# Technical Vocational Education and Training (TVET): A Veritable Tool for National and Industrial Development in Nigeria.

Gazali, S. A. 1, Kareem, W. B. 2, and Mannir, I. 3

<sup>1</sup>Federal Science and Technical College, Shiroro, Niger State,

<sup>2</sup>Department of Industrial and Technology Education, Federal University of Technology,

Minna, Niger State,

<sup>3</sup>Department of Fabrication and Welding Engineering, Government Technical College Funtua, Katsina State

e-mail: esike12@gmail.com

#### Abstract

Technical Vocational Education and Training (TVET) is instrumental in making remarkable contributions to national industrialisation and economic growth of the developing countries by way of suitable manpower production according to the needs of the industry and the nation as a whole. To produce fully skilled manpower/knowledgeable technocrats in the present era of national transformation is the need of the hour. This paper looked at various parameters and the impacts of TVET on economic growth in Nigeria. It finally make the recommendations among which are flexibility of course design using modularity in line with the need of industry and society, establish strong linkages and collaboration with employers and industry and provide opportunities in industry for TVET trainees to regularly update their workplace experience.

Keywords: Education, Training, Industrial Development, Vocation, Workplace

### Introduction

Qualitative education is required by citizens for fast development of a nation especially Technical Vocational Education and Training (TVET) this is to say that it is not education for the sake of it but functional education that propels a nation on the path of development, progress and greatness Kareem, Gazali and Adeyefa (2011). They further stressed that TVET holds the key to the profile of Nigeria industrial sustainability just as it has done to many industrialised nations. (TVET) Programmes are the acquisition of relevant knowledge, practical skills and attitudes for gainful employment in a particular trade or occupational area either self or paid employment. Among the aims and objectives of the National Policy on Education is acquisition of appropriate skills, abilities and competencies both mentally and physically for the individual to live in and contribute to the development of his society (FRN, 2004). In other for TVET to achieve its goals the training therefore, must be flexible, adaptable, and life-long. TVET in short terms is education and training for work, this is because it is designed to directly enhance the skills, knowledge, attitudes, competencies and capabilities of individuals, required in undertaking gainful employment.

TVET can also be described as the aspect of education, which is concerned, with the preparation of skilled manpower. It is a form of education, training or retraining which is directed towards developing the learner to become productive in a paid employment or in self-employment. It is therefore the bedrock in which a country's socio-economic, technological and cultural advancement must be built. Ethel (2007) stated that the emphasis for TVET should therefore not only emphasised on the provision of skilled manpower for a static economy but also continuing to do so for a dynamic one, especially with changing societal needs for technological advancement. Sandstone (1973) reported that TVET enhances opportunities for all types of learning. This type of education has the economic role of providing qualified manpower demanded by the technological world. As a matter of fact,

TVET is aimed at developing not only practical skills but also attitudes and habits that makes the recipient a creative, innovative and resourceful person that will be useful for industrial national development. Although there is the need for improvement in educational systems, sustainable industrial development need to be considered most carefully if these changes are to bring about effective improvement in the quality of Nigerian youths.

This world-wide growth in TVET enrolment has fuelled economic growth in some countries and fallen short of expectations in others. Globalization is prompting many governments all over the world to take renewed interest in this branch of education according to Maclean and Wilson (2009), which is considered as an indispensable means to tackle the many challenges that the rapidly increasing number of unemployed youth are confronted with when it comes to their integration in the labour markets. After years of neglect, fresh awareness arose in Africa when policy makers in many African countries including Nigeria awareness arose in Africa when policy makers in many African countries including Nigeria became convinced that if reformed TVET could play a major role in the training of a skilled and entrepreneurial workforce that could enable Africa to create wealth and emerge from decadence and poverty (African Union, 2007).

With this new spirit and energy, the African Union Commission spearheaded the development of a new strategy for the revitalization of the TVET programs in Africa. Using the school-based TVET programs, for example, Cameroon has endeavored to facilitate the integration of TVET with the job market. Lesotho and Rwanda have focused on linking TVET to business. The TVET programs in Malawi are tailoring their TVET programs to emphasize the need to create self-employment based on a foundation of sound general education and also are raising the productivity capacity of the learners in collaboration with industry and prospective employers (African Union, 2007). The current senior secondary school curriculum making a trade course compulsory for all learners at that level of education is a welcome idea making a trade course compulsory for all learners at that level of education should be tailored for national transformation. The required re-orientation from education should be tailored for socialisation into the national culture, with the aim being the development of a common polity, to the preparation of learners to live and work in a market-oriented state. TVET plays a vital role in human resource development of the country by creating skilled manpower, enhancing industrial productivity and improving the quality of life.

