



---

**QUALITY ASSURANCE IN TEACHING & EXAMINATION OF TECHNICAL VOCATIONAL EDUCATION & TRAINING (TVET) FOR SUSTAINABLE DEVELOPMENT IN NIGERIA.**

**UCHENNA OBIAGELI OGOEGBUNAM & ATTAMAH, CHUKWUNWIKE EMMANUEL**

*Department of Electrical/Electronic Technology, Federal College Of Education (Technical) Bichi, Kano State, Nigeria.*

---

**Abstract**

*The vital role of TVET in the production of skilled and competent manpower for economic, industrial and social development cannot be achieved if an efficient and effective teaching and examination is not maintained. Technical, Vocational Education & Training (TVET) is very vital to the sustenance of technological development of any nation of the third world. Therefore, this paper discussed extensively quality assurance on the teaching and examination of TVET for sustainable national development in the third world. The paper examines the concept of TVET, objectives and status of TVET in Nigeria, factors militating against quality teaching and examination of TVET, quality assurance in the teaching and examination of TVET, issues on sustainable development and rationale for enhancing the quality of TVET in Nigeria were explained. Conclusions were made to improve the quality of teaching and examination of TVET.*

**Keywords:** *Quality Assurance, Teaching & Examination, Technical-Vocational Education, Training, Sustainable Development.*

---

**Introduction**

Technical Vocational Education & Training (TVET) has been recognized as an instrument for empowerment to the people of any nation, especially the youth, for sustainable livelihood, social, economic and industrial

development. The United Nations Educational Scientific and Cultural Organization (UNESCO) recommended TVET as those 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 occupations in various sectors of the economic and social life, TVET is:

- An instrument for promoting environmentally sound development.
- A method of alleviating poverty.
- An integral part of general education.
- An aspect of lifelong learning and a preparation for responsible citizenship;

The aims/objectives of TVET according to the Federal Republic of Nigeria (FRN) in the National Policy on Education (NPE) (2004) are:

- Provide trained manpower in the applied sciences, technology and business particularly art, craft, advanced craft and technical levels;
- Provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development;
- Give training and impart necessary skills to individuals who shall be self-reliant economically. (NPE, 2004).

Formal education from the policy perspective is a potent means that could be explored to fast-track economic growth, technological progress and boosting of citizens capacities (World Bank; 2008). Education can better be improved with a sound quality assurance mechanism. The term quality assurance is a critical examination of the objectives, attitudes, procedures and institutional control systems with a view to ensure that set standards and quality are maintained (Fadokun; 2005). The essence of quality assurance is to enhance the effectiveness of system towards achieving set standards (Onyesom & Ashibogwu, 2013). Quality assurance in the learning environment provides policy-makers with deeper understanding of vocational and technical education, its functions set goals and key characteristics as it applies to TVET (ETF, 2012).

In the recent times, the Ministry of Education through the National Board for Technical Education (NBTE) enhanced the scope of TVET by **granting approval for the establishment of ninety-nine (99) Vocational Enterprise Institutes (VEIs) and Innovation Enterprise Institutions (IEI's) to complement ongoing efforts of the conventional TVET Institutions in the**

country (NBTE; 2011; Oweh, 2013; Ladipo et al, 2013). The VEI's and IEI's are special vocational centers empowered to train and award National Innovative Diploma (NID) and National Vocational Certificate (NVC) in courses such as software Engineering, film and TV production and networking and system security, multimedia technology, performing and media arts, computer hardware Engineering technology, automotive mechatronics, refrigeration and air-conditioning, electrical installation, early child care management, block laying and concreting, building construction technology, hospitality and tourism studies, etc (NBTE, 2011). The pace of technological progress, employment and industrialization is still low and unimpressive, despite the continued efforts of the government on TVET as evidenced by the rising rate of unemployment and level of poverty in the country (Ladipo et al; 2013). Nigeria still spends a large proportion of its budget on the import of industrial machines and equipment and ICT accessories which makes it difficult to attain technological progress and industrialization through TVET (Uwaifo and Uddi, 2009). Wherever TVET is encouraged and vigorously pursued, it should improve skills of learners and enhance employability (Maclean, 2011). The inability of Nigeria to develop technologically despite its adoption of TVET calls for objective policy investigation.

From the foregoing, it is a fact that to achieve the national objectives and the objectives of TVET in Nigeria, there is the need to ensure good quality in the teaching and evaluation of students, improving the quality of teaching and examination of Technical-Vocational Education & Training for sustainable development has become very necessary because most people who passed through TVET are unable to perform adequately as they ought to, unemployment and poverty rate is on the high side.

