



Effectiveness of Technical and Vocational Education and Training (TVET) on Self-Employed Graduates for Sustainable Skills in the Knowledge-Based Economy in Imo State

¹Ihenacho, Uchechukwu Oscar, ²Okike Celestine O., ³Akpelu Azunna E.,
⁴Ukwuoma Joy C., & ⁵Anuna Felicia Ngozi

¹Department of Business Education, Alvan Ikoku Federal University of Education, Owerri

²Department of Accountancy, Alvan Ikoku Federal University of Education, Owerri

³Department of Accountancy, Imo State Polytechnic, Mbano Campus, Ehime Mbano LGA, Imo State

⁴Department of Business Education, Aifue, Owerri, Imo State

⁵Department of Business Education, (Management Option)

Ignatius Ajuru University of Education, Port Harcourt, Rivers State

Abstract

The economy of our nation Nigeria is in a very bad condition, that required an urgent intervention and attention in a bid to recover and save the future of our youths/graduates. Vocational and technical education (VTE) with its relevant practical training components had been adjudged as one of the keys to achieving sustainable society. The lukewarm attitude towards Vocational Education and Training (VET), for not taking into cognizes the development of the country is based on her economic, industrial and technical advancement. The study investigated the effectiveness of Technical and Vocational Education and Training (TVET) on self-employed graduates for sustainable skills in the knowledge-based economy in Imo State. The specific aim of the study is to ascertain other challenges that have inhibit Technical and vocational education from producing self-employed graduates. The study area is Alvan Ikoku Federal University of Education, Owerri, Imo State. The study adopted a descriptive survey design. The population of the study was sixty (60) undergraduate students of the Department of Business Education, Faculty of Vocational and Technology Education, Alvan Ikoku Federal University of Education, Owerri. The researcher used questionnaire as instrument for data collection. One research question guided the study. The study identifies the effectiveness of TVET and factors inhibit the relevance of producing self-employed graduates in a knowledge-based economy. The study concluded among others that educational institutions should consider making available provisions for teaching and learning materials in vocational and technical education so as to improve maximum productivity of self-employed graduates.

Keywords: Graduates, Technical, Vocational, Education, Training, Sustainable, Skills, Knowledge-based Economy

Corresponding Author: Ihenacho, Uchechukwu Oscar

Background to the Study

Generally, education has become the basis for economic growth, political stability and social harmony. Shehu (2017) opined that the level of development of any society depends on its intellectual, scientific and technological achievements. He further stressed that technology has become a critical factor of economic growth and social development as it is through their application that the natural resources of the country could be transformed into goods and services for better quality of life of the majority of the country's citizens. In his contribution Akerejola (2011) asserted that the country's economic future depends to a large extent on its ability to adopt training strategies that will ensure the creation of adequate technically skilled development. However, technical and vocational education is a sure way to the desired development. Technical and vocational education empowers individuals by equipping them with skills and knowledge which would enable them to fit into the labour market and earn a successful living.

Vocational education is used as a comprehensive term in the educational process involving, in addition to general education, the study of technologies and related sciences and acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life (FGN, 2014). Okoro (1993) quoted in Agapu and Andural (2017) and Momoh (2012) defines vocational education as a form of education whose primary purpose is to prepare persons for employment in recognized occupation. In the same vein he defines technical education as a post-secondary vocational training programme which the major purpose is the production of technicians.

Vocational Education facilitates sustainable society through transmitting to local citizens certain values, knowledge and attitudes that are necessary to perform certain skills in the modern sector of the economy. For these reasons, VTE with its relevant practical training components had been adjudged as one of the keys to achieving sustainable society (Abimbade, 2018). General consensus is that Vocational and Technical Education has potential to stimulate and sustain socio-economic development by enhancing employment, improve quality of life, reduce poverty, limit the incidence of social vices due to joblessness and promote a culture of peace, freedom and democracy (National Policy on Education, 2013).

