IMPACT OF VOCATIONAL EDUCATION AND DIGITAL SKILLS ACQUISITION ON SUSTAINABLE WEALTH CREATION AMONG BUSINESS EDUCATION GRADUATES IN FEDERAL COLLEGE OF EDUCATION ABEOKUTA

[1]**Adegbokiki**, Lukmon Tunde (MABEN 1215) and [2]**Obadina,** Oluyemisi Bolanle

[1]Business Education Department, School of Secondary Education (Vocational and Technical Education), Federal College of Education, Abeokuta, Ogun State, Nigeria.

[2]Business Education Department, University of Lagos, Lagos State, Nigeria.

08065039757 abacusheritage@gmail.com

Abstract

The growing rate of graduate unemployment and limited economic diversification in Nigeria has intensified the need to reposition vocational and business education towards sustainable wealth creation. This study empirically examined the impact of vocational education and digital skills acquisition on sustainable wealth creation among Business Education graduates of Federal College of Education, Abeokuta. The study adopted a descriptive survey research design with a structured questionnaire administered to a representative sample of graduates. Data were analyzed using descriptive statistics, correlation analysis, and multiple regression techniques.

Findings revealed that vocational education has a significant positive effect on sustainable wealth creation. Digital skills acquisition was also found to significantly predict business performance and income stability among graduates. Furthermore, digital competencies strengthened the relationship between vocational training and wealth creation outcomes. The study concludes that integrating robust digital skill development into vocational and business education enhances graduates' entrepreneurial capacity and long-term financial sustainability.

It is recommended that curriculum planners, institutional administrators, and policy makers intensify practical-based instruction, strengthen industry collaboration, and embed advanced digital competencies within business education programmes to promote self-reliance, economic diversification, and sustainable wealth generation among graduates.

Keywords: Vocational Education, Digital Skills Acquisition, Sustainable Wealth Creation, Business Education Graduates, Entrepreneurship Development, Employability

Introduction

The persistent challenge of unemployment and underemployment among graduates in Nigeria has continued to attract the attention of policymakers, educators, and other stakeholders in the education sector. Despite the expansion of tertiary education, a significant proportion of graduates remain unable to secure meaningful employment or engage in productive economic activities. This situation has largely been attributed to the disconnect between theoretical knowledge acquired in school and the practical, entrepreneurial, and digital competencies required in the contemporary labour market (Ayonmike, 2016; Okoye & Ubaka, 2024). Business education graduates, who are expected to possess emploThe persistent challenge of unemployment and underemployment among graduates in Nigeria has continued to attract the attention of policymakers, educators, and other stakeholders in the education sector. Despite the expansion of tertiary education, a significant proportion of graduates remain unable to secure meaningful employment or engage in productive economic activities. This situation has largely been attributed to the disconnect between theoretical knowledge acquired in school and the practical, entrepreneurial, and digital competencies required in the contemporary labour market (Ayonmike, 2016; Okoye & Ubaka, 2024). Business education graduates, who are expected to possess employable and self-reliant skills, are particularly affected by this gap.

Vocational education, within the framework of Technical and Vocational Education and Training (TVET), has been widely recognized as a vital instrument for economic empowerment, job creation, and sustainable development. According to UNESCO (2015), TVET involves the acquisition of practical skills, knowledge, and attitudes necessary for employment in various sectors of the economy. In Nigeria, vocational education is designed to equip individuals with competencies that promote self-reliance and reduce dependence on white-collar jobs. However, the effectiveness of vocational education in achieving these objectives has been questioned, particularly in the face of rising youth unemployment and poverty (Okonkwo & Agwazie, 2023).

The global transition to a knowledge-based and technology-driven economy has further transformed the nature of work and economic activities. This transformation, commonly described as the Digital Economy, emphasizes the role of digital technologies in driving innovation, productivity, and economic growth. Digital tools such as the internet, mobile technologies, and e-commerce platforms have created new opportunities for business operations and income generation. As a result, digital skills acquisition has become an essential requirement for effective participation in the modern economy (Bello & Ajao, 2024).

