
Vocational Technical Education as a Tool for Sustainable Development in Nigeria

BY

Olaleye Adebayo Adeyemi

Department of Technical Education, Oyo State College of Education, Lanlate

E-mail: olaleyeadebayoadeyemi2470@gmail.com

Tel: 08066295556

Abstract

General consensus is that education is the most powerful instrument man has devised so far to shape his own fortune. While Vocational technical education in particular is the cornerstone for any sustainable technological development and society. Its relevant practical training components hold the key to Nigeria becoming technologically developed. This paper focused on vocational and technical education as a tool for sustainable development in Nigeria. The paper dwelt on the concept, historical overview of vocational and technical education in Nigeria as well as its roles in sustainable development. The constraints to vocational and technical education which affects its efficiency in sustainable developments were enumerated. It is expected that this paper would empower the stakeholders, especially the policy-makers, so that they genuinely accept vocational technical education as an equally important component of achieving sustainable development through the total learning system providing relevant knowledge, skills and competencies for employability, quality living and learning outcome. Consequently, vocational technical education is seen as the master key because it has the ability to open all the doors of life-long learning and improve the vocational expertise and consequently the quality of living which are components of sustainable development. Some of the recommendations proffered are that vocational and technical education should be integrated properly into the general education system. Government should provide adequate fund to support polytechnics and technical colleges to ensure that facilities are provided and maintained. The government should endeavour to develop a culture of entrepreneurial thinking by integrating entrepreneurship into nation's education system.

Key Words: VTE, Tool, Sustainable development, Nigeria.

Introduction

Vocational Technical Education (VTE) facilitates sustainable society through transmitting to local citizens certain values, knowledge and attitudes that are necessary to perform certain skills in the modern sector of the economy. For these reasons, VTE with its relevant practical training components had been adjudged as one of the key to achieving sustainable society (Abimbade, 2008; Ilori 2013). General consensus is that Vocational and Technical Education has potential to stimulate and sustain socio-economic development by enhancing employment, improve quality of life, reduce poverty, limit the incidence of social vices due to joblessness and promote a culture of peace, freedom and democracy (National Policy on Education, 2013).

Nigeria has not fully realized VTE potential and has treated it as a 'second best option' to academic education. However, present reality necessitates the need to rethink Vocational Technical Education (VTE) as a tool for sustainable development of Nigeria. Based on this premise, this paper reviewed the concept of VTE, examined the philosophy of VTE in relation to personnel training and development for sustainable development. Also, the paper examined relationships between VTE and sustainable development and identified challenges constraining VTE in promoting sustainable development.

Conceptual Clarification

Technical education "is a planned program of courses and learning experiences that begins with exploration of career options, supports basic academic and life skills, and enables achievement of high academic standards, leadership, preparation for industry-defined work, and advanced continuing education." Vocational Education "prepares learners for careers that are based in manual or practical activities. In other words, it is an "education designed to develop occupational skills." Vocational and technical education gives individuals the skills to "live, learn and work as a productive citizen in a global society."

Technical education could target the vocational, higher or any other education. While every vocational education programme is technical in nature, not all technical education programmes are vocational. The Technical and Vocational Education is the merging between Technical Education and Vocational Education i.e. the inclusion of basic technical and scientific knowledge with the skill-based vocational programmes. This is the higher level of skills and knowledge required to be taught as advanced learning prior to workplace entry to cope with the emergence of technologies in the workplace. Vocational and technical education gives individuals the skills to live, learn and work as a productive citizen in a global society (Dike, 2009).

Vocational and Technical Education (VTE) has been an integral part of national development strategies in many societies because of its impact on productivity and economic development. Despite its contributions the leaders of Nigeria have not given this aspect of education the attention it deserves. And that is one of the reasons for the nation's underdevelopment. This paper focuses on the dearth of skilled technical manpower in Nigeria and argues that technical education holds the key to national development.

Vocational Technical Education (VTE) is that aspect of education that enables the learner to acquire demonstrable skills that could be transformed into economic benefits (Akerele, 2007). Dike (2009) who indicated that VTE is that aspect of education that leads to the acquisition of skills as well as basic scientific knowledge. It is a planned program of courses and learning experiences that begins with exploration of career options, supports

basic academic and life skills, and enables achievement of leadership qualities, industry-defined skills, and advanced and continuing education (Maclean & Wilson, 2009).

In Nigeria, Vocational/Technical Education has always enjoyed low status, which perhaps explains why many youths prefer conventional universities. The emerging social and economic changes in the world appear to have forced many employers to seek employees who possess some technical skills in order to remain competitive. Despite the increasing demand for advanced technical manpower, policy makers are slow in developing appropriate strategies to promote this sector. Okoye (1999) has argued that any nation that wishes to remain politically relevant must strive to raise the standard of living of the people through scientific and technological knowledge.

