An Integrated ICT-Support for ODL in Nigeria: The Vision, the Mission and the Journey so Far

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Introduction

With an estimated population of 120 million (Common Country Assessment, 2001), Nigeria, a country on the West Coast of Africa, is the most populous nation in sub-Saharan Africa. It occupies a landmass of about 923,768 square kilometers, and generally known to have over 274 ethnic groups in the Federation. The government’s desire to move closer to the people has progressively led to the divisions of the three major regions into 36 states grouped under six geopolitical zones with a total of 774 local Government Areas (LGAs). The breakdown of the statistics available on Nigeria shows the following: more than 55% is female, the poverty rate is about 67.8% (Federal Office of Statistics, 1999), the majority of the population (70%) live in the rural areas, and has a young population in which over 60 per cent are under 15 years of age. These statistics indicate that the majority of Nigerians fit the main focus of this Global Forum which is to reach those who are yet to be reached (the class of the poor, illiterate, women, marginalized, and those living in remote areas) through one form of education or the other. In particular, women and minority communities such as nomads, fishermen, and unemployed youths are examples of these hitherto neglected communities in Nigeria.

Given the current situation in Nigeria, it is no coincidence that the main preoccupation of the Federal Government through its Federal Ministry of Education momentarily is the need to reach every nook and corner of the country in order to take education to the citizens no matter where they may be located. A major educational activity through which the above is being carried out is the national open and distance learning programmes (NODLP). The NODLP is experimenting with the massive use of the information and communication and technologies (ICT) as the veritable medium to reach the unreached in Nigeria. The focus of this paper is on this issue of using ICT for ODL to deliver education to all. While the details will be dealt with later in this paper, a number of other related issues necessary to situate the effort of the country would be given a cursory mention.

In terms of its economy, although Nigeria earns about 90 per cent of its annual revenues from petroleum, exports 2 million barrels of oil daily, and ranks as the seventh largest oil reserves in the world, her less-than-desirable economic growth makes it almost impossible to cope with the resources needed by the huge and fast growing population to develop the country and uplift the welfare of the ordinary person especially in the rural areas.
At one of the fastest growing rates in the world, the population of the country has been forecast to double by the middle of the 21st century, and become the third most populous country in the world next to China and India (Panorama, Ansett Australia’s Magazine, January 2000). This has direct bearing on the seemingly insatiable demand for education at all levels in Nigeria. Even though government’s attempts to meet this demand is fairly satisfactory when viewed at the backdrop of the huge amount of resources the country has expended on education to date, the effort does not seem to keep pace with the annual astronomical demands. According to a recent document by the Federal Ministry of Education (2001), there has been a meteoric increase in the demand for education for social, career and employment needs amongst many others. For instance, the document indicates that from less than 3,000 primary schools in 1960 enrolling about 1.3 million pupils; there are currently over 44,000 primary schools with pupil enrolment close to 20 million. Secondary school number and enrolment went from 534 and 24,640 respectively in 1960 to over 9,000 public and private secondary schools in 1999 with 3.4 million students. Higher education also has similarly witnessed tremendous population growth. From one university college in 1960, there are now 150 tertiary-level institutions made up of universities, polytechnics and colleges of education with aggregate student population of over 800,000 (full-time and part-time). The information available, however, is that only 20 percent of those seeking placement with the higher education sector secure admission. In 2001 alone over 1 million sought for admission meaning that over 800,000 Nigerians have been denied access to tertiary education. Since population growth rate outpaced the education sectoral growth rate, the quantitative expansions mentioned above has failed to significantly reduce literacy rate.

