



Impact of Vocational and Technical Education Training on Employment Generation among Students in Kwara State Public Colleges of Education

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Abstract

This study investigates the impact of vocational and technical education programs on students in Kwara State, Nigeria, focusing on employment generation. Two goals and corresponding null hypotheses were outlined for the research, employing a descriptive survey approach. The study population comprised 655 final-year students from three educational institutions: Kwara State College of Education, Ilorin, Kwara State College of Education, Oron and Kwara State College of Education, Lafiya. A sample of 389 students was randomly selected, and data were collected using a structured questionnaire with four rating-scale questions, which was validated by vocational and technical education professionals. The questionnaire underwent pilot testing, yielding a reliability coefficient of $\alpha = 0.92$. Data analysis was conducted using SPSS version 20, with regression analysis for hypotheses 1-2 which were all tested at a significance level of 0.05. The results revealed that vocational and technical education programs in Kwara State did not equip students with the necessary skills for employment generation in Nigeria. The study suggests that current emphasis on vocational and technical education, alongside other educational reforms, falls short of addressing the nation's economic challenges and rising graduate unemployment. It recommends the establishment of a robust committee by federal and state governments to develop and implement effective policies for monitoring, regulating, executing, and evaluating vocational and technical education initiatives.

Keywords: Vocational and Technical Education, Employment Generation, Colleges of Education

1.1 Introduction

Despite the implementation of various educational policies by successive administrations in Nigeria, the country's economic growth continues to be hindered by the persistent issue of unemployment. Recent data indicates a concerning rise in both underemployment and unemployment rates. Each year, a large number of graduates from Nigerian postsecondary institutions enter the job market seeking lucrative employment opportunities. The challenge lies not only in addressing the significant number of unemployed recent graduates but also in effectively integrating them into the workforce. Adejimiola and Olufunmilayo (2019) reported that a staggering 85% of Nigerian school graduates face difficulties finding employment annually, a figure significantly higher than the global unemployment rate of 21.3% (Asante, 2021). The core of this issue lies in the mainstream

educational system's failure to equip students, including school dropouts, with the requisite skills and competencies for employment generation and self-employment. Consequently, the nation grapples with profound challenges stemming from the high unemployment rate.

In response to Nigeria's persistent high unemployment rate, the federal government, in collaboration with the ministries of education, has embarked on identifying key areas in educational policy and practice. The aim is to equip young people with marketable skills, knowledge, and self-reliance, thereby fostering economic growth and reducing unemployment. This initiative aligns with the guiding principles of the National Policy on Education (2013), which underscore the importance of providing young individuals with essential skills and fostering their mental, physical, and social development to enable them to contribute effectively to societal progress. Consequently, there is a prioritization of technical and vocational education (VTE) in Nigeria, with the expectation that it will enhance human capacity development in terms of skills, attitudes, and essential knowledge for self-sufficiency. The Nigerian federal government is intensifying efforts to standardize and enhance vocational education, with strong support from state governments that are emphasizing VTE in schools and universities.

The high esteem for vocational and technical education (VTE) in Nigeria is understandable, given the prevalent belief that it holds the potential to bolster job creation. VTE is seen as instrumental in equipping students with the knowledge, skills, understanding, and values requisite for fostering an entrepreneurial mindset and culture post-graduation. As posited by Winer (2020), the objective of vocational education is to furnish individuals with the necessary abilities to enter and progress within the workforce in a productive and advantageous manner. Recent research conducted by Adamu and Abdul (2015) supports this notion, suggesting that students who undergo vocational education may harness their newly acquired expertise to establish their own enterprises.

In a bid to promote self-employment among graduates, the federal government has made entrepreneurship education compulsory across all tertiary institutions in Nigeria. This latest development underscores the significant changes occurring in the curriculum of Nigerian higher education institutions. Against this backdrop, researchers conducted an investigation to ascertain the extent to which these programs offer students practical experience that can support their career aspirations and attitudes towards independence (Adamu and Abdul, 2015).

Globally, there is a strong emphasis on vocational and technical education (VTE) due to its pivotal role in job creation and fostering national independence. With an estimated 80% of jobs worldwide requiring technical or vocational skills, VTE holds significant importance for both social and economic advancement (UNESCO, 2005). This underscores Ibrahim's (2019) argument that possessing vocational and technical skills helps prevent young people from becoming social outcasts as they secure gainful employment. Nuru (2017) asserts that technical and vocational education is essential for

preparing young individuals for the future job market, necessitating changes in a nation's economy to facilitate this transition. According to Amoor (2021), vocational and technical education aims to equip students with the necessary skills to pursue their chosen careers, address labor shortages, expand their career options, and make informed career decisions. Lesley (2019) emphasizes the pivotal role of vocational education and training (VET) in alleviating poverty and providing employability training, while McGrath (2019) argues that VET is instrumental in reducing unemployment and poverty. In line with these perspectives, adolescents should be equipped with fundamental knowledge, abilities, and skills to attain self-sufficiency.

