EDUCATIONAL TECHNOLOGY: THE IMPERATIVENESS OF ICT IN IMPROVING TERTIARY EDUCATION IN NIGERIA

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Abstract

The use and application of Information and Communication Technologies (ICT) as a product of educational Technology in Nigeria tertiary education system through the various educational Media devices such as Computers, internet, Television, overhead projectors, slide projectors, filmstrips etc have become imperative if meaningful achievement is to be attained in education and National development. This paper attempt to address the imperativeness of ICT in education and further proffer solution in the light of the existing situation in Nigerian tertiary institutions. I.e. shortage of qualify teachers, non provision of educational media to schools, poor funding of education by government, power and energy to operate and maintain the available audio visual materials including parents inability to provide their wards with basic learning facilities such as textbooks etc, Conclusion and recommendations were also given.

Introduction

No nation can develop technologically without education. Education holds the key to social, Political and economic development of any nation. Education and Technology the world over are noted to be largely responsible for the advancement of Nations. Educational technology essentially deals with finding solution to problems of teaching and learning in education through the application of appropriate media or modern technologies especially electronic media (hard and software's devices). The term technology education on the other hand is a baby of the United States of America whose birth day is between 1980 and 1985 (M C. Crory and Bame, 1986). In Nigeria, technology education is quite new. Technology is all about finding solution to human problems using human reasoning and materials/equipment. Consequently, technology education may be defined as that area of education which prepares one to acquire the techniques of processing ideals into practical solution to human problems. Technology education is scientific and works with concrete facts that can be practicalized into real life situation. Nigeria is yet to embrace fully the librating power of information as product of educational technology, for instance, a nation that is not linked to globalization is already underdeveloped. The various media needed to improve teaching and learning through researches are not available for students and teachers. One time minister of science and technology professor Turner Isoun stated that it would benefit Nigeria tremendously if she becomes part of the Global university system (GUS). Its aim is to educate students through satellite or wireless tele-communication infrastructure, mostly using internet. It is widely acknowledged that its use would improve the quality of teaching and learning in tertiary institutions. ICTs are becoming natural part of man's daily life, thus, their use in education by staff (academic and non-academic) and students is becoming necessity. Lecturers not only need to use ICTs but need to be comfortable with using them. This will help them participate fully in the life of contemporary university and accomplish their daily task (yusuf and Onssanya 2004). Unfortunately, ICTs has had more impact on administrative services such as admission, registration, fee payment and purchasing than on the fundamentals of classroom teaching and learning (UNC, 2000).

Problems Associated with Education in Nigeria: Poor Funding of Education by Government;

The Governor of Edo State, Adams Oshiomole, (2009) remarked that the paltry average of 8.5% of Nigerian's public expenditure on education is regrettable. According o him, the allocation has been

declining-steadily over the years resulting in decline of standard because government does not infuse funds into the sector. The implication of this is that most rich people send their children or wards abroad to get good education and careless about the average Nigerian students who cannot afford to do this. The education in Nigeria has become one which is fit for those who have the hope for the better chance and good education where the basic infrastructures for learning are available.

An educationist, Taiwo Akindele, (2009) stated that "The worst is yet to come if government continued to tread the unpathrotic part of neglecting the importance of education in human and national development". He pointed out that already 70% of Nigerian graduates are unemployed due to poor education funding by government. He also advanced that continuing decline of the federal government budget to education, the sector which is critical for the realization of growth process, indicates that government may be losing interest in the sector by allowing the private sector to play major role in the sector. For instance, in 2009 budget \$\frac{1}{2}3.6\$ million was allocated to the sector which showed less than 2% of the total budget against 26% recommended by UNESCO for developing Nations if any impact is expected in the sector. The educationist also believed that if Nigeria's allocation to education is compared to other less wealthy countries in Africa; it becomes clearer that a lot more needs to be done. He observed that with limited funding in education sector, there is bound to be inadequate infrastructures, over-crowded classrooms and lack of qualified teachers to mention a few.

Power and Energy- A major source of concern in education industry is inadequacy, of electricity supply to operate and maintain the available Audio visual instructional media in our institutions of learning in Nigeria. In (2007) when late president Umaru Musa Yar'adua assumed office, in his median broadcast to the Nation, said "Our plan to lunch a national emergency program on power supply". Unfortunately, the sector has not witness any meaningful change to this moment in spite of Nigeria's position as the 6th largest producer of crude oil in the organization of petroleum exporting countries (OPEC) and 5th largest US source of imported oil and 8th worldwide crude oil producer. It is indeed pathetic and even more worrisome because the nation cannot boost of stable and affordable power supply to put into use the available technological media that aid or support teaching and learning in our institutions of learning and also take care of other economic activities that enhances development.