### **Methodology.**

#### **Design of the Study**

The study adopted a descriptive survey design which applied a quantitative research approach. The design was considered most appropriate owing to the extensive literature review done in this respect that supports this type of research which is meant to reveal peoples' view.

#### **The Concept of Technical-Vocational Education & Training (TVET).**

Technical-Vocational Education & Training according to Akerele 2007, is that aspect of education that exposes the learner to the acquisition of

demonstrable skills that could be transformed into economic benefits. Oni 2007 viewed TVET as that type of education which fits the individual for gainful employment in as recognized career as semi-skilled worker, technician or sub-professionals. Maclean and Wilson, 2009 defined TVET as that education concerned with the acquisition of skills and knowledge for employment and sustainable livelihood. It is a planned programme of courses and learning experiences that begins with exploration of career options, supports basic academic and live skills and enables achievement of high academic standards, leadership preparation for industry-defined work and advanced and continuing education. TVET is very vital to the sustenance of technological development of every nation, It is described as the academic and vocational preparation of students for jobs involving applied science and modern technology. The TVET curriculum lays emphasis on the acquisition of employable skills, inclined towards the world of work and well placed to train the skilled workforce.

The development of TVET is important to economic development; It is needed for enterprise productivity and profitability, as well as national productivity and wealth creation. This is as a result of factors like technological advancement, globalization process, and knowledge economy, changes in modes of production in the work place, growing economic openness and competitiveness. TVET is also essential for individual prosperity. Acquisition of skills in it enables the individual to increase productivity and income, especially for those seeking out a living in the informal sector of the economy. Population growth, urbanization, poverty and lack of income generating capacity and failure of graduates to secure employment in Nigeria today, highlights the importance of career development which is achievable through TVET. There is the need to reposition it to enable those still in post-secondary to be relevant to the world of work as well as draw the majority of jobless people out of the unemployment market as the best means to improve economic opportunities for the teaming youths which will eventually enhance economic and sustainable national development of Nigeria (Yusuf & Soyemi, 2012). TVET is well suited to help youths and adults become self-reliant and self-dependent, while for those working in the industry, it is helpful in the areas of skills enhancement, mitigation of high job turnover and risks of obsolescence (Okolocha, 2012).

### **Status of Technical-Vocational Education & Training in Nigeria**

Since TVET is for useful employment for those preparing to enter occupations in Agriculture, Business, Home-making, Industrial and Technical fields, TVET plays a vital role in national development, especially in areas like:

- Generation of employers and creation of job opportunities; reduces the rate of drop outs or unemployment in the society. TVET develops in an individual employable skill making him an asset to the nation.
- Industrial development; TVET helps a nation develop technologically and industrially by producing people competent and capable of developing and utilizing technologies for industrial and economic development.
- Entrepreneurship strategy; TVET makes an individual to be self-reliant, job creators and employers of labour.
- Poverty alleviation; many who is fortunate to graduate in a regular school system and excel in various fields of learning fall back to the skills acquired in technical and vocational institutions in time of employment crisis.
- Promotion of Nigerian Economy; the national economy is promoted through foreign exchange by the export of locally made products.
- Promotion of national culture and value; TVET helps to promote the Nigerian culture and cause the people to value what they have.

### **Quality Assurance (QA)**

This is a mechanism that lays down exactly how the process in the system should be followed and the standards to be achieved. It can also be an in-built mechanism to ensure the quality of the end product while being processed. Good quality of teaching and examination can be regarded as the extent to which the teaching and examination is effective to achieve the set goals which are students learning and satisfaction. This ensures that students in TVET possess the knowledge, skills and competences that are appropriate for their area of study. These also includes standards that ensures teachers are competent in the subjects they teach and how to teach them to the students, understand how children learn and what to do when they have difficulty; and be able to use effective teaching methods. The overall goal in ensuring quality is to improve opportunities for high quality learning.

