

REPOSITIONING TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING AS A TOOL FOR ECONOMIC MODIFICATION IN NIGERIA

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Abstract

The purpose of this study is to explore repositioning Technical and Vocational Education and Training and Training (TVET) in Nigeria. The research paradigm of the present study is hinged on position manuscript approach which relied upon secondary data collection method designed to gather TVET information from journals, magazines, encyclopaedia, and other articles repositories within the scope of 10 years (2010-2020). The problem that prompted the conduct of this study is youths' restlessness, unemployment, poor linkages of TVET institutions with relevant economic sectors as well as myriad challenges faced by Technical and Vocational Education and Training practitioners. These problems resulted in economic recession, rising crime and decline of generic societal values. However, progress indices discovered in the present study revealed that investments in specialized areas of Technical and Vocational Education and Training is one of the innovative ways of reviving/or repositioning the sector. For instance, investment in Agriculture, Home Economics, Fine and Applied Arts, Electrical and Electronics, Mechatronics, Mobile Phone Technology, among others. Among the recommendations advanced is that repositioning Technical and Vocational Education and Training for sustainable national development should not be left for the government alone, private organisations should also come in by way of social corporate responsibilities in the TVET sector.

Key words: Repositioning, TVET, modification, economy, Nigeria.

1.0 Introduction

Nigeria is one of the developing nations of the world is saddled with the series of problems ranging from unemployment, poverty, youth restiveness, population explosion, and environmental degradation. The economic and social life of the nation has been sliding down as a result of the economic depression. There are closures of industries, premature retirement and retrenchment of workers, inflation in the prices of goods and services, unemployment, scarcity of petroleum products, irregular payment of salaries, among others (NBTE, 2020).

There is increase demand for better condition of living, technical and vocational education and training (TVET) strives to solve these pressing problems. TVET is a skill-oriented programme that prepares individuals for purposeful living. Technical and Vocational Education and Training improves the quality of life of people if appropriate skills are gained. TVET deals with the knowledge, skills, competencies and aptitude that fit an individual wholly and entirely for work or business. For the poor and needy in the world, TVET provides the medium to ensure an accessible, affordable and secured in living. Unfortunately, developmental strategies in Technical and Vocational Education and Training practices in many countries including Nigeria quite often ignore the needs of the poor in their own country. Technical and Vocational Education and Training (TVET) prepares individuals for jobs that are based on manual and practical activities in ration to specific trades, occupations or vocation, the learner directly develops expertise in a particular group of techniques or technology. In the past, anyone who went to school and acquired some form of education was sure to get one form of paid employment or the other immediately after graduation (NBTE, 2020). The present state of the depressed economy and the resultant measure of unemployment has resulted in the need for every Nigerian to become self-reliant through self-employment. This calls for ventures creation in the areas of TVET as its major aim is to encourage and train university, polytechnics, colleges and secondary school graduates to take up self-employment. This is why motivation and interest are central to venture creation. The characteristics that are common to venture creation include;

- i. The desire to create a new business
- ii. The freedom to determine one's destiny
- iii. The need for independence and the willingness to meet challenges
- iv. The need for motivation, great determination and perseverance.

By and large, this implies that Technical and Vocational Education and Training (TVET) curriculum should be diversified so as to cater for differences in talents and to anticipate variety of opportunities open to the students after completing their programmes in the universities, polytechnics and colleges. The curriculum should be designed to equip the students to live effectively in the present modern age of science and technology.

2.0 Exploration of Technical and Vocational Education and Training

Technical and Vocational Education and Training (TVET) refers to an educational programme that prepares individuals for a specific occupation, trade, or technical field (NBTE, 2020). It combines theoretical and practical training to equip students with the skills, knowledge, and competencies required to succeed in their chosen career. According to the National Board for Technical Education (NBTE), Nigeria, TVET is defined as: "Education and training that prepares individuals for employment in a specific occupation or group of occupations, and which may also provide a foundation for further education and training." (UNESCO, 2019). Similarly,

Eruh, (2007), reported that Technical and Vocational Education and Training is an education designed for expert in the field of education to prepare individuals to acquire practical skills, basic and scientific knowledge and attitudes required as craftsmen and technicians at sub-professional and even professional level. Supporting this view, Oranu, (2010) stated that Technical and Vocational Education and Training is a skilled-based programme designed for sub-professional level education and based on a specific vocation. However, Abdullahi (2008) reported that Technical and Vocational Education and Training is an instruction in skills necessary for person who are preparing to enter the labour market or who need training in the technology of their occupation. Technical and Vocational Education and Training is a skill-oriented programme which characteristically has a lot of opportunities for small-scale businesses where in graduates can become self-reliant vis-à-vis self-employed (UNESCO, 2019). This is because Technical and Vocational Education and Training is a broad and diversified field made up of many sub-areas including: Industrial and Technical Education (Building Technology, Electrical and Electronics Technology, and Mechanical Technology, among others). While the Vocational aspect entails Business Education (Secretarial studies education, accounting education), Home economics education, Fine and applied art education, and Agricultural education among others. In a nutshell, TVET major fields of study are:

- i. Technical education: Focuses on the practical application of scientific and mathematical principles to solve problems and create products.
- ii. Vocational education: Prepares individuals for specific occupations or trades, such as automotive repair, culinary arts, or nursing.

Technical and Vocational Education and Training, also known as vocational training or technical education, is an educational programme that prepares individuals for a specific occupation or trade (NBTE, 2020). It focuses on providing learners with practical skills, knowledge, and competencies required to succeed in a particular career or industry. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), technical and vocational education is defined as education and training that prepares individuals for employment in a specific occupation or group of occupations (UNESCO, 2019). Technical and vocational education can be offered at various levels, including technical college, basic, post-basic, and tertiary levels of education. It is often provided in institutions such as technical schools, community colleges, and vocational training centres (NBTE, 2020).

The general aim of a good Technical and Vocational Education and Training programme should be targeting the following:

- i. Training students for proficiency in specific occupations in the area of TVET.
- ii. Making students to acquire specific skills that can make them to be self-reliant.
- iii. Training the students to acquire skill on how to float and succeed in a business venture.

Characteristics of Technical and Vocational Education and Training

Some common characteristics of Technical and Vocational Education and Training include:

- i. Practical skills training.
- ii. Focus on specific occupations or industries.
- iii. Emphasis on hands-on learning.
- iv. Preparation for immediate employment or further education and training (NBTE, 2020).

Examples of technical and vocational education programmes include:

- i. Automotive Repair.

- ii. Culinary Arts.
- iii. Electrical and Electronics crafts.
- iv. Nursing.
- v. Welding, etc.

Objectives of Technical and Vocational Education and Training in Nigeria

The objectives of Technical and Vocational Education and Training in Nigeria and other African countries can never be overemphasized due to the fact that it's the substratum for societal development. Danko (2006) viewed the objectives of Technical and Vocational Education and Training to include but not limited to the following:

- i. To prepare the learner for entry into employment in his or her chosen career.
- ii. To meet the manpower needs of the society.
- iii. Increase the option available to each student.
- iv. Serve as a motivating force to enhance all types of learning.
- v. Enable the learner to wisely select a career.
- vi. Providing students with practical skills and knowledge.
- vii. Preparing students for immediate employment or further education and training.
- viii. Developing students' problem-solving, critical thinking, and communication skills.
- ix. Enhancing students' creativity, innovation, and entrepreneurship skills, etc.

Correspondingly, NBTE (2020) stated that all these areas of Technical and Vocational Education and Training have their career options which can also keep the graduate gainfully employed in the absence of paid employment. Furthermore, Technical and Vocational Education and Training related business opportunities includes:

- i. Agriculture and Agro-allied Industry: Processing of Garri and yam flour, poultry farming, fish farming, processing of cattle and poultry feeds, and production of industrial starch, etc.
- ii. Metal and Engineering: Production of rakes, cutlasses, hoes and shovels, furniture making and upholstery, iron-mongery chairs and tables, repairs and servicing of automobiles in workshops, and repairs of kitchen equipment, refrigerators, blenders, et cetera.
- iii. Chemical and Allied Groups: Production of candles, Manufacturing of all classes of soap, laundry detergent, and production of chalk, paint and plastics, etc.
- iv. Wood and woodwork: Treatment of timber, furniture making, and wood machinist, etc.
- v. Block-laying and concreting: Block/bricks moulding, building drawing/drafting, building construction, House painting, Tiles laying, and production of interlocking tiles, etc.
- vi. Traditional craft and cultural heritage: Basket making, Raffia making, carving, blacksmithing, and pottery, etc.
- vii. Paper products production: Production of cardboards, Book binding, manufacture of paper egg-tray, Toilet rolls, file jackets, and production stickers and labels, paper bags, etc.
- viii. Home Economics: Catering services and restaurant managements, Bakery-bread making, snacks, cakes making and decoration, fast food business, Outdoor catering services, Ice cream and yogurt business, preparation of beverages and soya beans milk, zobo and other fruit drinks, hair dressing, fashion school operation, laundry and dry-cleaning services, Rug leaning services and Interior decoration, etc.

- ix. Services Enterprise: Distributorship, consultancy, travel agency, computer business centre, rental services, GSM phone call centres, supply business, internet centre (Cyber-Cafe) and coaching centres.

The objectives of Technical and Vocational Education and Training (TVET) are broad and diverse and focused on preparing individuals for the world of work. Here are other objectives advanced by authors such as Adeyemi, (2012), Olaniyan and Ojo (2016), Aina (2017), Adebayo, (2018), Adebayo (2018), Federal Ministry of Education (2019), National Board for Technical Education (2020)

- i. Preparation for Employment: TVET prepares students for entry-level positions in various industries, equipping them with practical skills and knowledge.
- ii. Development of Skills: TVET develops manual, technical, and problem-solving skills, enabling students to adapt to changing work environments.
- iii. Promoting Entrepreneurship: TVET encourages entrepreneurship and self-employment, enabling students to create jobs and contribute to economic growth.
- iv. Acquisition of Technical Knowledge: TVET provides students with technical knowledge and understanding of principles, theories, and concepts related to their chosen trade or occupation.
- v. Development of Attitudes and Values: TVET fosters positive attitudes and values, such as discipline, hard work, and teamwork, essential for success in the workplace.
- vi. Preparation for Further Education and Training: TVET prepares students for further education and training, enabling them to pursue higher-level qualifications and certifications.
- vii. Contribution to Economic Development: TVET contributes to economic development by providing skilled workers, promoting entrepreneurship, and reducing unemployment.
- viii. Meeting Industry Needs: TVET meets industry needs by providing trained personnel with relevant skills and knowledge, enhancing productivity and competitiveness.
- ix. Reducing Poverty and Unemployment: TVET reduces poverty and unemployment by providing individuals with marketable skills, enabling them to access better-paying jobs and improve their socio-economic status.

Challenges and Constraints Grappling Technical and Vocational Education and Training (TVET) in Nigeria

Despite its potential, Technical and Vocational Education and Training (TVET) in Nigeria encounters numerous challenges. These challenges are itemized as opined by Olaniyan and Ojo (2016), Adebayo (2018), and National Board for Technical Education (2020):

- i. Inadequate Workshops and Equipment: TVET institutions in Nigeria lack modern workshops and equipment, hindering practical training.
- ii. Poor State of Buildings and Facilities: Many TVET institutions have dilapidated buildings and facilities, creating an unconducive learning environment.
- iii. Shortage of Qualified Instructors: TVET institutions in Nigeria face a shortage of qualified instructors, affecting the quality of training.
- iv. Lack of Continuous Professional Development: Instructors lack opportunities for continuous professional development, hindering their ability to adapt to changing industry needs.
- v. Outdated Curriculum: TVET curricula in Nigeria are outdated, failing to address emerging technologies and industry needs.

