

## CAPACITY BUILDING OF NIGERIAN YOUTHS IN ICT FOR HUMAN CAPITAL DEVELOPMENT

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### Abstract

*This paper examines what development means and how African countries, particularly Nigeria can harness the gains of ICT in the development of her youths for human capital development. The paper reaches a conclusion that for ICT to be gainfully used for human capital development, government and the private sector should provide necessary ICT infrastructures, especially computers for the empowerment of our youths.*

### Introduction

Most African countries, Nigeria inclusive, are just developing and one of the ingredients of development is information. How that information is disseminated among people is also of prime importance. Information is usually disseminated for various purposes: information about new farm products, agriculture or land development, town planning and community projects, public health (e.g. Malaria, HIV/AIDS, and Meningitis), education, and so on. The process of education is basically related to information dissemination and ICT, because information is education, and ICT disseminates education or information. The world has become a global village through communication via ICT and this enables people from one country to learn about happenings in many other countries as soon as they become news. ICT and traditional mass media such as television, newspapers and radio are some of the components of the information transfer system in international communication.

### What is Information and Communication Technology (ICT)?

Information and Communication Technology (ICT) is the use of systems such as computers and telecommunication gadgets for storing, retrieving and sending information. ICT according to World Bank in Ofuefena (2005) consists of hardware, software, networks and media for collection, storage, processing, transmission and presentation of information (voice, data, text and images). It is a powerful tool for improving the efficiency and quality of a wide range of public services that are important for poverty

alleviation, health and education. The major or key instrument in ICT is the computer. Corroborating the above, Gusen (1998) quoted by Okujagu (2008), describes ICT in practice as the use of computers and telecommunication system to solve problems. For Madison (1983), it is the use of computers, microelectronics and telecommunication to help us produce, store, obtain and send information in the form of pictures, words or numbers more reliably and economically. Since computer is the basic tool in ICT, the challenge before African countries is how to imaginatively employ it to further empower their citizens through active process of education. The ICT, therefore, if properly utilized, is capable of enhancing the ability of Africans in education, business and administration.

Development generally means the improvement of people's lifestyles through improved education, incomes, skills development and employment. Development also means that people should have decent housing, and that they should have security within those houses. It also means too that people should be able to read and write. This is a problem in Africa as most people are still illiterate.

economist of the World Bank, Joseph Stiglitz sees development as a transformation of society, a movement from traditional relations, traditional ways of thinking, traditional methods of production, to more modern ways. He argues that a characteristic of traditional society is the acceptance of the world as it is; the modern perspective recognizes change, it recognizes that we, as individuals and societies, can take actions that, for instance, reduce mortality, increase life spans, and increase productivity. ICTs influence this change from traditional to modern societies, through information transfer.

Sustainable development can be defined as development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. ICT, with its huge capacities to produce, transmit, and store information within countries and across national borders, also has the capacity to allow people and organizations to share this wealth of knowledge in the pursuance of developmental goals. For example, we produce information on our computers when we conduct research and type such information. We transmit the information to people in the same city or in cities located in other countries of the world via electronic mail (e-mail). We also store the information on our computers when we save it into files, for future reference and usage.

As stated earlier, the major instrument in ICT is the computer among all the tools of ICT. The aim of this paper is to put education within the context of sustainable development by emphasizing literacy in computer usage as one of the major pillars of capacity building for human capital development. But before we do this, we shall briefly state the potentials of ICT in combating most of the key challenges of human capital development.

- (i) ICT is used to share educational information among people and countries for development purposes.

- (ii) ICT can assist in the development of communications and information infrastructures of Less Developed Countries (LDC).
- (iii) ICT also provides a platform for information storage for human capital development.
- (iv) It can help monitor, assess and manage our increasingly fragile environment, reduce the impact of human activity, improve in the management of natural resources, as well as better prepare for, and mitigate, natural disasters (such as floods, droughts, fires and earthquakes), predicting as accurately as possible their occurrence, evolution and impact.
- (v) ICT also offers the means to improve social cohesion and address the challenges associated with the ageing of the population such as the rise in the number of people with high disability and a smaller productive work force.
- (vi) It can bring radical improvements to the quality and efficiency of healthcare systems, provide new solutions for continuous and more personalized care, and improve techniques for prevention and prediction.

