

TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) AND APPRENTICESHIP PRACTICE IN NIGERIA: PROBLEMS AND PROSPECTS

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Abstract

It has been observed that the rekindling of the values of apprenticeship has been one of the most significant trends in Technical and Vocational Education and Training (TVET) in recent years, by organizing the youths to undergo apprenticeship training in various vocational fields which could make them independent on the completion of such skill acquisitions but, this is usually faced with multiple of problems. This paper intends to review the inception of apprenticeship practice and Technical and Vocational Education (TVET) in Nigeria. It expounded on the Development of Technical and Vocational Education and Training (TVET) after independence and the role of technical and vocational education in nation building. Problems and prospect were outlined to suggest way forward in line with the global needs for sustainable self-employment strategies especially among the youths.

Keywords: *Repositioning, TVET, Apprenticeship, Nation building, youth, self-employment*

1.0 INTRODUCTION

In Nigeria, before the colonial masters, there existed traditional vocational training largely run on the apprenticeship system; this was largely placed on local crafts such as dyeing, local weaving, and blacksmithing e t c. The teaching learning of such education was informal despite which, the teachers who were usually fathers, mothers, brothers and relations, were known to be competent and reliable as millions of African children and adults were trained and retrained to generations (ILO, 2011). The individual learns the necessary skills of the occupation as well as how to impart the knowledge and skills of the occupation to future apprentices. Following the diffusion of the Europeans into Africa, many vocations that were the result of industrial revolution in Europe and America were introduced to the Africans. New fields such as Bricklaying, Mechanic, Welding, carpentry and joinery, Bicycle repairing, Driving, Printing, Painting and so on, became popular trades.

One defining characteristic of the informal sector is as if it is not recognized by the policy and law. The operators of this informal sector in Nigeria suffer from a range of disadvantages that come with this deficiency of legal recognition. The law often erects a range of barriers to those who lack the skills, the capital or the personal connections to overcome them and to incorporate their activities in the formal sector. Mhone (1996) further argues that the development of the informal sector was out rightly suppressed by ensuring that particularly Africans lived in a controlled environment of subjugation and domination. This point of argument suggests an important insight: although informal workers often operate outside the government regulated bodies, this is not because they choose to be so, but due to the government not recognizing, legitimating and enhancing their activities.

This paper discussed the background of TVET in Nigeria, TVET development after independence, the role of TVET in national development, re-positioning of TVET in Nigeria. The paper also discussed youth's unemployment proportion and apprenticeship training in Nigeria. Various researches indicated many efforts to make youths employable through apprenticeship practice; however several researches also reported problems which impede the success of the apprenticeship practice. It is the opinion of this paper that these could be addressed by stake holders of TVET and policy makers to make the outcome of apprenticeship practice a success, through its recommendation that is offered.

2.0 BACKGROUND TO TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING IN NIGERIA

TVET in Nigeria before Independence.

With the advent of the colonial masters, TVET extended to schools then, such as the Public Works Department (P.W.D) schools; the Nigerian Railway Corporation Training School, the Civil Aviation Training Schools, Post- and Telegraphs (P & T) Training Schools, the Petroleum Institute, the Water Resources Institute, Textile Workers Training School, the Federal Surveys School, the Metallurgical Training Institute (M.T.I), the Marine Engineering Training Centre, the Federal Staff Training Centre (Fafunwa, 2004). The Railway training school, Lagos was established in 1908; which later moved to Ibadan in 1928 and to Oyo in 1934. The Marine Training school was established in 1928. School of Agriculture at Samaru Zaria and Ibadan were established in 1930. Public works Department Training school Lagos was established in 1931. The Post and Telegraphs school was in 1932, while Veterinary School Vom, Jos was established in 1935. School of Forestry, Ibadan was in 1938. Department of land and surveys 1908. John Holt established vocational technical training school in Owerri in 1939. In 1954 the United African Company (UAC) opened a Vocational Technical Training School. Shell BP petroleum Development Company in 1958 opened its training school with a capacity of 130 students in Port Harcourt, while UTC opened one in Enugu. Before all these, there had existed the Yaba Higher College established in 1948 which had been able to produce high level manpower in engineering, technology, medicine, agriculture, pharmacy, surveying and forestry (Fafunwa, 2004).

