Innovation in Educational Technology for Self-Reliance and National Development

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Abstract

The very fact that the name Nigeria Audio Visual Association (NAVA) is now changed to Nigeria Association for Educational Media and Technology (NAEMT) has widely, epitomized the tremendous and far-reaching impact which the modern innovation in Educational Technology have had in recent years. Educational Technology has immensely contributed to the transition to self-reliance and National Development in Nigeria. Technology itself has developed from the narrow concept of the application of scientific knowledge in industrial methods to the wide application even in the solution of all educational problems self-reliance and National development. This paper therefore examined Education for self-reliance, Educational Technology and National Development. Conclusion and recommendation were also made which if adhered to would promote growth of the Nation.

Introduction

The importance of education in the overall development of a nation cannot be over stressed, hence, more than ever before, nations are spending huge amount of money on education on the main assumption that educated population contributes to the socio economic development of the society as whole and to the well-being of individuals within the society. Education has therefore become one of the major areas of investments for economic development in. in Nigeria's philosophy of education, NPE 2004, it is believed that (a) education is an instrument for national development in this end, the formulation of ideas, their integration for national development and ideals, are all aspects of education (b) education fosters the worth and development of the society. The policy further stated that "education shall continue to be highly rated in the national development plans because education is the most important instrument of change. However, educational expansion as we all know does not necessarily make people or countries prosperous, instead it may and does leave the former without jobs and the latter with increasingly burdensome claims on public funds.

Concept of Educational Technology

Educational Technology is concerned with the supply of essential knowledge and skills needed for improving the processes and products of Education. Educational technology is all about facilitating and using technological equipment to elicit responses in the cognitive, affective and psycho-motor domains. The advent of computers has made the growth and development of nation and self-reliance better, easier and quicker. Furthermore, it is clear that our society is rapidly transforming into one which is based on technology requiring its citizen to be familiar with and at ease with information based resources and their manipulations (Olaniyan and Okemakinde, 2006).

Educational Technology according to Taiwo (2009) can be conceptualized in three different ways via its use, how it is viewed, and how it impacts development. With regard to Educational Technology, at least four different conceptualization of its use in National Development can be drawn from literature. It could be as a commodity, as supporting development activities, as a driver of the economy and as directed at specific development activities with regard to how Technology is viewed. Lacoro (2001) proposed the classification of technology in terms of different conceptualizations. These are tool view which is equivalent to using Educational Technology as a commodity, the computational view which is equivalent to directing specific

development activities and proxy view which is equivalent to using it as a driver of economy. With regard to the impact of Educational Technology on National development, Malone and Rockart (1991) proposed a frame-work which posits that new technologies impact society through three effects.

The first order or primary effect (i.e simple substitution of old technology by the new). The second order or secondary effect (i.e an increase in the phenomenon enabled by the technology) and the third order or tertiary effect (i.e the generation of new technology-related businesses for societal change).

Education for Self Reliance

The rapid development of formal education has brought about higher enrolment rates and provision of faculties and institutions but unfortunately however, these increases have generally neglected economic and local realities and considerations. As a result, a lot of the products of our institutions are unemployable manpower. Hence, technology for self-reliance, that is, practical application of the intellectual knowledge acquired in such a way to enhance the quality of individuals' lives and national development. Self-reliance simply means relying on one's own efforts and abilities. According to tolgweh (2008) when somebody acquires skills in any occupation, such person can establish his or her own business and even employ others, such person according to him is self-reliant.Bassey (2009) stated that self-reliance as that which pre-supposes the attainment and autonomy without unnecessarily resorting to begging or browning. He emphasized that a self reliant individual is one that achieves steady supply of his needs, one that diversifies his resources to reduce dependency on others for assistance.Therefore, self reliance emphasizes growth and development in the life of a citizen, politically, socially and economically. Thus a person who is self-reliant will ensure an effective control of his resources which leads to national development. In other words, it is the antithesis of domination, dependency or subordination. It is therefore parochial to tag an individual as being self-reliant when he/she is unable to check interference from other people. Education which is the process of emaciation, civilization and development is also equated to a key that unlocks the development of an individual, that is, self-reliance (Jibrin, 2007).

Educational Technology and National Development

Since the inception of man, he has been involved in the process of Technology and has been producing various objects and machines to achieve his desires for survival and fulfillment. However, there has not been a time such as we are now during which Technology has played a major role in man's endeavors. All fields of human endeavors are embracing Technology in order to remain current and be relevant. The Education sector has also not been left out. Various products of Technology are being introduced into the teaching-learning process which has given birth to the branch of Education Called Educational Technology.

