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### Policy Options for E-Education in Nigeria

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#### INTRODUCTION

Information and communication technology (ICT) has turned the world into a global village, and its impact is being felt in all spheres of life. Though it has been rightly said that what is wrong with education cannot be fixed with technology; there is no doubt that modern life is dominated by technology. In today's globalized world, there is a universal recognition of the need to use ICT in education because the free flow of information via satellite and the Internet hold sway in global information dissemination of knowledge. The application of ICT to education brought about the concept of e-education. This chapter considers the concept of e-education vis a vis the provisions of the national policy for information technology, and gives a state of the art with regard to some e-education initiatives that have been embarked upon by the government, nongovernmental organizations, and other stakeholders in the country. It also identified the challenges constraining the effective deployment and exploitation of ICT for teaching and learning in the Nigerian education system, and recommends some policy options for the development of e-education in the country. The next section gives a background to the concept of e-education.

#### BACKGROUND

E-education and e-learning are terms sometimes used interchangeably to describe learning through electronic devices or media. That is, a technologically based enhanced learning mechanism that is packaged and targeted towards a broad based population. In other words, the scope of e-education is enhanced on efforts at reaching a widely dispersed population. According to Mac-Ikemenjima (2005), e-education is "an electronic mode of knowledge sharing and transmission, which may not necessarily involve physical contact between teachers and students" (p. 5). Thus, e-education is an alternative to conventional classroom educational system of face-to-face, dynamic, ongoing interaction between teachers and learners, and it is both a computer-aided teaching and computer-aided learning, which ultimately lead to computer-aided instruction. Nenad, Tibor, and Sabina (2005) have noted that e-learning is characterized by the following terms (which give the "e" in e-learning):

- Electronic learning the main medium of the learning is a computer, with all the advantages of the Internet, intranet, database systems, and applications that make the system easy-to-use and easy-to-manage,
- Everywhere learning the student is not bound to one place; the computer can be used wherever there is a computer and Internet access,
- Enterprise learning education is of the utmost importance for the academic community, this way we can offer the materials even to the graduated students to help them improve their knowledge even after graduation.
- Experience learning the system treats the student as a solver of the problem; it simulates real life situations, thus making the education interactive and exciting; it enables the student to test the knowledge and, if needed, to get help from the mentor (Nenad et al., 2005).

In essence, e-education is a learning system that rises above the confines of space and time, as it does not require physical contact between teacher and student. In this case, learning could be done without classrooms, since instructions and learning materials are accessed through the Internet, CD-ROM, specialized software, and other media. Information and communication technology (ICT) provides the platform on which e-education runs. The use of ICT in e-education makes schools more efficient and creative in knowledge transmission. It produces a variety of tools to enhance teachers' professional skills. However, as Hicks, Reid, and George (1999) have noted, technology by itself, or in itself, is inadequate to provide quality learning. Accordingly, quality is perceived as the function of the way technology is deployed to provide access to germane learning opportunities at the appropriate time. According to them, the main features of online education include computer-mediation, potential for accessing large amounts of dynamic information through WWW, use of hypertext and working with materials in nonlinear way, and access to real-world contexts via Internet. Others include capacity to communicate via e-mail and other electronic technologies with lecturers and other students, new methods for administration of learning, for example, submitting assignments, getting results, networking, and internationalizing the curriculum (Hicks et al., 1999). Also, NetTOM (2007) submitted that cognitive gains from e-learning include hypertext learning, which is nonlinear and

can be structured to engage learners into making greater use of critical thinking skills.

#### MAIN THRUST OF THE ARTICLE

# E-Education and Nigeria's National Policy for Information Technology

In 2001, the Federal Government of Nigeria approved a National Policy for Information Technology (IT). Its implementation started in the same year. The vision statement of the policy is "to make Nigeria an IT capable country in Africa and a key player in the information society by the year 2005, using IT as the engine for sustainable development and global competitiveness." Its mission statement is "to use IT for education, creation of wealth, poverty eradication, job creation and global competitiveness" (Nigerian National Policy for Information Technology, 2001). Some questions worth asking are: What are the provisions of the policy vis-à-vis the implementation of e-education in Nigeria? How adequate is the policy for the integration of ICT in the Nigerian education system? The policy, judging from its mission, general objectives and strategies recognized the importance of ICT in education. Some deficiencies observed however are as follows:

- a. The document lacks any sectoral application to education. While sectoral application exist for health, governance, agriculture, legislation, and others, issues on education are grouped under sectoral application for human resources development.
- b. The impact of ICT on education is limited to its economic competitiveness. In the sectoral application for human resource development, its objective is basically for students to learn about computers and prepare them to acquire knowledge and skills that would position them for future competitive jobs. It ignores the potential of ICT as a means of solving issues in teaching and learning. No focus is given to the integration of ICT for the development and management of teaching and learning in Nigerian schools.
- c. Students cannot acquire knowledge in a vacuum; they must be taught by teachers. However, the policy does not address the issue of teachers' ICT education. Many teachers are incompetent in using ICT to impart knowledge because they also lack such education.
- d. Fourth, the national IT policy does not acknowledge the need to develop nationally relevant context software for the education system. The available software in the country are foreign with no local content.

The reality is that the national policy is not focused on the basic issues involved in quality ICT application in education (Olatokun, 2006). It is limited to the market-driven goal of the application of ICT in education, and this can be seen from its emphasis on learning about ICT and not learning through ICT. However, the simple fact is that application of e-education can only be successful when not just learning, but learning and teaching through ICTs are encouraged. In the next section, we describe some e-education initiatives in Nigeria.

#### **E-Education Initiatives in Nigeria**

1. Government Initiatives

#### National Open University of Nigeria

Mac-Ikemenjima (2005) reported that the National Open University (NOU) was initially established on 22nd July 1983 but became functional in April 2001. The aim of the institution is to train professionals in various disciplines through the distance learning mode. The institution was set up on the premise that every year almost 1.5 million students apply to the various universities in the country but only about 20% can be absorbed by the university system. NOU is expected to take care of the remaining 80%. The course delivery is through a combination of Web-based modules, textual materials, audio and video tapes, as well as CD ROMs. The university currently has 18 study centers and plans to have at least one study center in each of the 774 local governments of Nigeria. It runs programmes in education, arts and humanities, business and human resource management, and science and technology.

The NOU is designed to increase the access of all Nigerians to formal and nonformal education in a manner convenient to their circumstances, and cater to the continuous educational development of professionals. The range of target clientele is elastic and is to be continually reviewed to meet Nigeria's ever-changing needs (National Open University of Nigeria, 2008). It employs a range of delivery methods to take education to the people and make learning an enjoyable activity, including printed instructional materials, audio, video tapes, and CD-ROMs; television and radio broadcast of educational programmes and electronic transmission of materials in multimedia (voice, data, graphics, video) over fixed line (telephone or leased lines), terrestrial, and VSAT wireless communication systems. For the take off of the university, pioneer student enrolment was 32,400 and it is believed that with time, more people will benefit from the programmes of the NOU (National Open University of Nigeria, 2008).

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