Education in Nigeria, Past and Present: Information Communication Technology for Sustainable Development

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Abstract

Education is the key to a nation's development and it is a major indication for the social well being, standard of living and social justice in a society. In Nigeria, the rapid development of ICT has greatly influenced the delivery of education just as the education sector is reacting to the emergence of the information society. Today's education system faces the challenge to prepare individuals for the information society .One of the most important aims should be to handle information since the prevalence and rapid development of information and communication technologies (ICT) in education can transform the society. This paper is an expository one that examined education in the first republic, Universal Primary Education and Universal Basic Education and ICT for sustainable development. It was therefore concluded that since education is important, those at the apex of leadership should be more focussed since we learn from the past to improve on the present and project into the future. Recommendations were made on how to make education more productive and fruitful through ICT, among which are; provision of: ICTs in schools, stable power and enabling environment for teachers.

Introduction

Education is a powerful instrument of developing intellectual abilities, of shaping cultural attitudes and acquiring knowledge and skills. In the National Policy on Education, (FRN 2004).It is conceived as an instrument for change and development both for individuals and the nation as a whole. The anticipated changes and development are therefore expected to occur through thoroughly planned and properly implemented curricular. According to Ajibade and Bada (2007), the clarion and clamour for a restructuring of Nigerian Educational system which is described as being too shallow and narrow in content than the elitist type of curriculum that will meet the hopes and aspirations of Nigerian citizen led to the National Curriculum Conference in 1969.It was from this conference that the national philosophy of education for Nigeria evolved.

Education, as it was expressed by the Federal Government of Nigeria in the National Policy on Education (FRN, 2004) is an instrument par excellence for effecting national development. Education cannot be globally competitive and enhanced without the integration of ICT, as this is a universal norm now and even

prescribed by UNESCO. The integration and use of ICT for teaching is a function of some factors such as knowledge of the use of ICT on the part of the teachers and sound pedagogical knowledge on how to integrate ICT (Benedeto 2005). Education for new emerging societies requires ICT to facilitate large-scale learning needs for social and economic development (Ilomarki, Syri & Letinen 2001).

The influence of ICT on the education system which had been previously confined to training individuals had gradually developed into a new dimension affecting the teaching-learning process in a direct way while the role of ICT in teaching and learning is rapidly becoming one of the most important and widely discussed issues in contemporary education policy. The introduction of ICT into the education sector is seen to have shifted the focus and paradigm of education from 'teacher-centred' to 'learner-centred' learning, where learners are active participants in the learning process, produce and share knowledge, and participate in the learning and learn in collaboration with others .

Moreover, several studies have indicated the benefits of ICT use in education which have found consistent positive and moderately high achievement gains at all educational levels from computer mediation in schools subjects, particularly sciences and mathematics. Computer-assisted instruction was found more effective in all educational levels and with lower achieving students (Chao,2001). The use of ICT in educational institution has become a necessity in order to prepare the students for the information era and the globalized world.

Information and Communication Technology has heralded the development and implementation of new and innovative strategies in education (Ittigson &Zasse 2003). Educators who advocated ICT integration in the education process believed it will improve teaching and prepare teachers to effectively participate and deliver in the twenty first century workplace. Thus, recognizing the impact of ICT on the education and everyday life, educational institutions try to restructure their education programs and classroom facilities, in order to minimize the teaching and learning technology gap between today and the future .Education today relies heavily on technology and over the past decade, schools have invested greatly in computers, networking and related technologies to enhance teaching and learning processes (Kirkman, 2000). In other words, technology has become a prevalent part of the educational culture and its impact on the changing face of curriculum can no longer be dismissed (Kirschner &Davies, 2003). Acknowledging the benefit of technology in enhancing education, Gray & Souter (2000) emphasized that expenditure to supply schools with computers and related technologies has increased throughout the world. Developments in computer technology and related technologies have also attracted the educators to explore its benefits and potentials for various purposes (Dillon &Morris, 1996). This is inevitable since advances in ICT indirectly change the delivery of science education especially basic technology. Education which is considered as a powerful tool to promote social and economic development has become the primary focus of the recently forged Information and

Communication Technologies for Education (ICTE) especially in developing countries.

However, Ogunsola (2005) opined that while there is agreement that ICT can be a powerful tool for advancing education efforts or going forward, the challenge is in turning the potential of Information and Communication Technologies for Education (ICTE) into reality with results. Olakulehin, (2007) also emphasized that ICT would play an important role in achieving the Millennium Development Goal (MDG) on education by making available the opportunity of transcending time and space in the education process.

The pace or growth on the adoption of new IT has been very speedy: it is markedly more rapid than that of earlier revolutionary technologies such as the steam engine or electric motor. But in Nigeria, information technology can be said to be a recent phenomenon telecommunications, the oldest element which had a modest beginning with the first trunk telephone service between two towns in1923 (Ofulue, 1980).Due to changes that occur in every society, Nigeria inclusive, it is pertinent to consistently review our educational programmes in order to make it suitable for every immediate challenges especially talking about technological advancement in the world over.

Opportunities now abound for Nigeria populace to be technologically-minded. Some institutions of higher learning, primary and secondary schools are now connected with the internet, many things are now changing positively in our educational systems, examinations, registrations of courses, learning, laboratory work and others are now being done via the internet. For example University of Ilorin started Computer Based Test and Examination in the first semester of 2008/2009 academic session. All their registrations were also done through the internet. This is a laudable step in the right direction, which is a pointer to the fact that any nation that wants to rise above her counterparts must be technologically-minded.