The government has continually stated that it has three goals for Nigeria. The first is that as a signatory to the 1990 Jomtien Declaration of Education for All, the Dakar 2000 Framework for Action and also a member of the Group of E-9 nations, Nigeria is committed to educating its entire people in order to eradicate illiteracy. The second educational goal pertains to determining the best and most appropriate type of education. The third educational goal is the use of the most appropriate means to deliver education to the people. Government needs to count the financial cost, critically examine the new foci of the new system it was adopting, and align the philosophical orientation of the new policy which has as its central theme the provision of education through the expansion of access, meeting the unmet demand for education, and reaching special segments of the population not yet reached by education through the old system. Naturally, Nigeria has therefore decided to embrace the open education system, which will afford the greater majority of the citizens, especially those hitherto unreached or denied access, to be educated as
and when they so wish. The open education system being fashioned out will establish the National Open University, the National Open Polytechnic and the National Open School. At the moment the National Open University is being set up within the umbrella of a National Open and Distance Education Commission (NODEC).

The major objectives of open education in Nigeria include the following:

(i) The provision through an alternative route, of flexible, time-independent and open education as practicable as possible for all who require it.

(ii) The delivery of instruction through several media and channels to people everywhere within Nigeria including the remotest parts of the country.

(iii) The development in an individual, of certain knowledge, process, skills and attitudes, within a specific content or proficiency area congruent with the learner’s needs, interest, learning styles, environmental and other constraints.

(iv) The provision of flexible learning opportunities purposefully sequenced with minimal disruptions to an individual’s socio-economic and cultural characteristics.

The net result of this is that if open and distance education is used to educate most Nigerians, in a system which regards education as the pivot on which other aspects of national development stand, the nation and individuals will benefit in many ways. For instance those educated will remain in their local communities, it will reduce the unemployment rate and the flocking to the urban areas, contribute to the alleviation of poverty in the rural areas, catalyze the level of literacy, and hopefully stimulate economic activities in these areas.

Attempts at total national development could become successful if it is effectively linked with development in the local communities. In this regard it becomes necessary to explore how the current wave of global development of information communication technologies can be put to the advantage of education in other to catalyse an integrated national development be introduced and made real to those who reside in the rural communities of Nigeria. If properly determined, it could bring forth another benefit of ensuring that local communities foster sustainable technological literacy to the benefit of individuals and the nation?

Nigeria is tackling the above through a multi-faceted community-based development using ICT and distance education in a number of ways, which take into consideration issues such as
appropriateness, cost-effectiveness, affordability, accessibility and portability. Four of these efforts at implementing Education For All will be described here.

(i) Dedicated channels for Radio and Television Broadcast

Access to radio and television as information and communication tools is very pervasive in Nigeria with the penetration of radio probably reaching 90 per cent. Indeed, the success of Nigeria’s nomadic education in which education is taken to itinerant groups has been adduced, in the main, to the use of radio as a means of reaching this group of hitherto unreached Nigerians.

In Nigeria, the first indigenously organised ICT-driven distance learning activity was probably the English by Radio programme of the Nigeria Broadcasting Corporation that began immediately after the attainment of political independence in 1960. This also probably marked the onset of the use of technology to support correspondence or distance learning in Nigeria. It was immediately followed by the Educational Television Programmes of the then National Television of Nigeria (NTV). The English by Radio programmes were a National Broadcast for both primary and secondary schools relayed during school hours. The programmes were integral to school activities and school timetables provided periods for students to listen and follow instructions with their work under the guidance of their teachers.

Educational Television 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. In addition to the Educational Television of the National Television of Nigeria, Radio Nigeria also established the Schools Educational Broadcast. It was stationed in Lagos and relayed all through the federation. All radio stations were required to hook on at specific times of the day during school hours for the broadcast of programmes.

In order to boost the current resurgence in open and distance learning in Nigeria, government is looking into having dedicated channels for radio and television broadcasts to support its educational initiatives. Several facilities and equipment that can be put to use in this regard have been identified. For instance a network of several FM radio stations have been established by state governments which can be networked to form a dedicated channel for ODL radio transmission. With regard to a dedicated television channel, the World Bank through a combination of its Community Development and Primary Education Projects has built a brand
new state-of-the-art, digital recording studio of the Educational Television Unit situated at the Nigerian Television Authority, Tejuoso, Yaba, Lagos. The thinking as recommended in the Blueprint for Open and Distance Learning Programmes in Nigeria is to use this as the pivot for the much-needed dedicated TV Broadcast channel for educational activities in Nigeria.

