THE POSITION OF EDUCATIONAL TECHNOLOGY IN HUMAN CAPACITY BUILDING THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY

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ABSTRACT

It is a known fact that we are in the era of global information explosion with Information and Communication technology (ICT) as the driving force knowledge and skills today develop in networks with ICT leading the process. It is against this background that ICT provide a great opportunity for human capacity building as it engulfed all geographical barriers on a global sealed. This internet provides access to information on any issue imaginable thereby empowering one to draw the collective wisdom of mankind. The weapon in the hand of any nation to harness and reap the fruit of ICT is education in general and educational technology in particular. This paper therefore discusses the concept and potentials of ICT, ICT and human capacity building and Educational Technology, ICT and Human capacity building. Implications were drawn out and recommendations were offered.

INTRODUCTION

The quest for globalization of human capacity building through information and communication Technology is a right step towards a right direction. In this information age the use of ICT is rapidly advancing and taking wide and varied dimensions in many countries of the world. ICT could be likened to globalization. It is one word that is shaking the world, it comes with the force of a 'Tsunami', and nobody can stop it. It crosses borders like a rampaging army and has shrinked the world from a continental mass into a diminutive village/global village.

Information and communication Technology has become an indispensable tool which is made available all over the world and within reach for any body who is ready to tap from it. Abdullateef (2008) summed up that all encompassing influence of ICT as a reconstruction of global capitalism, education, politics, culture of cetera in the new information super-highway and the transformation process which are of a manner in which individuals interact with the world. In this way, there will be cross fertilization of ideas, opinion, strategies, opportunity to improve and key in to the demands of the era.

However, in order to function in the new information era, citizenship of any nation have to learn to navigate large amount of information in order to be able to analyze, make decision and to master new knowledge so as to accomplish complete task collaboratively. Obviously, not much could be achieved if majority of the populace of any nation, including Nigeria remain ignorant, illiterate in the issues of ICT. Illiteracy is an enemy and evil which keeps people in darkness, it makes people resistant to change and isolated from progress, thus unaware and incapable of meeting the demands of the ever-progressing world.

The issues of ignorance/illiteracy can, to a large extent are checkmated through education in general and educational technology in particular. Education is the key to libration; it is the Human building capacity machinery which enables one to be functional in the ICT era.

CONCEPT AND POTENTIALS OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

ICT, ACCORDING TO Ezekoka (2007) is the combination of networks, hardware and software as well as the means of communication, collaboration and engagement that enable the processing, management and exchange of data, information and knowledge. Ezekoka (2008) added that it is a means of accessing or receiving, storing, transferring, processing and sending ideas, perception or information through computers and other telecommunication facilities. ICT encompasses all that is involved in modern communication technologies such as communication satellite, radio, television, video tape

recorders, compact disc, and personal computer and other related equipment so that the output generated can reach the users at reasonable cost and in good time to the overall benefit of mankind. Glonikawn (2008) remarked that ICT is generally referred to as technologies that support communication Vie computer. It implies the internet or local network, e-mail and World Wide Web (www) technologies. ITC has been explained as the term used to describe exciting and innovative ways to provide life long learning with global access to information learning and support.

Globally, ITCS have changed live of individual, organizations and indeed Nations. They have introduced new ways and methods of running and managing society system. The difference between machines. organizations and people are being progressively narrowed. The internet is offering an evereasier way to communication between organizations and organizations at a very low cost. It has provided an access to use set of technology and technology standard that can be adopted by all organizations, no matter what computer and information technology is being used. ICTs can facilitate and enhance the capabilities of people.

Anaehobe (2007) shared this view and remarked that ICT provides individuals with capabilities for location, storage, retrieval and dissemination of information. Internet access enable individual to locate on formation stored in websites. With search engines, information stored at different locations can be easily retrieved. For instance, one can be on line to locate order and set copies of an article in his living room without physically visiting any library. Virtual and digital libraries are very much available any time and any where, as summarized by anaerobe, (2007), LCT has a lot of potential which among others

- a. Speedy and easy access to information.
- b. Remote access to information
- c. Round the clock access to user
- Access to unlimited information from different source
- e. Facilities for the reformatting combination of data from different source and
- Flexibility in the usage by any individual according to his or her needs.

The potentials embossed in ICT are readily. Nigeria content, the question is, how could these potentials be used to build up the capacity of her populace in him with the global accepted trend?

INFORMATION AND COMMUNICATION TECHNOLOGY AND HUMAN CAPACITY BUILDING.

Capacity building is concerned with improving the abilities of people in performing tasks, human capacity building is the empowerment of individuals to realize their potentials and making better use of their capacity to performing tasks. For ICT as a tool to be effective and achieve the goal of building human capacity inauguration the citizen of that nation ought to be ICT compliant. ICT compliance describes the millings to acquire ICT skills and use them effectively in accordance with the practice or application of the system.

Salau (2003) declared that an ICT compliant person has the ability and capacity to see information, understand, evaluate, integrate it in to the existing knowledge base and critically utilize it. Onwubiko (2006) pointed and controlled by nation, in individuals and corporate bodies this fact, the technical know-low of creating, proceeding and utilizing information. This fact has implication for effective education generally and educational technology in particular.