TVET is instrumental in making remarkable contributions to national industrialisation and economic growth of the developing countries by way of suitable manpower production according to the needs of the Industry and the nation as a whole. To produce fully skilled manpower/knowledgeable technocrats in the present era of national transformation is the manpower/knowledgeable technocrats in the present era of national transformation is the manpower/knowledgeable technocrats in the present era of national transformation is the manpower/knowledgeable technocrats in the present era of national transformation is the manpower/knowledgeable technocrats in the present era of national transformation is the manpower/knowledgeable technocrats in the present era of national transformation is the manpower/knowledgeable technocrats in the present era of national transformation.

TVET was too high compared with the returns to the economy, that the quality of cost of TVET was too high compared with the returns to the economy, that the quality of training was poor and that there was considerable mismatch between training and the needs training was poor and that there was considerable mismatch between training and the needs of industry. However a skilled workforce is a basic requirement for driving the engine of industrialisation and economic growth, and TVET holds the key to building this type of industrialisation transformation.

Even though Nigeria now appreciate the contribution of TVET to national industrialisation for economic development and a tool to combat unemployment and reduce poverty in our societies. Successful governments have not found it necessary to properly and adequately finance the planning and implementation of TVET in Nigeria. Okebukola, (2012) adequately finance the planning and implementation of TVET in Nigeria. Okebukola, the asserted that a less than 10% of Gross Domestic Product (GDP) will get nowhere yet the allocation over the last ten years has averaged 2%. Too much noise has been made on the allocation over the last ten years has averaged 2%. Too much noise has been made on the pages of papers and television about TVET, but little is done to improve the programme in Nigeria. If we are to understand National Industrialisation as a form of development that Nigeria. If we are to understand National Industrialisation in Nigeria in a way that contributes to enhances the economic well-being of all individuals in Nigeria in a way that contributes to

social cohesion and democratic values, it is clear that TVET is a crucial tool for positive transformation of Nigeria.

# **Evidence on the Impact of TVET on Economic Growth**

Youth Employment

TVET has been recognized as bedrock for youth employment and national transformation. The World Bank compiled a world-wide inventory of the interventions that are designed to integrate young people into the labour market. This Youth Employment Inventory (YEI) is based on available documentation of current and past programmes and in 2007 included evidence from 289 studies of TVET interventions from 84 countries in all regions of the world. The interventions identified improvement in employment outcomes for youth (Betcherman, Godfrey, Puerto, Rother and Stavreska, 2007).

**New Qualifications of TVET** 

The increasing scope for TVET is being recognized in national transformation such as environmental conservation, cultural heritage site preservation and renewable energy production. Others are new qualifications as recycling management, regional planning, marketing, waste management, community planning are now becoming increasingly popular in Nigeria. Training for these qualifications has been undertaken through formal TVET and non-formal training, particularly through the advocacy for Private Public Partnership for TVET programmes.

Development of 21st Century TVET Curriculum

The changing nature of the world of work, especially due to globalization and technological changes, demands how these changes impact upon the quality of social, economic and environmental conditions. TVET can play an instrumental role in developing a new generation of individuals who will face the challenge of achieving sustainable national industrialisation. Knowledge and skill acquisition which education is all about cannot be over emphasised. According to the World Bank (1994), successful development entails more than investing in physical capital, or closing the gap in capital, it also entails acquiring and using knowledge as well as closing the gaps in knowledge. Thus, to successfully confront the challenges of national industrialisation in the transformation of Nigeria, the nation must undertake three major tasks in TVET curriculum development:

- > Acquired and adapt global knowledge and create knowledge locally
- > Invest in human capital to increase the ability to absorb and use knowledge > Invest in technologies to facilitate both acquisition and the absorption of knowledge.
- Unfortunately, TVET in Nigeria remain locked into the role of being a mere supplier of skilled labour to industry and is thereby unable to respond effectively to the needs of the sustainable industrialisation. The TVET professionals need to be called upon to reorient the TVET curriculum towards sustainability while maintaining the principles of 6Rs that is Reduce, Reuse, Renew, Recycle, Repair and Rethink perspectives. Therefore TVET system needed to be aware of the concept and challenges of national industrialisation for applying in

the work place urgently. Association for Career and Technical Education, (ACTE) (2006) stated that new curriculum must engage students of TVET in specific career-related to learning experiences that equip them to make well-informed decisions about further education and training and employment opportunities and prepare trainees who may choose to enter the workforce directly after secondary school with levels of skill and knowledge in a particular career area that will be valued in the market place. As both a consumer and a producer of resources, or more accurately a sector involved in the transformation of resources, TVET has multiple concerns about sustainability. The over-exploitation of natural

resources, ill-health and grinding poverty can threaten the ability of future generations to satisfy their needs and wants. The challenge for TVET is to re-orient and re-direct its curricula to imbue students and trainees with respect for the conservation and sustainable use of resources, social equity and appropriate development, plus with competencies to practice sustainable tasks at the workplaces of today and tomorrow.