3.0 DEVELOPMENT OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) AFTER INDEPENDENCE

The background to formal public technical vocational education after the independence dates back to 1962 with the establishments of the Department of Vocational Teacher education at the University of Nigeria Nsukka. The certificate awarded was diploma equivalent to the NCE. The study was supported by Michigan state university USA. There was a significant government involvement for training of technical teachers when the National teachers Training College (NTTC) were established at Yaba Lagos and Gombe in 1966 in conjunction with the United Nations Educational Scientific and Cultural Organization (UNESCO). Those institutions ran courses that lead to the award of the National Technical Teachers Certificate (NTTC). Only few were attracted into the courses, because of lower status and lower pay upon graduation. Most of the instructors in the technical institutions trade centers and government college/secondary schools in the 60s were foreigners, therefore the federal and regional governments embarked on technical education training overseas through scholarship awards. Most of those sponsored were those who study the general crafts or trade in Yaba Technical college, and other secondary schools or trade centers. The courses lasted between 2 and 3 years for the award of the certificate in education (Handcraft) of London (Mayaki 1987).

In 1972 Kaduna and Ibadan polytechnic ventured into the area of Technical education training leading to NCE (Tech), later in 1976 the Technical Teachers Certificate (TTC) courses was included which were similar to that of Yaba programmes. The Federal government embarked on the training of graduate vocational technical teachers in the United States of America in 1980/81 under the Technical Teacher Training Programme (TTTP) in order to enhance successful implementation of the 6-3-3-4 system and to prevent further wastage of the equipment procured. A total of 1,819 Nigerians benefited from this programme between 1981 to 1990 (Fafunwa, 2004).

The TTTP programme was transferred to university in Nigeria In 1991, having realized that the government could no longer support and fund technical and vocational teachers training programme single handily abroad. It was still inevitable to increase the number of vocational technical teachers in the country; therefore the Federal government established more Colleges of Education (Tech) at Bichi, Asaba, Umuaze, Gusau and Potiskum. The insufficiency of Technical and Vocational Teachers still exist, despite the fact that many states run the Nigeria Certificate in Education (Technical) in their higher institutions, like polytechnics and Colleges of Education.

When the then Educational system of 1979 required all secondary schools in the country to offer vocational technical subjects, those institutions proved to be grossly insufficient in providing the needed technical and vocational teachers, therefore several other state polytechnics and colleges of education opened up departments of vocational technical teacher education to meet the serious need for Technical and Vocational Teachers.

3.0 THE NATIONAL POLICY ON EDUCATION AND THE ROLE OF TECHNICAL AND VOCATIONAL EDUCATION IN NATIONAL DEVELOPMENT.

The National Policy on Education (2008) spelt out the aims of technical education in Nigeria as follows;-

- (i) Providing trained manpower in applied science, technology and commerce, particularly at sub-professional grades.
- (ii) Providing the technical knowledge and vocational skills necessary for agricultural, industrial, commercial and economic development.
- (iii) Providing people who can apply scientific knowledge to the improvement and solution of environmental problems for the use and convenience of man.
- (iv) Giving an introduction to professional studies in engineering and other technologies.
- (v) Giving training and imparting the necessary skills leading to the production of craftsmen, technicians and other skilled personnel who would be enterprising and self-reliant.
- (vi) Enabling young men and women have an intelligent understanding of the increasing complexity of technology.

