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Technical, Vocational Education and Training Today: Challenges and Prospects.

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Abstract

Nigeria aspires to become a major player in the world economy in line with its Vision 20-30. To achieve this ambitious goal, the most crucial vehicle apart from power and infrastructure is a skilled and competent workforce. Technical and Vocational Education and Training (TVET) 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 the acquisition of practical skills, attitudes, understanding, and knowledge relating to occupations in various sectors of economic and social life. In addition to technical knowledge and aptitude, TVET is also concerned with softer skills like communication, negotiation and teamwork. It is dispensed in public and private educational establishments or other forms of formal or informal instruction aimed at granting all segments of society access to lifelong resources.

Keywords: Technical and Vocational Education and Training: Challenges and Prospects.

1. INTRODUCTION

Nigeria aspires to become a major player in the world economy in line with her Vision 20-2020. To achieve this ambitious goal, the most crucial vehicle apart from power and infrastructure, is a skilled and competent workforce. This is necessary for the effective implementation of national development projects and for attracting necessary international investment by high-tech industries. (NBTE, 2011).

According to UNESCO-ILO's recommendation, Technical and Vocational Education and Training (TVET) 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, the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life (UNESCO & ILO, 2001) In addition to technical knowledge and aptitude, TVET is also concerned with softer skills like communication, negotiation and teamwork. It is dispensed in public and private educational establishments or other forms of formal or informal instruction aimed at granting all segments of the society access to lifelong resources. Traditionally, the so-called intellectual work is often contrasted with manual work. Thus, these would be on one hand, white collar (office) professions on the other hand, traders, technicians, etc. Nowadays, such a distinct is no longer possible.

Consequently, pupils and students are usually sent to vocational stream. Vision of TVET can be attributed to the crisis that Africa went through in the eighties. The serious economic and financial crisis that the continent faced at the market, and the increasing graduate unemployment are the factors that demanded for TVET. TVET is regarded as the most effective means of empowering the citizenry to stimulate sustainable national development enhance 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 (FME 2013). Nations like Japan, China, USA and Germany are industrially successful as a result of consistent investment in Technical Vocational Education and Training for their citizens.

Alhassan and Abdullahi (2013), opined that Technical and Vocational Education and Training play an essential role in improving the well-being of youths and communities. It also increases productivity, empowers individuals to become self-reliant, and stimulates entrepreneurship. Federal Ministry of Education (2013). The national master-plan for technical and Vocational Education (TVE) development in Nigeria in the 21st century with a blueprint for the decade 2001-2010. An outcome of the National seminar on Technical and Vocational Education in Nigeria in the 21st century. (vision and action) held from 31st October to 2nd November 2000 at Abuja.

Statement of the Problem

Nigeria is currently experiencing a depressed economy despite the introduction of Technical and Vocational Education and Training (TVET) since 1995 and subsequent improvements over time. This study therefore examines the prospects, issues, and challenges facing this system of education, with a view to understanding why the country's economy remains underdeveloped.

Outline of the Study

The paper seeks to:

i. Look into the concept, mission and purpose of Technical and Vocational Education and Training (TVET);
ii. the History of Technical and Vocational Education and Training TVET for a better understanding of what went wrong in the planning and implementation;
iii. Look into the implementations of Technical and Vocational Education and Training TVET in Nigeria today;
iv. Investigate into the challenges;
v. Make recommendations based on findings.

Significance of the Study

Findings from this study will be of tremendous benefit to stakeholders at all levels of governmental levels, heads of relevant institutions international bodies that may be interested in partnering with governments and institutions of learning and training as well as students undergoing the course or programmes/training.

Missions of Technical and Vocational Education and Training

The mission of Technical and Vocational Education and Training can be regarded as the hub with definite activities that are to be carried out judiciously. Some of the missions of TVET are:

- Provision of trained manpower in applied science, technology, and business particularly at craft, advanced craft and technical levels.
- Provision of technical knowledge and vocational skills necessary for agricultural, commercial, industrial and economic development.
- To groom people who can apply scientific knowledge to the improvement and solutions of environmental problems for the use and convenience of man.
- To give training and impact necessary skills to individuals for self-reliance economically
- To enable graduates to secure employment or set up their own businesses and become self-employed and able to employ others.
- To foster rapid national development.
- Production of sufficient trained manpower in technology and science.

