

REAPPRAISING TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) FOR FUNCTIONALITY AND SELF-RELIANCE

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Abstract

Following the millennium development goals, every nation strives to become economically strong. Nigeria's vision of 20-2020 is a good example and step to becoming an economic super-power. Education and TVET in particular has been identified and accepted globally as an indispensable instrument in achieving functional, self-reliant and strong economy. The value and relevance of TVET in this case has long be acknowledged and appreciated in Nigeria. Unfortunately efforts have not matched expectations. Hence this paper considers reappraising TVET for functionality and self-reliance. To achieve this paper discussed TVET, the current state of TVET in Nigeria, Challenges that necessitate reappraisal of TVET and the way forward.

Introduction

Every nation is anxious to become an economically giant state. Nigeria is not left out in this quest. Evidence is in its most recent vision of becoming one of the 20 largest global economies by the year 2020. Unfortunately, great nation is not determined by the abundance of natural resources inherent in it. Neither do rhetoric nor fanciful political slogans transform nations to economic super-power. As Peter Drucker cited in Dike (2009) said, "if you want to predict the future, create it". Instead great nations are made by the multitude of potentials (that is productive human resources) ready to harness and optimally utilize the available resources; or even tap from the resources of other nations.

The world's economic survival and vibrancy seems to depend entirely on the development of human capital resource. Societies are in desperate need of individuals capable of finding viable solutions to a variety of

challenges. The progress made in industrialization was due to high capacity of trained workforce (Obeyesekera, n.d). The leading factors in development in the emerging global economy are technology, knowledge, creativity and innovation (Dike, 2009).

It is not stretching the fact that the flock of human capital resources needed to transform a nation to economic super-power is generated via functional education. An educational program is functional when it addresses the needs for which it was designed. That is to say when it equips its products with competencies to participate fully and contribute positively to the social economy. Education boosts and builds the capacity of members of society to utilize their potentials, for personal, collective and national benefits. Through education, people are capacitated to exploit their environment, proffer viable solutions to variety of challenges and enrich themselves and their society. When this is achieved, it can be affirmed that such educational program has prepared the members of the society to be self-reliant and functional citizens. Self reliance here implies that such citizens possess the right and ability to set their goals and realize the goals as much as possible via their own efforts and using their factors (Odozi, 1991).

Technical and vocational education and training (TVET) has been recognized as a major actor in economic growth. It was contended at the UNESCO international expert meeting in "Learning for Work, Citizenship and Sustainability", that:

Since education is considered the key to effective development strategies, TVET must be a master key that can alleviate poverty, promote peace, conserve the environment, improve the quality of life for all and help achieve sustainable development (UNESCO 2004)

Thus as Tempere (n.d) observed, a consensus emerged recognizing that skilled technicians and technologist were critical in meeting the challenges of a technology-driven economy; running in tandem with the rest of the world's economics. Vocational, technical and educational knowledge and skills for the development of the world's economy was clearly manifested in the improvement of diversity in industrial and service fields (Obeyesekera, n.d). Base on this background, the authors of this paper depict TVET as a viable tool for achieving functionality and self-reliant. In doing so, the paper will discuss; TVET, the status of TVET in Nigeria, challenges necessitating the reappraising of TVET in Nigeria and the way forward.

Technical and Vocational Education and Training

TVET is a type of education specially designed to meet the economic and social needs for young people and adults to acquire competencies and raise performance standards on different levels. It is a peculiar educational program in the sense that it addresses the immediate needs of its host community. Its philosophy is built on imparting specialized skills and knowledge, as well as instilling social and political skills and behavior patterns essential for successful economic activities. TVET has the vision to make its recipients functional citizens, who will always be flexible to adjust appropriately to the dynamic society via engagement in industrial activities, small business or subsistence work. Infact, technical education evaluates the trend of technological development and ensures that its recipients are adequately equipped to live and contribute effectively in the dynamic world.

It equips individuals with skills which enhance their relevance and functionality in the society. TVET is geared towards the production of educated man who can effectively work with

his head, heart and hands. It is no exaggeration to assert that TVET constitutes the arteries that supply life-sustaining blood through the system of country economy and standard of living (Uwaifo, 2009). Kombe (2003) noted that TVET offers to the:

- (i) individual – future earning potentials, career progression, and employability
- (ii) unemployed – capacity to find ways of earning livelihood, likely through self employment
- (iii) organization – company productivity, profitability and competitiveness.
- (iv) Society – wealth through taxes contributed by high productive organizations and individuals.