Shortage of Qualified Teachers and non- Provision of Modern Instructional Educational Media to Schools

Most Nigeria tertiary institutions are already having computer study as part of their academic programmes, although most of them are still theoretical in nature to impact meaningfully on the society. Joseph, (2008) observed that despite advancement in technology and the advantages to be derived from use of audio visual in instruction, teachers in tertiary institutions are yet to adopt their use in teaching and learning process, stressing that majority of teachers have no adequate knowledge on how to operate and use the available audio visual equipment and materials as a result of lack of trained professional, and poor governance in the country. Okon, (2003) stated that, standard of graduates from Nigeria university have fallen below international standard because of lack of application of modern technology devices in teaching and learning, such as internets, computers etc. The resultant effect is the exodus of experts in Nigeria universities to foreign land (beside the in-ability to bring Nigeria experts in specialized disciplines back home to teach and research in our universities). This syndrome is principally due to lack of appropriate research facilities and poor remuneration simply referred to as brain drain.

It is in the light of the above problems that Francis Bissong, (2009). Professor in geography and deputy dean post-graduate school, university of Calabar called on Nigeria government to reverse its non-interest on education and pay adequate attention to the sector as one of the most important area responsible for the rapid advancement of any Nation.

The Imperativeness of ICT in Nigeria Education

The application and use of ICT in education has become imperative as tool for enhancing quality instruction, improve performance of students and technological advancement generally. Thus:

National policy on education, (2009) blueprint recommended measures government should take to implement its policy on education as follows:- Modern educational techniques shall be increasingly used and improve upon at all levels of education system. Education and training facilities shall continue to be expanded in response to the societal needs and made progressively- accessible to afford the individual a far more diversified and flexible choices.

The paper examined educational technology thereby narrowing it to informat is and Conclusion communication technologies (ICT) as a tool that brings us closer to technology. An x- ray of problems associated with education in Nigeria has been discussed with an appeal to government to supply modern educational media for use by teachers to enhance effectiveness and improve standard of student, and make them compete favourably with others countries anywhere in the world.

If Nigeria education is to compete favourably with other developed countries, the following Recommendations measures must be adhered to:-

- 1. Government should re-arranged her priorities and fund education sector more adequately with good equipment and necessary personnel through training to reduce recruitment of foreign teachers and avoid unnecessary spending to cover their salary and housing.
- 2. Give incentives to teachers at all levels by increasing their take home pay, as well as paying them as at when due thereby encouraging further researches and reducing to the barest minimum brain
- 3. ICT education be made compulsory at all levels of education, (primary to tertiary institutions) and centers established in all schools to create more awareness and help teachers and learners take advantage of its use.

References

- Adams, O. (2009). Solar Aids organization http://www.nigerianmuse, spotlight/governancne forum. yar'adua seven point agenda.
- Gambari, A.I. in NUC, (2006). A Ph.D Research proposal submitted to the Department of Science Education, Faculty of Education, University of Ilorin, Nigeria.
- Gambari, A.I. in Yusuf and Onasanya, (2006). A Ph.D Research proposal submitted to the Department of Science Education, Faculty of Education, University of Ilorin, Nigeria.
- Joseph, O.H. (2008). Assessing the Availability and Utilization of Instructional Materials in Kaduna Polytechnic.
- McCrory, D.L. and Bame, E.A. (1986) Technology Education: A new direction for industrial arts at the middle level: A report on trends and practices. Schools in the middle. Reston via - U.S. A National association of secondary school principals.
- Okon, E.A. (2003) Information Technology and learning organization: Nigerian Universities in perspective journal of Faculty of Education, University of Calabar.
- NPE, (2009). National policy on education, federal ministry of education.
- Simon, I.A. (2001). Invigorating Science and Technological Education in the Northern stares of Nigeria: The way forward for a higher powered technological education; Journal of Faculty of Education. University of Calabar
- Taiwao, a. (2009). Solar aids organization. http://www.nigerianmuse/sportlight/governance/fi.rum yar'adua seven point agenda
- Umaru, M.Y. (2007) Inaugural Address as Nigeria is president 29th May.