# The Impact of Technical and Vocational Education in the Sustenance of National Economy in Nigeria

Awa C. Promise CLN, Saidu S. Musa, & Ogbuji U. David

Library Division
Library Department,
Federal Polytechnic Ukana,
Akwa Ibon State
Akanu Ibiam Federal Polytechnic,
Unwana, Ebonyi State
awapromise@gmail.com, amusasaidu7@gmail.com,
ogbuji.david@yahoo.com

#### Abstract

Technical and vocational education (TVE) is a multidisciplinary field of study that is responsible for the development of man in the society and socio-economic development the world over. In this knowledge economy, the field of study has assumed a different dimension, especially with the sophisticated development of technical and vocational education (TVE). The dimension has metamorphosed to numerous opportunities, in addition to existing ones, which trainees of the field are expected to take advantage of for self-employment. This paper examines the impact of TVE in the sustenance of national economy in Nigeria, the paper is purely theoretical in designed and through extensive literature review. Inadequate funding and unfavorable disposition of government attitude to TVE, lack of skilled manpower and inadequate power supply are some of the challenges of TVE in the sustenance of national economy in Nigeria. Subsequently, some of the recommendations made include adequate funding of TVE by government for the acquisition of TVE resources, adequate power supply as well as increase in the TVE teacher's remuneration, and recruitment of more TVE qualified teachers will help in the advancement of TVE for national stability and economic survival in Nigeria.

**Keywords:** Technical and vocational education, sustenance, national economy, Nigeria.

#### Introduction

Nigerian education policies vital recently were pattern along those laid down by our colonial masters. It was education that was geared towards providing white collar job; school leavers shunned jobs that would make their hands dirty. They preferred to work in offices and when the government could not provide job opportunities for the rapidly increasing youths, the labour market become filled with several unemployed people. Education, formal or informal is the bedrock of development of any nation. The degree of social and technological development that any or nation attain is an indication of how functional and effective its educational system is and in part by the philosophy that derives the education system. Thus, a functional and effective education is strong tool not only for socializing the individuals of a society, but also for equipping them through training and skill development to contribute meaningfully and effectively to that society. Technical and vocational education is the type of education that is aimed at training individuals to develop skills recorded for a socially relevant occupation. Olaitan (1992) views vocational education as a process of getting people ready and keeping them ready for the types of services needed.

However, economic survival and national stability most probably emanate from business and technical education Kutz, (2001). The National Policy on Education defines technical and business education as ''that aspect of education which leads to the acquisition of practical and applied skills as well as basic scientific knowledge''. The traditional societies that inhibited the territory now known as Nigeria must have experienced one form of technical education or another. Even during the pre-historic times and time long before these societies come into any form of contact with western influence, it is doubtful that any society could have survived the harsh realities of life and the environment of those times and lived on to the present times without the development of skills and expertise in the creation of tools and gadgets acquired for the provision of basic needs especially food, security, shelter, healthcare and communication.

### **Historical Development of Technical and Vocational Education**

One of the major defects in the Nigerian educational system is the low priority accorded to technical and vocational education. As in most former British colonial territories, education in Nigeria was conceived largely as purely literary education. The phrase 'men of the book' had a double meaning: in one sense it referred to 'Bible men' (in the mid-nineteenth century). For almost a hundred years in Nigeria the educated men were those who read classics – Latin, Greek, Milton and Shakespeare. Indeed most of Nigeria's early scholars were noted for their literary erudition. As aptly observed by the Commission on Higher Education, the first Western schooling brought to Nigeria was a literary education, and once civil rule was established the expatriate administrators were graduates, most of them in arts. And so the literary tradition and the university degree have become indelible symbols of prestige in Nigeria; by contrast, technology, agriculture and other practical subjects, particularly at the sub-professional level, have not won esteem. It is small wonder, then, that training for qualifications other than degrees, especially in technology, is not popular (Fafunwa, 1980).