(ii) Virtual Library

(iii)

Considering the ever-growing number of higher institutions in Nigeria and the attendant difficulty in procuring essential instructional and reference resource materials to support teaching and learning, government has decided to establish one of the most gigantic virtual libraries in the world. The establishment of this project, under the able leadership of Professor Babalola Borishade, the Honourable Minister of Education, has commenced. When fully operational it is envisaged that it will considerably reduce if not totally eliminate the dearth of resources for students and staff. The first phase currently being pursued is for higher education. The second phase will be its extension to secondary and primary schools, while the third phase will be the local communities through the Community Resource and Study Centres.

(iii) National Infrastructure framework for Open and Distance Learning

In order to provide an extensive reach to the whole of the Nigerian populace, the National Open and Distance Learning Programmes is setting up a National Infrastructure Framework using ICT to eventually reach all the 774 local governments of Nigeria. The architecture of the infrastructure recognises the diverse networking requirement of the Nigerian landscape and also takes cognizance of the population rural sparseness of the nomadic lands at one extreme and the urban population density of Lagos in Africa’s most populous nation at the other.

The Distance Learning architecture uses the 6 geopolitical regions, the 36 States and all Local Governments as levels of connectivity. The geopolitical areas are political entities, which will form the regional centres, which shall provide adequate support and influence to ensure a favorable reception for the project.

The architecture of the infrastructure set up including the diverse media that will be required to deliver information for the open and distance learning initiative is as shown below:
The Geopolitical area is divided into Regional Distribution centers that will relay information and distance learning content downwards to the State and Local Study Centres. The State and Local Study Centres are categorized as Urban and Rural based on population density and available infrastructure.

The headquarters of the network shall be at the main campus of the Open University for logistical and management reasons. This will serve as the virtual data centre for repository, reproduction, distribution and administration headquarters (REPRODAhq) for all the networking and instructional materials holdings of the whole system. It is envisaged that materials held in REPRODAhq will be distributed through the various channels and formats through to the regional centres, state centres and local centres. The different channels and formats shall include textual materials, data, voice, graphic and multimedia to be distributed by broadcast (Radio and Television), captured and stored on audio, video cassettes and CD-ROMs, and through computer-mediated communications such as email and Web-based multimedia materials sent on-line to students in remote location. A major reason for providing multi-channels for instructional material delivery is the need to take care of the different learning styles of students and the facilities that they can access in their various localities. As mentioned above more than 70 per cent of the population has access to radio and television, while less than 5 per cent can access online internet-
based materials at the moment. But it is envisaged that with time internet technology will spread to every part of Nigeria to allow people take advantage of the infrastructure which by deliberate policy will be closely linked to the Community Resource and Study Centres. Given Nigeria’s infrastructural and technological development it is expedient at this stage to realistically deploy the array of technologies that are available.

The major elemental functionality required to supported a distance leaning environment is depicted in the three diagrams that follow:

(iv) **Computers in Schools project**

The latest in the development of ICT-based initiatives in Nigerian education was kick-started on the 18th of January 2002. The major objective is to develop computer and technological literacy through the introduction of computers in our secondary schools similar to what has been done in many other countries including Turkey, Morocco and others. It is envisaged that when fully developed this project can network with the National infrastructural framework set up for the open and distance learning and the virtual library so that there will be a seamless movement by all learners in Nigeria through the array of ICTs available. More than anything else it is hoped that all
these efforts will mark the humble but significant beginning of the technology-driven educational revolution envisioned for Nigeria by the current government.

References


