THE CHALLENGES OF ICT UTILIZATION AS EDUCATIONAL MEDIA BY URBAN AND RURAL SCHOOLS IN NIGERIA

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Abstract

The paper discusses the challenges of ICT utilization as educational media by urban and rural schools in Nigeria education system with an overview of media availability and use, Constraints, conclusion and recommendations proffered and the way forward. The revolution in information and communication technology (ICT) has significantly increased the awareness of media utilization in the society especially in the educational institutions of learning from primary to tertiary level.

Introduction

Nigeria is inhabited by both the urban and rural dwellers but the rural communities are inhabited by the bulk of the Nation's population who engage in primary activities that are fundamental to economic development. According to Global Information Society Watch (GISWatch, 2007) online research and interview of ICT stakeholders www.giswatch/.org.../Nigeria revealed that Nigeria has a population of 140 million people with seventy percent (70%) living in underserved and remote areas of the country. Nigeria nation with its 140 million people stand very tall in Africa, with high potentials in commerce, culture and education.

This attribute places the nation at a crucial position to contribute to global economy which can only be realized if the vast majority of the populace is productive. Unfortunately, ICT facilities are either non-existent or rare in the rural communities where the majority of Nigerians reside. It is quite worrisome at the acute state of educational infrastructural development in rural areas when compared to urban areas. It should be noted that schools whether urban or rural have a common goal of developing or preparing the individual for purposeful life to contribute meaningfully to the society one finds himself. It therefore holds that as government

make plans and policies on education there should be provision for equitable distribution of learning facilities between the urban and rural educational institutions.

Definition of ICT and Educational Media

Information communication and technology (ICT) as a product of technology has become a major driving force in the development of modern society through education. ICT in education simply mean effective ways of passing academic instruction, storing, retrieving, coding and decoding of information for better understanding of the learner and easy illustration and teaching by the teacher. Adesope and Adebayo (2007) describe ICT as tools and processes used to access, retrieve, store, organize, manipulate, produce, present and exchange information by electronic and other automated means. These include hardware, software and telecommunications in the form of personal computer, scanners, digital cameras, phones, faxes, moderns, CD and DVD players and recorders, digitalized video, radio and programs like database system and multimedia applications. Educational media are all those facilities that enhance effective teaching and learning in schools e.g the use of computers, internet, educational projectors, multimedia facilities etc.

Challenges of ICT Utilization in Education

Rural areas are the base for production of food and major services for capital formation in the country, the rural areas seems forgotten and unattractive to live in, and there is absence of learning infrastructure both human and material, absence of portable water, electricity and good feeder roads. The rural dwellers have low purchasing power and standard of living and without the basic learning infrastructure in place ICT cannot be utilized to its fullest potentials. Rural areas in developing countries particularly Nigeria are confronted by many challenges in terms of ICT utilization. Although, Nigeria has embraced ICT as a tool for enhancement of education but accessibility to learning resources however, has remained unrealistic i.e computer hardware and software, internet connectivity are grossly inadequate and have constituted constraints for effective usage.

Despite ICT drive, Nigeria is almost two decades behind in embracing the use of computer in primary and secondary school classrooms (Ezekute, 2000). Afolabi (2001) affirmed that Nigeria ranked lowest among five prominent African

countries in the application of ICT e.g Ethiopia, Mali, Senegal and still far behind model nations like Sweden stressing that the potentials to use technology to enrich and enhance the teaching and learning process is yet to be employed.

Nigeria classrooms still employ traditional methods of teaching via instructional materials. In line with this study, Adama (2009) stated that it became clearer that the issue of availability and utilization of instructional media in teaching and learning of English language and other subjects in some urban schools picture is not quite different from what is obtained in rural schools. Ajila (1985) carried out a study on teachers' competency and utilization of educational media in teaching of Biology in Ondo State of Nigeria. He stated that "instructional media are inadequate in the selected schools, furthermore, teachers do not attend workshops, seminars and conferences all of which are important to keep teachers abreast with modern teaching techniques." Gold (1990) revealed that schools are poorly equipped in terms of provision of instructional media. The revelation came out in his study of the status of educational technology in some selected schools where television set, radio were found but the teachers do not have access to them because they were locked up in the principal's office for security reasons. The researcher of this paper is of the view that the principal's action could be attributed to absent of electricity and expert technicians to carryout regular maintenance on the media rather than hide under the cover of security issue.