Vocational education is designed to offer people the opportunity of improving themselves in their general proficiency, especially in relation to their present or future occupation. Vocational education has brought about the training of manpower, high impact in quality skills generation and acquisition in different fields of human endeavour all of which tend towards job creation and poverty alleviation. Although vocational and technical education has contributed immensely to self-employment and job creation in the State. However, developing nation like Nigeria exerts great energy and efforts to develop functional system of education, which empowers its graduates with occupational skills and competencies to get fit for living in the society and to contribute towards its economic growth and technological development but her greatest challenges is on its implementation (Ayonmike, 2013). This

could be explained by the unprecedented increase in the number of Nigerian graduates without employable skills which could be linked to policy implementation problem.

Concept of TVET on Self-Employed Youths for Sustainable Skills Empowerment in a Knowledge-Based Economy

Nigeria as a country is blessed with many natural resources which can effectively cater to the upliftment of its citizens. Yet, the citizen, especially the youth, are living below the poverty level. Thereby, they cannot significantly offer to the development of the nation. This is because the technical vocational and training skills for empowerment are not imbibed into the youth due to the rejection of TVET, which is a basic tool that provides the skills needed for self-reliance in a knowledge-based economy. World Bank (2011) defines empowerment as the process of boosting the capacity of individuals or groups to make choices to transform those choices into desired actions and outcomes. Thus, the level of attainment of any industrialized and technologically developed country depends on the extent to which the youths, who are referred to as the backbone of the development of any nation, have been trained with skills and empowered to apply such skills in meeting societal needs (Okwelle & Deeborn, 2017). Also, the National Population Commission cited in Odunwole (2015) define youths as people between the age of 18-35 years. The Youth are seen as the foundation of any society, with their energies, character, inventiveness and orientation defining the pace of technological and industrialized advancement and security of a nation.

According to Federal Republic of Nigeria (2019), National Youth Policy posited, "Youths are one of the greatest assets any nation can have. Not only are they regarded as future leaders, but they are also potentially and actually the greatest investment for a country's development in a knowledge-based economy. They serve as a good measure of the extent of their vitality and responsible conduct, and their roles in society are positively related to the development of their country. Therefore, the youths of a nation serve as building blocks that link the past with the present. Tambari (2019), in his paper 'Developing the Youth through TVET for Sustainable Development in Nigeria,' recommended that the period of National Youth Service Corps (NYSCs) should be regenerated and reconstructed to be a mandatory training period for all graduates on different types of TVET skills and for non-graduates youths, there should be a skill training organized and supervised through government agencies such as National Directorate of Employment (NDE) and other commissions and that government should endeavour to grant loan to those embarking into TVET as this will effectively enable the establishment of the acquired skills. Moreover, the training for knowledge and skills should be based on psychomotor and cognitive given to individuals, which must be able to solve the problems related to societal needs. A knowledge-based economy is defined as an economy that is increasingly dependent for its growth on the input of knowledge as a value-added input to the economic system in the context of work and training. According to Wikipedia, a knowledge-based economy is an economic system in which the production of goods and services is based principally on knowledge-intensive activities that have an impact on the development of technical and scientific innovation. A knowledge-based economy features a highly skilled workforce with the environment, institution, and industries creating

jobs that demand highly specialized skills to meet the global market's needs. Therefore, highly skilled jobs in a knowledge-based economy require excellent technical skills and manpower, such as problem-solving and the ability to adapt to changes that can be realized through TVET.

The higher production capacity of a knowledge-based economy can only be achieved through quality and effective TVET education that is equilibrated with life skill acquisition through training and retraining programmes which can be accomplished through TVET. This view is supported by Iro-Idoro & Jimoh (2019), who asserted that TVET is seen as an effective means used in most developing and developed nations for developing professionals who are skilled in their various disciplines to control a nation economically, socially and technologically. Also, Nwosu & Micah (2017) posited that TVET is a type of education that brings about the acquisition of knowledge and saleable skill which intensify self-dependent and economic development in a nation.

