

ENHANCING TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING FOR SUSTAINABLE DEVELOPMENT IN A PERIOD OF SOCIO-POLITICAL AND ECONOMIC UNCERTAINTY

Peter I. Okoye

Department of Technology and Vocational Education
Nnamdi Azikiwe University, Awka, Anambra State
Email of corresponding Author: piz.okoye@unizik.edu.ng
Tel: +2348037588548

Abstract

The attainment of lofty objectives of technical, vocational education and training (TVET) has become a serious concern to technology experts. This is because, a well-established TVET is pivotal to sustainable development since it guarantees the acquisition and entrenchment of technological skills, creative and entrepreneurial ingenuities for individuals' sustenance and national development. This is what Nigeria requires to resolve its domestic issues. Regrettably, Nigeria has not holistically embraced TVET in order to progress in this trajectory. Despite the enormous resources bestowed in its land, the country has been bedeviled by endemic corruption and bad governance that had fueled insecurity, moral decadence, ethno-religious bigotry, institutional failure, fraudulent practices, unpatriotic zealotry, and economic sabotage of all sorts among others. Suffice that, no nation develops by proxy or on the foundation built by another country, instead, on its own platform, prudently tailored to provide the needs of the society by optimization of local contents. This could be achieved when the leadership is purpose-driven, and ready to leverage on advanced economies to transform its own. Unfortunately, Nigerian leaders only cling to foreign oligarch, who milk their resources and lure them into unpopular policies that entrench hardship, truncated education system, miscarriage of justice and feeble economy. Consequently, virtually all the sectors of the nation's economy have been crippled including TVET, which has been globally reckoned as the bedrock of technological advances. Against this backdrop, the paper unequivocally recounted the sordid state of the polity as orchestrated by the insensitivity and irresponsibility that characterize Nigerian leadership, underscored the place of TVET in national development as well as recommended plausible ways to entrench TVET in order to mitigate the apparent socio-political and economic uncertainty ravaging the nation.

Keywords: *Enhancing, Technical and Vocational Education and Training, Sustainable Development, Socio-Political and Economic Uncertainty*

Introduction

Education is the key for any form of development attainable by a nation or state. This suffices that education not only helps individuals discover their talents and acquire necessary skills for survival but also fit into the society and contribute meaningfully. This implies that education brings about total emancipation from mental slavery by letting people to understand that their future/wellbeing is in their hands. As such, they should aspire to develop their potentials, and apply same in transforming their society using available resources and creativity. A functional education is that which promotes the acquisition of requisite knowledge and technological skills which the recipients/learners need to be able to explore and exploit resources in their areas for the wellbeing of the society, and that of the nation at large. According to Uko (2023) the development of any society begins with the discovery and exploitation of its resources for the overall development of polity and global competitiveness; hence the need to embrace Technical, Vocational Education and Training (TVET).

Technical and vocational education and training aside from being reckoned as a tool for man's sustenance, it is considered the currency for exploitation of available resources and global competitiveness (Okoye and Ofonmbuk, 2019). In view of the eclectic/utilitarian nature of TVET to national development, various schools of thought have defined it differently. According to Duposhim (2016), TVET is the kind of education that prepares individuals for work. Similarly, Federal Republic on Nigeria- FRN, (2013) affirmed that TVET provides requisite knowledge and competencies for gainful employment to individuals/learners who are ready to progress on it. This holds true because, TVET was tailored to help individuals to discover their potentials and also acquire such competences in order to secure gainful employments or become employers of labour. Evidently, virtually all the developed nations embraced TVET in order to equip their workforce, optimize their resources equitably and diversified their economy. For instance, Germany, US, the ancient tigers: China, Russia among other developed nations embraced TVET to advance technologically (Okoye, Okoye and Okwelle, 2015). Indeed, technological advancement has enabled those nations to mitigate their socio-economic challenges and as well compete successfully internationally. Supposedly, this could be an antidote for Nigerian socio-political and economic uncertainty or quagmire.

A country is said to be faced with socio-political and economic uncertainty when the polity is bisected by economic, ethno-religious and socio-cultural influences; the political milieu is marred by intractable violence and electoral offences or being high jacked by winner-takes-it all politicians who are indifferent about people's welfare while the economy grapples with instability amidst inconsequential currency devaluation, endemic corruption, overdependence on imported policies and protracted low income per capita (Uko, 2023). Apparently, any society characterized with the above indices, often neglect its education sector and grossly compromise the judiciary system. The foregoing narrative demystifies the current situation of Nigeria, as virtually all the sectors of the economy are dysfunctional while those at the hem of affairs not only abuse power with impunity but also oppress the workforce, hence, the need for a paradigm shift towards embracing TVET in order to revamp the economy. According to Kento (2021), one of the ways to survive the economic crunch orchestrated by ill-governance is by engaging in vocational training in order to acquire skills and competences for productive

lifestyle. Unfortunately, Nigeria has not given TVET the attention it deserves to turn around the economy, hence, the need for urgent actions to be taken to entrench TVET.

Conceptualizing Enhancement of Technical, Vocational Education and Training

TVET has been reckoned globally as the pivot for individual survival and technological advancement of nations. That is why TVET is regarded as a form of education whose primary aim is to prepare people for employment in recognized institutions or occupations. This posits that TVET enables individuals to realize who they are, what they are or their worth, and as such leverage on TVET to harness resources within their locality for socio-economic development of the area. Cognizant of the forgoing submission, FRN (2013) defines TVET as all-embracing term in the educational process involving, in addition to general education, the study of technology and related sciences and acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life. Similarly, Ogbuanya and Okoye (2015) asserted that TVET is a type of education which inculcates requisite skills, knowledge and attitudes required for employment in a given occupation or cluster of related occupations. It is also perceived as a skill-based programme thoughtfully configured for sub-professional level education with emphasis on a specific vocation. Such vocation is meant to pave way for persons who are desirous to optimize their talents/skills creatively. Some critical attributes of TVET include: it inculcates in individuals, the capacities for accurate decision making, active participation, team work and leadership at workplaces which trigger-off economic and technological development. According to Federal Republic of Nigeria, (2013),

the goals of TVET shall be to: (a) Provide trained manpower in the applied sciences, technology and business particularly at craft, advance craft and technical level; (b) provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development; and (c) give training and the necessary skills to individual for self-reliance economically.

Interestingly, the above goals heightened the quest to appropriately reposition and re-engineer TVET in order to foster speedy transformation of the education sector in Nigeria which resulted to the review of the National Policy on Education document in 1981. This attempt birthed the 6-3-3-4 system of education which designated TVET as a core component of educational programme in Nigeria. The essence of these moves was to make Nigerian education system, especially TVET, functional and sustaining as in developed economies like the US, China, Japan, United Kingdom inter alia. This validated the widely acclaimed notion that TVET is the livewire of technologically advanced nations since it encourages the acquisition and optimal utilization of requisite knowledge and cutting-edge skills for creativity or innovations as well as entrepreneurial advances which are the bedrock of any productive nation or economy (Okoye and Nnajofofor, 2019). The implication of this view point is that the sustainability of a nation lies in its ability to provide the needs of its citizens using local contents. Otherwise, such nation(s) would always depend on productive or developed nations, who would eventually exploit them economically. For instance, Nigeria, Niger, Ghana etc., depend on developed nations, and as such could neither guarantee their sustainability or sustainable development themselves nor

could develop their natural resources. Hence, the sustainable development of a nation depends on its propensity to sustain its developmental strides to achieve brighter future for the citizens.

TVET for entrenching Sustainable Development of a Nation

Sustainable development is the concept and practice of using resources in a way that meets the needs of the present without compromising the ability of future generations to meet their own need (Sustainable Development Commission, 2023). It involves balancing economic, social and environmental factors to create a sustainable and prosperous future using the currency of creativity abound in TVET. Evidently, no facet of sustainable development goals is offset of TVET. Key principles of sustainable development as recommended by the Commission include:

Environmental Stewardship: Ensuring the protection and conservation of natural resources, including the atmosphere, land, and water, to maintain their availability and quality for future generations.

Social Equity: Promoting social justice and equality by addressing issues such as poverty, access to healthcare, education, and basic human rights.

Economic Prosperity: Fostering economic growth and development in a way that is sustainable, inclusive, and benefits all members of society.

Resource Efficiency: Using resources efficiently and minimizing waste generation, pollution, and environmental degradation through sustainable production and consumption practices.

Inter-generational Solidarity: Recognizing the interdependence of current and future generations and ensuring that creativity, enterprising and peaceful existence is maintained to attain sustainable development of the nation.

These key principles of sustainable development were formulated to make life easier for citizens as well as ensure adequate protection of plants and wildlife, and other concerns in the environment to guarantee the future. This however validates the goals set by the United Nations, which require TVET at the epicenter in order to yield the expected outcome.

