

Technical and Vocational Education: A Tool for Self Reliance and Sustainable Democracy in the 21st Century Nigeria

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Abstract

For Nigeria to be able to depend on her own capabilities, judgment, resources and skills in a bid to enhance political, economic, social and attitudinal independent the manpower development must be central to her programmes. Mohammed and Isyaku (2009) remarked that vocational and technical education (tve) is a veritable tool in the hands of Nigeria to realize her dreams. has proved to be an indispensable tool in manpower development which is the gate way to the economic and technological development of any nation. This paper reviewed the concept of technical and vocational education and traced its history. It further discussed the potentials of and hindrances to vocational and technical education. Finally, suggestions were put forward on possible ways to improve on the hindrances to vocational technical education in Nigeria.

Keywords: *Self Reliances, Sustainable Democracy, Technical and Vocational Education.*

Introduction

For any nation to be self-reliant, the development of her human resource must be central to her programmes. Human resource development is that development which can equip the individual with the knowledge, skills, abilities and competence necessary to expand and increase the productive base of its industries with a view to meeting both domestic and foreign demands for goods and services. It should be noted that any nation that could not use its manpower to exploit its natural resources and thus transform them to goods and services will continue to live in poverty. Such a nation is usually characterized by heavy reliance on the importation of technological by-product from other countries. This is in total neglect of its own long-standing traditional expertise and locally available resources.

This is a situation in Nigeria that demands urgent and serious attention. This is because, despite the fact that Nigeria is abundantly blessed with wide varieties of resource, ranging from human, fossil fuel, agricultural, ferrous and non-ferrous minerals to industrial minerals, the country remains underdeveloped and is characterized by importation and dependency. Nsofor (1998) emphasized that what is truly at stake for Nigeria to attain the status of being self-reliant is the development of her populace. In realization of this, several programmes are now mounted in Nigeria for manpower development. Central to these programmes is technical and vocational education.

This form of education as noted by Adigun (2003) is a vehicle for occupational training. In support of this, Williams & Offiong (2007) added that technical and vocational education is the education that provides the skills, knowledge and attitudes which leads to the production of individuals who are resourceful and productive. The products of such education can easily enter the labour force and make progress with their chosen careers. This skilled profession will help them to grapple with personal and societal needs. From the foregoing, it is evident that technical and vocational education's emphasis is on skill, knowledge and attitudinal acquisition. Thus in the context of craftsmanship it is education for production and self-reliance.

The Concept of Technical and Vocational Education

Technical and vocational education can be conceived both as body of knowledge and as an educational process. Technical and vocational educations are sometimes used interchangeably in referring to the same type of education. To this effect, adigun (2003) pointed out that vocational education may include technical education, and technical education can be seen as a post secondary vocational training programme whose major purpose is the production of technicians. Kazeem (2006) shared this view and clarified that in Nigeria, technical education is a special grade of vocational education which can be distinguished from other vocational educational programmes by the more sciences and mathematics required in the training programme.

However in the context of this paper both concepts and their concomitant values will be regarded as the same. Technical/ vocational education is the training or retraining given to prepare individuals for gainful employment as semi-skilled or skilled workers, technicians in trades, industries, agriculture, and home-making or business. In addition, it also prepares individuals for enrolment in advanced technical education programme. Kazeem (2006) reiterated that technical vocational education is that system of education aimed principally towards the teaching of the sciences, craft techniques or vocation. This implies a system of education and training that teaches creativity and development of craft skills in a variety of forms including theory and practical, thus it integrates learning and training. Technical vocational education is a generic term embracing all the experience an individual needs to prepare for some useful occupation in life.

From all these, it could be seen that technical vocational education concerns itself with the development of the individual in five areas which are:

- Personal Skills and Attitudes
- Communication, Computational Skills and Technological Literacy
- Broad and Specific Occupational Skills and Knowledge
- Employability Skills and
- Foundation for Career Planning and Life Long Learning

A critical analysis of the on-going reveals that technical vocational education qualifies as the catalyst for technological development and self-reliance. This is because it re-awakens the commitment to schools, sparks a renewed interest in the academic skills, emphasizes on “hand” and “brain” and finally caters for all categories of individuals in the society while availing them with marketable skills for gainful employment in diverse fields. It should be noted here that it is only when majority of the members of any nation are professional skilled in one field or the other that there will be a joint effort towards transforming the nation’s natural resources into goods and services. Consequently, the individuals will be self-reliant and the nation, in turn will also be self-reliant. It is only at this point that democracy could be sustained. This point is recognized right from the ancient times as is made manifest in history.