- vi. Lack of Relevance to Industry Needs: TVET programmes often lack relevance to industry needs, resulting in graduates who are not job-ready.
- vii. Inadequate Funding: TVET institutions in Nigeria often receive inadequate funding, hindering their ability to provide quality training.
- viii. Lack of Private Sector Investment: The private sector often fails to invest in TVET sector, limiting the availability of resources and equipment.
- ix. Societal Perception: TVET is often perceived as a second-choice option, affecting enrolment and funding.
- x. Corruption and Mismanagement: Corruption and mismanagement often plague TVET institutions, hindering effective management and resource allocation.
- xi. One of the major constraints to TVET playing the above role is the lack of infrastructures, such as road, electricity, communication systems, water and good transportation; Electricity and energy are a major component for the operation of Equipment and machineries.
- xii. Poor enrolment of students in TVET oriented courses which are skill-based training in technical college and similar institutions that can serve as feeders to post-secondary TVET programme for the attainment of national growth and economic prosperity.

4.0 Technical and Vocational Education and Training (TVET) in a Depressed Economy

Abdullahi (2007) opined that with roughly over 140 million Nigerian, (36 states and a Federal Capital Territory), a weak political and economic system and persistent ethnic and religious conflicts in Nigeria, Technical and Vocational Education and Training provides the best alternative for national stability, unity and prosperity. In addition, a “depressed economy” is an economy which experiences a prolonged period of recession, or a significant and prolonged downturn in the economy (Bukky, 2011). Supporting this view, Gaynor (2011) stated that there is a recession in the economy when a nation’s calculated gross domestic product is affected negatively on account of a decline in the economic activities. Similarly, Achoja and Eyaefe, (2010), also reported that an economic depression is characterized by heavy unemployment, a low level of consumers’ demand and a substantial amount of unused industrial capacity. Business profit melts down, confidence and hope of entrepreneurs melt down, and entrepreneurs will be unwilling to take risks in making new investments. Banks and other financial institutions have surplus fund that no entrepreneur wishes to borrow, even when they borrow, loan repayment by entrepreneurs is difficult due to profit melt down and low business activities (NBTE, 2020). According to the International Monetary Fund (2020), an economic depression is defined as a period of at least two years during which the economic activity, as measured by the gross domestic product (GDP), declines by at least 10%.

Characteristics of Economic Depression

- i. Prolonged and severe economic contraction.
- ii. Significant decline in income and employment.
- iii. Widespread business failures and bankruptcies.
- iv. Reduced consumer spending and investment.
- v. Increased poverty and income inequality.

Causes of Economic Depressions

According to Krugman, (2009) opined that the causes of economic depressions can be complex and multifaceted. They include the following:

- i. Monetary policy mistakes.

- ii. Fiscal policy mistakes.
- iii. External shocks (e.g., global economic downturns).
- iv. Financial crises (e.g., banking crises).
- v. Structural issues (e.g., lack of economic diversification).

Examples of Economic Depressions

- i. The Great Depression (1929-1939).
- ii. The Long Depression (1873-1896).
- iii. The Japanese Asset Price Bubble (1991-2003).

Impact of Economic Depression on Technical and Vocational Education and Training

UNESCO (2019) stated that economic depressions can have a significant impact on Technical and Vocational Education and Training (TVET) such as:

- i. Reduced Funding: Economic depressions often lead to reduced government funding for TVET programmes, making it challenging for institutions to maintain quality training and equipment.
- ii. Increased Demand for TVET: Depressions can lead to increased demand for TVET programmes as individuals seek to acquire new skills and enhance their employability.
- iii. Shift to Vocational Training: Economic depressions can lead to a shift in focus from academic education to vocational training, as individuals and governments recognize the importance of practical skills in the workforce.