The TVET principal objective is to train youths and adults alike, preparing them for the ever-changing labour market. Recent revolution and innovation in science and technology has made the labour market to evolve significantly bringing with it new challenges that must be met in order to labour match educational prospect with vocational demand In that regard, several countries are in the process of reforming their educational system with a view to training the youths to meet national, regional and international market needs. (UNESCO, UNEVOC 2016). Today, the global economy offers new opportunities and presents the continent with challenges that it cannot ignore.

Therefore, Nigeria must break this vicious cycle if it is to take its rightful place, given its enormous potential and multidimensional field. TVET is a complex and multi-dimensional field that is of paramount importance in developing competitive economies and better societies. Vocational Education concerned is to specifically prepare students for working life. It is also said to be closely related to but not identical to with the concept of training (or vocational training), which tends to focus on leading specific skills required workplaces.

It is dispensed at the technical colleges, which are equivalent to the Senior Secondary education but designed to enable the individual to acquire practical and technical skills, basic and scientific knowledge and attitude required as craftsmen and technicians at sub-professional level. TVET is defined by UNESCO (2016) as those aspects of the 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 life. Chijioke, (2016) opined that Technical and Vocational Education is a form of education that includes preparation and training individuals, in order to prepare them for employment in any industry for specialized education for which there is societal needs that can be most appropriately acquired in schools.

History of TVET in Nigeria

Nigeria is one of the blessed countries in the African continent, yet it remains the poorest and the least developed region of the world. Many African countries have been engulfed by series of internal crises over the past three decades up till today. As a result of these crises, poverty has increased throughout the nations and it has underpinned education and national development of the affected countries. Education remains a barrier to the advancement for the vast majority of citizens in developing countries. Oriahi and Aitufe (2010) opined that many developing countries lack essential raw materials, knowledge and skills expected to be acquired through formal education and training. Nigeria as a nation has remained underdeveloped or developing not because of lack of human and natural endowments but she lacks the propensity to identify and embrace vocational and technical education.

This form of education has been acclaimed as the launching pad to technological development of any nation (Aina, 2014). In the past, Vocational and Technical Education was relegated to the background in the scheme of things in Nigeria. This was as a result of societal misconception of the true meaning and the indispensability of this specialized education. To many, it was construed to mean education for less privileged in society. Many authors and writers lamented this exhibition of societal ignorance and belief that vocational education is for the mentally retarded, physically handicapped and socially maladjusted students.

The Nigerian education system after independence and before the National Policy on Education, was full of literary content. The secondary schools produced people who were only good for white- collar jobs with little or no basic skills of any vocational relevance (Fafunwa, 1995). Aside from the fact that the then system of education did not prepare the youths for meaningful productive life, it did not give serious focus to the scientific and technological needs of Nigeria. Youths were educated out of their own environment thereby making their education useless to their self-actualization and national development. The system of education then was 8-6-2-3, 8 years of primary education, 6 years of secondary education, 3

years of university education and 6-5-2-3 6 years primary, 5years secondary 2years higher school certificate, 3years university) inherited from the colonial masters who alienated their products from their cultural, economic, political and social environment.

Hence, the education failed to transform the Nigerian society to any appreciable level of development. Prior to the introduction of formal education in occupational training of the youth, though unwritten, the training pattern of most trades in Nigeria did possess consistent innovations in response to the technological advances. Hence, the natives were able to advance from use of stone implements to the use of metallic ones. All that could be called technical and vocational education then was manifested and introduced under the indigenous system of education whose skills include farming, carving, cattle rearing, carpentry, mattress making, basketry etc. (Fafunwa, 1995).

The first attempt to introduce and develop Vocational Education in Nigeria can be traced to early missionary educational activities in the country. Specifically, the teaching of vocational subjects started with the establishment of Hope Waddel (HIVTI) training institute, Calabar, in 1895. It was named after the Reverend Hope Waddell. The institute is still in existence, now located opposite the Governor's office in Calabar. The school was originally a vocational school in Jamaica in 1894. The establishment of the school in Calabar was a joint collaboration of missionaries like Mary Slessor (after she ended the killing of twins).

In the early part of the 20th century, technical courses and programmes were located in selected departments, these were sectors meant to train technicians specifically in jobs related activities of the departments. The period between 1908 and 1935 marked the visible beginning of organized Technical and Vocational Education in Nigeria. These formed the basis of teaching engineering courses at Yaba Higher College (later named Yaba College of technology founded in 1973/1974. Asquith and Elliot Commission of 1943 anticipated the need for higher education for Nigerians in its social and economic growth.