Enhancing TVET towards mitigating Socio-Political and Economic Uncertainty

The untold hardship currently faced by Nigerians could be attributed to myriad of factors bedeviling the country, such as corruption, unpatriotic attitudes, compromised electoral processes, slave master ideology, ethno-centric jingoism, bastardized judicial system, obnoxious policies, religious fanaticism and inordinate education system to mention just a few. These factors among others have apparently militated against the growth of Nigerian economy including the judiciary hitherto acclaimed the last hope of the common man, has become the epitome of corruption while the currency devaluates below the ladder underdeveloped nations in Africa. Sadly, politicians who are the ruling class often use the jobless youths to perpetrate all forms of criminalities, such ritual killings, kidnapping, robbery, vendettas and other heinous crimes either to amass wealth or to prolong their term in office and lord it over the people. Without mincing words, what such youths needed is TVET to enable them acquire salable competences to move on with their lives. Unfortunately, Nigerian leaders have not given due attention to TVET, and this has undermined every youth empowerment plan and economic recovery scheme embarked upon by governments at various levels. Against this backdrop, the

paper underscores ways of enhancing TVET institutions so as to assuage the socio-political and economic vagaries besetting Nigeria as thus:

4. **Performance-based teacher education:** This grapples with the minimum competencies to be acquired by a teacher before initial employment. The teacher must be competent in carrying out all the activities involved in the job. These include: competence in/mastery of subject matter, teaching methods, effective class management and control as well as measurement and evaluation (Okoro and Ochu, 2015). Additionally, the teacher must have proper understanding of individual differences and adequate skill in developing and utilizing variety of instructional resources. The adoption of this model would help to deemphasize theoretical instructional approaches and embrace psychomotor or performance-based, which would invariably enrich the instruction and concretize learning outputs.
5. **Adoption of impactful curriculum:** It is an incontrovertible fact that the current curricula used by Nigerian public universities, including TVET institutions are moribund, hence the need for holistic review by competent scholars. Obviously, this assertion does not give credence to the imposition of obnoxious curriculum, such as Core Curriculum Minimum Academic Standard, (CCMAS) imposed by the federal government that threatens the autonomy of public universities. That is not the way forward. Government should come down from its high horse and liaise with relevant stakeholders in the university to constitute formidable committees of seasoned intellectuals in various specialties to fashion out curricula in tandem with the global best practices. The adoption of such document after proper scrutiny, would likely enhance the relevance or prospects of our education system as well as the global competitiveness of TVET.
6. **Industrial/Institutional partnerships:** Over the years, many developed economies have thrived and gained global recognition by synergizing their institutions of engineering/technology with affiliate industries (Eze, Molokwu and Okoye, 2015). The arrangement has not only provided the requisite and enabling environment for training students/learners but also facilitated the recruitment of qualified and competent workforce. This therefore implies that, partnering TVET institutions with relevant industries will not only address the skill needs of learners and their employment opportunities after graduation, but would also mitigate unemployment, which is one of the major causes of youth restiveness and social menace.
7. **Prioritizing creativity:** Prioritization of creativity has been construed the way to economic and financial freedom. This is because, creativity is the currency in which the present generation trades (Okoye and Okoye, 2019). This emphasizes the need to restructure and upgrade the school curricula especially that of the TVET to be creative inclined or innovative oriented by assigning greater credit loads (units) to practical projects, sponsoring the production of such projects embarked upon by students and presenting them for exhibitions as well as gratifying or rewarding students with outstanding projects. Buttressing the foregoing, Rufai (2016) affirmed that learners' creative ingenuity could be enhanced and harnessed if appropriate emphasis is placed on competence bolster than theoretical. Apparently, this model would encourage learners to master creative thinking skills and also develop self confidence in executing their assignments confidently and efficiently with little or no supervision (Duposhim, 2016). Duposhim further opined that the US, China, Japan and

many other developed nations, in addition to adopting this model in their vocational and technical schools, ensured that adequate funds are budgeted, released and expended accordingly. This would really provide the enabling environment for development of requisite skills needed for individuals' empowerment and economic development. Consequently, it is therefore imperative that Nigerian state acts fast in this trajectory to mitigate the agonizing socio-political and economic upheaval in the country.

