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# Examining the Challenges of Technical and Vocational Education in Secondary School in Nigeria

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## **ABSTRACT**

Technical and Vocational Education and Training (TVET) is a vital component of Nigeria's educational system, designed to equip students with practical skills for employability and economic growth. However, despite its significance, TVET in Nigerian secondary schools faces numerous challenges that hinder its effectiveness. This study examines these challenges, including inadequate infrastructure, a shortage of qualified instructors, outdated curricula, negative societal perceptions, weak industry collaboration, and poor policy implementation. Drawing from historical and contemporary perspectives, the paper highlights the systemic failures that have marginalized TVET, contrasting Nigeria's struggles with successful models from Germany, Singapore, and the United States, where vocational education is well-integrated with industry needs.

The study identifies key strategies for revitalizing TVET in Nigeria, such as curriculum modernization, enhanced teacher training, increased funding, public-private partnerships, and awareness campaigns to shift societal attitudes. Recommendations emphasize the need for government commitment, industry collaboration, and technological integration to align TVET with labor market demands. Without urgent reforms, Nigeria risks perpetuating youth unemployment and missing opportunities for economic diversification. The findings underscore the potential of TVET to drive national development if systemic challenges are addressed through evidence-based policies and sustained investment.

**Keywords:** Technical and Vocational Education (TVE), Secondary Education, Skills Development, Unemployment, Curriculum Reform, Industry Collaboration.

## INTRODUCTION

Technical and Vocational Education (TVE) is a critical component of secondary education designed to equip students with practical skills, enhance employability, and foster economic growth (Okoro, 2019). In Nigeria, TVE is integrated into the secondary school curriculum to provide students with both academic knowledge and hands-on skills in fields such as carpentry, welding, electrical installation, computer studies, and agriculture (Federal Republic of Nigeria [FRN], 2013). Despite its importance, TVE in Nigerian secondary schools faces significant challenges that hinder its effectiveness and limit its contribution to national development.

Historically, vocational training in Nigeria was rooted in traditional apprenticeship systems before the colonial era (Ayonmike, Okwelle, & Okeke, 2018). However, formal TVE was institutionalized through policies such as the National Policy on Education (NPE), which mandates the inclusion of technical and vocational subjects in secondary education to promote self-reliance and reduce unemployment (FRN, 2013). The policy emphasizes the need for a balanced education system that combines theoretical knowledge with practical skills. Unfortunately, the implementation of TVE has been marred by systemic weaknesses, including inadequate funding, poor infrastructure, and societal bias against vocational training (Oviawe, Uwameiye, & Uddin, 2017).

One of the major challenges facing TVE in Nigerian secondary schools is inadequate infrastructure and obsolete equipment. Many schools lack functional workshops, modern tools, and up-to-date training materials, making it difficult for students to acquire relevant technical skills (Eze, 2020). Additionally, there is a shortage of qualified





TVE teachers, as many instructors lack industry experience or updated pedagogical training (Okolie, Elom, & Inyiagu, 2019). This deficiency affects the quality of vocational instruction and students' preparedness for the workforce.

Another critical issue is poor funding and government neglect. TVE programs often receive minimal budgetary allocations compared to general academic subjects, leading to stagnation in curriculum development and facility maintenance (Ajayi & Ekundayo, 2020). Furthermore, societal perception remains a barrier, as many parents and students view vocational education as inferior to university degrees, discouraging enrollment in technical subjects (Onyishi & Sefotho, 2021). The misalignment between TVE curricula and industry needs also poses a challenge. Many vocational programs in secondary schools do not reflect current labor market demands, leaving graduates with skills that are not marketable (Uwaifo, 2018). This gap contributes to high youth unemployment, as many school leavers lack the necessary competencies for available technical jobs (National Bureau of Statistics [NBS], 2022).