It appears that one of the most effective strategies for human resource development that the government could employ to enhance employment opportunities and stimulate economic growth is through vocational and technical education (VTE).

Despite numerous changes in the education system and the emphasis placed on vocational and technical education (VTE), the number of unemployed Nigerian college graduates continues to rise. Several scholarly inquiries, including those by Mari and Kasimu (2020), Udoh (2016), and Adamu (2010), indicate that Nigerian students enrolled in vocational and technical schools exhibit a negative attitude towards self-reliance and industry. What might be causing this trend? Is the increasing unemployment among VET graduate's indicative of a failure in the program? What barriers hinder graduates from commencing their own businesses, particularly amidst escalating national unemployment rates? These circumstances prompted the researchers to:

- (i) Examine the impact of vocational and technical education training on employment generation for college students in Kwara state, Nigeria.
- (ii) Investigate the influence of vocational and technical education training on the self-reliance of college students in Kwara state, Nigeria.

The following hypotheses were put out as a guide for this study.

1. In Kwara state, Nigeria, students attending college of education do not significantly benefit from vocational and technical education training in terms of employment generation.
2. In Kwara state, Nigeria, students attending college of education do not significantly benefit from vocational and technical education training in terms of their self-reliance.

2.1 Literature Review

Constructivist Learning Theory

Constructivism is a learning theory that concerned with the experiences and contexts that make the learners willing and enable to learn. Constructivist learning design focuses on activity that allow create and recreate past experience of students and the modification to new learning. Students are core matter while teachers just act as facilitators (Botto, Schorr, & Lema 2019). A study by Sink, (2020). investigated the validity of constructivism, second language acquisition and multimedia learning theories and design principles (modified ADDIE model of instructional design) for design and development of multimedia software in teaching and learning Arabic vocabulary for non- Finding

native Arab students at International Islamic University Malaysia (IIUM), Malaysia. of the study showed that the production and development of an Arabic vocabulary multimedia courseware based on theories, design and development methods as discussed earlier had a valid impact on the learning and meet the contextual analysis of learners needs. However, no explanation on instructional design theories used to create the courseware were provided. In addition, the study also did not report the procedures involved in validating the results generated by the study. (Hau's, 2020).

The framework for strategic sustainable development is a tool that is designed to provide the principles which are used to back-cast from a vision of a sustainability future. Education for sustainability aims at helping people to develop the attitudes, skills and knowledge to make informed decisions for the benefit of themselves and others, now and in the future, and to act upon these decision. Education for sustainable development covers different areas from elementary to university education. One of these areas is Vocational and Technical Education.

Training which is the type of education that emphasizes on the acquisition and application of the skills, knowledge and attitudes required for employment in a particular occupation in any field of social and economic activity (Okafor, Onukes and Chikezie, 2020). Concepts of Vocational education is any form of education that has its primary purpose as to prepare persons for employment in recognized occupations. It provides the skills, knowledge and attitudes necessary for effective employment in specific occupation. Okoro (2019) defines vocational education as education that provides a special programme offered at secondary and post-secondary levels. Vocational education is education for occupational preparation. It is also regarded as that aspect of the total education process that focuses on individual occupation. In their view, Eneyoh, Okon & Okeng (2021) stated that vocation education has six major areas; these includes: - industrial technical education, agricultural education, business education, home economic education, distributive education and health occupation education.

Nevertheless, the list may include fine and applied arts education and even computer education. Oguntoye (2019), Oghene (2019), and Olaitan(2020) opined that graduates in school of vocational and technical education, in colleges of education do jobs that relates to their course of study after school. Oguntoye (2019) was specific in mentioning home economics education, agricultural education and fine and applied arts. Oghene (2019) was also specific in mentioning about business education programmes that those who graduate from business education department do get jobs that relates to their field of study.

Technical Education: this is a post-secondary vocational training programme whose major purpose is the production of technicians. Technical education is a special grade of vocational education which can be distinguished from other vocational education programmes because more mathematics and science are required in the training programme. The graduates of this programme are called craftsmen. It is more often found in trade and industrial education.