However, the first major recommendation for the introduction of Vocational and Technical Education was made in 1945 when the Commission of Higher Education in West Africa proposed the premises of Yaba Higher College to be converted to a Technical Institute. Ten-year plan for Development and Welfare incorporated the commission's recommendations in 1946 following a grant of N40, 000.00 for the promotion of the programme for the first five years. The Northern regional government of Nigeria established the crafts school between 1956 and 1960, the Western region built 4, and the Eastern region built 9 while Lagos built 2 with the grants received.

Also, in 1949, the federal government appointed a two-man panel to assess the need for establishing Colleges of higher technical education. Their report led to the establishment of Nigeria College of Arts, Science and Technology with branches in Ibadan, Enugu and Zaria. In 1961, the Banjo Commission was set up to review the Western Nigeria educational system. His report recognized Nigeria needs for middle level manpower made up of skilled workers who could set up business of their own in areas like repairing electrical apparatus or motor cars or manufacturing small pieces of equipment or assembling of parts of apparatus purchased from abroad or using their commercial knowledge acquired in Commercial College (Ejiogu, 1986).

In 1962, the Eastern Government of Nigeria released the Dike Committee Report which was set up in 1958 to review the system of education in Eastern Nigeria. His report recommended that consideration be given to the secondary education, that is, technical and comprehensive in nature. By the time Dike's report was released in 1962, another committee named Ikoku Committee on the review of educational system was appointed by Western Government. That same year, the former Western Nigeria Government created the Aiyetoro Comprehensive High School based on the advice of Chief Somade (the then Chief Inspector of Education) and Dr Adam Shapski.

A similar school planned in Port Harcourt took off in 1964 but could not last due to the Nigeria crisis of 1967-1970. The Aiyetoro experiment of the Comprehensive system of secondary education largely

influenced the perspective of Nigerians regarding Technical and Vocational Education and Training. It can be claimed or stated that the experience of Aiyetoro High School influenced the 1969 National Curriculum Conference. As far back as the early sixties, free education was in place in the then Western Region. The priority after independence was to give access to education to the masses; while producing high and medium levels manpower, much needed for the country's development. Priority was also given to the training of technical manpower. This led to the creation of Universities and Polytechnics, as well as, Technical Colleges across the country. However, glaring disparities emerged between Northern and Southern Nigeria in the development of education.

The advent of oil boom in the early seventies brought about significant changes in the educational focus, with the Federal Government enforcing more uniform educational policies such as the Universal (Free) Primary Education (UPE) scheme in 1975. A comprehensive national policy was launched in 1977 in response to the dearth of skilled medium level technical manpower, a crash programme for the training of thousands of young Nigerians at post-secondary school level in engineering and technical courses was put in place in the mid-seventies under a collaboration or cooperation agreements with several countries in Western and Eastern Europe, the United States, Canada etc. Free Universal Primary Education was launched in 1976, but the Policy on Education itself was introduced in 1977, one year after the program's implementation.

National Policy on Education of 1981 defined Technical Education as that aspect of education that leads to the acquisition of practical and applied skills as well as basic scientific knowledge. This forms only a fractional segment of Vocational Education – applied skills acquisition. Nigeria Government to a grand step to promote the concept of Vocationlization by stating the objectives of Vocational and Technical Education in 1981 Revised National Policy on Education as:

- To promote trained manpower in applied science, technology, and commerce particularly at professional grades.
- To provide technical knowledge and vocational skills necessary for agricultural, industrial, commercial, and economic development.
- To provide people who can apply scientific knowledge for improvement and solutions to problems (FGN 1981, Nigerian Fourth Republic Development Plan).

The 6-3-3-4 (6 years of primary education, 3 years of each of Junior and Senior Secondary Education and 4 years of Higher Education) system of education implemented in 1982 should have been a self-reliant policy, but in reality, it was not, because of the gap between the policy document and the implementation including; a dearth of qualified competent teachers, decay and lack of maintenance of infrastructure, lack of standardization and development of non-formal TVET, and a low level of funding for the programmes. TVET, no doubt can serve as a bail out for unemployment and it can boost the economy of any nation if properly implemented and monitored (FRN 2013). This fact has been recognized and accepted in Nigeria by various governments with different policies, but the problem is how to make it work. The Federal Ministry of Education and Youth Development in collaboration with UNESCO and others organized a workshop in 1994.