Technical and vocational education in one form or another was in vogue before the introduction of Western education to Nigeria. The establishment of courses in the various government departments, for example Nigerian Railway, Marine, Public Works, etc., between 1908 and 1935 marked the beginning of organized technical and vocational education in Nigeria. These were followed by engineering course at the Yaba Higher College in 1932. Even then, only a selected few could benefit from this type of arrangement. Moreover, the courses were of postsecondary school nature. Consequently, there was no formally organized technical and vocational education at the post-primary or secondary school level (Fafunwa, 1980). The first major recommendation for the introduction of technical and vocational education was made in 1945 when the Commission on Higher Education in West Africa proposed that the premises of the defunct Yaba Higher College should be converted into a technical institute. The first technical institute for Nigeria should be at Yaba. The commission also recommended a territorial college for Nigeria with a view to meeting the needs of government and commercial firms at the post-secondary level. The 1946 ten-year plan for development and welfare incorporated the commission's recommendations. The plan proposed handicraft centers for training in manual arts; trade centers for the training of skilled craftsmen; and technical institutes for the training of technicians. A grant of \$400,000 was provided by the government under the Colonial Development and Welfare Scheme towards the promotion of the programme for the first five years.

The three regional governments started in earnest to implement the scheme, particularly in the north where fourteen craft school were built between 1956 and 1960 (the West build four, the East nine, and Lagos two). In spite of this initial enthusiasm on the part of the various regional

governments, technical and vocational education remained the Cinderella of Nigerian education even in the 1970s. The introduction of Nigerian College of Arts, Science and Technology in 1949 when the federal government appointed F. J. Harlow, principal of Chelsea Polytechnic (London), and W. H. Thorp, Nigerian Deputy-Director of Education (Technical), to assess the need for establishing a college of higher technical education. The report of the two-man team led to the establishment in 1952 of the Nigeria College of Arts, Science and Technology with branches in Ibadan, Enugu and Zaria (Fafunwa, 1980).

### **Concept of Technical and Vocational Education**

Technical and vocational education is the type of education that is aimed at training individuals to develop skills recorded for a socially relevant occupation. It is a type of education giving to individuals to enable them get useful employment or to use their skills to create employment for themselves and others. However, there is a distinction between vocational and technical education. (Iheanacho, 2006) inferring from Giachino and Gallington's definition of technical education opined that vocational education is different from technical education only in the level of preparation. According to the source, vocational education deals with preparations of persons for entry into recognized occupation while technical education deals with preparation of persons for entry into recognized occupations at higher levels. It therefore follows that the National Technical Certificate (NTC) and National Business Certificate (NBC) and programmes offered at science and technical colleges in Nigeria are good example of vocational education in areas of trade, industrial education and business education in Nigeria. On the other hand, National Diploma (ND) and Higher National Diploma (HND) are example of technical education programmes offered at post-secondary school especially in the polytechnic, monotechnics and colleges of education technical. According to the Federal Republic of Nigeria (FRN, 2004)

Technical and vocational education is used as a comprehensive term referring to those aspects of the educational process involving in addition to general education, the study of technologies and related sciences and acquisition of practical skills, aptitudes, understanding and knowledge relating to occupations in various sectors of economic and social life.

The National Policy on Education (2004) stated that Technical and vocational education is used as a comprehensive term, referring to those aspects of education processes in addition to general education, the study of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life. Technical education is regarded as education which provides the recipient with the basic knowledge and practical skills needed for entry into the workforce. Technical education is an integral part of education meant to prepare an occupational field as an aspect of continuing education for the development of individual and the progress of any society. It is the education of all about doing things with hands, limbs and brain in order to produce something or adds value to something that has been produced. Fafunwa cited in Musa and Ogbuji (2016), made it clearer that African reconstruction, rebirth, development can only become a reality when Africa is prepared to place more emphases on technical and vocational education. However, today there is a new consciousness towards achieving national stability and economic survival through technical and vocational education. Right from the school level there is the introduction of Introductory Technology in the curriculum. Basically, every state in the Nigerian Federation has a good number of technical secondary schools as well as at least a polytechnic. Another interesting

development is the emergence of a good number of Technical Universities and those of Agriculture. And there is even one for Military Science Technology.

