# Paradigm Shift from Technical and Vocational Education and Training to Technical and Vocational Skill Development for National Economic Development

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#### ABSTRACT

The wind of change in the education sector is paramount and calls for a paradigm shift from general education to the inclusion of technical and vocational education and training to improve not only the individual learners but also to enhance economic development in the country. Technical and Vocational Education and Training (TVET) suffered stereotyping from parents, students and other stakeholders and was perceived to be education option for dropout and less than average intelligence. Therefore, the introduction of Technical and Vocational Skill Development (TVSD) complements the thriving needs of TVET. In conclusion, the paradigm shift from TVET to TVSD does not really mean the eradication of TVET but more emphasis should be laid on technical and vocational skill training rather than theories. It was recommended that the government should give TVET a face lift to eradicate its public perceptions so that individuals can enrol in technical education and orientation programmes should be carried out to allow the public to know the employment benefits in TVET.

Keywords: TVET, TVET implications, TVSD, Economic development

#### **INTRODUCTION**

Nigeria has been variously described as a nation that is endowed with multifarious and multitudinous resources – both human and material and enveloped with opportunities. It is a pity that most of these opportunities are not seen by all but few and those who grab these opportunity thrive well in it. However, due to gross mismanagement, inadequacies in administration, poor funding, inappropriate imported policies, under-utilization of resources to meet the required standards and global demands; several human factors have relented in their efforts to give quality of service and quality of products. The importance of technical and vocational education and training (TVET) as change agent for social, economic,

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Journal of Research in Education and Society, Volume 8, Number 1, April 2017 ISSN: 2141-6753 technological and national development has been a subject of discussion at summits, academic conferences and at policy circles in Nigeria and other developing nations (FME, 2005).

However, what appears to form a limiting factor to self-paid engagement among Nigerian graduates is the curriculum of activities of Nigeria educational system. The curriculum appears to be of liberal bias since independence. The curriculum placed emphasis on academic excellence rather than skills acquisition that would duly and truly prepare the graduates for paid or self-employment; realistically more useful and fulfilling (Awogbenle and Iwuamadi, 2010). The goals of technical and vocational education according to the Federal Republic of Nigeria (2004) are to:

- (a) Provide trained manpower in the applied sciences, technology and business particularly at craft, advanced craft and technical levels.
- (b) Provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development.
- (c) Give training and impart the necessary skills to individual who shall be self reliant economically.

Though the goals of technical and vocational education as stated above are quite laudable but the implementation of the programme has fallen short of expectation. In recent global change, Marope, Chakroun and Holmes (2015) note that technological progress creates the demand for a more knowledgeable and skilled workforce, but also one that can adapt quickly to emerging technologies in a cycle of continuous learning. These workers must possess a minimum set of competencies in reading comprehension, communications skills, numeracy and trainability. This process highlights the need not only to increase access to quality general education for all, but also to expand opportunities for TVET learning.

Substantial effort still needs to be invested to clarify, anticipate and measure the impact of technological change on skills demand. In 2008, Handel noted that, 'researchers have only a general sense of levels of job skill requirements and even less information on rates of change and the specific dimensions along which job skills are changing' (Handel, 2008). Nevertheless, the ability to anticipate change and forecast skills demand is central to countries' efforts to develop responsive TVET systems and, more broadly, effective skills policies.

During the review period, the nature and use of ICT has changed dramatically, bringing many and far-reaching impacts and new external demands on TVET systems. In the formal sector, there was a massive increase in ICT use in a large variety of existing occupations, as well as an expansion of new occupations in the ICT sector. For example, small-scale farmers have new opportunities to access market information through mobile phones, and this could profoundly shape their decisions on what to produce, and where and when to sell their produce, potentially making a significant impact on poverty reduction. In urban informal economies, ICT is a source of new job opportunities in areas such as mobile phone unblocking and cable television installation, while vehicle mechanics are increasingly required to deal with the computerization of vehicle systems.

TVET is responding to the diverse ICT needs of learners, whether these are related to work, education or citizenship. New courses have been introduced to address occupational changes in the ICT job market. While TVET providers have shifted provision towards a blended approach, with significantly more selfdirected and/or distance learning. In developed countries, new ICT approaches have been introduced to modernize TVET organizations and to manage their administration and finance, including learner records (Marope, Chakroun and Holmes, 2015)

# Technical and Vocational Education and Training in Nigeria: The Paradigm Shift

Skill training enhances productivity and sustains competitiveness in the global economy. Worldwide countries are renewing efforts to promote technical and vocational education and training; this is because it is the only way to prepare young people for world of work, which reaches out to the marginalized and excluded groups to engage them in income-generating livelihoods (EFA, 2000). The primary objective of technical and vocational education and training (TVET) is the acquisition of employable skills for the world of work. Without job-related skills, young people and adults cannot benefit from employment opportunities that offer a decent income. The large numbers of young people who are not in education, employment or training is not only an indictment on the efficiency of national education and training systems but also a national security concern (ADEA, 2014)