I C T for Sustainable Development

Information Technology (IT) and networking skills is the arrow head of the modern world of work Salami, (2012). However, the gap that exist between what is taught in schools and skills required to perform on a job is so wide that a high percentage of young graduates are said to be unemployable for lack of needed skills that would make them profitable for any employer.

Skilled Manpower Development

The problems of unemployment youth of the Nigeria state require our educational systems to be re-oriented towards TVET. To produce fully skilled manpower/knowledgeable technocrats in the present era of national transformation is the need of the hour. Avis, (1997) argued that the days of job stability (which some would argue never existed) are over for many, and are being replaced by a context where flexibility, adaptability, and transferability of skills are essential.

### Conclusion:

Sustainable development is not a fixed concept, "rather it is a culturally-directed search for a dynamic balance in the relationships between social, economic and natural systems - a balance that seeks to promote equity between the present and the future, the equity between countries, races, social classes and genders" (Fien and Wilson, 2005). The increasing importance that Nigeria governments now attach to TVET is a welcome development having realized that if well placed TVET will train the skilled and entrepreneurial workforce that Nigeria needs to create wealth and emerge out of poverty. A skilled workforce is a basic requirement for driving the engine of industrialisation and economic growth, and TVET holds the key to building this type of industrialization transformation.

## Recommendations

TVET should be recognised as the tool for national transformation and put into consideration the important and the relevant areas that generally pose problems of implementation such as:

> Introduction of Nanotechnology and ICT into TVET

> Provision of training within national policy framework

> Flexibility of course design, modularity in line with the need of industry and society

> Establish strong linkages and collaboration with employers and industry

- > Provide opportunities in industry for TVET trainees to regularly update their workplace experience
- > Primary and secondary school teachers should be more involved in the orientation of students towards the relevance of vocational education to their communities and they should be constantly informed of the nations manpower needs
- > Enough funding and positive commitment towards implementation

### References:

- African Union, (2007). "Strategy to Revitalize Technical and Vocational Education and Training (TVET) in Africa." Meeting of the Bureau of the Conference of Ministers of Education of the African Union (COMEDAF II +) 29-31, May 2007, Addis Ababa, Ethiopia.
- Association for Career and Technical Education, (ACTE) (2006). Reinventing the American high school for the 21st century. Alexandria, VA: Author. Retrieved from <a href="http://www.acteonline.org/uploadedFiles/Issues\_and\_Advocacy/files/">http://www.acteonline.org/uploadedFiles/Issues\_and\_Advocacy/files/</a>
- Avis, J., (1997). "What's this got to do with what I do!" Contradictory views: Students in further education. *Journal of Vocational Education and Training*, 49, 81-105.
- Betcherman G., M. Godfrey, S. Puerto, F. Rother & A. Stavreska (2007) A Review of Interventions to Support Young Workers: Findings of the Youth Employment Inventory. World Bank Social Protection Discussion Paper 0715
- Ethel, I. (2007). "Quality assurance in the teaching and examination of Vocational and <u>Technical Education in Nigeria</u>". College Student Journal. FindArticles.com. 07 May, 2009. http://findarticles.com/p/articles/mi\_m0FCR/is\_3\_41/ai\_n2739
- Federal Republic of Nigeria (2004) National Policy on Education (Revised) Lagos: NERDC Press.
- Fien, J. & Wilson, D. (2005).Promoting sustainable development in TVET: the Bonn Declaration.Prospects XXXV (3), 273-288.http://www.springer.com/education+%26+language/book/978-1-4020-5280-4
- Kareem W B, Gazali S A&Adeyefa, M. A. (2011). The challenges of sustainable vocational and technical education for industrial development in Nigeria. Proceedings of the 24<sup>st</sup> Annual Conference of NATT, Nov., 2011. Jos. pg. 563-569.
- Maclean, R. & David Wilson, D. (eds.). 2009. International Handbook of ducation for the Changing World of Work, 1. Bridging Academic and Vocational Learning.UNESCO-UNEVOC Handbooks and Books Series.Bonn, Springer Science and Business Media.
- Okebukola, P. A. O. (2012). Breaking Barriers to National Development: Are we taking full advantage of Science and Technology. 19<sup>th</sup> and 20<sup>th</sup> Convocation lecture Federal University of Technology, Minna, Nigeria. 12<sup>th</sup> April, 2012.
- Salami, K. A., (2012). Vocational Technical Education: Panacea for Economic and Technological Transformation. An address as a guest speaker on the occasion of 48<sup>th</sup> graduation ceremony of the Government Technical College, Oyo on Thursday 15<sup>th</sup> November, 2012.
- Sandstrom, L.C. (1973): The Role of Vocational and Technical Education in Economic Development of Nigeria in the problems of Vocational Technical Education. Summer Workshop, University of Nigeria NSUKKA p. 11-27.
- World Bank (1994). Higher Education: The Lessons of Experience. Washington D.C: