

Technical and Vocational Education and Training (TVET) and the Challenges of Youth Unemployment in Nigeria

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Abstract

Youth unemployment is currently a major developmental challenge in Nigeria. It has become the source of sustained social and political instability, increased drug use and violence against women. However, Technical and Vocational Education and Training (TVET) has been identified as a major tool that can stem this ugly and dangerous trend. This study examined the link between TVET and youth unemployment in Nigeria; It assesses the current level and existing gaps between the desired and current levels of TVET in Nigeria with regards to youth unemployment and examines the specific roles that Open and Distance Learning (OPL) can play in improving the currently poor state of TVET in the country. The study concluded by proposing a TVET model that can stem youth unemployment in the country and sustain the development of TVET in the economic and social sectors of the Nigerian society.

Keywords: *TVET, Youth Unemployment, Nigeria*

Background to the Study

Youth unemployment is a major developmental challenge in Nigeria. The consequences of this unpleasant situation, is that it has become a source of sustained social and political instability, increased drug use and violence against women (Okafor, 2011). The major causes of youth unemployment include rapidly growing urban labour force; rapid population growth; mismatch in skills between those demanded by employers and those acquired in school; outdated school curricula and lack of employable skills; rapid expansion of the educational system ; and unequal economic growth (Adebayo, 1999; Ayinde, 2008; Awogbenle and Iwuamadi, 2010; and Utomi, 2011). According to Oyedokun (2010), of the over 40 million unemployed youths in Nigeria, 23 million are unemployable and therefore susceptible to crime, hence the need to articulate what could be done to salvage the situation.

The high rate of youth unemployment and its attendant vices can be handled effectively by Technical and Vocational Education and Training (TVET); and this fact has been recognized by many African countries and the international donor community (Wirth, 1972, McNabb, 1997). Technical education is that aspect of education which leads to the acquisition of skills as well as basic scientific knowledge, while vocational education is the practical instruction that gives learners specific occupational skills (UNEVOC, 1996 & Webster, 1993). TVET is concerned with the acquisition of skills and knowledge for employment and sustainable livelihood (Maclean & Wilson, 2009) and specifically gives individuals the skills to learn and become productive citizens and gives advancement in the work place (Oni, 2006).

The main objective of this study is to ascertain if there is a link between TVET and youth unemployment in Nigeria and the specific objectives are to assess the current performance level of TVET in relation to youth unemployment in Nigeria; identify any existing gaps between the desired and attained performance level of TVET, to ascertain the specific role that Open Distance Learning (OPL) can play in improving the current level of TVET and to suggest a TVET model that can sustain youth employment in the economic and social sectors.

Literature Review

Technical and Vocational Education in Nigeria

Ownership and Structure

The Nigerian National Policy on Education (FGN, 2004) described technical education as “aspect of educational process involving, in addition to general education, the study of technologies and related sciences which leads to the acquisition of practical and applied skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life, as well as basic scientific knowledge”. The objectives of technical education were to:

1. Provide trained manpower in applied science, technology and commerce, particularly at Sub-professional grades.
2. Provide the technical knowledge and vocational skills necessary for agricultural, industrial, commercial and economic development.

3. Provide people who can apply scientific knowledge to the improvement and solution of environmental problems for the use and convenience of man.
4. Give an introduction to professional studies in engineering and other technology.
5. Give training and impart the necessary skills leading to the production of craftsmen, technicians and other skilled personnel who will be enterprising and self-reliant.
6. Enable young men and women to have an intelligent understanding of the increasing complexity of technology.

The implementing agency for the policy on TVET in Nigeria is the National Board for Technical Education (NBTE), which was established by FGN act 9 of January, 1977. The function of the board includes the accreditation of academic programmes in all TVET institutions and recommendation for the establishment of private polytechnics and monothechnics in Nigeria. Currently there are 412 approved tertiary technical institutions and technical colleges under the purview of the board with different ownership structure summarized in Table 1.

Table 1: Summary of Number, Type and Ownership of Polytechnics, Monothechnics and Technical Colleges in Nigeria

Institution Type	Ownership			Total
	Federal	State	Private	
Polytechnics	20	37	18	75
Monothechnics Colleges of Agriculture	18	13	-	31
Colleges of Health Technology	6	6	1	13
Other Specialized Institutions	13	-	5	18
Innovation Enterprise Institutions (IEIs)	1	1	78	80
Vocational Enterprise Institutions (VEIs)	1	1	10	12
Technical Colleges	19	152	3	174
Total	88	212	112	412

Technical and vocational institutions were designed largely to prepare technicians at occupational levels. Fakae (2005) asserted that the emphasis of technical education was on skill-acquisition and sound scientific knowledge, which gives ability to the use of hand and machine for the purpose of production, maintenance and self-reliant”.