Olaitan (1992) views vocational education as a process of getting people ready and keeping them ready for the types of services needed. The National Policy on Education defines technical and business education as ''that aspect of education which leads to the acquisition of practical and applied skills as well as basic scientific knowledge''. The five main national objectives of Nigeria as contained in the national policy of education (2004) revised edition include equal opportunities for all in:

A free and democratic society

A just and egalitarian society

A united, strong and self-reliant nation

A great and dynamic economy

A land of bright and full opportunities for all citizens

It is on the above premise that curriculum for technical and vocational education is structured to take care of individual interest and capabilities. UNESCO cited in Musa and Attama (2016) opined that vocational education is designed to prepare skilled personnel at lower levels of qualification for one or group of occupations, trades or jobs and that vocational education provided at upper secondary level includes general education practice training for the development of skill required by the chosen occupation and related theory. While technical education is designed at upper secondary to prepare middle level personnel (technicians) and at university for higher management positions. Technical education includes general education, scientific and technical studies and related skill training. Ikwuegbu (2006) cited Olaitan (1992) believes that TVE ''is reputed for being the best form of education that prepares an individual for a specified work and not for world of work assumption''.

# Impact of Technical and Vocational Education in the Sustenance of National Economy in Nigeria

The National Policy on Education (2004) stated that Technical and vocational education is used as a comprehensive term, referring to those aspects of education processes in addition to general education, the study of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life. Technical education is regarded as education which provides the recipient with the basic knowledge and practical skills needed for entry into the workforce. Technical education is an integral part of education meant to prepare an occupational field as an aspect of continuing education for the development of individual and the progress of any society. It is the education of all about doing things with hands, limbs and brain in order to produce something or adds value to something that has been produced. Fafunwa cited in Musa and Ogbuji (2016), made it clearer that African reconstruction, rebirth, development can only become a reality when Africa is prepared to place more emphases on technical and vocational education.

However, the fact remains that the impact of technical and vocational education in the sustenance of national economy in Nigeria and the world cannot be over emphasized. In other words, economic survival of any nation cannot unilaterally realize its objective without the supportive role of technical and vocational education. Technical and vocational education is the ingredients of socio political stability and economic survival. For a long time now Nigeria has adopted education as the official ingredients for achieving socio-economic stabilities and political survival. Political stability and economic survival implies development in real economic terms and also improving the quality of life of the average Nigerian. It is in this perspective that re-examination of Nigeria's place in this fiercely competitive global economy

is necessary. Perhaps if we had adopted technical and vocational education rather than education generally as an instrument for national stability and economic survival, the nation would have been the better for it. The classic examples of the Asian Tigers viz South Korea, Malaysia, Singapore, Indonesia etc not to mention the Economic Giants such as Taiwan, China and Japan come to mind (Iheanacho, 2006). Unfortunately in Nigeria many graduates of polytechnics and other technical schools rather than fulfilling the desired man-power needs of their training drift into universities just to obtain degrees. This drift is not only financially wasteful but also undermines the effective utilization of critical middle-level manpower.

Today there is a new consciousness towards achieving national stability and economic survival through technical and vocational education. Right from the school level there is the introduction of Introductory Technology in the curriculum. Basically, every state in the Nigerian Federation has a good number of technical secondary schools as well as at least a polytechnic. Another interesting development is the emergence of a good number of Technical Universities and those of Agriculture. And there is even one for Military Science Technology. However, two of the aims of technical and vocational education as stated in the Nigerian National Policy on Education (NPE, 1981) are as follows:

- i. To give training and impart the necessary skills leading to the production of craftsmen, technicians and other skilled personnel who will be enterprising and self-reliant.
- **ii.** To enable Nigerian young men and women to have an intelligent understanding of the increasing complexity of technology.

These aims of TVE were stated almost three decade ago. Today, the nation still lack the quality TVE programmes capable of sustenance the nation's economy. Other roles of TVE in the sustenance of national economy include:

**Provision of Manpower:** The shabby performance of Nigeria's house builders is no longer news. According to Victor (2005) the success of an enterprise depends on the quality and number of technicians employed in the enterprise. Unfortunately, the society lacks skilled technicians who are product of TVE who is being employed in different sector for effective operation and the sustenance of economy in Nigeria.