The development of the economy, the crave for self-reliance and self sustainability are the driving forces for acquiring this program.

TVET in Nigeria

Nigeria has shown commendable interest towards achieving great and dynamic economy, through education. The NPE highlighted Nigeria's desire to achieve her national goals through education. The inherited Colonia system has been expended and modified to serve new economic and social needs. Greater emphasis has been on the type of education that will equip citizens with scientific and technical skills for productivity and economic self-reliant. Section 7, no 69 of the NPE (F.G. 2004) stated that:

- (a) A greater percentage of expenditure on university education shall be devoted to science and technology.
- (b) Not less then 60% of places shall be allocated to science and science oriented courses in the conventional universities and not less than 80% in the universities of technology. Also no 84 claimed that admission into the technology and business courses shall be weighted in the ratio of 70:30.

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Nigeria established a National Board for Technical Education (NBTE) by decree No 9 of 11th January 1977. The Board oversees the planning and implementation of TVET in Nigeria. All these efforts and many others indicate that the value and relevance of TVET in the development of skilled manpower, necessary for sustainable economic development has long been recognized and appreciated in Nigeria. TVET has been an integral part of national development strategies in many societies because of its impacts on productivity and economic development (Dike, 2009). Success cases of some economics like America, Japan, China, etc can attest to this claim. The neglect of TVET is socially and economically injurious as it robs the nation the contributions the graduates of TVET would offer in national development. Unfortunately, despite all Nigerian commitments to achieve national development through TVET, efforts have not matched expectations. The problems seem not to be on the policies or curriculum designs but on implementation. Thus the persistence of the challenges TVET should be addressing.

Challenges that Necessitates Reappraisal of TVET

These authors identified some factors they considered as challenges that must be addressed when reforming TVET for functionality and self-reliant. Some of these factors were also mentioned in African Union (2007).

1. Weak national economy characterized by low job growth, high population growth and a growing labor force: AU(2007) noted that the per capital income of most African countries is less than US\$400. The annual real economy growth rate in many African countries is less than 2% limiting the prospects for employment for seven to ten million annual new entrants into the labor market. This is likely due to high population

growth rate and increasing number of school leavers, owing to UBE initiatives.

2. Shrinking or stagnant wage employment opportunities especially in the industrial sector. The industrial labor force is less than 10% in most African countries (World Bank, 2000). Most TVET programs are originally oriented to meeting the needs of formal sector industries. Employment in the informal sector has increased, about 85% (A. U., 2007), raising the demand for training for self-employment.
3. Huge number of poorly educated, unskilled and unemployed youth. It could be asserted that many young people drop out of school before they acquire any practical skill and competency for the world of work. A. U. (2007) observed that the average completion rates in Africa are 80-90% for primary Schools, 30-40% for junior secondary, about 20% for senior secondary, and only 1-2% of the college age group actually enter tertiary institutions. This could be demonstrated by the mass failure of students in SSCE and JAMB, which is the basis for entry into tertiary institutions in Nigeria. Again it is not overstressing to say that Nigerian Senior secondary school leavers possess no salable skills to gain employment anywhere in the country.
4. Educated but unemployed college and university graduates: Poor training and ineffective institutions in Nigeria has left the nation in the state of low productivity. The nation's youth un/underemployment is shooting up the sky. Federal Government acknowledged that about 80% Nigerian youths are unemployed and 10% underemployed (Daily Trust, 2008). Education minister, Sam Egwu, Lamented that the poor quality of graduates is worrisome (ThisDay, 2009). The hopelessness of hordes of unemployed youths is most likely attributed to their lack

of skills. This can be traced to book knowledge they acquired in school which make them only suitable for office work that hardly exist. This situation buttresses the mismatch between training and labor market skill demands. Some have argued that the youths become entrepreneurs and good citizens. But the question is how? When critics have argued that the absence of entrepreneurial training in the school curriculum and lack of inputs from prospective employer into curriculum design and training delivery are partly responsible for the mismatch. This ugly situation has kept Nigeria in perpetual bondage of economic frustration.