Salma & Amin (2021) asserted that skill and development play an indispensable role in economic, industrialized growth and self-employed youths' skill empowerment in a knowledge-based economy of any nation. Therefore, in this era of globalization, developing nations need to develop personnel that will be more analytical and multi-skilled. For a knowledge-based economy, the manpower of that nation should possess the needed employability skills workforce with a strong Technical Vocational Education and Training system that will heighten and improve industrial productivity and the quality of life in the context of work and training. Also, David & Chinedu (2019) posited that a knowledge-based economy has four (4) key elements, namely:

- i. Education and skills,
- ii. Innovation systems,
- iii. Economic incentives and institution regimes and
- iv. Information and communication technology

Therefore, the only sustainable source of competitiveness for a developing economy is one based on a highly educated and skilled workforce. Here, a knowledge-based economy appears to reflect a growing consensus about the nature of wealth-generating enterprises with a highly skilled and professional workforce by training individuals in new ways for future purposes. Emezue, Attah, Ogbonna, Iwuagu & Oragwa (2015) asserted that an improved understanding and recognition of a knowledge-based economy will clarify the effectiveness of Technical Vocational Education and Training and its importance to the learning need of companies, individual workers, industry, and the nations at large.

Skills training enhances productivity and sustains competitiveness in the global economy. Worldwide, nations are renewing their efforts to promote TVET because it is the only effective tool to prepare the youths for the world of work, which reaches out to the marginalized and excluded groups and engages them in income-generating livelihood. Therefore, empowering self-employed youths with sustainable skills empowerment by TVET

education is an effective means that aids the development and growth of a nation in a knowledge-based economy if utmost consideration is given to the programme.

Statement of the Problem

Vocational education is a programme aimed at ensuring the employment of students with the much-needed knowledge, skills, attitudes and the competencies to help them become independent, advanced, creative, remain self-employed and self-reliant to their families and the society at large. Unfortunately, despite all the glaring contributions of vocational education in our nation, Nigeria is yet to accord this type of education the attention it deserves. This is one of the major reasons for the rising unemployment, poverty and unabated crimes in the society today. Inadequate funding of vocational institutions has caused the turning out of half-baked graduates because there is no fund to build and maintain workshops, laboratories or even purchase modern equipment. Vocational education is generally inadequate because of poor funding. Experienced and skillful teachers may not be employed. Those that are employed, because of poor remuneration do not stay long in the teaching profession, but drift to some other more lucrative jobs especially in the industries and abroad (Iro-Idoro & Jimoh, 2019).

Consequently, inexperienced and unqualified technical teachers are employed thereby lowering academic standard, resulting to wastage in the achievement of technical education goals and this may lead to producing incompetent graduates. Inadequate funding of Technical and Vocational institutions has often caused a lot of difficulties in producing graduates that are competent. It has also resulted to the lack of interest in the field of Technical and vocational education by students while in school thereby resulting not acquiring of relevant skills that help them to be self-reliant. However, it is the objective of this study to investigate into the effectiveness of Vocational Education in producing self-employed graduates in Imo State.

Purpose of the Study

The purpose of this study was to investigate into the effectiveness of Technical and Vocational Education in producing self-employed graduates in Imo State.

Specific (TVET) purpose study seeks to:

- 1) Ascertain other challenges that have inhibit Technical and vocational education from producing self-employed graduates.

Research Question

The following research question was formulated to guide the study:

- 1) What other challenges inhibit Technical and vocational education from producing self-employed graduates?

Method

The design that was adopted in this study was descriptive research design. According to Voxco's (2021), descriptive research helps to uncover the how, when and what questions that are in the research study. This descriptive design was adopted to this study to help unveil how

the study of vocational education will provide self-employed graduates and what necessary skills that are available in vocational education that will make graduates self-employed after gaining the knowledge. The study was conducted in AlvanIkoku Federal University of Education, Owerri Imo State, where Technical and Vocational students are trained. The population of the study is 140 students comprising Business Education students. The sample size was 140 but 135 were retrieved. A questionnaire was the instrument used for data collection. The questionnaire was structured, having two background information of 6 factors and 4 opinions. The researcher and a colleague assisted in administering the instrument and they were retrieved within a space of 1 day.