Creation of Employment: The high level of youth unemployment in Nigeria keeps increasing. This is due partly to the fact some of the people do not have the knowledge and skills that will enable them take up the job that is available. TVE will enable many Nigerians to obtain skills they need in order to fill the vacancies that exist. Friedman (1982) asserts that it provides people with ''life skills'', and Alwasilah (2002) to become productive entrepreneurs as it engenders creative and innovative ideas, enlarge the economic pie, and increase personal freedom.

**Income Generation:** TVE aims at addressing the nation's technological, entrepreneurial and information communication needs of the country. Well-equipped TVE is capable of manufacturing or assembling so many electronics and automobiles. Equipping 45% of Nigerian citizen with TVE skills will go a long way for Nigeria's economic sustenance. Other basic justification or need for Technical and Vocational Education for the sustenance of national economy include: The agriculturist as a well-trained farmer will learn the conservation of soil. This training makes the farmer an intelligent user of the natural resources unlike his untrained counterparts.

- i. Technical and vocational education is needed to increase wage earning capacity and productivity of individual.
- **ii.** Technical and vocational education is needed to increase the capacity of small scale businesses in the society. Small scale business plays a major role in the sustenance

of economy of any nation. The major relevance of small scale business in the sustenance of national economy includes: Capacity building, Employment creation, Technological acquisition, Poverty alleviation etc.

# Challenges of Technical and Vocational Education in the Sustenance of National economy in Nigeria

There are myriads of problems bedeviling the TVE in Nigeria. This is because TVE which has the mandate of meeting the manpower needs of the nation for technological development is grappling with some problems. These problems include; Inadequate funding and unfavorable disposition of attitude to TVE which results into situation where most of our youth have preference for University education as against that of technical institutions. Others include implementation of government policy, government bias with a view of favoring those that are university graduates, low level of technology, shortage of qualify teachers etc.

**Inadequate Funding:** As a result of the present economic constraint, most educational institutions have been plagued by serious problem of inadequate funding not only to pursue ongoing or outstanding capital project but also to meet their basic operating cost. Financial problem have always hindered all educational programmes in the country (Ebuoh, 2004).

**Implementation of Government Policy:** There is a laudable philosophy and objectives of TVE in Nigeria. The national policy also states clearly the strategy to be used in achieving the objectives. The implementation stage is the most important in the policy management process. The worth of any policy is its implementation. The implementation in secondary and tertiary institutions has been woeful due to mainly to corruption, misappropriation of allocated and political reasons.

Low Level of Technology: Nigeria as a developing nation is a technologically dependent on the developed or advanced nations like Britain, USA, Japan and so on. High technology imported into the country may not be sustained due to poor maintenance culture and lack of spare parts. Where adequate machines and equipments are not available to provide enabling training environment the competencies needed will not be adequately acquired.

**Shortage of Qualified TVE Teachers:** One of the major constraints of TVE in Nigeria is the shortage supply of teachers. The numerous TVE teachers tuned out by the university prefer the industries to teaching. This is because the remuneration in the industries is much better than the teaching profession. As a result many TVE courses are not taught properly to the students or teachers been over loaded.

**Inadequate Equipment:** The increasing need for TVE in the country has led to the establishment of institutions without due regard to equipping them. The schools lack necessary equipment and other infrastructural facilities for effective instruction and learning.

# Prospects of Technical and Vocational Education in the Sustenance of National economy in Nigeria

In view of the above submissions, this paper recommends as follows:

Government should increase the annual budgetary allocation to TVE to enable them meet up to the Nigeria aim for the sustenance of national economy.

National policy on Education and the curriculum planners should do everything possible to make TVE compulsory in senior secondary school scheme of work just as they did in subjects like English and mathematics for the sustenance of national economy.

Remuneration to TVE teachers should be increase to discourage the mass exodus of TVE teachers to the industries.

