

PROSPECTS, ISSUES AND CHALLENGES OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) IN REVAMPING NIGERIA DEPRESSED ECONOMY

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ABSTRACT: *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 hi-tech industries. (NBTE, 2011). 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 and 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 instructor aimed at granting all segments of the society access to lifelong resources.*

KEYWORDS: Economic Depression, Technical, Vocational Education, Development

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 hi-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 and 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 instructor 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, though society continues to

undervalue and minimise technical education. Consequently, pupils and students are those 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 regards 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 2000).

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 plays an essential role in improving the well beings of youths and communities. It also increases productivity, empowers individuals to become self-reliant and stimulates entrepreneurship.

Federal Ministry of Education (2000). The national master-plan for technical and Vocational Education (TVE) development in Nigeria in the 21st century with blue-print 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 31st October to 2nd November 2000 at Abuja.

Statement of the Problem

Nigeria is going through a depressed economy despite the introduction of Technical and Vocational Education and Training since 1995 with improvements at different periods since then. The writers decided to look into the prospects, issues and challenges faced by this system of education that made the country's economy to still be depressed.

Purpose and Objectives of the Study

The study was carried out to:

- i. Look into the concept, mission and purpose of Technical and Vocational Education and Training (TVET);
- ii. Trace 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 use for the stakeholders are government at all levels, Heads of Institutions where the course is being runs international bodies that may be interested in partnering with the governments and institutions of learning and training as well as students undergoing the course or programmes/trainings.

Missions of Technical and Vocational Education and Training

The mission of Technical and Vocational Education and Training can be regarded as the hob 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 impart necessary skills to individuals for self-reliance economically.
- to enable graduates 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. With technical revolutions and innovations in science and technology, labour market has evolved significantly new challenges that must be met in order to match the education proposed with vocational demands. In that regard, several countries are in the process of reforming their educational system with a view to train youths to meet national, regional and international market needs. (UNESCO, UNEVOC 2006).

Today, the global economy offers new opportunities and presents the continent with challenges that it cannot ignore. Therefore, Africa must break this vicious cycle if it is to take its rightful place, given its enormous potentials and multi-dimensional field.

TVET is a complex and multi-dimensional field that is of paramount importance in developing competitive economies and better societies.

Vocational Education is concerned 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 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 are exposed to, to prepare them for employment in any industry for specialised education for which there is societal needs and can be most appropriately acquired in schools.

History of TVET in Nigeria

Africa is one of the blessed continents, yet 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. 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 of 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 granted 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 education has been acclaimed the launching pad to technological development of any nation (Aina 2000).

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 specialised education. To many, it was construed to mean education for less privileged in the 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-actualisation 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 (6-5-2-3 = 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 Waddell (HIVTI) training institution, Calabar in 1895. It was named after the Reverend Hope Waddell. The institution 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 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 organised 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 to Nigeria 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 ₦40,000 for the promotion of the programme for the first five years. The Northern Regional Government established the Crafts School between 1956-1960 while the West built 4, East built 9 while Lagos built 2 with the grant 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 recognised 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 should 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. This 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. Another of such 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 appeared in 1977, one year after implementation of the programme.

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 Vocationisation 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 solution 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 recognised 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 organised 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 reformation TVET except without proper monitoring. It is also agreed that 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 why 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 skills.

Table 1: Institutions, Programmes, Number of available programmes/courses as at June 2012

Institution	No of Programmes	No of Courses
Polytechnics, Monotechnics, Colleges of Health Technology	11	94
Technical Colleges	10	41
Innovative Enterprise Institutions (IEIs) and Vocational Enterprise Institutions (VEIs)	8	20

National Board for Technical Education established in 1977 was created specifically to handle all aspects of Technical and Vocational Education under the supervision of Federal Ministry of Education. The Board supervises and regulates through an accreditation process, programmes offered by the institutions.