5. Low quality of training: it is needless claiming that Nigerians pay undue emphasis on theory and certification instead of skills acquisition and proficiency testing. This has led to the high level of examination malpractice, since certification is the only criterion that qualifies individuals for gainful employment in Nigeria. Rather than what the individual can offer practically. You can imagine a government establishment with a standard works department, hiring artisans for repair and maintenance services of their plants while they have employed technicians, technologists and engineers. A group of university undergraduate final year students of computer science were asked to write and run program. Surprisingly only one of them could perform the task and this individual later attested having acquired the skill outside the school. Then the question is if one can acquire this skill in less than six months in informal training why spend all four years of formal training for the skill that will hardly come by in the end of the four years? These authors wish to point at inadequate instructor training, lack of/obsolete training equipment and lack of instructional materials as contributing to the

low quality of training. Also most instructors are not committed to their duty. They pay less attention to their duties as instructors and give grater time to other activities that fetch money. Having not done justice to the courses they are to teach, they resolve to pass all the students to justify their conscience.

6. Access and equity: those with the greatest needs do not participate nor benefit from available TVET programs (Obeyesekera, n.d). Poor children cannot afford training fees. Again good technical and vocational schools are located in big towns, thereby limiting access to rural folks.
7. Poor public perception: It is no longer news that for years, TVET is regarded as career path for less academically endowed, rather than effective training to produce skilled workers for employment and sustainable livelihoods.
8. Poor funding and management: The cost of running TVET program is very high due to expensive equipment and training of competent instructors. And those at the management level do not appreciate the contributions of TVET. They find it difficult to release fund to procure necessary and adequate facilities and materials for effective instruction. Moreover, corruption that has eaten deep in our system hardly allows the use of fund for the purpose it is meant for. TVET is such program that demands adequate implementation or not implemented at all. One of its principle claimed that while every effort is made to reduce per capital cost, there is a minimum below which effective TVET cannot be given, and if the course does not permit of this minimum of per capital cost, TVET should not be attempted (Onoh and Onu, 1999).

Conclusion (The Way Forward)

For Nigerian to design and implement programs that response to the range of challenges

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facing TVET, an enabling environment must be created, nurtured and sustained. The problems are not on designing programs but on implementing programs. TVET has to reorient its agenda for action so as to continually provide scientific and technical skills in relevant and responsive programs. Consequentially develop a new generation of human resources (Valmonte, 2009). TVET reforms and attainment of vision 20-2020 should reflect the philosophy that the curriculum must be based on physical and psychological human needs. This will be achieved through focusing on application of knowledge throughout the growth and development of learners with particular attention to their special needs and specified goals (Nwachukwu, 2001). The realization of the aims of TVET is in no doubt the attainment of functionality and self-reliance. Thus these authors suggest these strategic issues to be acted upon in reforming TVET for functionality and self-reliance.

1. To echo Valmonte, (2009), developing awareness is the first step of reorientation – a process which encompasses more principles, skills, perspectives and values. It is only when leader and the public are aware of the contributions of TVET that there can be a position to be reoriented. The public must be made to understand that TVET is a strategic educational program for producing a productive workforce that can move the nation forward; rather than educational program for academically less privileged.
2. There is need to continuously update instructors skills and competencies and enhance their working conditions. According to Uddin and Uwaifo (2005), education unlocks the door of modernization but it is the teacher who holds the key to the door. Teachers are the hub or pivot on which any successful education revolves. If the teachers perform their task dutifully, there will be myriad new technologies in the future of

TVET. Constant training and retraining is highly recommended for the instructors; to keep them abreast of the changing dynamics in theoretical knowledge, technical and pedagogical skills and new technologies in the work place. Admission into all teacher programs (not only TVET) should be raised high and based not only on content knowledge but also on aptitude and attitude. Admitting students that cannot get admission in other faculties into the faculty of education must stop. Also important is to review the condition of service of TVET teachers to make the profession lucrative and attractive. This will attract, retain and sustain dedicated and committed instructors in the profession.