Vocational Technical Education (VTE) is that aspect of education that enables the learner to acquire demonstrable skills that could be transformed into economic benefits (Akerle, 2007). Dike (2009) who indicated that VTE is that aspect of education that leads to the acquisition of skills as well as basic scientific knowledge. It is a planned program of courses and learning experiences that begins with exploration of career options, supports basic academic and life skills, and enables achievement of leadership, qualities industry-defined skills, and advanced and continuing education (Maclean & Wilson, 2009).

While technical and vocational education has continued to thrive in many societies Nigeria has neglected this aspect of education. Consequently, the society lacks skilled technicians: bricklayers, carpenters, painters and auto mechanics; laboratory and pharmacy technicians, electrical/electronic technicians and skilled vocational nurses, etc. The hospitals are no longer a place where people go to get their ailments treated, but a place they go and die. Tales abound of how people die during surgeries and out of minor ailments. Half-baked roadside mechanics in the society cause more harm to vehicles when contracted to service vehicles, and because of poor training some of the commercial drivers have sent many people to their early death. The shabby performance of Nigeria's house builders (mason/bricklayers, etc) is no longer news. For that individuals with important projects now use competent technicians from neighboring countries. This is not to mention the havoc the poorly trained technicians have caused in the power sector. Nigeria's spotty electricity supply is the greatest bottleneck to national development. And toiling all day in the field with knives, hoes, and shovels would not feed the nation's 200 million people. Mechanized farming requires technical skills that could be obtained in technical and vocational schools.

This paper therefore reviews the conceptual clarifications of vocational education and sustainable development.

Concept of Vocational Education in Nigeria

Ekpenyong (2011), said that the confusion surrounding the meaning of the terms 'vocational' and 'Technical' education can be traceable to the different interpretations attached to them. It is common to find the terms been used compositely when they should be used in a restricted sense and vis-à-vis. Most a times, where the terms are used conjointly, some individuals (scholars inclusive) view 'vocational' to mean business subjects or studies, and 'technical' to mean technical subjects or studies.

The Federal Republic of Nigeria (2004) through the National Policy on Education (NPE) (2004) defined VTE as aspects of educational processes involving in addition to general education, the study of technologies and related sciences and the acquisitions of the economy and social life. The NPE which came into existence as a result of the

national curriculum conference of 1969 further stated that VTE is an integral part of general education and also a mean of preparing people for occupational fields and for effective participation in the world of work. It is an aspect of life learning and a preparation for responsible citizenship; an instrument for promoting environmentally sound suitable development and a method of alleviating poverty. Vocational and technical education according to Okorocho (2012) is an educational training which encompasses knowledge, skills, competencies, structural activities, abilities, capacities and all other structural experiences for securing jobs in various sector of the economy or even enabling one to be self-dependent by being a job creator. Vocational and technical education according to ILO in Oluwale, Jegede and Olamide (2013) is a vehicle for the development of marketable and entrepreneurial skills and engine of development. Amoor (2009) saw it as the core of both individuals and society's economy. He further stressed that through the acquisition of skills; individuals could explore their environment and harness the resources within it, which could serve them and the society since the wealth of any nation determines its development. VTE according to Ojimba (2012) is a forms of education whose primary aim is to prepare persons for employment in recognized occupation and this encompasses field of study (agricultural education, fine and applied arts education, business education and vocational trades in soap making, hairdressing, computer training among others. Iheanacho (2006) defined vocational education as that aspect of education that deals with business education, farming, book keeping, bricklaying, among others with aims of acquiring vocational skills in these fields. Uwaifo (2009) posited that technical education is the training of technically- oriented personnel who are to be initiators , facilitators, and implementers of technological literacy that would lead to self-reliance and sustainability. The author stresses that technical education has direct impact on national welfare. Banjoko cited in Dokubo (2013) summed it all stressing that skill is a major distinguishing aspect of vocational education which makes it outstanding from liberal arts. In summary, vocational and technical education essentially develops in the individual the knowledge, skills, and desirable attitude for legitimate work.

Vocational and Technical Education Defined

UNESCO (2004) defined Vocational Technical Education as the aspects of educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupation in various sectors of economic and social life.

Osuala (2004) defines Vocational and Technical Education in the following ways:

- As the education that prepares one for gainful employment.
- As the education that provides the skills, knowledge and attitudes necessary for effective employment in specific occupation.
- As the form of education whose primary purpose is to prepare person for employment in a recognized occupations.
- As the education for occupational preparation, the skills and knowledge acquired while training for one occupation may be of little or no relevance in other occupations.
- As the education that focuses on individual occupations whose function is to provide knowledge, develop skills and inculcate the attitudes that are necessary for entry and progress in an occupation.