Technical and Vocational Education and Training (TVET) is the form of education that advocates development of the head (knowledge), training of the hand (dexterity) and enriching the heart (consciousness and painstaking) i.e the 3 Hs. Africans have also found a way of practising 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 realisation 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), Workplace Education (WE) e.t.c. 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 standardised 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).

In line with UNESCO Strategy for TVET, skills training and development of Vocational and Technical Education programmes of Nigerian Higher Institutions through their skills acquisition programmes, offers a veritable root for fostering youth employment and entrepreneurial skills.

TVET provides wide area of specialised work skills for our youths to engage in and function optimally in economic development of the nation. Akinyele and Adu (2003) listed the following as areas of TVET based on areas of specialisation.

1. **Agricultural Education:** Livestock Production, Crop Planting, Fish Production, Piggery, Marketing of Agricultural Products, Grasscutter, Rabbitary, Snail Rearing, Honey Production, farm machineries e.t.c.
2. **Business Education:**
 - (a) **Accounting Option:** Consultancy in Accounting, Auditing Consultancy, Accounting School, Publishing books on Accounting, Auditing and Entrepreneurship, organising workshops and seminars for organisations e.t.c.
 - (b) **Marketing Option:** Buying and Selling of Products, Sales Promotion for business organisations, Advertisement for Promotions e.t.c.
 - (c) **Office Technology and Management Option:** Establishment of Business Centers and Secretarial Institutes, Writing and Publishing books in the field, Consultancy Services in Recruitment and Office Management e.t.c.
3. **Fine and Applied Arts Education:** Ceramics, Graphics, Painting, Sculpture, Textiles, Designs, Sales of Arts Products etc.

4. **Home Economics Education:** Catering Services, Hairdressing salons, Boutique, Sewing Institute, Bridal Shops, Food Canteen, Tie and Dye Batik Production, Day Care Centres, Interior Decoration Centres, Event Planning, Wedding Engagement Intermediaries (Alaga Ijoko and Alaga Iduro), Cosmetology, Hospitality, Day care etc.
5. **Computer Education:** Networking, Hardware Maintenance, Software Development, Multimedia Development, Video Editing, Graphics, Animations, Web Development, Programming, Word Processing, Database Management, Powerpoint Presentation Preparation.
6. **Industrial Technical Education:** Woodwork Technology, Electrical Technology, Electronics Technology, Auto mechanics Technology, Welding and Fabrication Technology, Building Technology with numerous trade areas like glacier, plumbing and fittings, tiling, painting, carpentry and joinery, block moulding, block laying, upholstery, furniture making etc.

Aside from jobs directly related with courses under Technical and Vocational Education and Training (TVET), Morakinyo (2001) pointed out the following general trades or businesses:

- Barbing
- Baby Food Production
- Bleach Production
- Body Cream Production
- Butter Production
- Candle Production
- Continuing Education Production
- Detergent and Soap Production
- Hair Cream Production
- Iced Black Production
- Import and Export Business
- Insecticide Production
- Nursery and Primary School Business
- Office Gum and other stationaries Production
- Photography
- Polythene Nylon Cutting and Production
- Popcorn Production
- Rental Services
- Toilet roll Production
- Toothpick Production

- Water Packaging
- Sobo/Kunu/Yoghurt/Ice cream etc. Production
- Organising Trainings and Workshops
- Employment Agencies etc.

Challenges of TVET in Nigeria

Nigerian TVET is faced with many challenges. Most of these challenges are also that of general education. Egwu (2009) opined that the following challenges are bottlenecks facing Nigerian Educational System especially TVET:

- i. Inadequate and obsolete infrastructure and equipment such as poorly equipped TVET workshops, libraries and classrooms;
- ii. Inadequate collaboration between tertiary institutions;
- iii. Unstable academic calendar;
- iv. Staff shortages across board;
- v. Unattractive Conditions of Service for teachers;
- vi. Weak Support Structure for Students' Industrial Work Experience Scheme (SIWES);
- vii. Brain Drain or human capital flight;
- viii. High incidence of cultism, examination malpractices and other social/academic vices;
- ix. Inadequate capacity in the institution for internal/peer quality assessment.

