in Nigeria.

- Nigerian Universities Network (NUN web) project
- The Polytechnics Network (Poly Net) project
- The School net project
- The Nigerian Education Academic and Research Network (NEAR Net)
- The Teacher Network (Teach Net) project
- National Virtual (Digital) Library Ministry of Education (NUC)
- National Virtual Library (Ministry of Science and Technology (NITDA)
- National Information, Communication and Education Programme of the Presidency.

E-learning in Business Education

Okolocha (2010) has pointed out that despite the Nigerian government's effort and emphasis on e-education initiative and the global emphasis on e-learning, it is unfortunate that most business educators especially at the tertiary level still rely only on lectures and chalkboard methods for delivering their lessons to students even when learning topics are suitable for e-learning approach.

The use of Computer-Assisted Instruction programmed packages which has metamorphosed into e-learning (Inegbedion, 2010) can be utilized to teach keyboarding and word processing in business education at the tertiary education institutions. For instance, Okoduwa (2007) said CAI is a new instructional technology that we in business education cannot afford to ignore in teaching keyboarding skills. Nwosu (2003) said that Computer Assisted

Instruction consists of programmed instructional sequence presented to students by means of computers adding that the students interact with the computers directly which may contain tutorials on a number of subjects, books, which can be purchased and effectively used in the classroom by business educators. Osuala (2009) adds that Computer-Based Training (CBT) programmes are available that can help a student learn keyboarding skills in business education.

In fact, the integration of software programmes into keyboarding instruction has shown positive results. Olinzock in Okoduwa (2009) believes that software should be in addition to an instructor. The programmes can help to individualize the curriculum. Boone (n.d) found that software-generated lessons provided just as an effective programme as one created and directed by the teacher adding that even though it is an effective programme, he feels that it is still best if the teacher is there to monitor and make sure directions are followed. Robinson (1992) recommends a programme that includes both an instructor and a software tutorial. Erthal (2002) believed that software can enhance a keyboarding curriculum but it should not take the place of the instructor.

In fact, there are many keyboarding programmed packages (software) such as Dance Mar Typing, Peter's online, typing course, Mr. Kent's typing tutor, typing online, touch typing letter chase typing tutor (window download), Crazy keyboarding for kids, typing with Yesmin. Also there are online typing tests such as typing test, comprehensive keyboarding timed tests for Machintosh, Kent's Typing Test II and Typing Master Test Version 6.3 for window (download). The major problem with some software is that they are not structured to meet the pedagogical curriculum needs as they do not allow the user to possess the full proficiency in keyboarding and word processing. In other words, many popular keyboarding software packages violate psychological skill development. However, Sladden in Okoduwa (2009) has remarked that many programmes such as Mavis Beacon, Type to Lean online etc are based on a behaviourist approach to learning. The programmes stress the home-row keys and a conditioned response. In order to move on to the next step or level, the student is required to demonstrate accuracy and speed. These methods arose from the days of the secretary having to be efficient at what he/she did. Today, there is much software on keyboarding but software cannot take the role of a qualified teacher (Erthal 2002, Okoduwa, 2009, Osuala 2009, Usman 2012.)

Nigeria's Vision 20:2020

The Vision 20:2020 is a dream statement that Nigeria will become one of the first 20 economies in the world by the year 2020. The optimism about Nigeria's

potential to become among the top 20 global economies by the year 2020 was confirmed by economists at Goldman Sachs, a leading United States (US) Investment Bank (Onyekekaya, 2011, Peters, 2009). Hence, to achieve this goal, government intended to use education and technical education in particular as a tool towards developing the nation.

Perhaps, the use of education to develop the human resources of Nigeria might be the roadmap to the attainment of vision 2020. This can be assured when quality technical and vocational education (business education inclusive) will be provided for the nation to enable its citizenry become self-employed to develop the economy of the nation. To this end, it infused technical and vocational education and training into the education sector – the aim is to provide skilled manpower in applied science, engineering, technology and commerce to operate, maintain and sustain the nation's economic activities and rapid socio-economic development. At the tertiary level, technical and vocational enterprise training is offered in the polytechnics, Monotechnics, University of Technology that is the Innovation Enterprise Institutions (IEIS) and the Colleges of Education (Technical). All these are aimed at producing skilled manpower of the nation. Manpower development of a nation requires the improvement of the economy through the use of educational programmes, the in-service training of workers and the provision of incentives to get people into critical or productive economic sectors and occupations that will make Nigeria realize the achievement of vision 20:2020. Sectorial manpower plan relies on the accurate data to be able to determine the skillful manpower requirement needs of the nation. It involves identifying problems and needs assessment using data generated from primary, secondary and administrative agencies such as Nigeria Institute of Social Economic Research (ISER), National Population Commission (NPC), Education statistics from National Education Council (NCE), National Universities Commission (NUG), National Board for Technical Education (NBTE), National Commission for Colleges of Education (NCCE), from public and private sectors of employment etc. Assessment of the labour force and the market situation will also help to determine the strategic plans necessary or the development of human resources to develop the nation.

Challenges Facing the Adoption of E-Learning in Business Education in Tertiary Education Institutions in Nigeria

In Nigeria, tertiary education institutions are now thinking through and negotiating the potential contribution of e-learning to their future. For many institutions, especially in developing country like Nigeria serious problems remain. Manpower (teachers and technicians), infrastructure and funding

are among the most important ones, but skepticism about the pedagogic values of e-learning and staff development are probably the most challenging. However Nigeria cannot realize these laudable potentials of ICT if teachers who are to develop and implement e-learning in Education do not have the necessary ICT competencies. In this regard, Leask and Pachler (1999:) opine that

> *.....No matter how well schools are equipped with up-to the minute hardware and software, our teachers remain far and away the most precious element of our education system – no amount of technological wizardry can change the performance of our children without the enthusiastic support of skilled, professional teachers.*

In the present ICT era, skilled, professional teachers as presented by Leask and Pacheler are those teachers who apart from being competent in their subject areas have developed ICT competencies that will enable them help learners develop into successful learners and effective contributor to an ICT dominated society. These are the type of teachers needed in the Nigerian educational system to prepare the society for self-sustenance, for international competitiveness and for transforming the society into a knowledge society.