Maybe the role of technical and vocational education in national development may possibly be more appropriately illustrated by citing instances of such roles; It can be recalled that after the Nigerian independence in 1960, many dreams were conceived of possible short-cut to economic development, among which were explosion of crude oil exploration and discovery, mechanization of agriculture, exploration of iron and steel, discovery of gold deposits, and indigenization of all technological manpower for execution of the planned projects. By 1970 the idea of iron ore exploration had truly materialized. Geology graduates from Nigeria were employed to work along with contracted Russian experts. Their work inspired the need for establishment of iron and steel factories. The objectives of the iron and steel projects were:

- (i) Indigenous production of all construction steel inputs, with the exception of heavy structures, by the year 1985.
- (ii) Initial foreign technical assistance in plant operation and maintenance and with gradual deletion of such foreign assistance,
- (iii) Inclusion of large facilities for spare parts manufacture as a first step to total equipment production,
- (iv) Development of incremental capability for plant construction and steel project execution. The Ajaokuta Steel Complex was completed and commissioned in 1981. This project apparently slow owed to lack of indigenous technical manpower. Realizing the colossal cost of engagement of expatriate experts, the federal government directed that Nigerians be trained to comprehend the operations and problems of the steel sector. Massive training programme of Nigerians evolved both at home and abroad, resulting in production of large number of professionals, skilled and artisan workforce .Today there are many engineers, metallurgists, technicians and craftsmen who carry out construction/erection and operation, increasing the nation's labour force. This is an aspect of technical education for national development, even though substantial part of what was made in policy was not achieved, due to many compounding problems.

4.0 REPOSITIONING TECHNICAL AND VOCATIONAL TEACHER TRAINING (TVET) IN NIGERIA

Repositioning technical and vocational education in the scheme of national education for optimal performance needed personnel, equipment and facilities. Unfortunately the efforts made by the governments in the past, towards the training of technical teachers and equipping schools workshop have not been thoroughly successful (Garba 2003).There were several national Development plans, the essence of the National Development Plan (NDP) were attempts for rational design for the future of Nigeria economy.

Ogwo(2008) in his assessment of the National Development plans, believed that the plan took a critical review of the problem and potential for development in different areas of economy including agriculture, industry, and education. He identified two important contributions of the plan to TVET and education in general;

- (i) Allocation of substantial fund to technical education in order to encourage skill training and development.
- (ii) That the first National Development Plan made provision for the opening of teacher training collages including advance teacher training collages (ATTC) to provide well qualified non –graduate teachers for the secondary schools.

The second national development plan was specifically meant to address pertinent problems on education vis;-

- (i) Inadequate facilities
- (ii) Poor quality of teaching
- (iii) Unplanned and uncoordinated expansion
- (iv) Shortage of teaching staff in schools and colleges and the creation of twelve state with the emergence need for requisite expertise and skilled manpower.
- (v) Expansion of teacher training programme

He also outlined educational projects put in the place in line with the educational policies, among others as;

- (i) Expansion of facilities at collages of technology.
- (ii) Provision of grants of the development of technical education.
- (iii) Establishment and development of national technical teacher training collages (NTTTC)
- (iv) Emergence of teacher training programme (crash programme) among others.

To Ogwo (2008), the third national plan was aimed at consolidating the achievements of all various plans to build the economy base for self-sustain growth in future and TVET promotion thus;

Technical Education: The programmes embarked upon in the plan which enhances development of technical education included the harmonization of tuition fees paid in polytechnics and collages of science and technology. Establishment of Industrial Training Fund (TTTP) to expose technical students to practice work in the field as part of their normal training programmes and the establishment of National Council of Technical Education (NCTE) to oversee technical education in Nigeria, among others.

In the fourth National Development Nigerian government sent a lot of her candidates to United States of America for the training of technical teachers under the Technical Teachers Training Programme (TTTP). This was coordinated by the United States Agency for International Development (USAID) in Washington. The aim of the programme was to train about 500 technical teachers annually for a period of 10 years (Garba (2003). Olaitan (1987) in Garba (2003) stated that this projected figure was not achieved as the value of the naira declined and the earning from oil sector also dropped. The training of technical teachers abroad was to meet up with the demand of National Policy on Education on the training of technical teachers. By 1991 it was obvious that the TTTP abroad has been terminated because of the economic crunch, and was localized with the beneficiaries enjoying the training while on in-service with their employers.