Area of the Study

The area of this study is Alvan Ikoku Federal University of Education, Owerri (AIFUE). Data collected from the respondents were analyzed using mean statistics. Responses received were analyzed using Mean statistics. Response equal or greater than 2.5 was taken as accepted, while response less than 2.5 was adjudged to have been rejected by the respondents.

Research Question One: What other challenges inhibit Technical and vocational education in producing self-employed graduates?

Table 1: Responses on other challenges that inhibit Technical and vocational education in producing self-employed graduates.

S/N	Questionnaire	VHE	HE	LE	VLE	Total	X	Decision
1.	Students in vocational education are not regularly exposed to fieldwork like IT (Industrial Training) to improve their learning.	7 (28)	24 (72)	32 (64)	72 (72)	135 (236)	1.7	Low Extent
2.	Vocational Education Students pay less attention during the course of teaching and learning.	92 (368)	32 (96)	4 (8)	7 (7)	135 (479)	3.5	High Extent
3.	Students of Vocational Education prefer to go for other irrelevant jobs when they are sent for IT instead of going to their various skills of learning interest.	48 (192)	72 (216)	8 (16)	7 (7)	135 (431)	3.2	High Extent
4.	There are no entrepreneurial skills available for students in vocational education while in school.	24 (96)	7 (21)	100 (200)	4 (8)	135 (324)	2.4	Low Extent
5.	Vocational Education students feel inferior to practice their learnt courses outside the labour market.	4 (16)	88 (264)	36 (72)	7 (7)	135 (359)	2.7	High Extent
6.	Students of Vocational education are challenged by inadequate or irregular power supply to carry out their practical assignments.	56 (224)	48 (144)	24 (48)	7 (7)	135 (423)	3.1	High Extent
Grand mean							2.8	

Source: Field Survey, 2024

Table 4 above shows the data analysis of other challenges that inhibit Technical and Vocational Education in producing self-employed graduates in Alvan Ikoku Federal University of Education Owerri, Imo State. Items 19 and 22 with mean scores of 1.7 and 2.4 respectively indicates that students of vocational education are not regularly exposed to fieldwork like IT and no entrepreneurial skills available for students while in school are to a low extent while items 20, 21, 23 and 24 had mean scores of 3.5, 3.2, 2.7 and 3.1 indicates that students pay less attention during the course of teaching and learning, students prefer to go for other irrelevant jobs when they are sent for IT instead of going to their various skills of learning interest, students feel inferior to practice their learnt courses outside the labour market and vocational education students are challenged by inadequate power supply to carry out their practical assignments are to a high extent.

Discussion of Findings

Research Question Four: What other challenges inhibit Technical and Vocational Education in producing self-employed graduates? Analysis in table 4 shows that that students pay less attention during the course of teaching and learning, students prefer to go for other irrelevant jobs when they are sent for IT instead of going to their various skills of learning interest, students feel inferior to practice their learnt courses outside the labour market and vocational education students are challenged by inadequate power supply to carry out their practical assignments are to a high extent. The result of research question 4 with the grand mean of 2.8 shows that there are other challenges inhibiting Technical and vocational education in producing self-employed graduates. The finding collaborate with the study of Stubbe (2012) who outlined some of the challenges facing vocational and technical education in producing self-employed graduates to include lack of training and incentives to staff knowing that without proper training and incentives, lack of interest from political office holders stands as a problem to vocational education whereby it will take technical educators to convince lawmakers to give priority to providing the required resources for such programmes and finally, Nigerian values system whereby Nigerian have this mentality that a university degree is more important than technical or skills development training.

Conclusion

Technical and vocational education and training (TVET) plays a crucial role in equipping self-employed graduate with sustainable skills necessary to strive in the knowledge-based economy. Also, TVET programmes enhance graduate employability, entrepreneurship and innovation capabilities leading to improved livelihood and economic growth.

