

The Use of Electronic Media in Nigerian Educational System: Principles, Practice, Problems and Prescriptions

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Abstract

Electronic media as a tool has created new options for extending and enhancing education. However, as the number of technologies of e-media in society increases rapidly, so does the rate of misuse. Even the most experienced members may be susceptible to unintentional mistakes. Maintaining professional boundaries in all forms of communication, technology-related or not, is vital to maintaining the public trust and appropriate professional relationships with students. Members must be aware of the numerous challenges and the ramifications associated with the use of electronic media. Electronic media is now used formally in primary, secondary and tertiary institutions and informally in Nigeria. However, the use comes with numerous advantages and disadvantages; moderation is therefore the key to ensure that they are not used inappropriately. In formal learning, e-media technologies should be highly maintained to ensure continuity and teachers trained on its usage as well as students. Informally, radio and television stations in Nigeria should develop more time to educational programmes. The internet on the other hand should be used to enhance learning and research and building social interaction among students, teachers, media practitioners and producers in the society.

Keywords: education, electronic media, Nigeria

1. Introduction

Education is the most powerful weapon which you can use to change the world” says Nelson Mandela. Education in its general sense is a form of learning in which the knowledge, skills and habits of a group of people are transferred from one generation to the next through teaching, training or research. Education frequently takes place under the guidance of others, but may also be autodidactic (a person who has learned something without a teacher or formal education; a self taught person). Education is more than reading, writing, and arithmetic. It is one of the most important investments a country can make in its people and its future and is critical to reducing poverty and inequality. Any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational. Education is commonly divided into stages such as preschool, primary school, secondary school and then college or university. Human development is partly a matter of people and communities improving their own lives and taking greater control of their destinies. Education is broadly used as an instrument for social change. The critical point of such belief can be traced far back to the 1960s when Theodore Schultz systematically articulated the human capital theory of development. In his voluminously printed works, Schultz argued that population quality and knowledge constitute the principal determinants of the future welfare of mankind (Schultz 1961). Adding to this argument, Harbison and Hanushek (1992) contended that a country which is unable to develop the skills and knowledge of its people and to utilize them effectively in the national economy will be unable to develop anything else.

Article 26 of the 1948 UN universal declaration of human rights declared that everyone has a right to education and that this education shall be free and compulsory. It went on to say that education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. If education is viewed as a human right, then it implies that education is for everybody in the society. The challenge towards this drive is how to indeed make education available to all and in good quality. As regard to the purpose of that education, this is all about the role of education in peoples’ future’s lives. Education has a great significance for the economic social and cultural development. The aim of educational policy should therefore be to give every person a chance of developing his/her inherent potential. It is this kind of education which will bring about accelerated economic growth, more wealth and income, decline in population growth, national unity and political stability.

Most people agree that every person has the right to an education. But investing in education is also the smart thing to do. Why? Because education gives people the skills they need to help themselves out of poverty and into prosperity. With education, people are better prepared to prevent disease and to use health services effectively. For example educated mothers have healthier children. In many poor countries, with each additional year of schooling, people earn 10% higher wages. These earnings, in turn, contribute to national economic growth. No country has ever achieved continuous and rapid growth without reaching a high literacy rate of at least 40%. Education supports the growth of civil society, democracy, and political stability, allowing people to learn about their rights and acquire the skills and knowledge necessary to exercise them.

2. Challenges of Education in Developing Countries

Although developing countries like Nigeria has experienced massive growth in enrollment soon after independence, such exponential growth has been accompanied by manifold challenges and dilemmas. They include:

Location/Cost of Schooling

Nigeria is a country where majority people live below one dollar and 70% of the population resides in the rural areas. In this situation sending a child to school is difficult for families who keep struggling to feed their families. Majority of school are located in the urban areas than the rural areas. In deciding to send their children to school, parents face a trade-off between household consumption now and children's expected future income. There are direct and indirect costs of children's forgone labour at home or in paid work, their forgone time that could be spent in non-school education, such as learning how to work in the family business or on a family farm. Thus, opportunity costs refer to the cash earnings or other contributions which a household or individual sacrifices in order, for example, to keep a child in school.