### **Factors Militating Against Quality Teaching and Examination of TVET.**

Technical-Vocational Education & Training programmes are designed for people who can profit and progress by it, in order to accomplish this outcomes quality must be the watchword; quality teaching and examination of vocational and technical subjects in our schools must be paramount. Unfortunately, the teaching and examination of vocational and technical subjects in schools is faced with some problems some of which are:

- Inadequate provision of instructional materials, tools and equipment; as noted by Akaniwor, 2001 the field of TVET need adequate physical, human and financial resources to effectively implement a TVET based curriculum, he traced the technological backwardness in the country to insufficient infrastructure and equipment for technological institutions. Puyate,( 2001) emphasized a TVET curriculum that will meet the present need and demands of the society in the present 21<sup>st</sup> century. The government therefore, needs to place great emphasis on TVET for the people to acquire skills and be gainfully employed in industries or other related organizations or become self employed, and avoid irrelevant courses and innumerable wastages.
- Poor organization and slow pace of implementation; those who formulated the National Policy on Education had a clear vision of an intended mission of technical-vocational education at the secondary school level. The programme was unfortunately affected by organizational and implementation problems. Akamobi, (2005) noted that most secondary school principals are products of general education, which brings about problems in the implementation of technical-vocational education policies.
- Shortage of qualified personnel; the need for technical manpower in the present stage of development in Nigeria is very important as we strive towards being a self reliant nation. Most graduates of vocational and technical institutions do not like to teach they rather work in the industries, those who are ready to teach are most of the times not employed, because of this, some technical-vocational subjects are not offered in schools while some are taught by unqualified teachers.
- Low level of funding; many of the institutions of higher learning producing vocational technical teachers due to low level of funds lack equipment, workshops and laboratories, training materials and

maintenance of equipment. Ebenebe (1991) stated that for technical-vocational institutions to perform their educational and training programmes properly and thus produce the right calibre of people that are employable, the government must increase the funding, and adequately equip these institutions.

- Poor societal attitude: This is about the low image of the TVET in the eye of the Nigerian public.
- Poor Remuneration of TVET Teachers: Poor remuneration is responsible for the poor attitude to work of some teachers, most states in Nigeria pay salaries, allowances, entitlements in arrears which are sometimes denied.
- Poor Administration and Supervision of TVET Programmes: This hinders the effective development of TVET. There is lack of coordination between the various agencies responsible for the administration of TVET programmes both in the federal and state.
- Poor Assessment Method: The assessment of TVET students should be both practical and theory which will enable them function properly in the society not only on the cognitive, but also on the psychomotor and affective aspects of learning.

### **Quality Assurance in the Teaching and Examination of TVET in Nigeria.**

There is the need to ensure continuity in the teaching and examination of vocational and technical subjects in schools at all levels, in order to ensure quality the following strategies can be employed;

- Competency: Emphasis should be on competency, skill acquisition by technical-vocational teachers must be consistent. Only those with competent skills and can demonstrate such should be the ones to teach those skills.
- Teacher Education: There is the need for teacher education to produce quality teachers who are well-equipped with variety and effective ways of teaching in and out of school settings. There should be an opportunity to train the untrained, and retrain the trained. This can be done through seminars, workshops, in-service training, training, etc.
- Change of Negative Public Attitude: The government should put in more efforts in the raising of TVET teachers socio-economic status.

- Re-training the Trainer: There is a lot of current skills and knowledge which creates the need to retrain the teachers on-the-job for the success of today's TVET.
- 
- Adequate Funding of TVET: To ensure quality in TVET, the funding needs of TVET should be addressed promptly, they include, purchase of equipment and materials for teaching, maintenance of equipment, funding of students' work experience programmes and payment of allowances to TVET teachers.

### **Administration and Supervision of Schools and Colleges**

The Administration of TVET institutions of learning should be in the hands of professionals in TVET. Experts are to monitor and spend time to train and retrain beginners for competency.

### **Issues on Sustainable Development**

The development of any nation is based on the extent of socio-cultural, socio-economic, political and industrial development through science and technology. Appropriate sustainable strategies must be developed for both rich and poor nations. TVET is a major factor in ensuring that there is sustainable development in a developing country like Nigeria. Sustainable development leads to fulfillment of societal ideals considered relevant to the needs and aspirations of the society. Factors which influence such developments are based on human ability to explore, invent and utilize. The development of any nation depends so much on the advancement and application of science and technology.

### **Rationale for Enhancing the Quality of TVET in the 21<sup>st</sup> Century in Nigeria**

Since the basic concern of TVET is the acquisition of skills for the individual to be productive and to be able to provide the goods and services required by the society, Nigeria as a nation presently has many social and economic problems to handle, some are just recovering from the chronic case of negative attitude towards TVET, awakening from her long slumber of negligence of these aspect of education, Apagu and Andural, (2007). Nigeria and her citizens are now questioning the quantity and quality of the aspect of TVET in the nations system of education and among Nigerians. Another



problem necessitating the enhancement of the quality of TVET in Nigeria in the 21<sup>st</sup> century is youth unemployment which appears to be rising astronomically every year. Adefaye, (2004). This can be reduced to a very large extent through relevant TVET programmes.