In a practical approach to understanding the different dimensions and connotations of skills would therefore be to adopt a parametric definition that takes into account the dimension of time (short-term, medium-term, or long-term skills), the dimension of content (basic, specific, or critical skills) and the dimension of context (skills that are sector-specific and linked to particular social, industrial, technological or economic activity or environment) (ADEA, 2014). It was further noted that the Technical and Vocational Skill Development (TVSD) paradigm shift naturally encompasses both the technical and cross-cutting skills (e.g. critical thinking, problem-solving, entrepreneurial and analytical skills) that are necessary for functioning effectively in the world of work and are capable of driving innovation or being adapted to new learning environments or different sectors of economic activity. Technical and vocational skills may also therefore be classified in terms of core competencies and knowledge that promote employability, employment, productivity, and lifelong learning.

ADEA (2014) further opined that TVET is often associated with the formal

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**schooling system**. The formal technical and vocational education and training system is based more on getting a qualification rather than on acquiring skills and competencies for successfully integrating the world of work. The non formal and informal skills training sectors (including traditional apprenticeship) are poorly equipped, only marginally linked to the formal sector (if at all), and lack channels for upward mobility and professional development. Although traditional apprenticeship, which dominates the skills development sector in many countries and has proven to be culturally and pedagogically effective in the transmission of skills from master crafts persons to their trainees, the sector has been largely ignored by governments, with little or no strategic support for their skills development activities.

The rationale and justification for the paradigm shift from TVET to TVSD is premised on the following key attributes and characteristics:

- TVSD is non-discriminatory with regard to age, gender, status or stage in life; in other words, TVSD is for all;
- TVSD does not value one learning or training environment over and above another;
- TVSD covers the entire spectrum of skills training from basic to higher level skills;
- TVSD acknowledges the diversity of provision and pathways which, in effect implies a unique system of recognition, validation and certification of skills acquired from the different learning environments: formal, informal, and non formal (ADEA, 2014)

# Defects that require TVET intervention

There is no doubt that TVET is a potent mechanism for technological advancement in developing nation like Nigeria, but the process of embedding TVET as a sustainable education option is faced with serious environmental challenges. Amodu (2011) notes that TVET suffers stereotyping from parents, students and other stakeholders in Nigeria. TVET is perceived and treated as an education option for drop-outs and learners with less than average intelligence. This negative stereotyping could be attributed to low awareness about the roles and benefits of TVET (Eze and Okoye, 2008). In an empirical survey by Akhuemonkhan and Raimi (2013), a total of 53.4% respondents described TVET as an education option designed for students who cannot cope with the rigour of conventional education system, 43.4% noted that brilliant students should not take-up TVET programmes and 40.6% perceived TVET as an inferior education designed for students from poor families. These findings aligned with the remark of Okebukola and Okolocha (2012) that Nigerians had low esteem for TVET and learners on vocational programmes are looked upon as less privileged or second class citizens. Also, institutional implementation of TVET has been very low far from the set objectives of TVET as provided for in the National Policy on Education. Oweh

(2013) note that the UNESCO rated Nigeria low in its 2012 report. Economic indices of high wave of insecurity, joblessness and endemic poverty justified the fact above. Ladipo, Akhuemonkhan and Raimi (2013) have argued that "the effectiveness of an education policy is adjudged by its impact on macroeconomic data. In the case of TVET, its impacts are not felt, because social indicators on poverty and unemployment rates have nose-dive. A nation with effective TVET would experience consistent improvement in its industrial growth rate and industrial capacity."

Not only that, the deliverables of TVET has been compromised in Nigeria because of poor funding of TVET institutions (Ladipo, Akhuemonkhan and Raimi, 2013). The challenge of poor funding is critical because it hinders institutional capacity and capability to meet their instructional and infrastructural needs contrary to the objectives of TVET (Onyesom and Ashibogwu, 2013).

Another threat to TVET is poor curriculum implementation at institutional and policy levels. Inability of schools to translate curriculum to practical realities is a common challenge across the three levels of education in Nigeria (Okolocha, 2012). Some other challenges according to UNESCO (2007) include:

*Integration of Education and Workplace:* TVET is being offered as formal education, but little reference is being made to the needs of the workplace. Changes in the workplace have not been met with changes in education and training. TVET should cater adequately to the varied needs of members of the society to enter and re-enter the world of work. It should also provide opportunities for achieving both personal and social development.