Trends in the History of Technical Vocational Education in Nigeria

Technical and vocational education is not alien to Nigeria. In the traditional societies it existed in the form of traditional apprenticeship system. Therefore this form of education was in existence before the advent of western education in 1842. In the traditional societies, the importance of this form of education was realized; hence people were involved in a variety of vocations. The aim was to make people functional members of the society and through this means; they were able to master skills sufficient enough to meet the needs and challenges of life. The credit for starting vocational and trade schools in established institutional setting goes to the missionaries and specifically to the southern Baptist convention in 1850s at Abeokuta. Similarly, the earliest effort to introduce technical education into the mainstream of post-primary education was in 1895 by the Presbyterian church of Scotland at hope waddle training institute at Calabar. The aim behind all these efforts was to meet the demands for technical manpower.

The place of technical vocational education was also recognition by the colonial government. However interest grew later and was sparkled off by the need to train Nigerians to man the expanding departments of the government. Consequently, in 1908 survey training school was opened in Lagos to train surveyors, and between 1908 and 1938 enough technical manpower were produced to meet the needs of various departments (public works, agriculture, railway, post and telegraph). In 1932 Yaba higher college came into existence as the first higher vocational technical institution in Nigeria. The institution had a good beginning in

higher education but due to many problems that confronted it, much of the glamour of that great beginning was lost. Consequently, the in-takes of the school were transferred to university college Ibadan in 1948. Closely following this, was the birth of colleges of arts, science and technology which were opened at Zaria in 1952, Ibadan and Enugu in 1955. These colleges succeeded in producing middle level negative self-concept professional who thus regarded themselves as inferior. Based on this, they only used their qualifications as a stepping-stone to other fields. The colleges were closed down in 1962.

From 1970's the birth of the present vocational and technical education in several levels were marked. Hence there were secondary vocational schools, craft schools, commercial schools, comprehensive schools and others. At the post secondary level, there were technical colleges some of which were upgraded to polytechnic. The culminations of higher stages are degree and diploma/courses in various fields. From history, it is evident that vocational and technical educations have manifested indifferent forms at different times. The reasons behind these metamorphoses have been the need to develop appropriate skills, knowledge and attitudes of different cadres of people in Nigeria. Also was the need to ensure that the available human resources within the society were directed into occupation on the bases of needs, interest, abilities and aptitude. All these efforts tend towards self-reliance among the individuals in particular and the nation as a whole. From all indications, it thus shows that the importance of vocational and technical education as a tool for self-reliance was recognized early enough in this country by individuals, traditional societies, missionaries, colonialists and Nigerian governments. One therefore can ask at this point, what was the rationale for all the recognition accorded to vocational technical education?

The Rationale for Technical and Vocational Education as a Tool for Self Reliance and Sustainable Democracy

One of the national objectives of the federal republic of Nigeria as stated in all her development plans is the building of a united, strong and self-reliant nation. A self-reliant nation is one which depends on her own capabilities, judgment, resources and skills in a bid to enhance political, economic, social, attitudinal and moral independence. This state in any nation can only be achieved where the development of human resources are emphasized and/or pursued rather than material resources. It is only in the context of this emphasis that the spirit and the skill of innovation, the knowledge and attitude to make people self conscious instrument of change can be developed. In this regard the country will not have to depend perpetually on the importation of relevant skill from other countries; rather she will use what she has to produce what she needs. Adenle (2009) shared this view and remarked that the need for emphasis on people when considering the indices of self-reliance is underscored by the fact that people are the real wealth of a nation. He therefore emphasized that any nation who desires to be self-reliant must have focus on manpower development.

Sequel to self-reliance is the issue of sustainable democracy. In Nigeria today, much is said about democracy, but unless attention is paid to human resource development, the people will be perpetually unable to put themselves on the drivers' seat of the vehicle for engineering political, social and economic change. Unless this happens, sustainable participatory democracy will be elusive. Consequently upon this, Oladipo (2009) remarked thus:

At this point of our socio-economic development in this country, i.e. Our intention and ambition to have beautiful roads and buildings, to make our own cars, to build our own ships and planes and generally to industrialize the country as a whole, efforts must be geared towards the development of human skills, knowledge and attitude for sustain democracy

This implies that the development of man, the unfolding and realization of his creative potential through training will enable him to improve his material condition of living through the use of resources available to him.