Vocational Enterprise Institutions (VEIs) and Innovation Enterprise Institutions (IEIs) are principally private institutions that offer vocational, technical, technology or professional education and other skills-based, training at post basic (VEIs) and post-secondary (IEIs) levels, to equip our youth and working adults with employment skill and knowledge to meet the increasing demand for technical manpower by various sectors of the nation's economy (Muhammad, 2008).

Model of the Nigerian TVET

The Nigerian model of TVET is based on the On-the-job training model. This model is the oldest and most frequent (natural) type of technical and vocational education in all societies and, in its pure form, has the following features:

i. Organization of learning:

The trainee acquires skills in the enterprise by observing, imitating, joining in, assisting and trying, by informal imitation of what he or she sees. Working on real jobs in the enterprise makes immediate economic sense: The products which the trainee has helped to produce reach the market, and their quality is controlled by feedback provided by the demand for such products within the enterprise and at the workplace. The trainee's work is always practical, at all times related to real demand, and it provides the prerequisite for the trainee's future ability to earn a living. The trainee shares the communicative, social and ritual relations within the community of staff members, which has its own spirit and will influence the trainee's way of speaking, behaving and thinking.

ii. Mode of Certification.

Technical and vocational education is available for graduates of junior secondary school. A two-tier system of nationally certified programs is offered at science technical schools, leading to the award of National Technical/Commercial Certificates (NTC/NCC) and Advanced National Technical/Business Certificates. The lower level program lasts three years after Junior Secondary School and is considered by the Joint Admission and Matriculation Board as equivalent to the SSC. The Advanced program requires two years of pre-entry industrial work experience and one year of full-time study in addition to the NTT/NCC. The advanced degrees are typically considered equivalent to an undergraduate degree. All certificates are awarded by the National Business and Technical Examinations Board (NABTEB).

iii. Teaching Staff

The professionally competent master craftsman, the journeyman, the experienced coworker take over work tasks required by the market, negotiates with clients, with the customers' department or the job scheduling department in the enterprise, he passes on appropriate tasks to the trainee, he plans the work and work processes, in many cases he joins in the work himself, he instructs the trainee, e.g. by way of the four-stage method (preparation, demonstration, imitation, practice), he controls work progress and evaluates work results; in short, it is the teaching staff's task to make decisions, to give or refuse permission, to instruct, to assure, to evaluate results, to settle conflicts, etc.

Conceptual and Theoretical Framework

TVET systems vary from country to country and it looks very different in the nations of the organization of Economic Cooperation and Development (OECD) compared to developing countries in Africa. In OECD countries, TVET plays an important role in preparing people for productive livelihood and benefits from close communication and linkages with the private sector and the educational system; substantial private – sector investment; industry – wide skill standards; a collaborative process of curriculum

development for learning at schools and workplaces; high stakes exit exams leading to well – paid technical jobs; and deeply rooted industries, trade associations, and other intermediaries that bring the various stakeholders together to hold one another accountable and share the costs and benefits of training. In contrast, developing countries generally have few, if any, of the conditions found in the OECD nations. Most of them have scant history of collaboration among or between employers and education providers; indeed most developing countries lack a strong and well – organized private sector.

Effective approaches to TVET vary significantly from country to country and to better understand what works, the United States Agency for International Development (USAID) commissioned a consulting organization EDC to conduct a 2-year, 20-country study (1995–1997) on best practices in workforce development and TVET (EQUIP3, 2012). The study concluded that the most effective programs shared nine characteristics: leadership and accountability; Demand – driven design; open access; Portable skills; continuous improvement; public – private partnership; sustainable financing; Replaceability; and economic and social impact of the programme or system. These nine criteria will be used to evaluate TVET in Nigeria in relation to youth unemployment in the country.