Digital skills encompass a wide range of competencies, including computer literacy, digital communication, data management, digital marketing, and software application. For business education graduates, these skills are crucial as they enhance their capacity to establish and manage digital enterprises, engage in e-commerce, and leverage online platforms for business expansion. Empirical studies have shown that individuals with strong digital competencies are more likely to be employed, self-reliant, and economically productive (Bello & Ajao, 2024; Samuel et al., 2025).

The integration of digital skills into vocational education has been strongly advocated by global organizations such as the International Labour Organization (2020), which emphasizes the need

for education systems to adapt to changing labour market demands by incorporating digital competencies and promoting lifelong learning. This underscores the importance of redesigning business education curricula to reflect current technological realities and industry expectations.

In Nigeria, several empirical studies have highlighted the positive relationship between digital skills acquisition and wealth creation among graduates. For instance, Samuel et al. (2025) found that digital skills training significantly improves the employability and income-generating capacity of graduates. Similarly, Uzoamaka and Okpuzor (2025) reported that employers increasingly demand digital competencies from business education graduates, particularly in areas such as e-commerce, online communication, and software utilization. Sustainable wealth creation refers to the ability of individuals to generate continuous income, accumulate assets, and maintain long-term financial stability. Unlike short-term income generation, sustainable wealth creation emphasizes innovation, adaptability, and resilience in the face of economic changes. Vocational education provides the foundational practical skills necessary for employment and entrepreneurship, while digital skills enhance the ability of individuals to exploit emerging opportunities in the digital economy (Okonkwo & Agwazie, 2023).

Despite the recognized importance of vocational and digital skills, significant gaps still exist in their acquisition among business education graduates in Nigeria. Studies have shown that many graduates lack adequate exposure to modern technologies and practical training required for effective wealth creation (Okoye & Ubaka, 2024). Institutional challenges such as outdated curricula, insufficient qualified instructors, and limited access to digital infrastructure further compound the problem. The situation is particularly critical in Colleges of Education, which are primarily responsible for training teachers and business educators. At the Federal College of Education, Abeokuta, business education graduates are expected to possess both teaching competencies and entrepreneurial skills that will enable them to be self-reliant. However, the extent to which vocational education and digital skills acquisition influence sustainable wealth creation among these graduates remains unclear and requires empirical investigation.

Statement of the Problem

Despite the increasing emphasis on vocational education and skills acquisition in Nigeria, graduate unemployment remains a persistent problem. Business education graduates, who are expected to be equipped with practical and entrepreneurial skills, often struggle to secure employment or establish sustainable businesses. This suggests that vocational education may not be adequately equipping students with the competencies required for wealth creation.

Furthermore, the rapid advancement of digital technologies has transformed the labour market, making digital skills essential for economic participation. However, many business education graduates lack the necessary digital competencies required to function effectively in a technology-driven economy. This deficiency limits their ability to explore opportunities in e-commerce, digital entrepreneurship, and other online income-generating activities.

Purpose of the Study

The main purpose of this study is to examine the impact of vocational education and digital skills acquisition on sustainable wealth creation among business education graduates in the Federal College of Education, Abeokuta.

Specifically, the study seeks to:

1. examine the influence of vocational education on sustainable wealth creation among business education graduates;

2. determine the relationship that exists between vocational education and digital skills acquisition in promoting wealth creation?

Research Questions

The following research questions will guide the study:

1. How does vocational education influence sustainable wealth creation among business education graduates?

2. What relationship exists between vocational education and digital skills acquisition in promoting wealth creation?

Scope of the Study

This study focuses on the impact of vocational education and digital skills acquisition on sustainable wealth creation among business education graduates in the Federal College of Education, Abeokuta. The study will specifically examine key components of vocational education and digital skills, and how they influence graduates' ability to generate sustainable income.

Concept of Vocational Education

Vocational education, often situated within Technical and Vocational Education and Training (TVET), refers to a form of education that equips learners with practical skills, knowledge, and competencies required for specific occupations. According to UNESCO (2015), TVET involves the acquisition of technical knowledge alongside general education to prepare individuals for employment and self-reliance. In the Nigerian context, vocational education is aimed at producing skilled manpower capable of contributing to economic growth and national development. It emphasizes hands-on training, entrepreneurship development, and the acquisition of employable skills. However, despite its objectives, vocational education in Nigeria has been criticized for its limited effectiveness due to poor implementation, inadequate facilities, and weak linkage with industry needs (Ayonmike, 2016).