EDUCATIONAL TECHNOLOGY, ICT AND HUMAN CAPACITY BUILDING

Education generally is the sure instrument for creating enabling environment for ICT as a tool to be utilized in human capacity building. Education is the greatest legacy that nations benefit to its citizens; it has been claimed as the most powerful rewritable instrument for human capacity building. The national policy on education viewed education as the greatest instrument that the nation can make for quick development of its economic politics, social and human resources. Education can be seen as a drawn out process through which the individual acquires skills, attitudes and competence. Thus the concern of education can be seen to be the development of an individuals thinking, attitude to life, physical appearances, and skills in a chosen profession (capacity building) that will assist him to live a productive and acceptable life within the nation.

Nigeria is yet to attain a level of ICT competence needed in this information age. There is need for urgent action to make the populace fully information age complaint in order to compete favorable with the international communities being in mind that the world today is a global village. The positive response to remedy this situation could be drawn from the services which educational technology has in stock. Several meanings depending on who is using it, when and how. A school of thought saw the concept of educational technology in the terms of software, the second school of thought saw it in terms of hardware while the third school of thought still saw it in term of system approach. All these thoughts are encompassed within the terrain of educational technology. Educational technology thus could be regarded as the systematic process of making instructional information meaningful to learners such that the knowledge, attitude and skills acquired can be utilized to improve themselves and their environment. Nsofor (2010) saw educational technology as a systematic way of designing, creating and evaluation educational process in line with the pedagogic objectives of research in the human learning and communication fields. Educational technology provides strategies for capacity building. Educational Technology will expose and equip teachers and students on the use of ICT 'Best Practices such as computer tutorial lessons virtual classroom/e-classroom, video conferencing system, E-mail electronic bulletin boards, virtual fieldtrip, virtual laboratory /E-laboratory, virtual library/E-Library, Internet browsing, Simulation and a host of others. Also educational technology provides training in the use of ICT facilities, empower teachers on the use of student-centered method of teaching cooperative teaching and learning method. It empowers teachers and student teacher to have competence in the use of modern technologies in teaching and learning. All the strategies in turn will attract positive attitude to the use of ICT by the teachers themselves, hence improving their competency/capacity. When this fact is achieved, the multiplier effect continues more Nigeria at all levels of education will be ICT compliant and thus can key into the global information trend. As stressed by Olibie (2008) ICT could be used to revolutionize lesson planning, course content and teachers could compete favorably in an ICT driven world. This is supported by World Bank (2002). Which opined that generally, ICT holds out the opportunity to revolutionize pedagogical methods, expand access to quality education system? Educational technology has effectively proved a useful companion in the pursuit of training in ICT facilities as a pre-requite site for human capacity building.

Implications to achieve ICT compliance through educational technology, it implies that:

- ICT facilities installation and monitoring committee (MC) should be set up in Nigeria Universities to include staff and user. The committee should be required broken ICT facilities for effective utilization.
- There should be appropriateness of the technology. That is, the ICT facilities installed should be suitable to the local and socio-cultural context of the environment and these facilities should be appropriate to the need of the users.
- Adequate ICT facilities are provided in all the sections/ units of the University.
- Alternative power supply (solar power energy) be provided.
- Educational technology teachers should be exposed to ICT training and retaining to enhance acquisition of basic ICT skills. This will to a large extent, improve the quality of international service delivery in the system

CONCLUSION

Our nation, Nigeria has been witnessing increasing on daily basis about globalization of human capacity building through ICT. This paper concluded that the implementation of technology in our educational system should be given prominent attention and that there is the need for technological orientation of students at all level should be improved on rather than being treated with levity. It will likely be advantageous if educational technologists are employed in schools at strategies centre where they can contribute to teaching in schools.

REFERENCES

- Abdullateef, H.D (2008) Shifting paradigm in the teaching function in an ICT era. ICTs in Teaching and Training. Proceedings of Nigeria Association for Educational Media and Technology. Pg 1-3.
- Adetoro, N. (2009) Information and Communication Technology (ICT) as an Access equalizer of Information: Opportunities and challenges for Nigeria person with visual impairment. The Information Technologist 6(1) 133-138.
- Anaehobi, E.S (2007) Availability of ICT Facilities in academic Libraries in Anambra State journal of NLA Anambra State Chapter 1(1) 57-64.
- Ezekoka, G.K (2007). Evaluation of secondary school Teachers use of ICT for cumulus implementation. Journal of Women in Academic 4(1)210-219.
- Ezekoka, G.K. (2008). The Impact of ICT in teaching and learning in Tertiary Institutions in Imo state proceedings of Nigeria Association for education Media and Technology Pg. 13-16.
- Nsofor C.C (2010). Effects of Improvised instructional media on secondary school students Achievement in Biology concept in Nigeria State: Unpublished Ph.D Thesis, Department of science Education, Federal University of Technology, Minna
- Onwubiko, C.P.C (2006) Emerging tools in the provision of Library and information service in the 21st Nigeria. The Research Libraries (1) 6-27
- Salau, M.O (2003) Promotion of ICT usage in Mathematics Instruction at the secondary school level in Nigeria. Journal of Educational reforms and the attainment of the millennium Development Goals (MDGs). The Nigerian Experience 260-264.
- Utulu, S.C.A (2008) Information and communication Technology. In Academic and Research Libraries in Oyo State. The Information Technologist 5 (22) 47-54.