At the end of the workshop with the theme: 'Technical Education: A foundation for a healthy economy', the consensus reached was that the state of Technical Education in Nigeria is unsatisfactory. Some participants believe that Vocational and Technical Education has reached a point of crisis. Adequate attention has not been given to TVET sector. It should be noted that there is no magic for reforming TVET except without proper monitoring. It is also agreed the acquisition of both formal and informal training to acquire skills and knowledge could be a means of creating jobs and solving unemployment in Nigeria.

Therefore, the present administration in Nigeria is orchestrating a policy of placing TVET and higher institutions of learning (universities, polytechnics, colleges of education, monotechnics and colleges

of health technology), Technical Colleges, Innovation Enterprise Institutions (IEIs) and Vocational Enterprise Institutions (VEIs) were approved to train youths to acquire skill.

Africans have also found a way of practicing result-oriented education which was a need that arose from the colonial era. Education is a process of training designed to give knowledge, develop skills and abilities that could lead to the development of mental alertness and right attitude to life, education can only be adequate when it gives knowledge; develop skills and abilities that could lead to the development of mental alertness and the right attitude to life. Education is an agent of human development, social mobility and national transformation. It is a universal concept that differs from society to society (Okoye and Etwelle, 2014).

TVET was resolved based on the realization of the fact that skills and attitude required for job performance in work place is not being achieved. TVET is a term coined to mean 'education planned to provide necessary skills and other formal/informal training needed during employment and entrepreneurial practices. Various terms and names had been used by various educationists, authors and researchers to describe what is now called TVET. Such names as apprenticeship training (AT), technical and vocational education (TVE), occupational education (OE), vocational education and training (VET), professional and vocational education (PVE), career technical education (CTE), workforce education (WE), etc. These terms were used by specific graphical areas and at specific times in our tertiary institutions. Colleges, Polytechnics and Universities are tertiary institutions established to provide standardized minimum guide curriculum for technical and vocational education and training (TVET). The mission is to promote the production of skilled/semi-skilled technical and professional manpower, to revitalize, and sustain the national economy. (Bolarinwa 2015). UNESCO - UNEVOC outlined TVET Strategy for 2016 - 2021 with three key priorities areas namely: fostering youth employment and entrepreneurship, promoting equity and gender equality, and facilitating transition to bring economies and sustainable societies (UNESCO, 2016).

Technical and Vocational Education and Training (TVET), in line with the UNESCO Strategy for TVET, plays a significant role in skills training and human capital development in Nigerian higher institutions. Through various skills acquisition programs, TVET provides a viable pathway for promoting youth employment, entrepreneurship development, and sustainable economic growth. It equips learners with practical and specialized competencies required for self-reliance and productive participation in national development.

TVET encompasses a broad range of occupational and technical skills that enable youths to function effectively in different sectors of the economy. According to Akinyele and Adu (2003), the major areas of TVET specialization include agricultural education, business education, fine and applied arts education, home economics education, computer education, and industrial technical education.

Agricultural education focuses on areas such as livestock production, crop cultivation, fish farming, piggery, rabbitry, snail rearing, honey production, agricultural marketing, and the operation of farm machinery. These areas create opportunities for food production, agribusiness, and rural development.

Business education consists of Accounting, Marketing, and Office technology and management options. The Accounting option offers entrepreneurial opportunities in auditing, accounting consultancy, book publishing, and professional training services. Marketing education promotes skills in product distribution, sales promotion, and advertising, while Office technology and management prepare graduates for business centres, secretarial services, office administration, and consultancy in recruitment and management practices.

Fine and applied arts education provides skills in ceramics, graphics, painting, sculpture, textile design, and artistic production. These areas support the creative industry through the production and commercialization of artistic works.

Home economics education equips learners with competencies in catering services, fashion design, hairdressing, cosmetology, hospitality management, event planning, interior decoration, daycare services, and textile production such as tie-and-dye (batik). These skills are highly relevant for self-employment and small-scale enterprise development.

Computer education exposes students to modern digital competencies including networking, hardware maintenance, software development, graphics design, animation, multimedia production, web development, programming, database management, and presentation design. In the contemporary digital economy, these skills are increasingly important for innovation and global competitiveness.