More qualified teachers should be recruited and lecturers and teachers in this field should be retrained or rather be sent to better and more technological advanced countries to update their knowledge so as to be able to help the society in the sustenance of its economy.

Adequate power supply is a major infrastructure that drives TVE deployment and use. Nigeria must get it right in this regard if we must follow other countries of the world in the use of TVE especially for the sustenance of national economy.

#### Conclusion

The fact that TVE has become a critical tool in the sustenance of national economy in the Nigeria and the world over cannot be overemphasized. Unfortunately, the greatest challenges militating against TVE in the sustenance of

national economy in Nigeria are, Inadequate funding, unfavorable disposition of attitude to TVE, implementation of government policy, government bias with a view of favoring those that are university graduates, low level of technology and shortage of qualify teachers among others. These challenges and others can be smoothed in Nigeria by implementing effective TVE programmes. These solutions namely increase in the annual budgetary allocation to TVE, Introduction of TVE compulsory courses in senior secondary school scheme of work, increase in the TVE teacher's remuneration, recruitment of more TVE qualified teachers, and retraining of TVE lecturers and teachers in more technological advanced countries and adequate power supply. The paper also concludes that the economic survival of Nigeria cannot unilaterally realize its objective without the supportive role of TVE; therefore, the above solutions are major infrastructure that drives TVE deployment and use. Nigeria must get it right in this regard if we must follow the Asian Tigers viz South Korea, Malaysia, Singapore, Indonesia etc as well as the Economic Giants such as Taiwan, China and Japan in the use of TVE as an instrument for national stability and economic survival.

### References

- Alwasilah, C.A. (2002). Vocational education must provide students with life skills, The Jakarta Post Plc.
- Ebuoh, C.F.N. (2004). Issues and implementation of new education system in Nigeria. Enugu: Sky Printing Press.
- Fafunwa, A.B. (1995). History of Education in Nigeria. Ibadan: Samadex Nigeria Commercial Enterprises Ltd.
- Fafunwa, A.B. (1980). New perspective in African Education. Lagos: Macmillan & co Nigeria Ltd.
- Federal Republic of Nigeria (FRN, 2004). National Policy on Education (Revised).
- Friedman, M. (1982). International Project on Mechanical and Vocational Education Capitalism and Freedom: University of Chicago Press.
- Iheanacho, E.N.O. (2006). Technical and business education for socio-economic and political stability in Nigeria. Accessed on September 02, 2017 from <a href="http/www.unidaho.edu.ng/news/education">http/www.unidaho.edu.ng/news/education</a>.
- Ikwuegbu, P.N. (2006). Vocational education and skill development: Challenges for educational administrators and planners in Nigeria. *International Journal of Research in Education*, 3(1), 145-149.
- Kutz, R.L. (2001). Skills of an effective administrator. *In Harvard Business Review in management*, 1(1), 44-48.
- Musa, S.S. & Attama, R.O. (2016). The role of information and communication technology in the advancement of science and technical education in Nigeria

- for national development. A paper presented at the Maiden National Conference of the School of General Studies and Continuing Education held at Akanu Ibiam Federal Polytechnic, Unwana, Ebonyi State, Nigeria.
- Musa, S.S. & Ogbuji, U.D. (2016). Academic libraries and the advancement of science and technical education in Nigeria for national development. *The Melting Pot Journal of School of General Studies and Continuing Education, Akanu Ibiam Federal Polytechnic, Unwana, Ebonyi State, Nigeria, 4(1), 98-105.*
- National Policy on Education, NPE (2004). *National Economic Empowerment and Development Strategy (NEEDS)*, Abuja: National Planning Commission.
- National Policy on Education, NPE (1981). *Nigerian Educational Development Council*, Lagos: Nigeria.
- Olaitan, S.O. (1994). Identifying the needs of industry in technical teachers education curriculum. *Journal of Teacher Education*.
- Victor, E.D. (2005). Vocational education: Missing link in Nigeria's development policy. Accessed on September 10, 2017 from <a href="http://www.nigeriavillagesquare.com/articles/victor">http://www.nigeriavillagesquare.com/articles/victor</a>