“Any education which is necessary for effective employment in an occupation is vocational. He further explained that Vocational and Technical Education assumes a choice of an occupation has been made and that appropriate training is needed to enable the individual enter or advance in his chosen occupation”. In a nutshell, Vocational and Technical Education is the acquisition of certain relevant skills attitudes and aptitudes under tutors of gainful employment and proper integration into the society.

Finch (2008) emphasize that Vocational Education through the years has been responsive to the needs of society. When geographic and occupational mobility of workers, accelerated and improved technology required a higher degree of trained skills, society turned to the schools to supply its need for trained workers.

Finch (2008) further explain that because society currently insists that everyone leaving the public school system should have some type of occupational skill appropriate to earn a living, new importance has been attached to vocational education. There is therefore, no doubt that the Nigerian Vocational Education needs to be refocused for effectiveness and sustainable national development.

Objectives of Vocational and Technical Education

These are the commonly accepted goals of vocational education, which are derived from the central tenets of democracy. The major objectives are:

- To promote general and practical education in Nigeria.
- To prepare the learner for entry in to employment in his or her chosen career.
- To train male and female students in areas of Technical and Vocational Education, so as to develop their personality to higher level.
- To enable the learner to wisely select a career.
- To produce for Nigeria market competent professionals.
- To develop for Nigeria, high level manpower for various sectors of the economy.
- To provide specialized training in specific areas involving tasks and duties due to the changing nature of the world of work.
- To provide professional development for local education agencies through a programme of pre-service and in-service vocation education.
- To provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development.
- To give training and impart the necessary skills to individual who shall be self-reliant economically.

Historical Development of VTE in Nigeria

The origin of vocational and technical education in Nigeria has a chequered history. Its roots could be trace to pre-colonial era when traditional education was in practice. According to Ogunmilla cited in Sofoluwa and Olumade (2006), “in traditional education of the various ethnic nationalities, arts and crafts of various types have existed as their own expression of vocational training. The traditional agricultural practices then were developed to suit the cultivation of agricultural species predominantly produced in the different eco-geography areas of the country”. The instructional method then was observation and imitation of the master. During the colonial era, the child was trained in the family trade through direct apprenticeship by either the parents or relations. During this period, non-indigenous companies like shell BP, the PZ and the UAC started training artisans among their

employees who were to serve the skill needs of the companies at that particular time. There was no arrangement for examination of issuance of any certificate. The emphasis was to improve the learners' ability to accomplish more complex tasks. In other words, during the early part of the colonial era, vocational training was encouraged. However, schools were built primarily for the purpose of evangelism by the early missionaries. Specifically, the early missionary activities were characterized by literacy types of education which was geared towards winning converts and producing clerks and interpreters (Ajayi and Ayodele, 2002). It was not until 1908 when government department started to organize some form of vocational training school. The marine training school according to (Adegbite, 2000) came on board in 1982. The public works, the post and telegraph and railway training school were also established around 1931. Government active participation in the provision of technical education became obvious between 1930 and 1960. The first technical institute established in Nigeria was the Hope Waddell Institute in Calabar in 1885 with the aim of providing education in the rudiments training in the technical trade and teacher's education, (Mamman, Chadi, Jirgi, & Mubarak, 2013). Yaba Higher College was officially opened on January 19, 1934 and later became the first vocational and technical institute in 1948 with the motive to train Artisans, crafts men and Technicians, together with teachers of technical education to teach in trade centres (Aina in Mamman, Chadi, Jirgi & Mubarak, 2013). Thereafter, technical colleges were established by various regional governments various locations in the country, namely: Enugu (1950), Ilorin (1951), Kano (1953), Bukuru (1953), Sapele (1955), Ijebu-Ode (1959), Osogbo, Oyo (1961), Owo (1963), Aba (1964) and Abakaliki (1966). These colleges were not fee paying and they were adequately funded by the government at that time. In 1959, Nigeria Federal Ministry of Education set up a commission- the Ashby commission to conduct an investigation into Nigerian needs in post secondary education. The Ashby commission recommended that adequate attention should be given to technical and vocational education. It also recommended that students studying technical drawing and craft subjects should be encouraged. Similarly, technical schools should be upgraded to award the City and Guilds London Certificate. The Commission for Technical Education (1963) recommended three levels of vocational and technical education as follows: Pre-vocational and pre-technical training usually offered in secondary schools; Craftsmen training usually offered in technical colleges, trade centres and vocational schools and Technical training usually offered in polytechnics and colleges of technology.