At this point, Ezema (2010) reiterated that technical and vocational education is a veritable tool and a reliable answer to the above call by Oladipo. This form of education is a utilitarian type of education design to develop skill, abilities, understanding, attitude and appreciation and to impact the knowledge so gained in a useful and productive venture. Nwatah (2009) shared this view and added that technical vocational education prepares youth for employment in industries, commerce and other enterprises by exposing them to experiences that provide the manipulative, cognitive and attitudinal skills that make them qualify for it. He noted that vocational and technical education also provides experiences for adult who are already employed and whose skills have become obsolete and needed to be updated. Technical and vocational education is a good tool for stimulating technological and in industrial development. It does this through the production of competent workers who are capable of developing and utilizing technologies for industrial and economic development. To add to this, vocational and technical education helps to reduce the problem of unemployment, as graduates need not depend solely on government for employment. They can start business of their own and become employers of labour, thus contributing to the growth and economic development of our nation, culminating in self reliance.

To crown it, the salient features of vocational and technical education as tool for self reliance are embedded as stated in the national policy on education (2004 revised) as: -

- Giving training and impartation of necessary skills leading to the production of craftsmen, technicians and other skilled personnel.
- Provision of people who can apply scientific knowledge to the improvement and solution of environmental problems for the use and convenience of man.
- Provision of trained manpower in applied science, technology and commerce particularly at sub-professional grade.

- Provision of technical knowledge and vocational skills necessary for agriculture, industrial, commercial and economic development.
- Giving an introduction to professional studies in engineering and other technologies.
- Enabling young men and women to have intelligent understanding of the increasing complexity of technology.

A careful examination of the above objectives shows that the concept there in will eventually give birth to army of skilled technicians, engineers, scientists and the likes who have technical skills and good general educational background and who will eventually give Nigeria the future it so much desires- a self-reliant nation.

No doubt, the objects as stated above are laudable but one needs to purse to ask question, how far are these objectives being realization in Nigeria? Are there hindrances to vocational and technical education? If yes, are there ways to address these problems? These are issues that need to be jointly and seriously addressed.

Hindrances to Realising the Goals of Technical and Vocational Education in Nigeria

The problems of technical and vocational education dates back to the 19th century when it was introduce in the western type education. From time of establishment of the hope Wadell institute in Calabar through survey school in Lagos to higher college Yaba, the story has not been encouraging and manifested in lack of enthusiasm on the part of the parents and students towards the programme. Secondly the programme was not able to acquire the pride of place in the society, thus it was not popular.

Form then till now, the story has not change. The product of vocational and technical education leaves much to be desired. The role of vocational technical education in the development strategy has been describe as important in all verbal declarations, but beyond rhetoric, little has been achieved by way of injecting technical manpower into industrial production, design, operation, maintenance, marketing and servicing. Technological under-development and dependence remain our faith. Consequently a number of factors are identified as been responsible for these hindrances. Such factors which are categorized into four major areas include: teacher-related factors, students-related factors, environment-related factors and government-related factors. These factors act singly or co-jointly in militating against technical vocational education in Nigeria. Discussion on these factors will bring the issues at stake to the limelight. Thus:

Teacher-related factors

The success of any educational system depends to a large extent on the teacher who is the negotiator and facilitator of meanings of technical vocational concepts, organizer of relevant material and constructor of knowledge. It has been noted variously that vocational technical education teachers are faced with a number of problem in schools. These include among other: -

Poor preparation of subject matter, lack of knowledge of subject matter, lack of skills/competence required for teaching, lack resource fullness leading to inability to improvise where necessary, lack of motivation of teachers, low morals as result of the neglect of the teaching profession as a whole, absence of basic infrastructures in schools, and misplaced values on the goals of vocational technical education. All these make the teacher ineffective and manifest in the production of ill-equipped, ill-prepared and obviously incompetent students who cannot transform our resources into goods and services.

Students-related factors

The factors relating to students which lead to unproductive are: -poor attitude of students to work, lack of interest in vocational technical course, and apprehension on their part that vocational technical course are too demanding.

All these factors, lead to lack of commitment and seriousness to the course of study among students and manifest in the production of graduates of vocational technical education who are identified only by the possession of certificate but not with employable skills. Such graduates cannot get jobs or employ themselves; they rather work endlessly from one office to the other looking for jobs that are nonexistence. Such attributes defeat the drive towards self-reliance.