Bryant (1990) noted that many children in Malawi began working at very early ages and were not enrolled in school at all. He noted also that they spent their time on child-minding of their siblings and working on the estate farms, in family fields and with herds or on the lake. Elsewhere, Dall (1989) observed that in Zambia, parents, unable to spare children from rural household chores, withdrew or kept them away from school during important seasonal events like harvest and fishing. In Nigeria, Jakande (1987) observed that the establishment of neighbourhood schools appeared to have been an effective answer to the problem of rural parents who wanted to be compensated for the loss of their children's labour on the farm as the child is available after school hours. However, if schools were to be within walking distance in sparsely populated areas, this would result in the construction of schools for small numbers of children. It seems that this is the inevitable at this level of education if every child of every citizen is to be educated.

Equity and Gender Issues

Another problem in the provision of basic education has been to reach deprived groups. In deprived areas like the Northern Nigeria, creating schools does not guarantee that children will attend them. Ahmed and Carron argued that measures to increase the physical accessibility to schools and to improve their quality will have to be supplemented by other types of action aimed at stimulating the demand for education while at the same time adapting educational services to the specific needs of deprived local communities. And Burney and Irfan (1991) also pointed out that male and female differentials in literacy and school enrolment cannot be attributed to the availability of the schools since enrolment differentials are also influenced by the parental characteristics and socio-economic status of the household.

Lockheed, Jamison et al. (1980) also argued that in many African cultures, parents decide that education is not worthwhile for their daughters who will move into their husbands' families when they marry and that gains in productivity or income due to education will accrue to the families of their sons-in-law rather than to them. The low value attached to female education is said to be linked with some rooted features of gender relations. As Summers (1992) summed it up, under-investment in girls is an economic problem that results from a vicious cycle caused by distorted incentives. The speculation that girls will grow to do other than serve their husbands reduces the parents' incentives to invest in their daughters as human capital.

Cultural and Religious Attitudes

Culturally determined ways of defining women and men and their roles in a given society shape gender-specific opportunities and constraints. Thus, the existence of discriminatory attitudes towards the schooling of girls is informed by customs and culture. Mobility restrictions arise in many societies when girls reach puberty and this makes the effect to be more on girls' retention than on entry (Lloyd & Blanc 1996). In some tribes in Africa, as soon as a girl reaches puberty, she is taught the wisdom and knowledge of her society in order to maintain and develop it. These instructions are considered directly relevant to a girl, preparing her for life as a wife and mother in a village. 'Sometimes conflict arises between what is taught at home (in initiation ceremonies) and at school which may lead to parents opposing girls' continued attendance at school' (ODA 1996,).

Indeed, girls' behaviour is often directly related to the many tribal and traditional taboos which dictate what and what not to do at the various stages of their development which may conflict with the demands of schooling. Another factor which also acts together with attitude is religion. Religious privileges of access have often been restricted to certain classes and to males. And this pattern of transmitting and gaining of religious knowledge and power has been influential in determining access and exclusion to formal public education. King (1987) found that religion, along with gender; social class and regional location were important determinants of schooling.

3. Nigeria Educational Policy and Organizational Overview

The existing educational system in Nigeria and its history is guided by the National Policy on Education and several coordination mechanisms have been put in place to ensure that the highest standards are maintained in curriculum, infrastructure and manpower requirements. The Primary and secondary schools are directly under the ministry of education either at the state or federal level, the universities are under the National Universities commission (NUC), the polytechnics the National Board for vocational colleges and Technical education (NABTECH), and the National commission for colleges of education (NCCE) oversees the activities of the Colleges of Education.

Forms of Education

Formal Education: This corresponds to a systematic, organized education model, structured and administered according to a given set of laws and norms, presenting a rather rigid curriculum as regards objectives, content and methodology. It corresponds to the education process normally adopted by our schools and universities. Formal education institutions are administratively, physically and curricularly organized and require from students a minimum classroom attendance. There is a program that teachers and students alike must observe, involving intermediate and final assessments in order to advance students to the next learning stage. It confers degrees and diplomas pursuant to a quite strict set of regulations.