The fourth Commonwealth Education Conference (1986) recommended that industry should be closely associated with technical education. This could be through policy-making, manpower planning and curriculum development, and provision of opportunities for industrial experience, accreditation, consultancy services part-time courses and vocational guidance. In 1987, the National Council on Education (NCE) approved the National Board for Technical Educational (NBTE) which classified vocational and technical institutions into: Vocational Schools - These are made up of vocational/artisan training centres to produce artisans. They are post-primary level institutions that offer courses leading to the award of the Federal Ministry of Labour and Productivity Trade Test Certificates. Technical Colleges - Institutions that produce craftsmen at the craft level and master craftsmen at the advanced craft level. They are post-Junior secondary school institutions offering courses that lead to the award of the Advanced National Technical Certificate/Advanced National Business Studies respectively.

Polytechnics/Monotechnics/Colleges of Technology: - These are post-Senior Secondary school institutions, which produce technicians and higher technicians/technologists.

The courses offered by these institutions are of two-year duration, each leading to the award of National Diploma (ND) and Higher National Diploma (HND) respectively. Federal Government of Nigeria (2004) identified a range of courses offered under vocational and technical education as mechanical trades, computer, craft practice, electrical engineering trades, building trades, wood trades, hospitality, textile trades, printing trades, beauty culture trades, business trades and leather goods manufacture. This historical evidence has shown that the VTE existed in Nigeria during the olden days before its transformation as it exists today.

Concept of Sustainable Development in Nigeria

Although many definitions abound, the most often used definition of sustainable development is that proposed by the Brundtland Commission (Cerin, 2006; Dernbach J. C., 1998; Dernbach J. C., 2003; Stoddart, 2011). This broad definition, which will be used in this dissertation, does not limit the scope of sustainability. The explanation does, however, touch on the importance of intergenerational equity. This concept of conserving resources for future generations is one of the major features that distinguish sustainable development policy from traditional environmental policy, which also seeks to internalize the externalities of environmental degradation. The overall goal of sustainable development (SD) is the long-term stability of the economy and environment; this is only achievable through the integration and acknowledgement of economic, environmental, and social concerns throughout the decision making process. In the application of this definition of sustainable development, one issue concerns the substitutability of capital. There are several types of capital: social, natural, and man-made. The definition of weak sustainable development explains that only the aggregate level of capital matters: man-made, or manufactured, capital is an adequate alternative to natural capital. Strong sustainability, on the other hand, recognizes the unique features of natural resources that cannot be replaced by manufactured capital. Most ecologists and environmentalists are proponents of the strong sustainability definition (Stoddart, 2011). In addition to substitutability, this definition of sustainability is also founded on several other important principles. Contained within the common definition of sustainable development, intergenerational equity recognizes the long-term scale of sustainability in order to address the needs of future generations (Dernbach J. C., 1998; Stoddart, 2011). Also, the polluter pays principle states that “governments should require polluting entities to bear the costs of their pollution rather than impose those costs on others or on the environment” (Dernbach J. C., 1998, p. 58). Thus, government policy should ensure that environmental costs are internalized wherever possible; this also serves to minimize externalities. The precautionary principle establishes that “where there are threats of serious or reversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measure to prevent environmental degradation” (United Nations Conference on the Human Environment, 1992). Therefore, the proponent of an activity bears the burden of proving that this action will not cause significant harm. Explicitly stated in the Rio Declaration, the notion of common but differentiated responsibilities recognizes that each nation must play their part on the issue of sustainable development. This principle also acknowledges the different contributions to environmental degradation by developed and developing nations, while appreciating the future development needs

of these less developed countries (Brodhag & Taliere, 2006; Dernbach J. C., 1998; United Nations Conference on the Human Environment, 1992). Developed nations, therefore, bear greater responsibility in light of the resources they require and the pressures they exert on the environment.

Vocational Technical Education and Sustainable Development in Nigeria

Vocational technical education has been an integral part of national development Strategies in many societies because of the impact on human resources development, productivity and economic growth Dike (2007). Nigerians do not seem to accord vocational technical education the attention it deserves despite its proven contributions in other nations. Vocational Technical Education (VTE) has been an integral part of national development strategies in many societies because of its impact on productivity and economic development. Despite its contributions the leaders of Nigeria have not given this aspect of education the attention it deserves. And that is one of the reasons for the nation's underdevelopment.

Technical education “is a planned program of courses and learning experiences that begins with exploration of career options, supports basic academic and life skills, and enables achievement of high academic standards, leadership, preparation for industry-defined work, and advanced and continuing education. While vocational education and training “prepares learners for careers that are based in manual or practical activities, traditionally non-academic and totally related to a specific trade, occupation or vocation.” In other words, it is an “education designed to develop occupational skills. Vocational and technical education gives individuals the skills to “live, learn and work as a productive citizen in a global society.” The provision of vocational and technical schools has a long history. Before the Industrial Revolution (between 1750 and 1830) the home and the “apprenticeship system” were the principal sources of vocational education.