8. **Provision of state-of-art tools and equipment:** Available statistics have revealed that workshops and laboratories in TVET institutions are not only inadequate but also fraught with obsolete and dysfunctional equipment (Ogbuanya and Okoye, 2015). Regrettably, this could be attributed to availability of paltry funds, even at that, when funds are released for procurement of standard equipment, substandard and moribund equipment are usually purchased instead, to give room for embezzlement. The practice has become recurring decimal owing to lack of effective monitoring and supervision. The untold effect of this situation is that, it prevents teachers from concretizing learning processes which in turn, fuels learner's apathy and low enrolment. It is imperative to expeditiously address this scenario, in order to boost knowledge processing and transfer which outputs creativity that drives the economy. Unarguably, the provision and use of state-of-art tools and equipment in training TVET students would not only heighten the admissibility of TVET programmes but also would compel learners to strive to acquire competences to excel professionally (UNESCO, 2023).
9. **Retraining teachers and optimization of entrepreneurship in TVET:** Training and retraining of TVET teachers in various aspects of lifelong learning is a sine quo non for the realization of TVET goals and objectives. According to UNESCO (2023) the increasing changes in socio-economic and technological world demands an urgent response in training and updating TVET teachers' capacity in emerging technologies and entrepreneurship through in service training. Acknowledging that entrepreneurship is an integral aspect of TVET (Okoye, 2013); through retraining, teachers could enhance their mastery of content and dexterity in instructional delivery which results in successful enterprising and technological advancement. To this end, UNESCO Revised Recommendation for Technical and Vocational Education as cited in Okoye, Okoye and Okwelle (2015) affirmed that lifelong learning should include: (a) continuous review and updating of knowledge, competencies and skills. (b) continuous updating of specialized professional skills and knowledge. (c) periodic work experience in relevant occupational sector. Substantiating the above, Wanacott (2021) posited that TVET teachers should update their occupational ICT skills through workshops, seminars, conferences, summer works, business partnership, networking with other teachers, reading professional literature among others. It is therefore evident that retraining could help TVET teachers update their knowledge and capacity, in order to optimally impact same in learners who would eventually use such competences for their survival and national development.
10. **Optimization of local contents:** This entails the ability of a nation or society to explore and optimize its natural (human and material) resources, and leverage on them for the overall wellbeing of the citizens as well as the socio-economic development. Simply put, it is a metamorphosis from consumption economy to productive economy, and that is what not only

defines a nation but also places it on the ladder of super nations. For instance, Nigeria has enormous resources but could not optimally harness them due to ill-fated political will-power and parochial agendas of the leaders. Consequently, foreigners and agents of the ruling class connive to exploit the abundant mineral resources and resale them exorbitantly to Nigerians; whilst the best brains in Nigeria immigrate to western countries for better life. These would be a thing of the past if concerted effort is made towards optimizing local resources through TVET as indispensable tool for harnessing indigenous technology via optimal utilization of local contents. This would drastically reduce unwarranted waste of resources and thereby, stimulate the economy for rapid transformation through an informed/productive lifestyle among the workforce; which makes repositioning of TVET institutions imperative for sustainable development.

11. **Adequate Funding:** There is no gainsaying the fact that availability of fund is essential for the success of any pursuit, be it academic, economic, governance, political; perhaps, lack of funds has been one of the major impediments to advancement of TVET in Nigeria (Okoye and Nnaji for, 2019). Though, TVET programme is really capital intensive, and as such demands the provision of adequate funds for the procurement of materials, tools and equipment for active and sustainable learning. This cannot be realized unless prudent management of funds and strict monitoring of project execution are maintained to justify the purpose of the project. Therefore, investing in TVET will not only promote its public image but also demystify TVET as a lifelong learning as well as bolster learners' confidence in the programme. Until this narrative is addressed, TVET would remain a tool for electioneering campaign to hoodwink the pauperized citizens by ravenous politicians.

Conclusion

Saving Nigeria from total collapse is a necessity that could be realized through an informed educational paradigm shift that guarantees the acquisition and optimization of requisite skills and knowledge for gainful employment as government at all levels has failed in their legitimate responsibilities. However, that is what TVET promises, especially in economy like Nigeria, where leadership is misconstrued an opportunity to dehumanize and rip off the populace. It is therefore apparent to conclude that people will do better when equipped with saleable skills via TVET.

Recommendations:

The following recommendations are proffered:

1. Government should budget and release adequate funds to education sector, especially TVET, and also ensure that such funds are expended on projects they are meant for.
2. The curriculum planners should liaise with the educationists and TVET professionals to fashion out homegrown curriculum/ emerging technologies that would leverage on local contents and peculiarities akin to various states to expedite learning and creative inventions.
3. School-industry partnership should not only be embraced but also be prioritized. Such partnership would encourage the industrialists to actively participate in training learners, who would be recruited into the industry after graduation.
4. The citizens should be made to understand that it is their civic responsibility to hold their leaders accountable of their stewardship, and as such, could employ legitimate instrument at their disposal, such protest, petitions etc to evict self-serving or unpopular leaders in their constituencies.

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