Informal Education comprises the following activities: (a) visits to museums or to scientific and other fairs and exhibitions, etc (b) listening to radio broadcasting or watching TV programmes on educational or scientific themes; (c) reading texts on sciences, education, technology, etc. in journals and magazines; (d) participating in scientific contests, etc (e) attending lectures and conferences. There are many instances of situations/activities encompassed by informal education, from those that may take place in the students' homes - such as scientific or didactic games, manipulation of kits, experiments, reading sessions (biographies, scientific news, etc.) to institutional activities - lectures in institutions, visiting museums, etc.

The Electronic Media

Electronic Media is information or data that is created, distributed and accessed using a form of electronics, electromechanical energy or any equipment used in electronic communications. The common equipment we use on a day to day basis to access Electronic Media is our television, radio, computer, cell phones and other devices transporting information to and from us by means of electronic involvement.

Electronic media are media that use electronics or electromechanical energy for the end user (audience) to access the content. This is in contrast to static media (mainly print media). The primary electronic media sources familiar to the general public are video recordings, audio recordings, multimedia presentations, slide presentations, CD-ROM and online content. Most new media are in the form of digital media. However, electronic media may be in either analog electronic data or digital electronic data format. Any equipment used in the electronic communication process (e.g. television, radio, telephone, desktop computer, game console, handheld devices) may also be considered electronic media.

Use of Electronic media in a Formal Education Setting

The use of electronic media has led to the concept of E-learning. E learning refers to the use of various kinds of electronic media and information and communication technologies (ICTs) in education. E-learning is an inclusive terminology for all forms of educational technology that electronically or technologically support learning and teaching, and may depending on an emphasis on a particular aspect or component or delivery method, sometimes e-learning could be termed technology-enhanced learning (TEL), computer-based training (CBT), internet-based training (IBT), web-based training (WBT), virtual education, digital educational collaboration or distance/open education.

E-learning includes numerous types of media that deliver text, audio, images, animation, and streaming video, and includes technology applications and processes such as audio or video tape, satellite TV, CD-ROM, and computer-based learning, as well as local intranet/extranet and web-based learning. Information and communication systems, whether free-standing or based on either local networks or the Internet in networked learning, underlie many e-learning processes.

It is commonly thought that new technologies make a big difference in education. Many proponents of e-learning believe that everyone must be equipped with basic knowledge of technology, as well as use it as a medium to reach a particular goal. The internet and multimedia technologies are the basic enabler of e-learning, with consulting, content, technologies, services and support being identified as the five key sectors of the e-learning industry.

E-learning can occur in or out of the classroom. It can be self-paced, asynchronous learning or may be instructor-led, synchronous learning. E-learning is suited to distance learning and flexible learning, but it can also be used in conjunction with face-to-face teaching, in which case the term blended learning is commonly

used.

E-learning as a domain of intellectual pursuit and technical development can be categorized into discrete areas. The focus of e-learning could be as an educational approach or tool that supports traditional subjects; e-learning as a communication medium for knowledge development and exchange; e-learning itself as an educational subject (i.e. computer studies) where courses are most often named as Information and Communication Technology (ICT); e-learning administrative tools such as education management information systems (EMIS). E-learning has evolved since technology was first used in education. There is a trend to move towards blended learning services, where computer-based activities are integrated with hands-on, face-to-face, or classroom-based situations.

Technologies including blogs, collaborative software, ePortfolios, virtual classrooms, audio, video and tools like computers, laptops, tablets are increasingly used to support e-learning. With the increased use of mobile phones, a new method in e-learning being explored is the use of mobile phones for different types of learning and this is referred to as Mobile learning or m-Learning. In order to leverage and maximize the opportunities through e-learning, Educational institutions, corporate organization, Government should develop their e-learning strategy for maximum use.

Use of Electronic media in Informal Education setting.

Electronic Media such as Radio, Television, Cinema, Internet etc plays a predominant role in social change and education. Change is very much essential in the outlook, attitude of its people. It is only possible if timely awareness and proper educational programmes is provided.

Radio

Radio is a senior component of electronic media has maintained a very good influence. It covers almost all parts of our country reaching public everywhere. Besides providing information, preserving art and culture, it is also playing a very important role in imparting education. It has significantly contributed towards national development.