Industrial technical education covers vocational trades such as woodwork, electrical installation, electronics, automobile mechanics, welding and fabrication, building technology, plumbing, tiling, painting, carpentry, upholstery, furniture making, and block moulding. These technical competencies contribute directly to infrastructural development and industrial productivity.

Beyond occupations directly linked to TVET disciplines, Morakinyo (2001) identified additional entrepreneurial ventures that graduates can engage in. These include barbering, baby food production, bleach and detergent manufacturing, cosmetics production, candle making, photography, stationery production, nylon and polyethylene production, popcorn processing, rental services, toilet roll production, toothpick production, water packaging, and the production of local beverages such as zobo, kunu, yogurt, and ice cream.

The wide scope of TVET demonstrates its importance as an instrument for reducing unemployment, alleviating poverty, and promoting entrepreneurship among Nigerian youths. Consequently, greater investment in vocational and technical education is necessary to strengthen skills acquisition, improve productivity, and enhance national economic transformation.

Challenges of Technical and Vocational Education and Training (TVET) in Nigeria

Despite the significant contributions of Technical and Vocational Education and Training (TVET) to skills acquisition, entrepreneurship development, and national economic growth, the sector continues to face numerous challenges in Nigeria. Many of these challenges are similar to those confronting the general educational system and have negatively affected the effective implementation of TVET programs in higher institutions.

According to Egwu (2009), several bottlenecks hinder the development of TVET in Nigeria. One major challenge is the inadequacy and obsolescence of infrastructure and equipment. Most TVET institutions operate with poorly equipped workshops, outdated laboratories, inadequate classrooms, and insufficient library facilities, making practical training ineffective. Another challenge is the inadequate collaboration among tertiary institutions, which limits the sharing of research findings, technical expertise, and training resources.

The instability of the academic calendar also affects the smooth implementation of TVET programs. Frequent strikes and interruptions in academic activities reduce students' learning time and weaken skill acquisition processes. Furthermore, there is a persistent shortage of qualified academic and technical staff across TVET institutions. This shortage is worsened by unattractive conditions of service for teachers, leading to low motivation and poor job satisfaction among educators.

Egwu (2009) further identified weak support structures for the Students' Industrial Work Experience Scheme (SIWES) as another challenge. Many students encounter difficulties in securing placement opportunities and accessing adequate supervision during industrial training. In addition, the problem of brain drains or human capital flight has resulted in the migration of skilled professionals and qualified educators to countries with better working conditions and remuneration.

Other challenges include the increasing incidence of cultism, examination malpractice, and other social vices within educational institutions. These problems negatively affect discipline, academic integrity, and the quality of graduates produced. There is also inadequate institutional capacity for internal and peer quality assessment, which weakens effective monitoring and evaluation of TVET programs.

Funding has been consistently identified as one of the greatest challenges confronting TVET in Nigeria. UNESCO (2012), Udoka (2010), and Yusuf and Soyemi (2012) emphasized that poor financing affects curriculum implementation, acquisition of training equipment, staff development, and infrastructural expansion. Without adequate funding, institutions find it difficult to maintain quality vocational and technical education.

Okoroafor also identified lack of sponsorship for lecturers as a major problem affecting TVET implementation. Due to financial constraints, many tertiary institutions are unable to sponsor lecturers to attend conferences, seminars, workshops, and professional training programs necessary for updating their technical knowledge and teaching skills. In addition, inadequate infrastructure prevents lecturers from effectively applying the practical knowledge acquired through professional development programs.

Another challenge is inadequate time allocation for practical activities and unrealistic expectations placed on TVET institutions. Technical and vocational education requires sufficient practical engagement, yet many institutions allocate limited time for workshop practice and industrial exposure. Similarly, lack of reward for excellence discourages innovation, creativity, and commitment among TVET teachers and students.

Nwogu and Nwanorvo (2011) further observed that TVET suffers from a lack of skilled manpower and an acute shortage of qualified teachers. This situation undermines effective teaching and the production of competent graduates. Poor funding also contributes to insufficient training materials, inadequate instructional facilities, and poor maintenance culture.

Similarly, Olaitan (1994), as cited in Odu (2011), identified additional challenges such as insufficient material resources for training, poor workshop organization, unhealthy classroom environments, and inadequate preparation of lessons by TVET teachers. Odu (2011) further stressed that many of these challenges are linked to weak human capital development and inadequate investment in teacher training and professional capacity building.