While technical and vocational education has continued to thrive in many societies Nigeria has neglected this aspect of education. Consequently, the society lacks skilled technicians: bricklayers, carpenters, painters and auto mechanics; laboratory and pharmacy technicians, electrical/electronic technicians and skilled vocational nurses, etc). The hospitals are no longer a place where people go to get their ailments treated, but a place they go and die. Tales abound of how people die during surgeries and out of minor ailments. And the half-baked roadside mechanics in the society cause more harm to vehicles when contracted to service vehicles, and because of poor training some of the commercial drivers have sent many people to their early death. The shabby performance of Nigeria's house builders (mason/bricklayers, etc) is no longer news. For that individuals with important projects now use competent technicians from neighboring countries. This is not to mention the havoc the poorly trained technicians have caused in the power sector. Nigeria's spotty electricity supply is the greatest bottleneck to national development. And toiling all day in the field with knives, hoes, and shovels would not feed the nation's 200 million people. Mechanized farming requires technical skills that could be obtained in technical and vocational schools.

Every facet of the economy has been affected by lack of skilled technicians. The financial sector lacks technicians to regulate the banks and to develop financial software to properly tackle the rising fraudulent activities in the banking sector. Without security development is impossible. The neglect of technical education is socially and economically injurious because it is robbing the nation the contributions the graduates would make on national development. Although technical and vocational education seem deficient in ‘citizenship or leadership training’ (Friedman 1982) it provides students with “life skills” (Alwasilah, February 11, 2002) to become productive entrepreneurs as it engenders creative

and innovative ideas, enlarge the economic pie, and increase personal freedom. Most of the so-called “expatriate engineers” who are being paid millions of dollars to build Nigeria’s roads and bridges are graduates of technical and vocational colleges. Yet the leaders do not take technical institutions seriously.

The design of Nigeria’s educational system is flawed. The neglect of technical education is an obstacle to national development. Not everyone needs a university education. In Nigeria technical degrees are regarded as inferior to regular academic degrees. But in advanced nations those with technical degrees are highly regarded. Individuals with years of field experience work in tandem with those with academic degrees. In fact, the worth of every worker depends on the person’s skills and knowledge, and not on the stack of academic degrees one has. Nigeria must learn to blend theory and practice in its education because theories alone cannot serve any useful purpose. The nation’s technical schools should be brought to international standard by employing teachers with field experience in the subject areas and experienced and professional administrators to run technical institutions. As obtained in the developed nations the technical graduates should be thoroughly certified before they could work as technicians.

Nigeria is terribly lagging behind in preparing its labor force for the 21st century economy. Adult education is also imperative as it would assist those who could not complete their primary and secondary education to acquire basic skills, and for the retired, who constitute greater part of the unemployed group in the society, to retrain for a second career. No nation would make any meaningful socioeconomic stride without well-equipped technical and vocational institutions. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has noted that revitalizing this important sector is among the ways to improve economic opportunities for the youths. The National Board for Technical Education (NBTE) and teachers in this area should take up the campaign for more funds for technical and vocational education and to launder its image.

Nigeria can become an economic power-house (and realize its visions) only if proper attention is given to education and technological development and promotes and rewards creativity, and channel its material and human resources to productive use. The leaders must recognize the relevance of technical and vocational education in national development and adopt and adapt what works in developed nations.

Ever since the Industrial Revolution in the late 18th century, progress and prosperity have been closely identified with economic development (Jomo, 1993). The economic competitiveness of a country depends on the skills of its work force. The skills and competencies of the work force, in turn, are dependent upon the quality of the country's education and training systems. Vocational education is perceived as one of the crucial elements in enhancing economic productivity (Min, 1995). Based on social efficiency theory, schools should prepare and supply future workers with appropriate knowledge and skills to enhance their productivity and, therefore, promote economic growth (Finch, 1993; Labaree, 1997). Nevertheless, vocational education has sometimes become a tool for addressing the economic, political, and social crises that are threatening the political and economic stability of some nations. Rising unemployment, lack of skilled workers, high dropout rates, and the changing demographic nature of the work force have placed the issue of workforce education high on the educational reform agenda (Giroux, 1991). Traditionally vocational education has prepared students for specific skills. However, in the post-Taylorist work environment, workers are expected to perform more broadly-defined jobs (Hirsch & Wagner, 1995). Therefore, a broad-based education is required. In the new economic environment, vocational

education is expected to produce an educated, skilled, and motivated work force (Mustapha, 1999).