Role of TVET in Mitigating Economic Depression

Federal Ministry of Education (2019) identified some roles of Technical and Vocational Education and Training (TVET) in mitigating economic depression to include the following:

- i. Providing Skills Training: TVET programmes can provide individuals with the skills and training needed to adapt to changing economic conditions and enhance their employability.
- ii. Promoting Entrepreneurship: TVET programmes can promote entrepreneurship and innovation, enabling individuals to start their own businesses and create new job opportunities.
- iii. Supporting Economic Diversification: TVET programmes can support economic diversification by providing training in emerging industries and technologies, reducing dependence on traditional sectors.

Best Practices for TVET During Economic Depression

The best practices to be considered for Technical and Vocational Education and Training (TVET) during economic depression were listed as:

- i. Focus on Emerging Industries: TVET programmes should focus on emerging industries and technologies, such as renewable energy, healthcare, and technology.
- ii. Promote Entrepreneurship: TVET programmes should promote entrepreneurship and innovation, enabling individuals to start their own businesses and create new job opportunities.
- iii. Develop Partnerships with Industry: TVET programmes should develop partnerships with industry stakeholders to provide students with practical training and job opportunities.

Economic Recession

Economic recession is a period of economic decline, typically defined as a decline in gross domestic product (GDP) for two or more consecutive quarters. During a recession, economic activity slows down, leading to a decrease in production, employment, and income International

Monetary Fund (2020). Similarly, National Bureau of Economic Research (2020) defined economic recession as a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales.

Characteristics of Economic Recessions:

- i. Reduced consumer spending.
- ii. Decreased business investment.
- iii. Increased unemployment.
- iv. Reduced economic output.
- v. Decreased government revenue.

Causes of Economic Recession:

- i. Monetary policy mistakes.
- ii. Fiscal policy mistakes.
- iii. External shocks (e.g., global economic downturns).
- i. Financial crises (e.g., banking crises).
- ii. Supply chain disruptions.

Examples of Economic Recessions:

- i. The Great Depression (1929-1939).
- ii. The 1980-1982 Recession.
- iii. The 1990-1991 Recession.
- iv. The 2007-2009 Great Recession.
- v. The 2020 COVID-19 Recession.

Impact of Economic Recessions on Technical and Vocational Education and Training

Economic recessions can have a significant impact on Technical and Vocational Education and Training (TVET) by creating scenario like:

- i. Reduced Funding: Economic recessions often lead to reduced government funding for TVET programmes, making it challenging for institutions to maintain quality training and equipment.
- ii. Increased Demand for TVET: Recessions can lead to increased demand for TVET programmes as individuals seek to acquire new skills and enhance their employability.
- iii. Shift to Vocational Training: Economic recessions can lead to a shift in focus from academic education to vocational training, as individuals and governments recognize the importance of practical skills in the workforce.

Role of TVET in Mitigating Economic Recession

Economic recessions can have a significant impact on TVET, but TVET can also play a crucial role in mitigating the effects of recessions by providing skills training, promoting entrepreneurship, and supporting economic modification.

- i. Providing Skills Training: TVET programmes can provide individuals with the skills and training needed to adapt to changing economic conditions and enhance their employability.
- ii. Promoting Entrepreneurship: TVET programmes can promote entrepreneurship and innovation, enabling individuals to start their own businesses and create new job opportunities.
- iii. Supporting Economic Modification: TVET programmes can support economic diversification by providing training in emerging industries and technologies, reducing dependence on traditional sectors.