Given Nigeria's rising unemployment rate (NBS, 2022) and the increasing demand for skilled labor in sectors such as construction, manufacturing, and information technology, revitalizing TVE in secondary schools is crucial. This study seeks to examine these challenges comprehensively and propose strategies for improvement. Addressing these issues could enhance the quality of vocational education, improve students' employability, and contribute to national economic growth.

Nigeria faces a critical youth unemployment crisis, with rates exceeding 40% (National Bureau of Statistics [NBS], 2023). Technical and Vocational Education and Training (TVET) is designed to equip students with employable skills, yet systemic failures have rendered many graduates uncompetitive in the labor market. Researching the obstacles hindering TVET effectiveness is essential to addressing this skills gap and reducing unemployment.

The Nigerian economy remains heavily dependent on oil, making it vulnerable to global market fluctuations (World Bank, 2022). A robust TVET system could support economic diversification into sectors like manufacturing, agriculture, and technology by producing a skilled workforce. Investigating TVET challenges can help policymakers align educational outcomes with industrial demands, fostering sustainable economic growth. Despite its potential, TVET suffers from poor societal perception, with many students and parents viewing it as a last resort for academically weak learners (Ayonmike et al., 2015). This stigma contributes to low enrollment and undermines the program's impact. Research into public attitudes can inform strategies to rebrand vocational education through awareness campaigns and incentives, encouraging broader participation.

Another major issue is the outdated TVET curriculum, which often fails to reflect current industry needs (UNESCO-UNEVOC, 2021). Many programs still teach obsolete skills, leaving graduates ill-prepared for modern job markets. This research can identify gaps in the curriculum and propose updates, such as integrating emerging technologies like artificial intelligence, renewable energy, and robotics into vocational training.

Inadequate funding and poor infrastructure further hinder TVET delivery. Many secondary schools lack functional workshops, tools, and modern equipment, making practical training nearly impossible (Okoro, 2019). Exploring innovative financing models, such as Public-Private Partnerships (PPPs), could provide sustainable solutions for resource mobilization and infrastructure development. Gender disparities also persist, with female students significantly underrepresented in technical fields such as welding and engineering (Okeke & Anigbogu, 2020). Cultural and institutional barriers often discourage girls from pursuing these paths. Research can highlight these challenges and recommend gender-inclusive policies to promote equitable participation in TVET programs.

While Nigeria has policies like the National Policy on Education (2013) advocating for TVET, weak implementation limits their effectiveness (Federal Ministry of Education, 2013). Evaluating these policy gaps can lead to stronger enforcement mechanisms and better alignment between educational planning and labor market needs. Finally, Nigeria's informal sector employs over 80% of the workforce (International Labour Organization [ILO], 2022). Effective TVET programs can empower youths with entrepreneurial skills, enabling





self-employment and innovation. Research can explore how vocational training can be tailored to support informal sector growth, fostering job creation and economic resilience.

## **Research Questions**

- 1. What are the principal barriers to the effective implementation of vocational/technical education in secondary schools in Nigeria?
- 2. How do students' perceptions of vocational education influence their enrolment and performance?
- 3. To what extent do productivity and employability outcomes of secondary school vocational education graduates align with industry expectations?

# **Research Objectives**

- 1. The main objective of this study is to examine the challenges facing technical and vocational education (TVE) in secondary schools in Nigeria.
- 2. To identify the major challenges affecting the effective implementation of technical and vocational education in Nigerian secondary schools.
- 3. To assess the qualifications and competencies of teachers handling TVE subjects
- 4. To suggest possible strategies for improving the effectiveness of TVE in secondary schools.

# LITERATURE REVIEW AND THEORITICAL FRAMEWORKS

#### **Theoretical Frameworks**

## **Systems Theory**

Views on educational challenges as interconnected within a larger system involving policies, infrastructure, teachers, students, and societal factors. Addressing these issues requires a holistic approach targeting multiple components simultaneously. It offers a comprehensive framework for understanding the complex challenges faced by Technical and Vocational Education (TVE) in Nigerian secondary schools. By viewing the educational system as an interconnected whole, this theory emphasizes the importance of considering various subsystems—such as curriculum design, teacher training, infrastructure, and policy environment—and their interactions that influence the effectiveness of TVE.