Vocational technical education is a comprehensive term referring to those aspects of the educational process involving in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life, Baba, (2020) submitted that vocational preparation must always be viewed against the backdrop of the needs of the society and of the individual. While meeting the demands of the economy, the abilities of the individuals must be utilized to the fullest meeting the job needs of individuals is a crucial objective of vocational and technical education for sustainable national development.

Baba (2020) Basset (2021) and Igweh (2021) that most people who claim to be working in Nigeria were just working only on hand to mouth existence. Jobs most people do cannot sustain them. Sustainable national development refers to the ability to harness all available resources, human, material or economic to bring out the potentials of a nation. In view, Dzungwe (2020) affirmed that National development is the ability to flow along with other nations in terms of effective management and utilization of current development in science and technology. According to Aguele & Uhuamavbi (2019) development means “bringing a nation to an advanced or a highly organized state, that is utilizing all the human and material potentials of a nation to bring about growth and development”. Development has to do with employment for all the citizens of a nation. Ehwarieme, Ahmiegheme and Enosekhatob (2019) also added that the most important thing is not the job in itself but the sustainability, that employment without sustainability is work in futility. For the economy of the nation to develop, employment should be sustainable. However, sustainable development is attaining and maintaining the height of standard in the developmental agenda of the nation. This include; education, health services, economic, transportation, good road networks, justice and equity, food security and all the social amenities needed for safe and healthy living of citizens in a country.

3.1 Methodology

The research employed a descriptive survey design approach, considered most practical for obtaining participants' actual data and statistics. This choice aligned with Kerlinger's (2005) recommendation, especially for research utilizing questionnaires to capture respondents' perspectives. The study population comprised 655 final-year students from three educational institutions: Kwara State College of Education, Ilorin, Kwara State College of Education, Oron and Kwara State College of Education, Lafiagi. A sample of 389 students was randomly selected, and data were collected using a structured questionnaire with four rating-scale questions, which was validated by vocational and technical education professionals. The questionnaire consisted of thirty questions addressing the hypotheses. The tool was validated by three professionals and included four-point rating scales: Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1), with adjustments based on their feedback. The questionnaire underwent pilot testing, the results from the pilot testing were analyzed using Cronbach's alpha method and the results yielded a coefficient of $\alpha = 0.92$, meeting Tracy's (2016) threshold

for credible scale reliability (0.50 to 1). Data analysis was conducted using SPSS version 20, with regression analysis for hypotheses 1-2 which were all tested at a significance level of 0.05.

Face-to-face interaction facilitated questionnaire administration, chosen for its potential to achieve a higher response rate. The research team, comprising primary researchers and two skilled assistants, distributed and collected the surveys. Participants were instructed to respond based on their level of agreement with the statements. Clarifications were provided to those needing further explanation, with two days allotted per institution for questionnaire completion over three weeks. For data analysis, responses were consolidated, considering strongly agree and agree as agree, and likewise for disagree responses. IBM SPSS Statistics Version 20 was used for analysis, employing regression analysis for hypotheses 1 and 2 with significance level set at 0.05 for the hypotheses.

4.1 Results

Hypothesis One: In Kwara state, Nigeria, students attending College of education do not significantly benefit from vocational and technical education training in terms of employment generation.

Table 1: Regression analysis of Respondents opinion on the Impact of Vocational and Technical Education Training on Employment Generation

Model	B	Std.Error	T	R-crit	R-Cal	R-cal ²	Adjusted R ²	Sig
EG	5.69	0.65	8.79	0.09	0.86	0.74	0.70	0.000
VTET	0.05	0.02	3.67					

Source: Result of Fieldwork 2024

Based on the findings presented in Table 1, the calculations revealed a calculated R value of 0.860, which surpasses the critical R-value of 0.088 at a significance level (α) of 0.05. This observed value of R (0.860) was deemed statistically significant. The summary from the regression analysis indicates that the Beta value for the constant is 5.694. This suggests that the regression equation needs to be adjusted by 5.694 to establish a regression equation relating to Vocational and Technical Education Training (VTET) with Employment Generation (EG). Furthermore, the result indicates that 74% of the variability in Employment Generation is determined by Vocational and Technical Education Training. This outcome suggests that the content of the Vocational and Technical Education Training significantly equips students with the necessary skills required for the Employment Generation. Consequently, the null hypothesis is not retained, indicating that there is a significant relationship between VTET and EG.

Hypothesis Two: In Kwara state, Nigeria, students attending College of education do not significantly benefit from vocational and technical education training in terms of their self-reliance.