**Uncertainty and Anxiety:** Today, more people than ever before experience frequent career changes and periods of unemployment as a result of the changing demands of the workplace. It is difficult to predict with certainty the employment needs of the informal sector which absorbs a major part of the labour force. It is also becoming increasingly difficult for young people to choose courses of study and career they would like to pursue in their adulthood. Adults who may have been laid off or retrenched require guidance and support in looking for new jobs and some time new career. One of the most dangerous consequences of fundamental changes now prevailing in politics and of course, in education is uncertainty. In Nigeria, people are retiring or their appointments are being terminated without knowing what to do next to cater for their needs. Therefore, it is one of the most important tasks of technical and vocational education to enable people cope successfully with their uncertainties.

**Prepare young people for life:** There is a widely shared consensus about the goals of education. It is to prepare young people for life by developing their intellect, their aptitudes and their talents; and to create opportunities for them to earn their living and to take part in the democratic and economic process of the country. All educational systems have to serve these purposes. Technical and Vocational Education and Training, that is, the education and training of skilled

workers and employees has to be broader and more diversified. Take for instance, a vulcanizer must have diagnostic skills and knowledge (computer literacy), be customer oriented (direct personal contact), have all the skills of the trade (high tech.), must take into account ecological effects of his or her work, be able to calculate the cost of a repair and, more generally, be conscious of adding value. *Flexible access to TVET throughout life:* Due to the high cost of TVET, the majority of those who could benefit from it do not have access. Available TVET programmes are often de-linked to a large extent are delivered using traditional theoretical methods. TVET should address the needs of informal sector where most production activities go on.

# **Transformation: A Mechanism for Skill Acquisition**

To build and sustain economic development in third world countries, it is important to combine human capital (technical knowledge) with social skills (Wals, 2009). TVET is expected to equip the people with the life-skills necessary for the labour market and also to provide technical support to keep up with the fast changing market by expanding necessary skills and competencies. This type of education is seen as a means to ensure sustainable lifestyles and occupations through the development of knowledge and skills that can meet the needs for a specific position in the labour market and result in an overall improvement of the quality of life of people. The more sustainability concepts that workers are exposed to, the better chances they will have to increase their productivity at their workplace.

Consequently, a nation or society that has no adequate means for occupational training of its citizens in the prevailing occupations of the time cannot develop competitively with other nations. It is TVET therefore that must transform the Nigerian populace of the 21st century into knowledge based workforce able to power the economy and advance the cause of economic production and service for national prosperity. If TVET must do so, it must be free from the current hindrance to its development and practice such as inadequacies in:

- access and equity
- curriculum and curriculum delivery,
- facilities rehabilitation and expansion,
- teacher production and certification,
- teacher remuneration and incentives,
- national Assessment and certification,
- monitoring, research and evaluation,
- status of TVET institutions,
- academic and professional progression of trainees; and
- marketing of TVET

And it must carry the future of Nigeria in its organization, operation and production of skilled and technical manpower in the context of the character of the 21st

century world of technical imperialism and trade liberalization. TVET thus is expected to enhance Nigeria's international competitiveness in production and service. It must reinforce the capacity of the populace for entrepreneurship and job creation. In the recent global world, the acquisition of skills and competencies is not only limited to manual labour but be exposed to the use of ICT in carrying out tasks so as not to be left out in the changing ICT world. The three tiers of government, education stakeholders and employers should give massive support to vocational and technical education programmes by investing in the programmes to meet the transformation standard of the individuals. Olakunri (2006) identifies the dearth of technical teachers as one of the problems militating against the transformative process of TVET in Nigeria. According to Manfred and Jennifer (2004), industrialized countries are transforming themselves into knowledge society by investing more on human resources. This implies that productivity and competitiveness of Nigeria in the economic world order is dependent on a well educated, skilled and adaptable workforce.

# **CONCLUSION AND RECOMMENDATIONS**

Conclusively, when people are empowered, the community is empowered and when the community is empowered, the nation is better off. The paradigm shift from TVET to TVSD does not really mean the eradication of TVET but more emphasis should be laid on technical and vocational skill training rather than theories. Adequate cognizance should also be given to as many who have learnt a trade outside the formal system of technical and vocational education and training but should be seen as a complement. The following recommendations are made:

- i. The government should give TVET a face lift to eradicate its poor public perceptions so that individuals can enrol in technical education.
- ii. Orientation programmes should be carried out to allow the public to know the employment benefits in TVET.
- iii. Non-governmental organisations should assist the government in funding and procurements of equipment because of the expensive nature of TVET.
- iv. The parents should encourage their children/individuals in choosing careers in vocational and technical education and training.
- v. Teachers and facilitators should ensure that facilities/equipments are properly utilized to motivate students of TVET to stay in the field.

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