Udoka (2010) also posited that the major challenge of TVET is funding. Yusuf and Soyemi (2012) reported that financing is one of the problems of implementing TVET Curriculum. Okoroafor noted that some of the problems of implementation of TVET Curriculum are:

- i. Lack of Sponsorship: Management of Tertiary Institutions find it difficult to sponsor TVET lecturers to relevant seminars, conferences and short courses due to lack of fund;
- ii. Inadequate Infrastructure: TVET lecturers do not put into practice what they have learnt due to lack of infrastructure;
- iii. Inadequate Time Allocation and Expectation
- iv. Lack of Reward for Excellence.

Nwogu and Nwanorvo (2011) stated that the challenges of TVET are numerous and they include:

- i. Lack of skilled manpower;

- ii. Acute shortage of TVET teachers;
- iii. Poor funding.

In addition, Olaitan (1994) in Odu (2011) posited that the following challenges confronted the implementation of TVET:

- i. Insufficient materials resources for training.
- ii. Dearth of qualified TVET Educators

Odu (2011) stated that some of the challenges are related to Human Capital Development which includes:

- i. Inadequate funding;
- ii. Poor workshop organisation;
- iii. Inadequate funding.

Other challenges posited by Okebukola and Okolocha (2012) are:

- i. Teachers' inadequacies;
- ii. Funding inadequacies;
- iii. Gross inadequacy in facilities;
- iv. Harsh and Intimidating Classwork;
- v. Poor quality preparation of lesson by TVET Teachers;
- vi. Resource inadequacy;
- vii. Unhealthy classroom;
- viii. Shortage of equipment;
- ix. Social Vices.

UNESCO (2012) reported that Nigerian TVET is faced with many challenges. The image of TVET as education of the last resort despite the efforts of the government to change 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 irrelevance of the curricula taught in TVET programmes.

We can conclude here that TVET in Nigeria is facing a lot of challenges ranging from stakeholders and general public's view of the programme, poor infrastructure, finance and resources, inadequate resources especially human resources, inability to meet up with daily advancement of technology etc. Bolarinwa (2015). Observed that emerging challenges now are more than ever before, Nigerian economy requires competent workforce with relevant psychomotor, cognitive and affective domains.

TVET Mission, Strategies and Legislation

(a) TVET Mission

TVET 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 socio-economic development of the country.

(b) TVET Legislation

The National Policy on Education implemented in 1977 and most recently revised in 2004 describes 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.