In the study carried out by Mamudu (1990) he noted the following as problems encountered by teachers' in designing and producing instructional facilities in college of education Ilorin; Lack of fund to embark on production of Instructional Aids, majority of the teachers are not trained towards designing and producing Instructional Aids, the teachers were ignorant of the importance of educational technology in classroom instruction, infrequent power supply prevented the teachers in trying their hands on creative things. Some teachers claimed to be technophobia while damaged equipment could not be repaired due to lack of qualified technologist to carry out the repairs and the problem of getting spare parts to replace the warn-out equipment among others.

According to komolafe (2009) she observed that ICT infrastructure in higher institutions are grossly inadequate, she also noted that much attention is paid to internet while other essential equipment are lacking such as CD-ROM, radio, tape,

television etc. komolafe (2009) study 65% of respondents confirmed that computers available for internet use are grossly inadequate to meet the demand of people for its usage both at urban and rural setting. Joseph, (2008) carried out a survey research on the availability and utilization of audio visual materials for teaching and learning in Kaduna polytechnic, he remarked that despite the advancement in technology and the advantages to be drive from their use, majority of teachers have no knowledge on how to operate and use the audio visual materials and equipment. Also, there are no trained professionals or technical personnel to help in operating the few equipment available. He recommended that refresher courses or workshops be organized on periodic bases for teachers' to enable them acquire knowledge and skills on how to operate instructional materials and equipment.

Constraints

The following were identified by Adeyanju (2010) as obstacles facing ICT diffusion in the rural areas; Lack of private sector involvement (ICT manufacturers and operators) in designing ICTs suitable for rural poor context, lack of sustainable wired and wireless networks, Poor adaptation of ICT interventions due to high cost per person in rural contex, security issues, policy inconsistencies and lack of capacity building for managing resources and lack of effective coordination.

Furthermore, Iloanusi and Osuagwu (2009) reported on factors limiting ICT infusion in rural areas to include inadequate funding by government and lack of technology budget to address ICT infrastructure, high cost of consumer ICT services, and irregular supply of electricity.

Goshit (2003) explained that the main issue facing Nigeria ICT programme is lack of "quality manpower" and "poverty" as major obstacle for ICT education in a country where education has become highly controversial. It implies that there are no qualify trained personnel for the programme and government poor funding of education is inadequate as ICT programme is capital intensive.

The absent of electric power grids in most parts of the country and the locations of cyber cater in commercially profitable communities to the detriment of semi urban or rural communities is a major constraint for instance, the president of the Association of telecommunications in Nigeria (TITI Omo) noted in Daily Trust, of 1st August, 2011 that 70% of rural school problem was poor public

electricity supply stressing that power supply is largely Government controlled.

Conclusion

In the light of discussion in this paper, it could be said that the major challenges confronting the realization of ICT utilization in schools particularly in the rural areas is government inability to fund education and adequately provide ICT facilities to schools, lack of experts and teachers to operate and maintain the relevant educational media, incessant power outrage without which these devices cannot function and lack of supervision by education stake holders. However, it is hoped that government positive change in attitude towards funding of education especially as it affect the provision of ICT facilities and utilization in rural schools will lead to enhanced educational development. Furthermore, funding of education should not be left to government alone, organizations and individuals who have education in Nigeria at heart should rise-up to these challenges facing the sector especially schools in the rural areas.

Recommendations

In this edge of ICT and for wider coverage in urban and rural areas the following points should be adopted: There is need for financial sustainability on the part of government to enable it succeed and impact felt through proper funding, purchase and equitable distribution of ICT instructional materials to schools at urban and rural level in addition to training teachers and professionals on use and maintenance of educational facilities and equipment.

There is need to distribute effectively information or data received through collective method called telecentre to reduce cost, telecentre provides public with access information and communication technologies for personal, educational, social and commercial economic purposes.

ICT infrastructure requires collaboration among many stake holders. The effective use of ICT in education will require that ministries of education collaborate with other ministries and government bodies responsible for infrastructural development.

There should be regular monitoring of schools by education stake holders to ensure effective use of instructional media facilities by the teachers while provision of electricity to enhance operation of instructional materials should be given priority.

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