3. Adequate monitoring and evaluation need to be carried out on regular basis. The aim of such activities should be to identify areas of needs of learners and that of employers. This entails developing labor market information system, linking with job network locally and nationally. Also career guidance job placement program and feedback/monitoring system should be put in place.
4. Reorient training to focus directly on skill acquisition with entrepreneurial/business management skill development. To achieve this, the chalk and talk training mode must change to learning by doing.
5. Constantly review TVET curriculum to infuse latest developments in technology, implement industrial researches, introduce and promote innovations. Relevant physical resources with high quality for training should be made available according to the implementing curricular. Fulfill the infrastructure development according to the industrial needs. Provide facilities to have public private partnership training programs and make income generation for maintenance. These exercises will prove more effective if prospective employers

- participate in design, review and implementation of the TVET curriculum.
6. Encourage establishment of indigenous small scale industries. Most affluent Nigerians prefer to invest their money in commerce instead of industries. The claim that inadequate physical infrastructures such as transportation, electricity, telecommunication and water supply hinder industrialization is to ignore the fact that these infrastructures are the products and not the agents of industrialization (Ukaegbu, 1991). You can agree with the authors that there are few industries in Nigeria to absorb the fleet of graduates produced by the colleges and universities annually. Some may argue that the graduates should establish own industries, but the reality is, it is extremely difficult for a starter to establish industry considering the huge capital involvement. Small scale industry being a private establishment that is out for profit making, values productivity and competitiveness. As a result it is interested in what an individual can offer practically to the productivity of its organization; rather than the certification the individual possesses. With this, the much value attached to certification in Nigeria will reduce and competency in job performance will be appreciated. The much discrimination in the type of institution (university, polytechnic or college) and type of training (formal or informal) will be minimal.
 7. Expand training opportunities to increase access and equity: Employ ICT as a tool such as web-base Teaching and learning system, distance and online learning courses. Also courses should be offered in modules such that a module can equip an individual with a particular skill to progress in the world of work. This will reduce the cost of pursuing the whole program at once. Again provision should be made for one who has acquired informal training to further the person's training in the formal sector if the person wishes to do so.
 8. Introduce financing system for students trained such as bursaries, training levies, voucher scheme, student loan scheme, and employer financing system.
- The improvement in societal perception and interest in TVET has culminated in demands for changes in content, organization and delivery of TVET curriculum to reflect a new emphasis on technology. It is a forward looking resolution to create qualitative opportunities for acquiring employable skills, new technical competencies and problem-solving skills through a refocused TVET system streamlined to respond to the realities of Nigerian situation. TVET need to be highly responsive to employment patterns of the economy. Therefore institutional training inside and outside formal training should be recognized and encourage as long as the trainees acquire desirable skills.

Reference

- African Union (2007) Strategies to revitalize technical and vocational education and training (TVET) in Africa. final draft of the meeting of the bureau of the conference of ministers of education of the African Union (COMEDAF II+) Addis Ababa Ethiopia
- Daily Trust (2008) 80% of Nigerian youths unemployed – F. G. Nov, 26
- Dike, V. E. (2009) Technical and vocational education: Key to Nigeria's development. www.nigeriavillagesquare.com
- Federal Government of Nigeria (2004) *National policy of education*. Lagos, Ministry of education

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Kombe, A. M. (2003) Technical education and vocational education as a tool for sustainable development.
www.googlesearch.com

Nwachukwu, C. E. (2001) *Designing appropriate methodology in vocational and technical education for Nigeria*. Nsukka: Fulladu Publishing Company

Obeyesekera, H. L. (n. d) Innovative practices in TVET for education for sustainable development in Sri Lanka to suit to the regional competitiveness. Sri Lanka: Department of technical education and training

Odozi, E. (1991). The contributions of the private sector in developing self-reliance in Nigeria. A lecture Delivered at the 7th Convocation Ceremony of the Polytechnic, Nekede, Owerri, 14th February.

Onoh, C. E. C. & Onu, F. M. (1991) *Fundamentals of technology and vocational education*. Enugu, Cheston Ltd.

Tempere, E. (n. d.) Sowing the Seeds for Nigeria's Technical Prowess.
www.weekly.dailytrust.com.index

ThisDay (2009) *Shun Social Vices, Youths Told*. March, 17

Uddin, P. S. O. & Uwaifo, V. O. (2005) Principles and practice of vocational and technical education in Nigeria. Benin City: Ever-Blessed Publishers