5.0 Repositioning TVET for Economic Modification

The following strategies were advanced by the Federal Ministry of Education (2019) as some of the ways to reposition TVET in Nigeria:

- i. Revitalizing Infrastructure: Investing in modernizing TVET institutions, providing state-of-the-art equipment, and ensuring access to resources.
- ii. Curriculum Review and Update: Collaborate with industry stakeholders to develop relevant, competency-based curricula that address emerging technologies and labour market needs.
- iii. Promoting Entrepreneurship and Innovation: Integrate entrepreneurship and innovation training into TVET programmes, encouraging students to develop business ideas and solutions.
- iv. Addressing Stigma and Misconceptions: Launch awareness campaigns to promote TVET as a viable career path, highlighting success stories and industry demand for skilled technicians.
- v. Industry Partnerships and Collaborations: Foster partnerships between TVET institutions, industries, and organizations to provide students with practical training, mentorship, and job opportunities.

Benefits of Repositioning Technical and Vocational Education and Training (TVET)

- i. Skilled Workforce: Produce a skilled and competent workforce that meets industry demands, driving economic growth and diversification.
- ii. Entrepreneurship and Innovation: Foster entrepreneurship and innovation, leading to the creation of new businesses, jobs, and industries.
- iii. Economic Modification: Contribute to Nigeria's economic diversification by developing skilled workers in various sectors, reducing dependence on oil and gas.
- iv. Reduced Unemployment: Provide training and skills development, reducing unemployment rates among Nigerian youth).

6.0 Methods Used in Repositioning Technical and Vocational Education and Training

National Board for Technical Education (2020) advocated some methods in which TVET can be repositioned:

- i. TVET experts and successful small business entrepreneurs should be involved in the development and implementation stages of our nation's education plans.
- ii. Entrepreneurship education should be introduced at all level of educational system. Students should be given opportunities for educating and training for self-employment.
- iii. The emphasis should be that government should provide the needed Legal Framework and the enabling environment for TVET to continue to strive. In addition, social amenities and infrastructures should be provided.
- iv. If TVET programmes are to emphasized in entrepreneurial education, then the teachers should be given adequate relevant training in entrepreneurial knowledge, skills and attitudes. These have to be reflected in both pre-service and in-service training programmes of the teachers.

- v. Educational facilities should be provided and utilized to support human capital development which would encourage enrolment into TVET programmes.

Linkage of Technical and Vocational Education and Training with the Nigeria's Economy

The linkage of Technical and Vocational Education and Training with Nigeria's economy is crucial for the country's development. Technical and Vocational Education and Training (TVET) plays a significant role in providing skilled manpower, promoting ventures creation through entrepreneurship, and enhancing economic growth (NBTE, 2020). Ventures creation through Technical and Vocational Education and Training are power engines that run the economy of many developed countries of the world such as China, and Finland. Conversely, Ugwaja (2010) stressed prevention of wastages in human resource and the need for redirecting them to Technical and Vocational Education and Training which, so far, Nigeria has given very little attention to conservation of human resources. Thus, it is obvious that the waste of labour by improper employment can be largely restructured towards Technical and Vocational Education and Training as a good tool in addressing wealth generation and employment creation in Nigeria. This view is in line with opinion of Amoor (2011) who maintained that Technical and Vocational Education and Training brings about rapid technological advancement and reduce the level of unemployment of Nigerian youths.

7.0 Conclusion

Having provided that Technical and Vocational Education and Training has potentials for a well-rounded development of any nation's economy; and having x-rayed the various challenges facing this type of education in Nigeria, it can therefore be concluded that; the country still has a long way to go in utilizing this veritable sector to put its economy back on the track so that it will be able to avoid the effects of recessed and depressed economy on its citizenry.

8.0 Recommendations

- i. The paper therefore recommends that private organization should come on board by assisting the government through their social responsibilities in embracing some of the ways of promoting Technical and Vocational Education and Training as explored by this paper.
- ii. It recommended that the work of repositioning vocational education to avail the country sustainable national development should not be left for government alone, but private organisation should also give it priority in their social responsibility by promoting investments in vocational education such as agricultural education, home economic education, fine and applied art education and technical education.
- iii. Vocational Centres should be established in various location of our country, which will be a way of solving the problem of vocational workshops and machine. This implied that in every geographical area of Nigeria should be properly equipped with the need equipment for training our youths.

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