The situation at present in our educational institutions across the three sub-sectors, that is Basic education (early childhood, primary, junior secondary, adult and non-formal education), post-basic education (senior secondary, technical collages, vocational enterprises institutions (VETs), and Tertiary education (innovation enterprise institution (IELs), collages of education, polytechnic/monotechnics and universities) is not encouraging. In spite of all the national development plans. The use of outdated machines for teaching new technology, shortage of hand tool and equipment are the sorrowful situations in our Technical institutions. Libraries, laboratories, technical workshops are not adequately funded or not found; where they exist they are equipped with absolute machines, facilities and equipment.

This corroborate Aliyu (2000) observation in Dahiru (2008) that most of the vocational institutions are poorly equipped with the necessary materials for workshop practice, the teachers of technology have no tools with which to teach their students, workshop are poorly equipped with obsolete materials which lack maintenance and spare parts.

This-sector is also characterized by challenges which includes; the in adequate academic staff in number and quality, and low quality of graduates.

5.0 NIGERIAN YOUTH UNEMPLOYMENT PROPORTION AND APPRENTICESHIP TRAINING

According to the National Bureau of Statistics (2009, 2011), the national unemployment rates for Nigeria between 2000 and 2011 showed that the number of unemployed persons constituted 31.1% in 2000; 13.6% in 2001; 12.6% in 2002; 14.8% in 2003; 13.4% in 2004; 11.9% in 2005; 13.7% in 2006; 14.6% in 2007; 14.9% in 2008; 19.7% in 2009; 21.1% in 2010 and 23.9% in 2011. The Nigeria Economic Report released by the World Bank in 2011 stated that unemployment rate worsened from “12% of the working population in 2006 to 24% in 2011. In 2012, unemployment rate in Nigeria increased to 24%. The NBS reported that in the year 2016 Nigeria’s unemployment rate rose from 13.3 percent in the second quarter of 2016 to 13.9 while Youth unemployment is particularly high at 24 percent, up from 21.5 percent (NBS,2016).

Such wide rate of unemployment was transmitted through the various states’ unemployment rates. It is believe that if sectors of the informal apprenticeship such as the roadside metal work fabrication apprenticeship can holistically be supported well, this rate of unemployment will defiantly reduce drastically.

A research conducted by Ekong UM, Ekong CU (2016) investigated how Unemployment problem is tackled through Skills Acquisition by the National Directorate of Employment (NDE) in Akwa Ibom State, Nigeria, pointed out that training centers were not stretched to all the Local Government Areas in the State, instructors of the programmes are not well remunerated, delay in Empowering the trainees, The income effect from Skills Acquisition by NDE is low. The inability of the Graduate trainees to set up the businesses in themselves is suspected.

Ogunlela YI (2012) discovers the impact of National Directorate of Employment Programmes on graduate employment and unemployment in Kaduna State of Nigeria, using both secondary data as well as oral interview. He established that the impact of NDE on graduate employment in Kaduna State has not been particularly positive and much still needs to be done. Only modest achievement in the area of generation of graduate employment has so far been recorded, calling for a thorough reappraisal of its programme in order to overhaul the system.

According to Ogundele, Akingbade, and Akinlabi (2012), the contribution of Skill Acquisition and training on unemployment reduction through youth empowerment and social welfare service improvement will be much significant if encouraged at all the levels especially at local and community level. To this effect Ohize and Muhammed (2009), opined that nongovernment organization, can play a vital role in Training and Skill Acquisition.

Amadi and Abdullah, (2012) stated from their study that a larger percentage of the sampled youth reported high and moderate levels of their capacity building: implying that the vocational skills acquisition and development was a successful They however recommended that the constraints that impede the success of the scheme be addressed by policy makers to make the outcome of the skills training more successful. Adofu and Ocheja(2013) investigated the conduct of Skill Acquisition and training in alleviating poverty and unemployment in Kogi state, Nigeria. The study found that people benefited from the programme and could afford the basic necessity of life. The government should therefore begin to think of the way of developing the programme to better status. This could extend to the informal roadside metal work apprenticeship practice.