The lack of dedicated and competent workforce in Nigeria is the most militating force against the nations technological, industrial and any type of national development. TVET will help the nation out of this problem of lack of appropriate manpower and low level of technological development. Therefore, the quality of Nigeria's workforce to improve and suit current trends, TVET needs to be enhanced and improved on by all stakeholders involved in TVET for effectiveness and sustainable national development.

### **Conclusion**

The paper highlighted and discussed in details strategies for achieving quality in the teaching and examination of TVET. Therefore, in order to achieve sustainable national, social and economic development through TVET, there must be collective and concerted efforts with strong commitments on the part of everyone (government, parents/guardians, educational institutions, employers, and various stakeholders). Poor governance, poor economic policy, corruption have to be eradicated and adequate facilities put in place to produce the much needed sustainable and economic national development.

### **Recommendations**

The following recommendations were made to achieve a sustainable national development:

1. A sustainable financing scheme for TVET should be introduced by the government, increase the percentage of expenditure on education to TVET, grant financial aids to trainees who are interested in pursuing TVET programmes at whatever level to attract people enhance interest and bring attention to the relevance of TVET.
2. To enhance the status of TVET, the general public should be sensitized on the importance of TVET.
3. There should be a strong linkage and collaboration between training institutions and the industry; this is to enable teachers in TVET to update their workplace experience, and to develop appropriate curricular that is relevant to employers' needs.

4. There should be an involvement of Nigerian stakeholders and other bodies in providing TVET.

## References

- Adefaye, G., (2004). Neglect of Technical Vocational Education, Increases Youth Empowerment. Vanguard December 24<sup>th</sup> pp.30.
- Akamobi, I., (2005). Strategies for Ensuring Quality in the Teaching of Vocational Education in Secondary Schools. Journal of Qualitative Education 1 (2)
- Akaniwor, K.G., (2004). Curriculum Issues in Technical and Vocational Programmes for Sustainable Poverty Alleviation in Nigeria. In the proceedings of the Conference of the Nigeria Association of teachers of Technology (NATT). Lagos; pp 2-12.
- Apagu, V. and Andural, S.I., (2007). Refocusing Nigerian Vocational Education Relevance and Sustainable Development. Multidisciplinary Journal of Research Development, 9 (1); 1-7
- Fadokun, J.B. (2005). Educational Assessment and Quality Assurance Implication for Principal Instruction leadership Roles. A paper presented at the 31<sup>st</sup> annual conference of international association for educational assessment. 4<sup>th</sup> - 9<sup>th</sup> September, Abuja.
- Ladipo, M.K. Akhuemonkhan, I.A and Raimi, L (2013). Technical Vocational Education and Training (TVET) as mechanism for Sustainable Development in Nigeria (SD): Potentials, Challenges and Policy Prescriptions; Presentation at CAPA International Conference Banjul, The Gambia, 3<sup>rd</sup>-8<sup>th</sup> June.
- Maclean, R. (2011). Key Issues and Research Challenges for TVEI: Bridging the gap between TVEI research and the needs of policy makers in NORRAG News September (46) 125-127.
- National Board on Technical Education, (2011). List of approved VET/IEI. in Nigeria <http://www.nbte.gov.nglist-07.html>
- National Policy on Education, (2004). Federal Government of Nigeria, press.
- Okolocha, C.C (2012). Vocational Technical Education in Nigeria; Challenges and forward Business Management Dynamics, (2) 6 1-8.
- Olaitan, S.O. (1996). Vocational and Technical Education in Nigeria: Issues and Analysis. Onitsha: Noble Graphics Press.

- Oni, C.S., (2007). Globalization and its Implications for Vocational Education in Nigeria. *Essays in Education* (21) 30-34.
- Onyesom, M. and Ashibogwu, N.K (2013). Towards Quality Assurance in Business Education in Nigeria: Constraints and Control. *Asian Journal of Business Management*, vol. 5 (3) 306-312.
- Oweh, I. (2013). Poor Perception hindering Technical Vocational Education in Nigeria. *Rufa'i*. Daily Independent newspaper 20<sup>th</sup> March.
- Puyate, S.T., (2001). Manpower Development through Relevant Technology Education Curriculum for Sustainable Poverty Alleviation. *Proceedings of the Conference of the Nigeria Association of Teachers of Technology (NATT) Lagos: Nigeria*. pp: 22- 30.
- UNESCO, (2008). *Nigeria Technical Vocational Education Project Phase ii*.
- Uwaifo, V.O. and Uddi, P.S., (2004). Technology and Development in Nigeria: Missing Link. *Journal of Human Ecology*. Vol. 28 (2); 107-111.