Tertiary education institutions in Nigeria are contending with the adoption of e-learning in business education and bringing into the mainstream of their organization, and are contemplating restructuring to take account of e-learning in terms of staffing, staff development, course design and student support.

Another serious challenge is persuading academic staff (Business Educators) to use and develop e-learning software in business education courses. The general concept of 'staff development' is widely seen as a key to sustainable e-learning adoption business education in tertiary institution. Aderogba (2009) report that institutions are struggling with the division of labour between faculty members and new staff focused on the technical aspect of e-learning, adding that for most institutions, meeting these day-to-day campus-based challenges of e-learning is far more important at least for the moment than the commercialization and internationalization of e-learning.

The negative attitude of business educators to e-learning may partly be due to their perceptions of the limitations of e-learning and the insufficient maturity of the tools available. But this can be explained by a lack of time to carry out what is basically an additional task, since e-learning mostly supplements rather than replace the classroom-based tutoring coupled with insufficient literacy either in ICT in general or in e-learning applications. E-learning and the sharing of information it implies might also conflict to some

extent with the professional culture of academics, based on autonomy and a reward system often based on research. Concerns about intellectual property rights may also pose a problem (Larsen and Lancrin, 2004).

Partnerships are key characteristics of e-learning that could assist tertiary institutions in Nigeria to share knowledge, good practices, achieve benefits such as advanced technology and educational quality in addition to enhanced market presence and lower costs. Some institutions of higher learning are already involved in partnerships covering activities such as e-learning infrastructure, learning management systems and applications, creating e-learning materials, developing joint programme, joint marketing collaborating for research, sharing best practices and sharing costs of hardware and software. Besides, partnerships equally raise contextual issue. One of such issue whether e-learning material should be made available to third parties free of charge or for a fee. Another issue is the attitude towards outstanding of non-core e-learning activities. Tertiary education institutions in Nigeria see minimal or short-term value in outsourcing activity and rarely give strategic attention to making learning materials available to third parties. Partnership and networking could still be used more effectively to enhance the diffusion of knowledge and good practices at the sectoral level (Ogunieye, Oke and Adeoye, 2007).

The building of community e-learning adopters within the length and breadth of tertiary institutions and general knowledge management processes related to e-learning are critical issues for further e-learning developments in Nigeria. However, the scaling up of successful experiments and the sharing and mainstreaming of good practices remain the real challenges.

Conclusion and Recommendations

This paper started by looking at the concept of e-learning, reviewed the state of tertiary education institutions in Nigeria and examined the challenges of e-learning. At the moment, tertiary education institutions of learning in Nigeria are generally lacking in even the most basic technological infrastructure for widespread installation of ICT is schools and communities with the wide disparity between urban and rural areas. In addition to the poor infrastructural facilities, education budgets are usually very low, and the scarcity or non-existence of more traditional educational facilities and equipment in many areas often makes suggestions for introducing the sophisticated new technologies into the education institution seems vicious illusion a mere pipedream. However, gradual implementation of these technologies starting from areas which have the basic infrastructure may be the way forward.

The critical lesson to be learnt in this paper is that the uses to which the new

technologies can be put in tertiary education institutions vary and are highly flexible. Besides, the use of e-learning resources which aim to increase student retention is indicative of the many ways that the online delivery of programmes is likely to open up new avenue for the technological development of the country. It is very likely that we gain more experience with the online delivery of programmes, many new ways of delivering online learning will emerge. The key to advancement in this area will be ground experimentation and the sharing of knowledge and experience gained.

Finally, Nigeria vision 20:2020, like other development visions, programmes and plans, policies and reforms agenda in Nigeria, remains a vision until it is actualized – not by mere touting, but by commitment to discipline and political will on the part of the government. And against the backdrop of historical antecedents of policy reservals, summersaults and failures in Nigeria, the vision is utopian. Following are a number of recommendations which arose from reviewing the literature to help realize the vision 20:2020.

1. For effective adoption of e-learning in business education to succeed, business educators and students must change their attitude by viewing knowledge about e-technology as learning that cannot be avoided if they must fit into and survive in the current e-technology world. Besides, tertiary education institutions with business education in Nigeria should be able to device, tailor adaptations of the new technologies which (a) are appropriate for their target audience, (b) have a reasonable cost structure (c) meet the pedagogical objectives of the business education programme.
2. Computer and internet studies need to be properly articulated and integrated into business education curriculum by NUC, NCCE and NBTE. This will, in turn, develop and promote the quantity of e-learning programmes in order to establish and develop standards for e-learning software.
3. Serving business educators should be helped to develop ICT competencies through in-service training such as seminars, workshop and conferences in the field of e-learning for professional development in this area.
4. Heads of Department of business education in Colleges of ~Education and Faculty of Education in the Universities should liase with the management of their institutions to ensure that appropriate e-learning facilities for effective teaching and learning of business education courses are provided.
5. The accreditation agency (National University Commission, National Commission for Colleges of Education and National Board for Technical Education) should include in their accreditation requirements internet connectivity for institutions. This will

help to pave way for e-learning implementation in business education.

5. Government should adequately fund business education programme in tertiary education institutions. This will enable the head of institutions to procure all the necessary ICT facilities needed in the education to produce skillful manpower that will fit into the labour market to raise the economy of the nation.

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