According to Alam (2007), human capital theory has powerful influence on the analysis of labour market. Alam notes that investment in education and training produces benefit both to the individual and to society as a whole. The return on investment for society will be a skilled workforce that will enable global competitiveness and economic growth, while the return of the individual will be a better career path, increased earning and a better quality of life. According to Fagerlind and Shah (1989) the concept of 'human capital' suggests that education and training raises the productivity of workers, and increases their life time earning capacity. According to Alam (2007), governments perceive increased demand for skills when the labor supply shows rapid growth, when employment grows quickly, or when employment increases significantly. They argue that governments have called upon Vocational Technical Education and (VTE) Systems to help unemployed young people and older workers get jobs, reduce the burden on higher education, attract foreign investment ensure rapid growth of earnings and employment, and reduce the inequality of earnings between the rich and the poor. But Zymelman (1976) Paschorpoulos (1987) and Tilak (1998) argue that VTE provides a lower rate of return (ROR) than general education. Colin (1999) suggests that VTE not only prepares skilled labor but also provides general education to the students. Foster also (1965) aggressively criticizes that vocational school is a fallacy in development planning, and points out that vocational education can be effective if the acquired skills are utilized properly. Colin (1999) likewise says that VTE can play vital role for development planning, but he warns that if the policymakers do not make it up to date, and VTE schools do not have enough qualified teaching Faculty and sufficient facilities to offer quality Vocational Technical Education, it will not be limitations of the useful. He also claims that these are not limitations of VTE per se, educational policy of the country. Bennell (1996) says that though VTE has been a powerful influence in development planning; indiscriminately offering VTE may have negative impact on development. Arriagada and Ziderman (1992) criticize VTE, saying does not pay an appropriate role in development and claim that the higher investment needed for VTE does not seems to be compensated for by high return. However his definition of VTE can explain a good significant role of VTE in development: "Vocationalization refers to effort school to include in their curriculum those practical subjects which are likely to generate among the students some basic knowledge, skills and dispositions that might prepare them to think becoming skilled worker or to enter other manual occupations". The World Bank Policy Paper on VTE (1991), says that to get the maximum benefit to national development from VTE certain factors must be considered:

- Well timed modern courses linked of local and global demand;
- Relevant and up to date VTE courses need to be developed;
- Proper justification in respect of individual country that at which is best in offering VTE courses; and level of schooling
- Wider range of VTE courses need to be developed in terms of demand and cost effectiveness (not only for offering various courses but also for duration of the courses, for student classification in terms of their merit, ages, job market, etc.

Lewin (1993) claims that VTE seems to allow us to "kill several birds with the same stone." Akyeampong (2002) points out that VTE in national educational system not only for its economic contribution but also for its cultural, social and political contribution. International Labor Organization (ILO) (2001) claims that VTE is intended as a bold and courageous step to undertake, with the changing scenario for economic life by developing human capital. From the discussions above, it seems clear that from the economic, social and political standpoint, national development requires education which is intended to meet a

range of different national needs. These include those associated with building an appropriate workforce, and stronger economy, as well a cohesive, literate and healthy society. Economic freedom and social freedom are interrelated; one cannot thrive without the others. Alam (2007) says that without economic growth, social freedom cannot be achieved. Therefore the purpose of education is to provide adequate knowledge to the local community to cope with the professions, and that education will also provide social value, so that people can achieve two developmental things. Moreover, if education programs offered do not provide employment, parents will perceive that investment in education as not worthwhile, because their children do not achieve anything promising for their future as a result of their schooling. Under circumstances where there is no effective enforcement of law to makes primary and secondary schooling compulsory, the number of school-going people will likely decrease. Though this decline might not initially hurt the employment market since there are few job opportunities in Nigeria, it will impact social development predominantly in the health and other sensitive sectors through a drop in general literacy and it will hamper future economic growth.

Barriers to Technical and Vocational Education in Nigeria

There are many barriers to the development of VTE in Nigeria and these are summarized below:

- Most elite parents think that their children should not become a laborer. Even if their children are less academically able, parents try to push their children into higher education - disobeying the law. Social elites and political leaders in Nigeria do not bother much about the law. They also send their children to study abroad. In such circumstances, poor parents become disappointed about their children's education (Alam, 2003, 2007)
- The quality of VTE is poor and cannot provide sufficient significant knowledge for jobs. Most of VTE schools are also located far from rural areas; meaning village Students cannot have access to them easily (World Bank, 1991);

Gallart (1988) claims students of VTE suffer anxiety about the purpose of VTE, being only preparing laborers to get more profit from hem, saying it is a moral obligation to eradicate such anxiousness and help them understand that VTE has two roles preparing for VTE students for the world of work, and opening the door skilled manpower to pursue higher education with a solid foundation. Unfortunately, higher education is very limited for VTE school graduates in Nigeria. In addition, once a student has a gap of two academic study, he/she cannot enroll in further higher education. In these circumstances if a VTE graduate joins his/her job after completion of secondary and higher secondary education, he/she cannot come back into further education (Rafique, 1996);