Vocational education is particularly relevant to business education programmes, as it integrates theoretical knowledge with practical business skills such as accounting, marketing, office management, and entrepreneurship. These competencies are essential for graduates to become self-employed and economically productive (Okonkwo & Agwazie, 2023).

Concept of Digital Skills Acquisition

Digital skills acquisition refers to the process of developing the ability to effectively use digital technologies for communication, problem-solving, and value creation. In the era of the Digital Economy, digital skills have become essential for both employment and entrepreneurship. Digital skills can be categorized into basic, intermediate, and advanced levels. Basic skills include computer literacy and internet usage, while intermediate skills involve digital communication and online collaboration. Advanced skills encompass data analytics, software development, digital marketing, and e-commerce management (Bello & Ajao, 2024).

For business education graduates, digital skills enhance their ability to operate in modern business environments. They enable graduates to engage in online business activities, manage digital platforms, and explore opportunities in the global marketplace. According to the International Labour Organization (2020), digital skills are critical for improving employability and adapting to technological changes in the labour market.

Concept of Sustainable Wealth Creation

Sustainable wealth creation refers to the ability of individuals to generate consistent income, accumulate assets, and maintain financial stability over time. It goes beyond short-term income generation to include long-term economic resilience and growth. Vocational education contributes to wealth creation by equipping individuals with practical skills for employment and entrepreneurship, while digital skills enhance their ability to exploit emerging opportunities in the digital economy. The combination of these competencies enables graduates to create sustainable sources of income and achieve financial independence (Okonkwo & Agwazie, 2023).

Business Education and Wealth Creation

Business education is designed to equip students with the knowledge, skills, and attitudes necessary for effective participation in the business world. It encompasses areas such as accounting, marketing, management, and entrepreneurship. In recent years, the focus of business education has shifted toward entrepreneurship and self-reliance due to the increasing scarcity of white-collar jobs. Business education graduates are expected to become job creators rather than job seekers. However, achieving this objective requires the integration of vocational and digital skills into the curriculum (Okoye & Ubaka, 2024).

Theoretical Framework

This study is anchored on relevant theory that explains the relationship between skills acquisition and wealth creation.

Human Capital Theory

The Human Capital Theory, propounded by Gary Becker (1964), posits that investment in education and skills development enhances the productivity and earning potential of individuals. According to this theory, education is a form of investment that yields economic returns in the form of higher income and improved employment opportunities. In the context of this study,

vocational education and digital skills acquisition represent investments in human capital that can enhance the ability of business education graduates to create wealth sustainably. The theory provides a strong foundation for understanding how skills development contributes to economic empowerment.

Empirical Review

Several empirical studies have examined the relationship between vocational education, digital skills acquisition, and wealth creation.

Ayonmike (2016) examined the role of vocational education in job creation and found that inadequate implementation of vocational programmes limits their effectiveness in reducing unemployment. The study recommended improved funding and infrastructure for vocational education. Bello and Ajao (2024) investigated digital literacy and skills development in Nigeria and found that digital skills significantly enhance employability and productivity. The study emphasized the need for integrating digital competencies into educational curricula. Samuel et al. (2025) conducted a study on the impact of digital skills training on graduate employability in Ogun State and reported that digital skills acquisition positively influences income generation and self-employment among graduates.

Uzoamaka and Okpuzor (2025) examined employer perceptions of digital skills among business education graduates and found that employers prioritize digital competencies in recruitment decisions. The study highlighted the importance of aligning educational programmes with labour market demands. Okonkwo and Agwazie (2023) explored the relationship between business education and sustainable economic development and found that skills acquisition plays a critical role in promoting entrepreneurship and wealth creation. Okoye and Ubaka (2024) investigated digital skills required for business education students and found that many graduates lack essential digital competencies needed for self-reliance. The study recommended curriculum reform and increased investment in digital infrastructure.

