Socio-cultural Influences on Technology Education in the Attainment of Economic and Political Sustainable Development

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Abstract

The rise of Technology Education is part of a larger shift for sustainable growth and development in any country. Technology Education represents effort to design, develop, implement, to achieve a never-ending array of desirable development in any country. The organization for Economic and Political Cooperation and Development lists some key factors for sustainable development as science and technology, growth and development but rarely address the socio-cultural challenges and influences on technology education for sustainable development in any country of the world. The key factor from social, economic and political development of any country is considered a driving force for both growth and development. This paper therefore, focuses on the importance of technology education in the attainment of sustainable development in Nigeria, and challenges facing technology education in the attainment of economic and political sustainable development. Conclusion and recommendations where made which include: implementation of effective measures on socio-cultural aspect of education into technology education for sustainable economic and political growth and development in the country.

Key words: Technology Education, Socio-cultural, Sustainable Development

Introduction

For any nation to implement technology education for sustainable development there is need to recognized and promote socio-cultural education as a priority area of education for growth and development (Nwodo 2017). The importance of technology education in the attainment of economic and political sustainable development cannot be over emphasized, technology education is the study of technology in which individual learns about the process and knowledge related to technological advancement in all aspect of life to make a change (Joel 2017). As a field of study, it covers the human ability to shape and change the socio-cultural aspect of life to meet individuals need by manipulating both materials and tools with techniques to make a change in life and to promote economic and political growth and development in the country (Nwadobi 2018).

Socio-cultural aspect of life embraces the society, culture and technology for the attainment of sustainable development of a country. The existing socio-cultural conditions are determinants of diffusion of an innovative technology education implementation which may be a reflective of socio-cultural difference.

Socio-cultural aspect of life influence attitudes, behavior intention towards economic and political development which have been shown to influence decision on implementation and adaptation of technology education (Burns 2014). Our societies and nations are dominated and even driven by ideas and products from socio-cultural aspects of life in our society, and it is very likely that this will influence technology education in our society.

In modern society, the need for stable economic and political development with the implementation of Technology is very important as modern technologies sharpens the future. Socio-cultural aspect of education is the major cultural products, and all citizens independently of their needs should be acquainted with the element of human culture (Irwin 2013). Therefore, socio-cultural aspects should not influence technology education in the attainment of economic and political development.

The Importance of Technology Education in the Attainment of Sustainable Development in Nigeria

Technology Education, as we all know has several facets, all of which are powerful drivers of change. New materials or tools, biotechnology innovations and robotics are few of them. However, the most profound of all is what is often called telematics which is the convergence

and explosive growth and development of the information and communication technology (Althoff 2017).

Technology education breakthrough resulting in rapidly declining cost of communication, exponential growth in the power of computers, and the transformation from analogue to digital formats in the way information can be stored and transmitted, have become the primary drivers of economic change (Dias 2017). Together they are rapidly teaching to a convergence of separate industries of broadcasting and telecommunication, and in the process they are creating a world where the differences in the devices we have used to send and receive voice, video, text and graphic messages will soon disappear. The emerging network technologies of fibre-optics, direct satellite broadcasting, wireless and cable, together with the avalanche of new communication appliances, provide both the context for the global knowledge economy as well as the potential to meet the educational demands that result from it (Cancino 2017).

Some of the ways to think about information technologies in the attainment of sustainable growth and development in Nigeria is in the area of Networks. These are made up of the wires, cable, fibre, optics, satellite and wireless pathways by which information is moved among send-and-receive points. Networks are information highways that promote growth and development of any country (Fisher 2016).

Appliances are the devices such as telephones, television sets, radio, taxes and computers which are needed either to receive or send information. Appliances can be thought of as the entry and exit point to the highways sustainable growth and development in the country. Content is the information that moves via the network between and among send-and-receive points. In this, technology education may be the documentary you watch on television, the political program you listen to on radio, the questions you ask your course lecturer or fellow learners about on the telephone, the on-line course you take via computer conferencing, or the information you acquire from having done a search on the world wide web will promote the lives of individuals in society a country at large (Ertmer 2017).

Challenges Facing Technology Education in the Attainment of Economic and Political Sustainable Development

Despite increasingly widespread adoption of technologies in virtually every aspect of education, significant challenges are preventing widespread effective implementation.

According to Nzeh (2017), some the challenges facing technology education in the attainment of economic and political development are those challenges that are systemic and some are related to the technologies themselves teachers and education leaders share in the blame as well.

Lack of adequate ongoing professional development for teachers who are required to integrate new technologies into the classrooms yet who are unprepared or unable to understand new technologies is one of the problem in the attainment of economic and political sustainable development in Nigeria. There is a lack of sufficient, continuing professional development for teachers who have to integrate new technologies into their classroom but are unable due to a lack of preparedness or understanding of these technologies (Joe 2010). There is a comfort with the status quo which result in teachers and school leaders believing that learning about new technologies is outside of their job description which affects the attainment of economic and political sustainable development in Nigeria. Informal learning is found more often in traditional classroom settings like flipped classrooms, which provide a combination of formal and informal learning and have much more non-traditional approach that embraces multimedia into its standard curriculum.

There is a gap between the idea of differentiated personalized instruction and the technologies available to it happen, even though teachers see the need for personalized learning, but do not have the tools or time available to make happen. Testing has always been an important driver for educational practice and change which bring about development in any nation, many teachers now teach for the test. The curricula and skill sets have adapted to our society's needs, and in turn current testing methods have become an antiquated assessment. New technologies and our understanding of different learning patterns needs to play into the new way students are scored for the understanding and proper use of technologies for the promotion of growth and development in the country (Loun 2016).

Despite increasing adoption of technologies in all levels of education, there seems to be a challenge in the widespread implementation. Older teachers seem to lack an understanding of how new technology works. This lack of an understanding is exasperated when an older teacher is trying to teach a student who grew up using that technology. We have all seen youtube video of toddlers using an Ipad, we have also watched our grandparents struggle to understand what an Ipad is, or what it can do. Older teachers also struggle with this sort of thing and that's when the problem with implementation comes up. Teachers need to be confident using new technologies to teach "old" concepts and more importantly how they apply to today's would.

Conclusion and Recommendations

Although the task of socio-cultural technology integration in the attainment of economic and political sustainable development in Nigeria presents significant challenges to school districts, school administrators, and teachers alike, exciting new educational technologies are increasingly available that offer teachers novel ways of presenting material to students. Socio-cultural influence of technology education has considerable positive impact on student performance. Efforts to adopt new socio-cultural educational technologies in schools to promote growth and development will be rewarded especially in the aspect of assess to computing resources in the country.

There should be training on newly adopted educational technology software directly from software to enable the teachers to teach with the new technologies that will enhance growth and development in the country.

There should be adequate technological tools, administrative knowledge, and peer support available to enable teachers utilized it during the implementation and administration of their teaching.

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