Environment-related factors

The environment here refers to the Nigerian society at large, the school and the home. Each of them contributes to the problem of vocational technical education in these ways: -

I. Society-related factors

Non-acceptance of vocational and technical education as a welcome intervention in the normal course of development and misplaced value, hence less people go for it.

II. School related factors

- * Overcrowded classroom
- * Over loaded curriculum and examination syllabus
- * Heavy teaching load for teachers, which dose not allow enough time for closer supervision and field trip.

III. Home-related factors

- * Lack of support from parents even when the child has aptitude for vocational technical areas.
- * Lack of concerns by parents for children's progress in schools.
- * Lack of provision for the educational needs of students in vocational technical areas.
- * Craze for career in pure science rather than technical related course.
- * None of these provides optimum conditions for technological development

IV. Government related factors

These are some of the government action or inactions that have led to the underachievement in vocational technical education. These actions include: -

- * Very little support for the sector, manifesting in lack of workshops, equipment, text books and others.
- * Lack of commitment to the promotion of vocational technical education

Reports from various vocational and technical institutions in the country point to the fact that funds made available to them are never adequate for effective running of the programmes and maintenance of available equipment. In a situation like this, not much could be achieved in relation to the objective of the programme.

Where do we go from here?

This presentation has so far enumerated some of the factors that are responsible for the setbacks of TVE in Nigeria schools. The possible options on what to be done to enable the programme begin to achieve the stated objectives need to be explored. The following can be considered in that direction. As potent and varied the above mentioned factors may be in undermining the efforts of technical vocational education in Nigeria they are no means insurmountable. Bearing in mind the great potentials embedded in technical vocational education as a means of achieving a great and dynamic economy which is self-reliant, all efforts must therefore be directed towards stemming the problems associated with it. What is needed in this match is a strong will to succeed.

Consequently the following steps are suggested as steps that can be taken to move the programmes forward: -

I. Provision of adequate number of skilled teacher:

It is an established fact that the success or failure of any educational programme depends to a large extent on the teacher. For vocational and technical education to assume its role as a tool for self-reliance, there must be available adequate number of professionally trained, committed, motivated, conscientious and efficient teachers. These qualities will predispose them into handling the course of study skillfully, knowing how to handle the equipment while using appropriate teaching method and skills. Such teachers will definitely emphasize practical experience more as this may lead to the production of the highly skilled students. These teachers being vehicle to bring the dreams of Nigeria to fruition should also be given incentive by all concerned.

II. Provision of funds:

Education generally and vocational and technical education in particular is a costly enterprise. It requires enough funds for the purchase of items for practical experiences and repair of workshops equipment. This will make it possible to teach the students the required practical skills needed in the labour market. Oladipo

(2009) noted that if school leavers are unable to find work for which they have been trained, then the resources invested in them will have been at least partially wasted. Hence, fund, which is the prime mover of any programme must be provided.

III. Provision of adequate and relevant equipment

For vocational and technical education to be effective and for it to achieve its aims, there must be the provision of laboratory workshop equipped with suitable equipment. These will allow for practical activities, acquisition of skills and lead to the production of creative and functional students with capacity to think clearly, design clearly and have variety of means of livelihood. Consequently it will enhance the future work force and economic development viz-a-viz self reliance which can sustain democracy in the 21st century Nigerian.

VI. Making vocational technical education popular:

Public attitude to vocational technical education has to change and the self image of the technicians must change also. The orientation of the general public towards this move must be under taken by the government, administrators, teachers and students using all the available means and mass media to secure public supports. Also colleges of education, polytechnics and universities should be fully equipped with modern machines and teachers to train students adequately in the chosen fields. Through these efforts, all the biases working against this form of education could be eliminated. Finally while all these measures are taken, the government, the administrators and teachers must endeavour to rededicate their commitment by being prudent and honest in the discharge of their functions.

Conclusion

The need for self-reliance and sustainable democracy in 21st century Nigeria is a 'sine qua non'. However, the extent to which this can be achieved depends on the effectiveness of our vocational technical education programme to produce the type of manpower that will have the capabilities to conceive original ideas in order to midwife a realistic technological development. The success story of Japan in the drive for industrialization was a step in that direction. Nigeria and Nigerians must draw inspiration from the experience of Japan and other emerging industrial 'giants'. A bold step must be taken in this regard, other wise economic development will be in an everlasting jeopardy, self-reliance will be unattainable, importation will continue to grow and maintenance will remain poor.

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