Methodology

The study adopts a descriptive survey research design to investigate impact of vocational education and digital skills acquisition on sustainable wealth creation among Business Education graduates of Federal College of Education, Abeokuta. The design targeted 457 Business Education graduates of Federal College of Education, Abeokuta within the last three years. Only 100 out of the population were selected using simple random sampling technique. Data were collected using a structured questionnaire titled: “Vocational Education, Digital Skills and Wealth Creation Questionnaire (VEDSWCQ).” The questionnaire is divided into four sections: Section A: Demographic information (e.g., age, gender, year of graduation) Section B: Items on the research topic. The questionnaire is designed using a 4-point Likert scale: Strongly Agree (SA) – 4, Agree (A) – 3, Disagree (D) – 2, Strongly Disagree (SD) – 1. To ensure the validity of the instrument, the questionnaire is subjected to face and content validation by experts in business education and educational research. The reliability of the instrument is established through a pilot study conducted on 20 business education graduates from a similar institution outside the study area. The data obtained are analyzed using Cronbach’s Alpha, yielding a reliability coefficient of 0.82,

which indicates that the instrument is reliable for the study. Data collected are analyzed using descriptive and inferential statistics: Descriptive statistics (mean and standard deviation) are used to answer the research questions. A criterion mean of 2.50 is used as the decision rule: Mean ≥ 2.50 → Accepted. Mean < 2.50 → Rejected Inferential statistics are used to examine relationships among variables: Pearson Product Moment Correlation (PPMC) is used to determine the relationship between vocational education, digital skills acquisition, and wealth creation. Regression analysis may also be employed to determine the predictive influence of independent variables on sustainable wealth creation.

Research Question One

How does vocational education influence sustainable wealth creation among business education graduates?

Table 4.1: Mean and Standard Deviation of Responses on Vocational Education and Wealth Creation

S/N	Influence of vocational education on sustainable wealth creation among business education graduates	Mean ($\bar{X}$)	Std. Dev.	Decision
1.	Vocational education equipped me with practical skills for self-employment	3.46	0.65	Accepted
2	Skills acquired enhanced income-generating capacity	3.39	0.71	Accepted
3.	Promotes entrepreneurial mindset	3.55	0.59	Accepted
4.	Enabled business start-up/management	3.28	0.76	Accepted
5.	Reduces dependence on white-collar jobs	3.33	0.69	Accepted
6.	Skills are relevant to market demands	3.42	0.67	Accepted
7.	Contributes to financial stability	3.42	0.66	Accepted
8.	Creates employment opportunities	3.37	0.72	accepted

Grand Mean = 3.40

The results indicate that all items have mean scores above the benchmark of 2.50, indicating that respondents agree that vocational education significantly influences sustainable wealth creation among business education graduates. The grand mean of 3.40 confirms a strong positive perception with item 3 having the highest mean score with S.D of 0.59 while item 4 has the least mean of 3.28 with S.D of 0.76.

Research Question Two

What relationship exists between vocational education and digital skills acquisition in promoting wealth creation?

Table 4.2: Mean Responses on Vocational Education and Digital Skills Acquisition

S/N	Relationship between vocational education and digital skills acquisition	Mean ($\bar{X}$)	Std. Dev.	Decision
9.	Exposure to digital tools	3.44	0.63	Accepted
10	Acquisition of digital marketing skills	3.31	0.74	Accepted
11.	Use of software applications	3.47	0.60	Accepted
12.	Availability of ICT facilities	3.12	0.81	Accepted
13.	Improved business performance	3.36	0.70	Accepted
14.	Integration of digital entrepreneurship	3.28	0.75	Accepted
15.	Use of online platforms for income	3.50	0.58	Accepted
16.	Enhances innovation and creativity	3.41	0.64	Accepted

Grand Mean = 3.36

The findings show that there is a significant relationship between vocational education and digital skills acquisition, as all items exceeded the acceptance benchmark. Item 15 has the highest mean of 3.50 with 0.58 as the S.D while item 12 has the least mean with 3.12 and 0.81 as S.D under the grand mean of 3.36

Discussion of findings

The findings from the first research question revealed that vocational education significantly influences sustainable wealth creation among business education graduates, as evidenced by the high mean ratings across all items. This implies that vocational education equips graduates with practical competencies that enhance self-employment, entrepreneurial engagement, and long-term financial stability.