Education determines the ability of a country to move into the computer information age. This is so because this movement depends on the capacity of the whole society to be educated, and to be able to assimilate and process complex information. This starts with the educational system, from the primary school level to the tertiary level. This relates to the overall process of cultural development, including the level of functional literacy, the localization of content of the media (instead of the globalization of the media content), and the diffusion of information within the population as a whole. This could be easily done if developing countries focus attention on the development of their human resources. This is where education, particularly in the area of computer literacy, is of paramount importance.

The computer is seen as one of the major inventions of the 20<sup>th</sup> century that has contributed immensely to the services of humanity (Abimbade, 1997) because of its efficiency, accuracy and speed. In recent years, the computer has established itself as an important feature of modern life. Many of us use computers daily. Example, Banking, word processing, industries, accounting and record keeping, design, office management, publishing, computer games, teaching and various ways are some of the uses where computers are now a part of our everyday life. With the increased use of computerized equipment in industries and commerce, as a result of the inevitable role of computer in the society, much attention is being focused on the use and learning about computers in educational institutions. Computer literacy is now emphasized and included in courses of study in almost all the levels of our educational system from primary level to the university. It is also now one of the requirements for recruitment into the labour force.

According to Adesanya, in Abimbade (1997), the idea of introducing computer education in Nigeria was first mentioned during the 1979-1984 Development plans. However, in 1987, the Federal Government set up the National Committee on Computer Education. In the inaugural address given by the then Honorable Minister of Education, Professor Jubril Aminu, and the following general policy objectives of the nation on computer education were listed.

- (a) To bring about a literate society in Nigeria by the middle of the 1990,
- (b) To enable the present generation of school children at the various levels of education appreciate the potentials of the computer and be able to utilize it in various aspects of life and later occupation (NPCE, 1988:10).

According to the policy, the intention of government then was to build the capacity of all Nigerians, especially the youths so that they can appreciate:

- (i) the impact of Information and Communication Technology (ICT) in today's society;
- (ii) the importance of the effective use of information to the individual and the society;
- (iii) the techniques through which information is processed, managed and communicated; and
- (iv) the techniques by which information is managed [NPCE, 1988:10].

To actualize the policy, the committee came up with specifications, procedures, activities and objectives at primary, secondary and tertiary levels of education. The policy was targeted at the production of students (youths) who are skilled and knowledgeable about the use of the computer so that they will be fit for the world of work or for their studies in their various institutions. Other African countries have also embarked on similar programmes to empower their youths. South Africa is one of such African countries.

In addition to the above efforts by Nigeria, she has also through the New Partnership for Africa Development (NEPAD), a new initiative geared towards the socio-economic recovery of the continent and which also has as one of its priorities the development of ICT, been working to empower Nigerian youths in the use of ICTS. This is as a result of the fact that NEPAD recognized the importance of African youths in effecting ICT development in Africa.

For decades, Nigeria's development has depended solely on crude oil. But despite the huge resources accruing from this natural resource, we are still under the scourge of poverty, religious unrest and different ethnic unrests. Recent statistics has also shown that 44% of Nigerian population of about 120 million (about 52 million) are below the age of fifteen. Government then recognized that this is a reflection of the enormous potential the nation has if she can train and transform this human resource into a befitting IT

workforce. This is in accordance with Iriajen's position that the wealth of nations is no longer equated to the scale of the quantity of the inherent natural resources but on the quality and strength of the knowledge-based workforce. Government has therefore resolved that the path to ICT development should be such that the youths should be made a veritable component of our national strategy. Government has therefore embarked on certain laudable schemes which must be implemented with youth development in the front burner. The moves include:

- (i) the launch of the New National Telecommunications policy in September 2000 to liberalize the sector,
- (ii) the declaration of information and communication technologies as national priority project;
- (iii) the approval of the National policy on Information Technology and the establishment of a National Information Technology Development Agency (NITDA) in March/April, 2001; and
- (iv) the launch of the National Space and Development Agency (NARSRDA) for the Nigerian satellite system.