Education in the First Republic in Nigeria

The first republic in Nigeria started immediately after independence and terminated in 1966.The government at that time was headed by Alhaji Tafawa Balewa of The Northern People's Congress. The federal government of Nigeria set up Ashby commission in April 1959 to investigate the needs of Nigeria as regards post-secondary school certificate and higher education over the next twenty years(from 1960-1980).Eric Ashby was made the chairman and eight other members that constituted the committee were drawn from Nigeria, America and Britain.

The report of the commission titled 'investment in Education' was submitted to the government in September 1960 and was based on the followings among others:

1. There were lot of imbalances between primary and secondary schools and between secondary and higher levels.
2. There were many teachers not professionally qualified
3. Inadequate number of secondary schools in Nigeria.
4. Brilliant students were not attracted by agriculture, technical education and commercial subjects

Based on the above the commission came up with some recommendations on secondary and higher education which bothered on total improvement and complete overhauling of the systems for better achievement.(Fasasi,2002 &Abdulkareem,1990)

Universal Primary Education and Universal Basic Education.

The scheme took off in September 1976 under the leadership of General Olusegun Obasanjo. Financing the scheme was the sole responsibility of the federal government. After the introduction of the scheme, the enrolment was higher than the facilities on ground could cope with. The scheme was faced with insufficient fund.

Basic education is a type of education, which provides for acquisition of further knowledge, skills and competencies in different fields (Fasasi, 2002).The Universal Basic

Education (UBE) was formally launched by President Olusegun Obasanjo on the 30th September 1999.In the National Policy on Education (FRN 2004), the following were stated as regards Basic education. Basic education is of 9- year duration comprising 6 years of primary education and 3 years of junior secondary education. It is free and compulsory. It also includes adult and non formal education programmes at primary and junior secondary education levels and out of school youths. In all local government areas in Nigeria, the federal government training programme for UBE teachers. These sets of teachers are employed at different periods to teach for 2 years in the first instance.

ICT for sustainable Development

Information and Communication Technology (ICT) "refers to technologies people use to share, distribute, gather information and to communicate through computers and computer networks" (ESCAP, 2000). ICTs can be described as a complex varied set of goods, applications and services used for producing, distributing, processing, transforming information- (including) telecoms, TV and radio broadcasting, hardware and software, computer services and electronic media" (Marcelle, 2000). ICTs represent a cluster of associated technologies defined by their functional usage in information access and communication, of which one embodiment is the Internet. Hargittai (1999) defines the Internet technically and functionally as follows: "the Internet is a worldwide network of

computers, but sociologically it is also important to consider it as a network of people using computers that make vast amounts of information available. Ogunlade (2008) asserted that Information communication technology provides an avenue for people of the developing nations of the worlds to accelerate or increase their developmental growth. She also view that a society that doesn't have adequate facilities for gathering information is living in ignorance.

Onasanya (2009), defines ICT as computer based tools used by people to work with the information and communication processing needs of an organization, it encompasses the computer hardware and software, the network and several other device. ICTs can be described as a complex varied set of goods, applications and services used for producing, distributing, processing, transforming information-(including) telecoms, TV and radio broadcasting, hardware and software, computer services and electronic media" (Marcelle, 2000).

Uden, (2007) asserts that ICTs are advances in technologies that provide a rich global resource and collaborative environment for dissemination of ICT literacy materials, interactive discussions, research information, and international exchange of ideas, which are critical for advancing meaningful educational initiatives, training high skilled labour force, and understanding issues related to economic development

Kimberly, Leahy and Yermish (no date) have the followings which are additional benefits of ICT that will tend to bring sustainable development.

1. Reduction of learning time
2. On demand learning –availability of instruction wherever the learner `needs it.
3. Increases achievement –students always have better results, retention or job performance from interactive learning.
4. It has better quality than classroom instruction
5. It is learner-controlled
6. It increases motivation –students usually report that they find
7. It increases motivation-Students usually report that they find technology based interaction more interesting and enjoyable.

ICT in its totality enhances critical and mathematical thinking ,problem solving, demonstrate increasing levels of communication and cooperation. For Nigerian education system to achieve its set objectives, information is needed in taking decisions towards achieving the aim of the system.

Conclusion and Recommendations

In conclusion, The UBE should be seen as a programme and not political or hijacked by politicians. There should be harmonious existence between the state, local and federal government for the success of the programme at all levels of education.

Financial allocation to education sector should be increased, to be able to cater for procurement of relevant equipment, materials and other facilities. Relevant planning data should be collected for better achievement and adequate preparation should be made.

There should be public enlightenment campaign in all rural areas in each local government. This will pave way for awareness, adherence and enhancement of community support. The executors of the programme should be sincere and committed to the goals of the programme.

The government should provide ICT in its entire ramification to schools. Coupled with this, stable power supply should be provided because without it many of these ICT cannot operate.

Equally, students should be encouraged to meet up with the challenges of automation. All designers of higher education programmes must be conversant with what obtains in developed countries so as to make students move with the technological advancement.

If students are properly groomed in ICT skills, they will achieve the following:

a. Effective communication .This will be possible through range of skills to express themselves in computer environment.

b. Analysis and interpretation of data. Students will be able to discover data now available on various websites.

c. Engaging in problem solving. This will give them opportunity of using what they have been exposed to in new situations.

Teachers at all levels of education must be qualified and duly registered as practicing teachers. They must all be computer literates to allow for a better classroom that will bring about adequate output. In other words all teachers must be ICT compliant. Therefore, emphasis should be on the teachers' professional and skills development and adoption should be considered before providing computers and related technologies in schools.

Enabling environment for teachers should be provided for teachers to acquire knowledge on the use of ICT through in service training , seminars, workshops and conferences.

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