- Higher educated people in general discipline areas can work at any place but higher educated people from VTE can only work in VTE related placements, which is low in terms of social prestige. Therefore the top authorities enjoy the respect and favor of general graduates rather than VTE graduates. In these circumstances VTE graduates are socially neglected so bright students do not have much interest in studying VTE (Rafique, 1996); and
- Providing good TVE needs more money for practical workshop facilities, and also demands Industrial attachments for internships (World Bank, 1990). Lauglo and Lillis (1988) say that vocational and practical subjects 'pedagogic systems have unusually multifarious expensive requirements (such as equipment's, materials, resources, curriculum, support system, personnel, managements requirements, etc.), which are not easily met. As a developing country, achieving a high budget for education is a real challenge for Nigerian It is also added that budget for TVE is very low in comparison with other sectors of education (BANBEIS, 2007).

Conclusion

The success of Vocational and Technical education programme in Nigeria hinges on proper planning, efficient implementation, adequate funding and motivation. The three tiers of government that is the federal, state and local government needs to re-access and reinforce the implementation of the VTE policies. For Nigeria to address the socio- economic changes currently taking place thereby survive in the modern world, she must ensure that her youth were equipped with the best and the latest skills. Vocational and Technical education institutions should align its curricula to labour market demands in order to provide youth with sufficient skills necessary to access good jobs. Since an adage says "no man is an Island" there must be in place, a framework for pulling together resource and expertise of VTE. This will create understanding, cooperation and good academic input into various VTE issues.

The integration system of pathway should be adopted to bring together VTE curriculum, academic and applied curriculum, the labour market demands, institutions and the society at large. It cannot be overemphasized that VTE is the engine for economic growth. No nation can fight a war without an army. Nigeria cannot develop without well-equipped vocational and technical institution. Nigerians need to create a new approach for the concept of vocational education and its purpose to the society.

Recommendations

Corollary to the above, the following recommendations were made to revamp Vocational and Technical Education for Sustainable Development in Nigeria. That: There should be less emphasis on certificates/ examinations in implementing the curricula content of various programmes. Acquisition of practical skills should be stressed on the final outcome. Orientation programmes should be carried out towards enlightening the general public on the need for their children to be vocationally and technically oriented in light of the pervading economic meltdown. The content of VTE must be related to the requirements of the labour market; this could be corrected by setting up an advisory council for technical colleges, polytechnics, colleges of education and university in which employers will be reoriented. Good teaching learning environment must be provided by the educational stakeholders.

There is also the need to make students' industrial training more effective through the inculcation of entrepreneurship skills to complement the vocational and technical skills acquired by them. This will make them more relevant, functional and self-employed in their areas of specialization after graduation. Government should endeavor to fund VTE and other skill acquisition programmes very well, bearing in mind the capital intensive nature of the programmes a special fund to be tagged Vocational and Technical Education Intervention Fund" should be created for the effective implementation of VTE programmes at all levels. This will help to equip the workshops and laboratories for effective skill acquisition. More qualified and skilled teachers should be recruited to handle vocational and technical subjects and courses in schools. Those on the job who lack the required qualification and skills should be retrained. Moreover, vocational and technical education teachers should be motivated through attractive conditions of service in order to increase their level of productivity.