Table 2: Regression Analysis of Respondents opinion on the Influence of Vocational and Technical Education Training on the Self-Reliance

Model	B	Std.Error	T	R-crit	R-Cal	R-cal ²	Adjusted R ²	Sig
SR	2.58	1.93	1.34	0.09	0.06	0.004	0.002	0.174
VTET	0.02	0.02	1.20					

Source: Result of Fieldwork 2024

The summary of the regression analysis indicates a calculated R value of 0.061, which falls below the critical R value of 0.088 at the 0.05 alpha level. This observed R value of 0.061 is deemed not significant. Furthermore, the summary from the regression analysis reveals that the constant Beta has a value of 2.584. This suggests that the regression equation needs to be adjusted by 2.584 in order to establish a regression equation relating to Vocational and Technical Education Training (VTET) with Self-Reliance (SR). The R-squared (R²) value was observed to be 0.004, indicating that only 0.4% of the variance in Self-Reliance is influenced by the Vocational and Technical Education Training. Consequently, it can be concluded that Vocational and Technical Education Training has no significant influence on students' Self-Reliance. Therefore, the null hypothesis is retained.

4.2 Discussions

The initial null hypothesis test revealed an R² value of 0.070, suggesting that students undergoing vocational and technical education training had only a 1% likelihood of securing employment. This finding underscores the inadequacy of vocational and technical education in terms of imparting necessary competencies. Consistent with the conclusions drawn by Yusuff and Soyemi (2012), the study suggests that the high unemployment rate among VTE graduates stems from a mismatch between the skills needed for self-employment and the lack of collaboration between training institutions and the industry. Similarly, Nwankwo et al.'s (2013) research highlights persistent unemployment and poverty in Nigeria despite government efforts to empower youth and reform education, attributing this to the program's failure to equip young people with the requisite skills for independence.

Furthermore, the study indicates that vocational and technical education provides instruction that explains only 0.3% of the variance in students' self-reliance levels. This suggests a minimal likelihood (0.3%) for VTE graduates to achieve independence after graduation, implying inadequate preparation in essential abilities for self-employment. These findings align with previous reports by Jegede (2019), highlighting challenges faced by VTE graduates in Nigeria due to limited facilities hindering entrepreneurial skill development. Anyakogu's (2022) research further emphasizes the impact of insufficient school infrastructure on students' ability to develop entrepreneurial skills, while Kamba (2019) observes that many graduates lack essential working skills due to inadequate instructional resources. Garba, Solomon, and John (2015) recently noted a lack of necessary tools in schools, resulting in ill-prepared graduates lacking career-starting abilities.

Moreover, the study reveals an R² value of .002 for self-reliant among students receiving vocational and technical education training, indicating a negligible 0.2% contribution to

economic growth. This suggests that the training has minimal impact on students' economic advancement. Essia (2010) underscores students' limited understanding of launching and operating enterprises, affecting their poverty levels due to inadequate or unsuitable instruction. Nwibo and Okorie (2013) highlight graduates' inability to launch firms as a significant obstacle to economic success, stemming from a disparity in skills and information imparted. Adamu and Abdul's (2015) study supports these findings, attributing graduates' economic hardship to the failure of vocational and technical education to prepare them adequately for self-employment.

5.1 Conclusion

Vocational and technical education training in Kwara State Public Colleges of Education play a significant role in employment generation among students. These programs provide students with practical skills and knowledge that are directly applicable to various industries and sectors, increasing their employability upon graduation. Collaboration between educational institutions, government agencies, industries, and other stakeholders is essential to further enhance the impact of vocational and technical education programs on employment generation and economic progression. By aligning curriculum content with industry needs and providing opportunities for practical training and internships, stakeholders can ensure that students are well-prepared for the workforce and contribute meaningfully to the economy. Overall, the findings highlight the positive contributions of vocational and technical education programs to employment generation and economic progression in Kwara State. Continued investment and collaboration in this area are key to maximizing the benefits for students, industries, and the broader community.

5.2 Recommendations

Based on the impact of vocational and technical education training on employment generation and economic progression among students in Kwara State public Colleges of Education, several recommendations can be made to further enhance the positive effects of vocational and technical education programs:

1. **Strengthen Curriculum Relevance:** Collaborate with industry stakeholders to regularly review and update vocational and technical education curricula to ensure alignment with current industry needs and emerging trends. This will enhance the employability of students by equipping them with relevant and up-to-date skills.
2. **Expand Practical Training Opportunities:** Increase opportunities for students to gain hands-on experience through internships, apprenticeships, and industry placements. Encourage partnerships between colleges of education and local businesses or industries to provide students with real-world learning experiences and exposure to workplace environment.

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