In summary, the challenges facing TVET in Nigeria include poor funding, inadequate infrastructure, a shortage of qualified personnel, obsolete equipment, weak industrial support systems, unstable academic calendars, poor teacher motivation, and social vices. Addressing these problems requires increased government investment, effective policy implementation, stronger institutional partnerships, improved teacher welfare, and continuous modernization of TVET facilities and curricula to meet global technological and industrial standards.

The image of TVET as education of the last resort, despite the efforts of the government to charge it, still prevails. Another issue is the lack of efficient educational monitoring and evaluation procedures. Poor funding is also a great challenge preventing TVET system from coherent development. Teachers in Nigerian TVET are underestimated, and there is a great lack of incentives provided for them. Another challenge is rapid technological growth that is hard to keep up with, which results in the irrelevance of the curricula taught in TVET programs.

We can conclude here that TVET in Nigeria is facing a lot of challenges today, ranging from stakeholders' and general public's views of the program, poor infrastructure, finance and resources, inadequate resources, especially human resources, inability to keep up with daily advancements in technology, etc. Bolarinwa (2015). Observed that emerging challenges now are more than ever before; the

Nigerian economy requires a competent workforce with relevant psychomotor, cognitive, and affective domains.

TVET Mission, Strategies, and Legislation

(a) TVET Mission in Nigeria is a tool for combating poverty and unemployment. Given the shortage of qualified manpower, especially in technical disciplines, TVET is believed to be one of the main priorities that will greatly contribute to the socioeconomic development of the country.

(b) TVET Legislation on National Policy on Education was implemented in 1977 and most recently revised in 2004, describing main priorities and ways to achieve them for all aspects of Nigerian Education System. Decree 9 of 1977 establishes the National Board for Technical Education (NBTE), the main coordinating body for TVET in Nigeria. Several decrees and acts regulate various aspects of education including TVET in Nigeria. Decree No. 17 formally inaugurated in 1991 establishes the National Commission Mass Literacy, Adult and Non-formal education. The Education National Minimum Standards and Establishment of Institutions Decree No. 16 of 1985, together with the constitution of 1999, empowers the ministry of education to ensure that minimum standards are established, maintained and constantly improved in all schools of the federation.

(c) The Federal Inspectorate Service (FIS) Department and other bodies of the Ministry bear the responsibility of ensuring uniformity of standards in schools and colleges. The same Decree No. 16 vested the NBTE with the power of maintenance of standards in Nigeria Technical Institutions. This power is exercise through a variety of quality assessment processes including visitations for Resource Inspection and Accreditation. The TRCN Decree No. 31 establishes the Teachers' Registration Council of Nigeria (TRCN), which became operational in June 2000.

TVET Formal, Non-Formal, and Informal Systems.

TVET System: Upon completion of basic education and successful passing of the Basic Education Certificate Examination (BECE)/Junior Secondary Examination, the students may choose to proceed to one of the following study tracks:

- Senior Secondary School
- Technical College
- Out-of-School Vocational Training
- Apprenticeship Scheme
- Vocational Enterprise Institutions (VEIs) and Innovative Enterprise Institutions (IEIs)—Institutions supported by the private sector and are occupation-specific. They started to operate in 2007/2008. Senior Secondary Education has three main goals, which are:
- To offer a diversified curriculum application for people with different abilities and opportunities;
- To provide trained manpower in applied sciences, technology and commerce at the sub-professional grade; and
- To prepare potential middle-level manpower for higher education and relevant professions and specialization in line with national needs.

Vocational subjects belong to the group of the core subjects in senior secondary education. They range from Agriculture to Typing or Technical Drawing and from Book Keeping to Auto Mechanics and Woodwork. The Nigerian Education system distinguishes Technical Education and Vocational Education as two different sub-sectors. In general, institutions in the Technical Education sub-sector are of tertiary but non-university level, and have the role of education middle and technical-level manpower for commerce, industry, agriculture, health care and teaching. Polytechnics, Colleges of Technology (Mono-disciplinary Tertiary Colleges) and Colleges of Education all belong to the Technical Education sub-sector. The main role of Vocational Education is to train low-level workforce, such as operatives, artisans, craftsmen and

master craftsmen for commerce, industry, agriculture and ancillary services. This sub-sector includes Technical Colleges and Vocational Enterprise Institutions.