For a very long time, it was under the control of Government and had limitations and yet achieved desired results in education and development. In the earlier part of post-independence era, it served as an inter-locator between Government and public. As the percentage of illiterates was high radio remained as a paramount communicator. It may not be an exaggeration if it is said that in post-independence era, radio served as a sole carrier vehicle of development and education. E.g “The Flava” Programme used to enlighten people on HIV/AIDS, “Story Story” on Radio Nigeria is used to enlighten people on problems in society

The radio is cheaper than television in both price and maintenance. Added to its cheapness is its portability. There are many radio stations, owned by the Federal and state governments and the private individuals in the country. Unfortunately, the endemic power outages in the country poses a limiting factor to the extent to which the radio can be used to effectively broadcast educational programmes. On the whole, like the television sub-system, the radio has the problem of being frustrated as a result of unreliable electric power supply in the country.

Television

Television is the most powerful medium in the electronic media. It almost succeeded in quickening the pace of development and education. It has enormous strength to attract both literates and illiterates and has equal strength in effective communication. It can be said without any hesitation that television has greater influence on society. Such a powerful medium is being used in education for teaching and learning process. America has given more importance to education is evident from the fact that more than hundreds of channels exclusively meant for education are in operation. In Nigeria, the Nigerian Television Authority (NTA), the states' television and the private television stations can reach all students within the country and beyond. But the problem associated with this sub-system is whether a separate channel will be assigned educational programmes be sandwiched with the regular existing channels. Or, to establish separate television houses for the purposes of education. Whichever alternative, disruptive problem of incessant power outages in the country will pose a limiting factor. Thus, while there is the prospect of using television to boost education in the country, there are many constraints surrounding the usage (Osuji, 1981:141; Akinyemi, 1986:96). E.g. is the “I need to Know” programme aired on AIT and other State Stations in Nigeria.

New Media

In recent times, revolutionary changes in mass media has also influenced education and learning in Nigeria. Revolution in information technology has reduced huge globe into a small village. Invention of mobiles, internet, blogs in this sector have shrunked the world to fit in the fist. Whatever and wherever an eventuality takes place, within a few minutes it will be brought before the world. On many occasions, such eventualities have been

covered live by electronic media.

Modern electronic media has developed into a very powerful Mass Media which is required to be used systematically for the development of education. Sincere efforts are to be made in this direction. Marshall McLuhan's phrase 'the global village' suggests that people of the world can be brought closer together by the globalization of communication. The global village is an image of a world in which everyone's voice has a chance to be heard. Interactive media facilitates participation in global communication and debates, offering entry into public space. The globalization of communication enables us to share in each other's lives. In this ideal communication environment, the mass media continues to play an important role in democracy, informing people and generating discussion about events and issues worldwide. In today's life, media glare is visible everywhere in several forms. It has opened up many vistas in all spheres of life - social and economical; art and culture; tradition, information and publicity; education and entertainment; politics etc., It has become a voice for the neglected classes. Thus, in the present scenario, media has become part and parcel of our life.

In spite of growing concern of media's internal competition and its fall out on social responsibility, it has not lagged behind in fostering education e.g. live practical teachings on sites like YouTube, teleconferencing etc.

Learners need opportunities to interact with audiences beyond their family and like-minded friends. The competencies promoted by digital and media literacy are fundamentally tied to true participation in a community, where engaging with people different from ourselves helps us clarify our own ideas, look at the world for different viewpoints, and in the process, deepen our own learning and develop a sense of connectedness to the people around us.

Impact of Electronic media use in Nigeria Education System

The influence of electronic media in educating students is not socially progressive it has resulted to frustration on the part of many teachers who do not have inadequate knowledge of electronic media technologies like computer, internet, education software etc, audio and video tools. Many primary and secondary schools in Nigeria especially private owned are strongly encouraging teachers to develop and have indeed created programs that efficiently transmit contents to the students thus freeing the teacher to assist students individually. All this comes with additional funds on the part of parents or guidance. Government owned schools cannot afford to increase fees

Again, there is the time consuming and skill demanding component of teacher training to consider, so teachers will in effect translate their curriculum effectively online, fully access internet resources and communicate to students via this mode. E.g distance learning or education. Distance education is offered to students who are not available to attend regular day school. The main advantage of distance education is its flexibility. Students complete readings and assignments according to their own schedules without struggling over the constraints imposed by time tables and due dates of a formal school schedule. Students can proceed more or less at their own speed provided that they meet the wider time frame allotted or the deadlines for assignments or final exams. Teachers maintain contact with their students via e-mails, internet access and in most cases, telephone supplemental help which includes academic as well as computer technical support.