Recommendations

The following recommendations are made based on the findings of the research;

1. Educational institutions should consider making available provisions for teaching and learning materials in vocational and technical education so as to improve maximum productivity of self-employed graduates.
2. Teachers/instructors of vocational and technical education programmes should ensure that students of vocational education are exposed to the available teaching and learning materials by way of engaging them in practicals.

3. Educational institutions should ensure better remuneration of the employed skilled and competent staff/personnel of vocational education in order to motivate them to impart more knowledge and skills to the students so that they can be self-reliant after graduation.
4. Educational/Curriculum planners of vocational and technical education programmes should endeavour to find possible solutions that will help in solving some of the inhibiting factors of Technical and vocational education like poor funding, poor remuneration, and so on.

References

- Abimbade, S. O. (2018). An appraisal of the education work and employment of vocational and Technical school graduates in Nigeria and trends in vocational education in Nigeria, *Nigerian Educational Research Association* 4(3), 16-23
- Agapu, I. & Andural, A. (2017). *The role of the directorate of technical cooperation in Africa (DCTA) in technology transfer and acquisition in countries*, Proceeding 2nd African Regional Conference on Engineering Education; University of Lagos, 20th-22nd September, 35-42.
- Akerejola, A. S. (2011). *An in-depth review and Assessment of the present state and technical and vocational education in Nigeria Lagos*, P E O Tower
- Ayonmike, C. S (2013). Status of technical and vocational education in rural institutions in Delta State, Nigeria, *Makerere Journal of Higher Education*, 5 (1), 81-90.
- Ayonmike, P. I. (2013). The implementation of the senior secondary chemistry curriculum: An analysis of some implementation. Constraints. Lagos, *Orbit Educational Journal* 1 (1)
- David, I. O., & Chinedu, D. O. (2019). *Developing a knowledge-based economy through enhancing management of vocational and technical education*, Asian Conference on Education.
- Emezue, I. N., Attah, P. O., Ogbonna, N. B., Iwuagwu, S. W., & Oragwa, O. F. (2015). *Nigeria Journal of Management and Development of Education (NJMDE)*, 2(1), 12–21.
- Federal Republic of Nigeria (2013). *National policy in education* (4th ed.), Lagos. NERDC Press.
- Federal Republic of Nigeria. (2019). *National youth policy*, Retrieved from: <https://nigeriayouthngs.org>

- Iro-Idoro, C. B., & Jimoh, T. A. (2019). Technical Vocational Educational and Training (TVET) as mechanism for empowering youth towards self-reliance in Ogun State. 41st International Conference of commonwealth association of Polytechnics and University of Technology in Africa. Kigali: Rwanda.
- Momoh, O. A. (2012). Revitalization of technical education in Nigeria: As a vehicle for transformation, *Proceedings of COREN 21st Engineering Assembly*, Pp 53 – 81
- Nwosu, J. C., & Michah, E. M. (2017). Technical vocational education and training as a tool for national sustainable development: Curriculum issues. *IOSR-JRME*, 5(3), 12–18.
- Oduwole, T. A. (2015). Youth employment and poverty in Nigeria, *Journal of Sociology and Anthropology Research*, 1(2), 23–29.
- Okwelle, P. C., & Deebom, M. T. (2017). Technical vocational education and training as a tool for sustainable empowerment of Youths in Niger Delta, Nigeria, *International Journal of Innovative Social & Science Education Research*, 5(1), 29–38.
- Salma, A. (2021). Technical Vocational Education (TVE): Role in individual and national growth, *International Journal of Computer Applications Technology and Research*, 10(09), 213–215.
- Shehu, U. I. (2017). *The importance of science and technology in nation building on Nigerian educational system and national development*, A paper presented at National Conference held at the Federal College of Education, Katsina 27-30,
- Tambari, D. (2019). Developing the youth through technical vocational educational and training (TVET) for sustainable Development in Nigeria. *Asia Journal of Educational and Social Studies*, 5(1), 1–9.
- World Bank Group. (2011). *Poverty reduction and equity*, Retrieved on 2020, from: <http://web.worldbank.org/V45HD4P100>