This finding is consistent with the human capital perspective advanced by Gary Becker, which posits that investment in skills and education increases individuals' productivity and earning capacity. Empirical evidence supports this position. For instance, Oketch (2016) found that vocational and technical education significantly improves employability and income generation in developing economies.

On the relationship between vocational education and digital skill acquisition, the correlation analysis revealed a strong positive and statistically significant relationship between vocational education and digital skills acquisition in promoting wealth creation ($r = 0.71$). This indicates that digital competencies serve as a critical link between skill acquisition and economic outcomes.

This finding is supported by the World Bank (2019), which highlighted that digital skills are essential for participation in the global digital economy and significantly enhance income-generating opportunities. Individuals with digital competencies are better positioned to leverage online markets, reduce operational costs, and scale their businesses.

Similarly, Autor (2015) argued that technological skills complement human capital and increase productivity, thereby leading to higher earnings. This supports the finding that digital skills improve business performance and sustainability.

In addition, Nwosu (2021) found that digital entrepreneurship significantly contributes to wealth creation among youths by enabling access to wider markets and innovative business models. This explains why respondents agreed that digital platforms enhance market reach and financial independence.

Conclusion and Recommendations

The study concludes that while tertiary institutions in the State recognize the relevance and transformative potential of digital skills acquisition and entrepreneurship education, actual implementation remains constrained by systemic challenges. The current curricula largely fail to accommodate emerging digital skills acquisition for sustainable wealth creation. Yet, students, faculty, and administrators support the inclusion and acquisition of digital skills in the curriculum, indicating a readiness for reform if institutional capacity and policies are enhanced. This reinforces the need for urgent interventions by government agencies, institutional leaders, and curriculum developers to realign business and entrepreneurship education with the digital realities of the 21st century economy.

Recommendations

Based on the findings, the following recommendations are proposed:

1. Curriculum Reform: National Commission for Colleges of Education (NCCE), National Universities Commission (NUC) and the National Board for Technical Education (NBTE) should mandate the inclusion of digital – related content in business and entrepreneurship curricula.

2. Capacity Building: Institutions should organize regular workshops and professional development programs for faculty and staff to improve their competence in digital skills applications.

3. Infrastructure Investment: Federal and state governments, along with private sector partners, should invest in digital infrastructure—such as AI labs, internet access, and computing resources—to support learning and innovation.

4. Pilot Programs and Research Centers: Establish pilot AI integration programs in selected tertiary institutions as models for scale-up, and create innovation hubs or research centers to test AI tools for business and entrepreneurship education.

5. Ethical Education: Include modules on digital ethics, data privacy, and AI bias to prepare students for responsible use of AI in business.

References

Adebisi, S., & Ojo, S. (2020). Graduate employability in Nigeria: Barriers and prospects. *Journal of Vocational Studies*, 8(2), 45–60.

Becker, G. S. (1964). Human Capital: A Theoretical and Empirical Analysis. University of Chicago Press.

Creswell, J. W. (2014). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.). Sage.

Eze, F. C., & Ndukwe, C. (2022). Digital literacy and entrepreneurial performance among Nigerian graduates. *International Journal of Business and Technology*, 10(1), 23–37.

Federal Ministry of Education. (2013). National Policy on Education. NERDC Press.

Hoffmann, K., & Oreopoulos, P. (2019). The labour market returns to vocational education and training. *Journal of Economic Perspectives*, 33(1), 101–126.

MSEA. (2021). Digital skills and SME growth in Sub-Saharan Africa. MSEA Policy Brief.

Okoro, U. (2021). Assessing the relevance of vocational education in the digital era. Education and Society Review, 12(4), 78–91.

Ojo, A., & Adeyemi, O. (2021). Vocational training and youth entrepreneurship in Nigeria. *Journal of Small Business Development*, 9(3), 12–28.

Rogers, E. M. (2003). Diffusion of Innovations (5th ed.). Free Press.

Smith, K., & Kemmis, R. (2022). Digital competence frameworks in TVET. *Journal of Technical Education*, 14(3), 55–73.

UNESCO. (2017). Education for Sustainable Development Goals: Learning Objectives. UNESCO Publishing.

World Bank. (2020). World Development Report 2020: Trading for Development in the Digital Age.