While the flexibility of this programming is advantageous, it can also be a stumbling block, particularly for the students that are lacking personal management and organizational skills. Without the regular guidance and contact that a live teacher can provide, many students do not complete their programmes or struggle with deadlines more than usual. This is a recognizable drawback for this mode of learning. Also this mode could become an "easy out" for students who are avoiding the regular classroom experience.

Electronic media can be effectively when used cautiously or professionally. They serve a range of purposes, from helping students and teacher or lecturers to access assignments and researches related to classroom studies and other countries. Users for example students can be vulnerable to unintended misuses of electronic media e.g social media. Even the most innocent can be easily manipulated. The immediacy and simplicity of a text message for example may lead to longer informal conversation

Education is very essential part of an individual's life. Previous research has calculated that more than 90% of college students use social networks. Technology has shown a fast development by producing small communication devices but these small communication devices can be used for accessing social networks any time anywhere, these devices include pocket computers, laptops, iPads and even simple mobile phones (which support internet) etc.

Technology is step towards betterment, no doubt but any technology which can provide ease of social networks can be dangerous for social network addicts. Providing ubiquitous facility of social networks is a straight invitation of addiction to any teenager and even an adult, as academic satisfaction is not enough for those students who suffers from social isolation. Social Networks grab the total attention and concentration of the students and diverts them towards non educational, unethical and inappropriate actions such as useless chatting, time killing by random searching and not doing their jobs. As social network has introduce many attractive tasks

like gaming, advertisements etc. so that people can never get enough of these things.

Challenges of electronic media-Education in Nigeria

In many schools, despite significant investment in electronic technology, teachers are not making effective use of the engaging instructional tools. The reasons for this vary. Some teachers do not know how to use technology tools. Some mistake the mere transfer of classroom materials from paper to a computer screen as effective use. Others do not have the time to spare on media production projects because they are busy preparing children for high-stakes testing.

One thing is certain: simply buying computers for schools does not necessarily lead to digital and media literacy education. Schools have a long way to go on this front. Mandatory Internet filtering in schools means that many important types of social media are not available to teachers or students. And though there are computers with Internet access in most classrooms, fewer than half of teachers can display a website because they do not have a data projector available to them. When computers are used, most students use them to prepare written documents, drill-and-practice on basic skills, or to make Powerpoint presentations.

Sadly, some people equate the amount of money that schools spend on technology or the numbers of students enrolled in online learning programs as a proxy for digital and media literacy education. Some of the hype surrounding “digital natives” and the transformative potential of technology in education is promoted uncritically by fans of social media or subsidized by those who stand to benefit from selling data systems, interactive white boards, games or cell phones.

Although using e-media technology holds great potentials in supporting and augmenting existing educational as well as National development efforts in Nigeria, several challenges remain. If these challenges are not addressed the effectiveness of any program will be reduced considerably and we will not be able to successfully replicate them at the national level. These challenges include:

1. Inadequate infrastructure including computer hardware and software high, and bandwidth/access etc.
2. Lack of skilled manpower, to manage available systems and inadequate training facilities for e-education at the tertiary level;
3. Resistance to change from traditional pedagogical methods to more innovative, technology based teaching and learning methods, by both students and academics;
4. The overall educational system is underfunded; therefore, available funds are used to solve more urgent and important survival needs by the institutions;
5. The over-dependence of educational institutions on government for everything has limited institutions ability to collaborate with the private sector or seek alternative funding sources for e= educational initiatives.
6. Ineffective coordination of all the various ICT for e-education initiatives.

This list is not exhaustive but represents the major problems faced in the development of ICT for e-education in Nigeria. I believe that when adequately addressed, the chances that e-education will thrive in Nigeria will increase dramatically. I also believe that this will have larger, much desired impacts on development and modernization of Nigerian society.