Results and Discussion

Enrolment

In the National policy on Education (1977) it was envisaged that students who complete junior secondary schools are streamed as much as possible into senior secondary schools, technical colleges, vocational training centres or apprenticeship schemes in the ratio of 60%, 20%, 10% and 10% respectively. However, from the data shown in Table 2, it is obvious that while there was a rapid expansion in basic and general secondary education in the two decades (1980 – 2000), enrolment in vocational and technical education was shrinking. The situation is no different at the post – secondary level, because as shown in Table 3, there is high attrition ratio (about 50%) between enrolment and output of graduates of monothechnics and polytechnics. Also, at the current basic education annual turnover rate of about 4 million, expected enrollment in technical colleges in the 2009/2010 session was 74,299 students, this however compares unfavourable with the expected 800,000enrollments. This shows clearly that technical colleges are only able to enroll barely about 9.3% of their target (NBTE, 2011)

Teaching Capacity for TVET in Nigeria

The teaching capacity for TVET in Nigeria is very low for several reasons. Firstly there is unhealthy perception or discrimination against technical graduates compared to their counterparts in the university, because parents and employers of labour perceived TVET as a second rate education to underachieving students with low aptitude and serves as a holding area for students waiting for university spaces. This perception is further reinforced by the method of training TVET graduates, which is not linked to the demands of the labour market, leading to graduates of TVET finding that their new skills were outdated or in low demand leading to unemployment or underemployment. This

attitude has also severely affected scholarship in technical education at the University level. Evidence shows (Table 4) that many Universities with technical education departments have very few academic staff with PhD, the minimum qualification for teaching in the university.

Table 2: Enrolment in Vocational and Technical Institutions and Secondary Schools (1991 – 2001)

Year	No. of Secondary Schools	Enrolment	No. of Technical colleges	Enrolment
1991	3,854	1,653,891	208	46,083
1992	5,840	1,814,000	202	40,878
1993	5,948	1,865,189	190	72,136
1994	6,092	2,794,498	300	72,136
1995	5,991	2,934,349	240	76,434
1996	5,859	2,941,781	252	89,536
1997	6,001	2,923,791	261	1,179
1998	5,860	2,901,993	261	1,426
1999	6,008	3,123,277	261	1,425
2000	6,009	3,600,204	261	1,835
2001	5,959	4,032,083	261	1835

Source: Dike (2009)

Table 3: Enrolment and Output for Polytechnics and Monothechnics (2005 – 2010)

Year	Programme	Monothechnics		Polythechnics	
		Enrolment	Output	Enrolment	Output
2005/2006	ND	11,459	5,999	143,035	50,432
	HND	4,937	2,998	48,216	16,094
2006/2007	ND	3,017	340	109,211	66,257
	HND	1,538	2,034	58,174	28,909
2007/2008	ND	8,663	3,402	95,299	35,795
	HND	4,549	1,980	58,537	23,993
2008/2009	ND	10,392	3,015	90,571	29,725
	HND	4,942	1,779	57,244	16,267
2009/2010	ND	7,428	3,032	97,963	13,276
	HND	4,196	1,952	53,940	8,891

Source: National Bureau of Statistics (2010)

Thus it is obvious that youth unemployment is growing because of low enrolment and low teaching capacity of TVET schools in Nigeria. This is because many of the employability skills that most youth would have acquired have been lost due to lack of exposure to TVET training. This can be further collaborated when compared with other countries where enrolment in TVET amongst youths is very high. According to Abdul-Wahab (2010), in the United Kingdom, 66% of those in secondary and higher education

are in TVE; In France, it is 65% and Germany 72%. Singapore and South Korea moved to 92 and over 50%, respectively. In Bahrain, more than 55% of secondary school students are enrolled in technical colleges. The Middle East has a target of 50%.

Table 4: Relative Percentage of Academic Staff with PhD in Technical Education across Southern Nigerian University (2010)

S/ N	Name of University	Course Areas				No. of PhD Hold ers	%
		Building / wood work	Electrical/ Electronic s	Metal/a uto mechani cs	Tota l		
1.	Nnamdi Azikiwe University, Akwa	5	4	4	13	2	8
2.	University of Benin, Benin – City	5	4	6	15	2	8
3.	University of Nigeria, Nsukka	6	4	5	15	5	21
4.	Ambrose Alli University, Ekpoma	6	4	3	13	1	5
5.	University of Uyo, Uyo	3	5	5	13	3	13
6.	Delta State University, Abraka	5	4	4	13	2	8
7.	Enugu State Univer. of Sc & Tech	5	4	3	12	2	8
8.	Rivers State Univer. Of Sc & Tech	5	3	5	13	2	8
9.	Ebonyi State University, Abakaliki	4	5	4	13	2	8
10.	Rivers State Univer. of Education	8	6	14	22	3	13
	Total	52	43	53	148	24	100