The National Council for Educational Technology NCET (1995) highlighted the benefits of the use of Educational Technology (ICT). Thus, for a anyone not to be left out in what is happening in the world, he or she has to key into the use and application of this Technology.
NCET asserts that Information and Educational Technology aids motivation, presentation, questioning skills, problem solving, information handling and techniques. It also stated that teachers often find that using educational technology leads to re-thinking, teaching and learning strategies, more opportunities for individual teaching and group work, greater expectations of fazirpupils and better understanding of their pupils learning.

Educational Technology has been rightly described by Seinan Harindraurth (2004) both as an enabler of Development as well as an enhancer of capacity Development at the individual, Community, Organizational and Societal levels. In recognition of this, the United Nations

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Millennium Declaration outlines a focus on partnership with the private sector and civil society to ensure that the benefits of new Technologies especially ICT are available to all (nations 2003).The National objectives of Nigeria as contained in the second National Development Plan (1970-1974) cited in Taiwo. (2009) and accepted as an essential foundation for the National policy on Education includes the building of:

- A free and democratic society.
- A just and egalitarian society.
- A united, strong and self-reliant nation.
- A great and dynamic economy and.
- A land of bright and full opportunities for the citizens.

These objectives can be grouped into three, that is, political, economic and social. The utilization of Educational Technology for overall National Development can therefore, not be overemphasized. New technologies can contribute to a culture and practice of co-operation basic for a renewal of democracy. The internet can facilitate the ability of citizens to get information about campaign issues and to mobilize community networks.

It also has the potential to foster dialogue and consultation between citizens, concerning political parties and between groups of citizens by which government and social representatives seek to understand people's needs and in which citizens seek to contribute actively with knowledge (Matsuura, 2003). Access to Educational Technology is necessary for the people know about policies that affect them, to understand the options available and be able to gather information to make an informed opinion. Public participation is thus necessary for people be able to make their opinion known to the relevant authority on any policy. Effective use of Educational technology promotes transparency, debate and decision making.

Innovation in Educational Technology

Innovation in the common sense means the introduction of anything new with the purpose of improving quality, quantity, output or procedure. Rogers (2003) viewed innovation as an idea, practice, or object that is perceived as new by an individual or groups. Innovative strides in education generally have helped to address issues that relate to educational materials, methodologies and learning environment. Innovative learning environment focus on the utilization of new knowledge, adoption of problem-solving strategies and self-directed learning. Innovation in Educational technology should explore ways and means of producing individuals who are in dependent, imaginative, constructive,creative and with ideas capable of breaking new grounds. Innovation is the propeller for the development of any nation because it enhances productivity, self-reliance and development. Innovation and creativity are indispensible in this era of unemployment and underemployment.

Skill Acquisition in Educational Technology

The acquisition of skills in Educational Technology would lead to the reduction if not eliminating of hunger and poverty in the society, thus empowering our teeming jobless graduates and youths to be self reliant. Some of these skills that are youth friendly include:

- Database, web and network technology.
- Computer repairs/maintenance.
- Satellite maintenance/repairs.
- Online business (e-market).
- GSM handset repairs/maintenance.
- Designing of technology based games.
- Digital photography.

Challenges Facing Education for Self-Reliance and National Development

There are many challenges facing education and training for self-reliance which has adversely affected our national life and development. Some of these challenges include:

- Lack of qualified skilled manpower.
- Shortage of Educational Technologists.
- Lack of adequate training facilities, equipment and Educational Technology laboratories.
- Inadequate Educational policies.
- Lack of follow-up and continuity in Government policies.
- Poor funding of the Educational sector.
- Poor emphasis on skill acquisition/practical aspect of Educational Technology.
- Poor attitude of students to work with their hands.
- Poor attitude of the general public towards skill acquisition that is, working with our hands.
- Inappropriate and irrelevant curriculum.

Conclusion and Recommendations

In conclusion this paper highlighted the vital role of Education and Educational Technology for self-reliance and National development. It was observed that although Nigeria has laudable Educational programme as analysed in the National Policy on Education towards self - sufficiency and national development, much has not been achieved. The crisis Nigeria is experiencing today is rooted in the colonial educational mentality for white collar jobs in offices. To reverse this trend, there is an urgent need for the acquisition of Educational Technology and their effective application to meet the various and varied needs of the society. It therefore, recommended that:

- Awareness should be created on the importance of Technology Education for Self-reliance
- Education planners and policy makers must accord Educational Technology a priority in Nigerias future Development plan.
- Individuals, industries and agencies should assist to fund Technology Education.
- Provision of more technical support in integrating Educational Technology into the curriculum at all levels of the Educational sector.
- The curriculum of Nigerian Educational system should be radically overhauled to make it Educational Technology focused and friendly.

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