REFERENCES

- Adegbite, P. O. (2000). *Technical and vocational education in Nigeria: A critical Analysis*. Paper presented at the seminar on TVE in Nigeria. Abuja, Nigeria.
- Aiagada, A., & Ziderman, J. (1992). *Vocational Secondary Schooling, occupational choices and earnings in Brazil*. Washington DC: World Bank.
- Ajayi, LA., and Ayodele, ILB.(2002). *History and development of education*. Ado- Ekiti: PETOA.
- Akyempong, A.K. (2002). *Vocationalization on secondary education in Ghana*. Washington, DC: World Bank.
- Alam, G.M. (2003). *The impact of students' involvement in party politics on higher education and national development in Bangladesh*. Dhaka: Bangladesh.
- Alam, G.M. (2007). *Private HE in Bangladesh: the impact on HE governance & legislation*. Unpublished PhD thesis, University of Nottingham, United Kingdom.
- Amoor, S.S. (2009). *The challenges of vocational and technical education programme in Nigerian Universities*. Retrieved from: www.abu.edu.ng/publications.
- Ayonimike, C.S., Okwelle, P.C. & Okeke, B.C. (2015). *Towards Quality Technical Vocational Education & Training Programmes in Nigeria: Challenges and Improvement Strategies*. Journal of Education and Learning. 4(1), 25-34.
- Bennell, P. (1996). *General versus vocational secondary education in developing Country: A review of rates of return evidence*. The Journal of Development Studies, 33(2), 230-247.
- Brodhag, C., & Taliere, S. (2006). *Sustainable development strategies: Tools for policy coherence*. Natural Resources Forum, 136-145.
- Cerin, P. (2006). *Bringing economic opportunity into line with environmental influence: A Discussion on the Coase theorem and the Porter and van der Linde hypothesis*. Ecological Economics, 209-225.
- Colin, N.P. (1999). *Technical and vocational education for the twenty first century*. Prospect, 29(0), 290-36.
- Dernbach, J. C. (1998). *Sustainable development as a framework for national governance*. Case Western Reserve Law Review, 1-103.
- Dernbach, J. C. (2003). *Achieving sustainable development: The Centrality and multiple facets of integrated decision making*. Indiana Journal of Global Legal Studies, 247-285.
- Dokubo, C. & Dokubo, I. (2013). *Identifiable problems inhibiting the effective management of Vocational education programme in Nigeria Universities*. European Scientific Journal, 9(22), 1 857-743 1.
- Fagerlind, I., & Saha, L.J. (1989). *Education and national development: A comparative perspective*. Oxford, UK: Pergamon.
- Fagerlind, I., & Salha, L.J. (1989). *Education and national development: A comparative perspective*. Oxford, UK: Pergamon.
- Ekpenyong, L.E. (2011). *Foundation of Technical Education: Evolution and Practice for Nigerian Students in Technical and Vocational Education and Adult Education, Policy Makers and Practitioners*. Benin City: Ambix Press Ltd.
- Federal Republic of Nigeria (2004). *National Policy on Education*. Lagos: National Education Research Development Council.
- Foster, P.J. (1965). *The vocational school fallacy in development planning*. In J. Karabel & H.Hasey (Eds.), *Power and ideology in education* (pp. 142-166). Pennsylvania, PA: Oxford University Press.

- Gallart, M.A. (1988, May). *The secundarization of technical education in Argentina and the professionalization of secondary education in Brazil in a comparative perspective*. Paper presented at the Vocationalizing Education Conference. London.
- Iheanacho, E.N.O (2006). *Technical and business education for socioeconomic and political stability in Nigeria*. International Journal of Research and Education. 3(1).164-168.
- International Labor Organization (ILO).(2001). Revised recommendation concerning technical and vocational education 2001. Retrieved 21 March 2004 from www.ilo.org/public/english/employment/skills/recomm/instr/unesco3.htm
- Lauglo, J., & Lillis, K. (1988). *Vocationalization in International Perspective, Comparative Education Review*, 34(3), 411-414.
- Lewin, K.M. (1993). *Education and development: The issues and the evidence research for the development for international development* (No.6). London: Department for International Development.
- Mamman, I., Chadi, A. M., Jirgi, L.M. & Mubarak, C.M. (2013). *The role of vocational and technical education in skill acquisition in Nigeria*. Journal of Education and Practice, 4(10), 46-49.
- Nigerian Education Research and Development Council (2008). *Teachers Handbook for the New Basic Education Curriculum*. Lagos: NERDC Printing Press.
- Ojimba, P.D. (2012). *Vocational and technical educational in Nigeria: issues problems and prospects*. Dimension (IPP) Journal of Education and Social Research, Rome, Italy, 2(9), 23-30. www.mcser.org.
- Okoh, E.C. (2000). *Fundamental Issues in Vocational and Technical Education*. Kontagora: Amaka Enterprises.
- Oluwale, B.A., Jegede, O.O. and Olamide O.O.(2013). *Technical and Vocational skills, depletion in Nigeria and the need for policy intervention*. International Journal of Vocational and Technical Education 5(6), 100-109.
- Psacharopoulos, G. (1987). *To vocationalize or not to vocationalize? That is curriculum questions*. International Review of Education, 33(2), 583-597.
- Rafique, A. (1996). *The challenges of TVE for human resource development*. Dhaka, Bangladesh: Bangladesh Technical Education Board Press.
- Tailak, J. (1998). *Economics of vocationalization: A review of the evidence*. Canadian and International Education, 17(1), 227-236.
- Uwaifo, V.O (2009). *Technical education and its challenges in Nigeria in the 21st century*. International NGO Journal 5(2) 40-44.
- World Bank (1991). *Vocational and technical education and training*. Washington, DC: Worldbank.
- World Bank.(1990). *Bangladesh vocational and technical education*. Washington, DC: Worldbank
- Zymelman, M. (1976). *The economic evaluation of vocational training programs*. Baltimore: Johns Hopkins University Press.