The duration of the programmes offered by Vocational Training Centres is between 1 and 3 years, depending on the vocation. After basic education, technical colleges are the main alternative route to further formal education. However, their number is quite low-under 200 Colleges in comparison to 12,000 Secondary Schools. Curriculum for Technical and Vocational courses is developed in collaboration with the experts from the industry, vocational educators from the Polytechnics and Universities and Ministry officials. Technical students are introduced to metalwork, woodwork, engineering drawing and basic electricity before they specialize in any trade.

Qualifications Frameworks for Secondary Vocational Education

The following diplomas are awarded in polytechnics and monotechnics;

Higher National Diploma (HND) in the following disciplines: Accountancy, Banking and Finance, Building Technology, Business Administration and Management, Civil Engineering Technology, Electrical Engineering. Technology, Hospitality Management, Leisure and Tourism Management, Mechanical Engineering Technology, Office Technology and Management, Quantity Surveying, Science Laboratory Technology, Chemistry Option, Statistics; National Diploma (ND) in the same discipline as HND;

National Technical Certificate (NTC) in the following discipline: Block laying, Bricklaying and Concreting, Carpentry and Joinery, Electrical Installation and Maintenance work, Fabrication and Welding, Foundry, Furniture designs and construction, General Studies, Instrument Mechanics Works, Mechanical Engineering Crafts, Motor Vehicle Mechanics' Works, Painting and Decorating, Plumbing and Piping fittings, Radio, TV and Electronic work, Refrigeration and air-conditioning works; and Advanced National Technical Certificates (ANTC), the same disciplines as in NTC. National Qualifications Framework (NQF) In December 2010; the National Steering Committee on National Vocational Qualifications Framework (NVQF) was set up by the Executive Secretary of the National Board for Technical Education (NBTE). Members of this committee come from various ministries, departments and industry/organizations. The purpose of the committee is to come up with a draft of National Vocational Qualifications Framework for Nigeria containing levels of attainment, level descriptors, quality assurance mechanism of qualifications, registration of training centres, and required legal framework and involvement of the industry. The draft report of the committee comprises 6 qualification levels:

Level 1: Entry-level or unskilled employees

Level 2: Foundation or basic-skilled employees

Level 3: Operators or semi-skilled employees

Level 4: Technicians, craft, skilled and supervisory employees

Level 5: Technical and junior management positions

Level 6: Professional engineers and senior management positions NBTE and other key stakeholders of NVQF have partnered with International Labour Organization (ILO) for the development of National Occupational Standards (NOS) in Nigeria.

2. CONCLUSION

TVET is a crucial platform for the acquisition of skills and knowledge for employment and sustainable livelihood. It provides the needed employable knowledge, skills and attitude necessary for effective performance in workplace as employees, employers and entrepreneurs. It is a programme that has suffered a lot of misunderstanding, poor implementation and abuse.

3. Recommendations

To achieve the basic aims and objectives of TVET in Nigeria as well as the prospects, challenges and achievements of this programme. The following recommendations: are proposed

1. TVET should be encouraged through a more consistent and higher funding.
2. International collaboration may be encouraged to enhance a more efficient and effective TVET.
3. TVET needs to be monitored more keenly and ensured compliance to implementation of stated policies always.
4. The government, stakeholders and the public needs to acknowledge and encourage locally produced items and ensure that all documents and documentations needed to make such products accessible, attractive and desirable to the consumers should be simplified.
5. Governments at all levels should ensure that energy needed for production, training and practice is available always. - Other infrastructures like road, availability of raw materials etc. should be worked upon.
6. TVET should be standardized to make it fir for use globally.
7. A healthy and stable economy should be worked on for the survival of TVET. - Curriculum for all levels of education should be planned in such a way that all students will be involved in TVET.
8. Required machinery and equipment needed for each trade, training, and course should be made available, maintained and kept in conducive environments.
9. TVET should be planned, practiced, and monitored in uniformity in all tertiary institutions.
10. Competitions, exhibitions, and show casing of student's creativity should be encouraged and sponsored to occupy students and reduce their involvement in cultism and other menace.
11. TVET teachers should be well trained, constantly updated, and properly networked to enhance better performance.
12. Lastly, the public should be educated to enhance change in their opinion.

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