Ezeji and Okorie (1999) stressed the importance of skills acquisition in national growth, unequivocally contended, “that Nigeria’s social and economic problems will be drastically reduced if people are given adequate vocational training in skills, raw materials, machineries and equipment”. It is only with skilled men that materials can be harnessed, manipulated and transformed into products. With quality skills acquisition programmes, countries like America, Britain, Germany and Japan have rehabilitated drug addicts, school dropouts and several destitute who eventually contributed meaningfully to the economy and the development of high volume of productivity in their countries.

In their study, Kanyenze G, Mhone GCZ, Sparreboom T (2000) highlighted that skill acquisition in vocational and technical will reduce youth marginalization in Anglophone Africa. These researchers conducted survey research of six Anglophone countries of Africa including Egypt, Nigeria, South Africa, Uganda, Zambia and Zimbabwe, they found that these countries have instituted various programs of skills acquisition but unemployment is still on the rise. They, therefore suggest that youth unemployment should not be seen as an incidental or special anomaly of an otherwise employment friendly environment, but as a manifestation of the overall structural problem that affects adults as well as youths. Therefore, the point in dispute is that policies aimed at enhancing the welfare and employability of youths such as those in the informal roadside metal work apprenticeship practice, should preferably be undertaken in the broader context of policies aimed at enhancing the overall employment absorption capacity of the Nigerian financial judiciousness.

Students Industrial Work Experience Scheme (SIWES) managed by the ITF is another avenue through which youth acquire skills during their studentship in Nigeria. In a study conducted by Okolocha CC, Okolocha

CB (2012) of such effect in 258 Nigerian students in Anambra State, they found that Student's Industrial Work Experiences Scheme (SIWES) is an important programme that can help to bridge the gap between school life and the world of works by blending meaningful job experiences with related institutions learnt in the classroom. For SIWES to help students to acquire the appropriate vocational skills that will help them face the challenges of unemployment and economic problems, proper machinery to sustain SIWES programme was advocated. But the ITF an advocate of the SIWES is faced with the Lack of fund as the major impediment to achieving the mandate of the Industrial Training (Halima Musa 2011) .Chibuzor (2013) also observed that, the ITF being an icon of manpower training and development has failed to meet up with human resource development in the area of apprenticeship despite the establishment of Instructors training Centre in Kano.

6.0 CONCLUSION AND RECOMMENDATION

The stakeholders should face-up to the challenges and proffer a way out of the dilemma of unemployment especially amongst youths which has resulted in insecurity and economic instability. Youth unemployment should not be seen as subsidiary or special inconsistency of an otherwise employment friendly environment, but as a manifestation of the overall structural problem that affects especially the youths. Therefore, the point in dispute is that policies aimed at enhancing the welfare and employability of youths such as those in the informal roadside metal work apprenticeship practice, should preferably be undertaken in the broader context of policies aimed at enhancing the overall employment absorption capacity of the Nigerian financial judiciousness, such as that which was suggested by the International Labour Organization (ILO2013),(ILO,2011).This, as regards the improvement of the informal apprenticeship practice and equipping the youths. Machines, equipment in our workshops/laboratories can be procured with the on-going intervention of the Tertiary Education Trust Fund(TETFUND) in our education sector and by other international body like world Bank through the world Bank- Science and Technical Education Post-Basic, (World Bank-STEP-B) projects aimed at assisting in the areas of capital projects financing procurement of modern equipment, award of scholarship to outstanding students in our tertiary institution to supplement the efforts of the government. NGO's.

To effectively use such programmes as the ITF there should be a direct link to the informal roadside apprenticeship being practiced across the country, to alleviate the itching improper skill services rendered by the roadside informal apprentice's operators.

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