The National Information Technology Development Agency (NITDA) has recognized the potentials of utilizing the youths in actualizing the nation's information technology policy, the agency has plans geared towards the development and empowerment of youths with IT skills to make them globally competitive. These include:

- (a) Provision of IT facilities for the various levels of the educational system to cater for the challenges of the information age. IT facilities shall be provided at the primary, secondary and tertiary institutions.
- (b) Promoting "Training the Trainers" scheme using existing establishments such as the National Youth Service Corps (NYSC), the National Directorate of Employment (NDE) to boost capacity is building on IT.
- (c) The agency has partnered with CISCO and is presently rolling out local CISCO academics in the universities and later the polytechnics so as to bring the IT learning environment to the doorsteps of the university students, whilst empowering them with the requisite skills upon graduation.
- (d) The agency is working out modalities with its strategic partners in the private sector to generate IT related jobs for urban and rural youths.
- (e) Organizing workshops to demonstrate the features and benefits of IT for performing artists through the Ministry of Youth, Sports and Culture.

The School/Net Nigeria programme is the nation's response to the global call for the harmonization of school networking activities worldwide. The mission is to play a significant role in transforming the nation's education through the introduction and application of Information and Communication

Technologies (ICTs) to Nigeria children, adolescents and youths in and out of school. Some of the specific goals of the scheme include:

- (a) encouraging the use of ICT in education for human resource development and capacity building, particularly among the youths and disadvantaged and/or rural schools through partnership and association with other organizations (national and international).
- (b) Promoting the development of cross-cultural understanding and joint knowledge between children and youths in Nigeria and those outside by facilitating online collaborative projects.

In addition, there is the Think Quest Nigeria Programme (Nigeria's variety of the Think Quest Africa Initiative) which of the School/Net Nigeria Programme. It is aimed at encouraging students of ages 12-19 to use the internet to create high quality, information-rich web-based learning tools and materials relevant to Africa.

All these efforts are a pointer to the fact that the possibilities of empowering youths in ICTs are enormous only if the opportunities and enabling environment are provided.

It is also true that media technologies are part of the necessities for development, but the main ingredients of development are the people themselves who should state their development goals for their own communities, and how these goals will be achieved. In Nigeria, the approach should be through education, provision of adequate infrastructure, the political will by government and all other stakeholders.

Education policies are well formulated in Nigeria but implementation is always the problem. Education is not also adequately funded. This definitely will affect provision of ICT infrastructure especially availability of computers in schools.

Government also has no political will to implement ICT policies. Most schools are not involved in the School Net programmes but the policy says that IT facilities shall be provided at the primary, secondary and tertiary institutions.

Power supply is also a constraint due to irregular power supply by Power Holding Company of Nigeria (PHCN). Other very serious constraints are fraudulent and incompetent service providers who indulge themselves in ineffective provision of service.

One other major constraint in empowering youth with ICT knowledge is teachers who develop apathy to the use of ICT because they are addicted to their traditional ways or methods of imparting knowledge to their students.

## Conclusion

This paper examines the role of ICT in the empowerment of youths for sustainable development. It is discussed that for human capital development, Nigerian youths must be encouraged to be involved in ICT development. They should be well-equipped for the greater challenges of the future.

### Recommendations

Efforts should be made by our governments and the private sector to provide ICT infrastructures, especially computers, in our schools, fund education through political will and genuine legislation. The private sector should also be encouraged to participate fully in the empowerment of our youth in ICT for human capital development.

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