Source: Ojimba (2012)

Government Intervention – National Vocational Qualification Framework for Nigeria (NVQF)

The NVQF is government latest intervention in turning around TVET and stemming youth unemployment in Nigeria. It is an instrument for the development, classification and recognition of skills, knowledge and competences acquired both formally and informally. The framework is based on nationally – validated and certification system developed by a national steering committee of the NBTE which submitted its report in August 2011 and was approved by the Federal executive council in April 2013. The NVQF framework which is similar to those operational among developed and developing countries (Germany, UK, Ghana, and South Africa) is expected to recognize, integrate and certify the huge skills of the informal sector through its system of certification and involves the institutionalization of a six – level vocational qualification framework for the country. It is hoped that the lofty objectives of the NVQF will be accomplished at the implementation phase of the framework.

The Role of Open and Distance Learning (ODL) in Revamping TVET in Nigeria
Curiously, the proposed NVDF does not consider ODL a veritable tool that can be applied in revamping TVET in Nigeria. This in our opinion will limit the access, scope and enrolment for TVET in Nigeria. This is because over the past decades, there has been a noticeable growth in ODL as evident by increased enrollment in ODL institutions (Cavanaugh, 2005 and Fozder & Kumar, 2006). ODL institutions are not only imparting education as an alternative to the formal system, but also in areas such as TVET and even in high technology based education (UNESCO, 2002; Bourne et al, 2005 and Mehrotha & Sacheli, 2005).

ODL in TVET has much to offer the world of work because it is responsive, flexible, promotes independent learning, and can be set up in a way that fosters teamwork as well as individual achievement and the immediate transfer of skills in the work place.

Proposed Model for TVET Education in Nigeria

Based on the foregoing the study proposes a model for TVET education in Nigeria (Figure 1). Six major factors have been identified by the study as factors that will drive the revamping and development of TVET in Nigeria. These factors are: manpower development; demand – driven design; ODL; effective implementation of NVTF; Skill harmonization and Effective management.

As shown in Table 4 there is an urgent need to build teaching capacity to impact skills and knowledge in technical and higher technical schools; also there is a need by the NBTE to conduct a need assessment of the skills and competences in dire straight and to focus training in filling this gaps. The use of ODL to improve enrolment and broaden the skill of trainees cannot be overemphasized and must be taken into consideration in developing the TVET in Nigeria. There is also need to harmonize the skill acquired by trainees to include business and entrepreneurial skill to create new enterprises and encourage self-employment. The failure of most programmes in Nigeria is not at the design but at the implementation phase, the NBTE must effectively implement the NVTF by introducing effective monitoring and evaluation. The NBTE should also provide proper leadership and governance by effectively managing the revamping process of TVET in Nigeria.

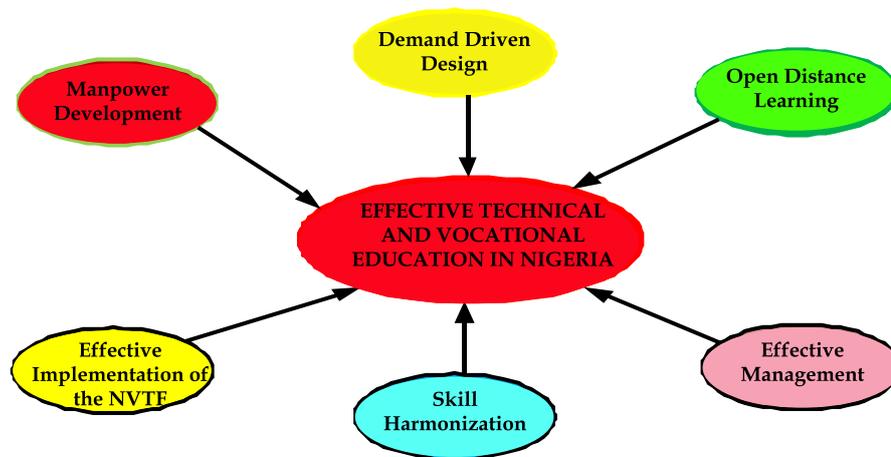


Figure 1: Proposed model for Developing TVET in Nigeria

Summary and Conclusion

The paper has examined the problem of youth unemployment in Nigeria and concludes that the collapse of the TVET institution is a contributory factor amongst various other economic and social factors. The paper concludes by proposing a model based on six major factors as an effective model for revamping and developing TVET in Nigeria.

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