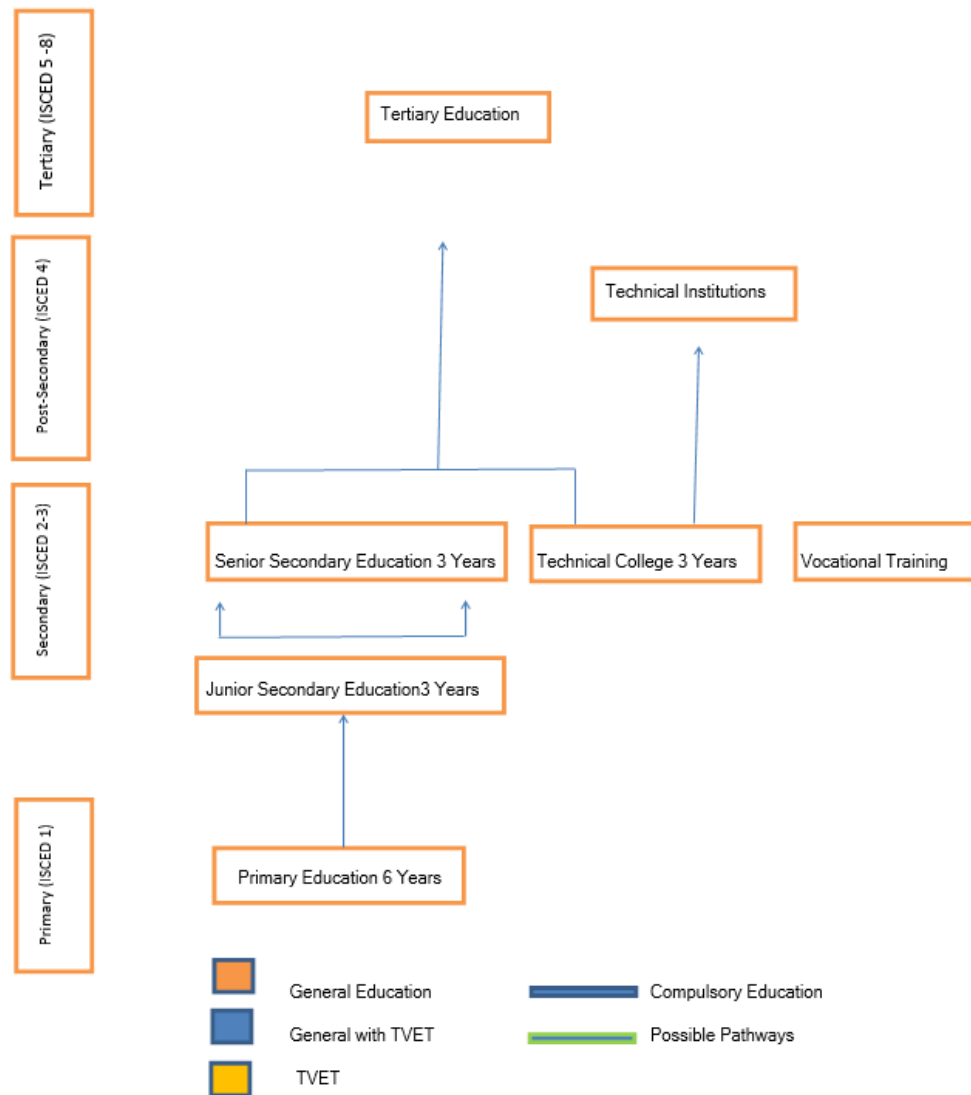
Decree No. 17 formally inaugurated in 1991 establishes the National Commission Mass Literacy, Adult and Non-formal education.

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. 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 exercised 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 DIAGRAM



Source: UNESCO-IBE (2011). World Data on Education VII Ed. 2010/11. Nigeria. Geneva: UNESCO-IBE

Formal 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 specialisation 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 specialise in any trade.

Qualifications and Qualifications Frameworks

Secondary Vocational Education

The following diplomas are awarded in Technical Colleges and Polytechnics:

- 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/organisations. 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 Organisation (ILO) for the development of National Occupational Standards (NOS) in Nigeria.

CONCLUSION

TVET is a crucial platform for 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.

RECOMMENDATIONS

To achieve basic aims and objectives of TVET in Nigeria as well as the prospects challenges and achievements of this programme so far. I hereby make the following recommendations:

- TVET should be encouraged through a more consistent and higher funding.
- International collaboration may be encouraged to enhance a more efficient and effective TVET.
- TVET needs to be monitored more keenly and ensured compliance to implementation of stated policies always.
- 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.
- Governments at all levels should ensure that energy needed for production, training and practice are available always.
- Other infrastructures like road, availability of raw materials etc should be worked upon.
- TVET should be standardised to make it fir for use globally.
- A healthy and stable economy should be worked on for survival of TVET.
- Curriculum for all levels of education should be planned in such a way that all students will be involved in TVET.
- Required machinery and equipment needed for each trade, training and course should be made available, maintained and kept in conducive environments.
- TVET should be planned, practiced and monitored in uniformity in all tertiary institutions.
- 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.
- TVET teachers should be well trained, constantly updated and properly networked to enhance better performance.
- Lastly, the public should be educated to enhance change in their opinion.

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