Conclusions

There are two ends of any e-media-based education the source end and the receiving end. The source end is responsible for planning, producing and telecasting programmes while the receiving end takes care of utilization of the programmes. But experience reveals that utilization of programmes is nobody's business/concern. The source end - media planners, producers, researchers/academics, feel that the success of programmes in terms of their utilization is not their responsibility Whatever be the reasons, under utilization of the programmes is a wastage of immense proportions. In this context there is a need to formulate perfect guidelines for use of media in education. Hence the following suggestions:

- a. Potential of Media as an educational medium has yet to be realized fully in education. In this regard, Media policy should be designed from the point of view of the needs of the users, the citizens.
- b. Awareness on educational programmes need to be enhanced through advertisements and publicity. Encouragement has to be given towards the creation of more educational FM stations to be established and run at college levels throughout the country.
- c. Local inputs and interaction should be made a regular feature in the educational radio and TV programmes.
- d. Prepare and disseminate different types of educational awareness programmes on a massive scale. Publish or broadcast the story of success and failure of people in education.

Recommendations

The core of the recommendations contained in this paper point to how policy makers and government can work with civil society and the private sector to mainstream electronic media technologies in the overall educational development process. Although this paper is focused on e-education in Nigeria, its implications will apply in

many developing countries, as the challenges faced in the deployment of ICT for educational purposes are largely similar and can be addressed using cross cutting recommendations and strategies. The following key points maybe considered as recommendations for the development of e-education in Nigeria:

1. E-Education has great potentials to assist achieve Nigeria's goal to achieve education for all by the year 2015 and therefore should be maximally harnessed by every possible avenue, Government should as a matter of urgency provide more electronic instructional materials in schools and ensure that they are literarily used in all classes at the secondary school level to enhance positive reading achievement for quality education at the higher level
2. IT education should be included in the educational curriculum including the provision of necessary infrastructural support and massive training and deployment of skilled manpower into both secondary and tertiary institutions;
3. Young software developers should be trained and supported with the necessary equipment to develop nationally usable e-education software;
4. The various government education coordinating agencies should work together to develop an integrated broad-based model/ strategy for e-education with a definitive timeline for its completion;
5. Government should increase funding for the entire educational sector with particular emphasis on ICT

References

- Akinyemi, A (1986). Problems and prospects of using technological media in the Nigeria distance learning system. *Adult education in Nigeria*, 7: 191-193
- Adekola, G (2008) *Methods and materials utilization in adult and non-formal education*. Ibadan: Gabesther Educational Publishers
- Aminu, I. (2003) The higher education environment and users of the Nigerian virtual library. Working paper at UNESCO Virtual Library Feasibility Workshop.
- Bryant, C (1990) Investigating in people: World Bank lending for human resource. Development in Malawi, Washinton DC
- Burney, N.A & Irfan M. (1991) Parental characteristics, supply of schools and childhood enrolment in Pakistan. *The Pakistan development review*, 30 (1), 21-62
- Dall F (1989) *Confronting the basic education crisis: The Zambian dilemma*. Cambridge. Bridge Project, Harvard University
- Harbison R. & Hanushek E. (1992) *Education performance of the poor: lessons from Northeast Brazil*. New York: Oxford University Press.
- Jakande A.L. (1987) *The problems and prospects for education for all*. Ikeja: John West Publications ltd
- King U. (1987) World religions, women and education. *Comparative education*, 23 (1), 35-49
- Lockheed M. & Verspoor, A.M. (1992) Improving primary education in developing countries: A review of policy opinions. Washington DC, the World Bank
- Lloyd C.B & Blanc A.K. (1996) Children schooling in Sub-Saharan Africa: *Population development review*, 22 (2) 265-298
- McLuhan M. (1987) *Understanding media: The extensions of man*, Ark London.
- Osuji S.N (1981) *The relationship between theory and practice in selected adult education programmes in Nigeria*. 1944-1974, Ibadan, University of Ibadan
- Schultz T.W (1961) Investing in human capital. *American economic review*, 51 (1), 1-17
- Summers H.L (1992) *Investing in all the people*. Policy research working papers. Islamabad: Institute of Development Economics
- World Bank (1995) *Priorities and strategies for education: A World Bank view*. Washington DC: The World Bank
- Yakubu N.A (2003) *The virtual library and the polytechnic system*. Paper presented at feasibility study on the development of a virtual library in Nigeria