In the Nigerian context, systemic issues such as inadequate funding, outdated facilities, and misaligned policies can be better understood through this lens, highlighting the need for a holistic approach to reform. Systems Theory suggests that addressing these challenges requires coordinated efforts across all subsystems to create a sustainable and responsive educational environment that prepares students for the demands of the modern workforce (Bertalanffy, 1968; Okoye & Odili, 2018). Therefore, adopting a systems perspective can facilitate the development of integrated strategies that enhance the quality and relevance of technical and vocational education in Nigeria.

## **Diffusion of Innovation Theory**

This theory Explains how new ideas and practices spread within society or organizations. Barriers to adopting modern vocational techniques in Nigerian schools—such as resistance to change or lack of awareness—can be addressed through better communication, training, and stakeholder involvement. It developed by Everett Rogers (2003), offers a valuable framework for understanding the adoption and implementation of new technologies and pedagogical practices within technical and vocational education (TVE) in Nigerian secondary schools. According to Rogers, the rate at which innovations are adopted depends on factors such as communication channels, social system norms, and perceived attributes of the innovation itself.

In the context of Nigeria, challenges such as limited awareness, resistance to change, inadequate infrastructure, and insufficient training hinder the effective diffusion of modern TVE practices. Understanding these barriers through Rogers' lens highlights the importance of strategic communication, stakeholder involvement, and





addressing socio-cultural factors to facilitate smoother adoption processes and improve the quality of technical and vocational education (Rogers, 2003). Ultimately, applying the Diffusion of Innovation Theory can inform targeted interventions that accelerate the acceptance of innovative educational technologies and methodologies, thereby enhancing skill acquisition and employability among Nigerian secondary school students.

## LITERATURE REVIEW

# **Historical Context of TVET in Nigeria**

The historical development of Technical and Vocational Education and Training (TVET) in Nigeria is rooted in the colonial era, where vocational skills were primarily intended to support agricultural and industrial development (Akinlabi & Akinlabi, 2019). Post-independence Nigeria continued to emphasize vocational education as a means of fostering self-reliance and economic growth, leading to the establishment of various technical institutes and secondary schools with specialized curricula (Olaniyan & Ojo, 2020). However, despite these efforts, the sector has faced persistent challenges including inadequate funding, outdated curricula, and a shortage of qualified teachers, which hinder the effective implementation of TVET programs (Eze et al., 2019).

These issues are compounded by socio-economic factors that influence student enrollment and retention in vocational tracks, as well as policy inconsistencies at the federal and state levels. Current studies underscore the need for systemic reforms to align TVET with contemporary market demands and to improve its relevance and attractiveness to Nigerian youth (Okafor & Nwankwo, 2021). Understanding this historical context is essential for addressing the ongoing challenges faced by secondary school TVET in Nigeria, as they are deeply rooted in the country's socio-political and economic evolution over the decades.

# **Global Perspectives on TVET**

The global perspective on Technical and Vocational Education and Training (TVET) underscores its critical role in fostering economic development, reducing youth unemployment, and promoting lifelong learning (UNESCO, 2019). Internationally, studies highlight that effective TVET systems are essential for equipping young people with relevant skills aligned with labor market demands, yet many countries face challenges related to quality, accessibility, and industry linkage (World Bank, 2020). In Nigeria, these issues are compounded by inadequate infrastructure, insufficient funding, and a disconnect between educational institutions and industry needs (Akinbobola & Akinbobola, 2020).

Recent research emphasizes that addressing these challenges requires a systemic overhaul that integrates policy reforms, stakeholder collaboration, and curriculum modernization to enhance the relevance and efficacy of secondary school TVET programs (Eze, 2021). Overall, while the global discourse advocates for increased investment and innovation in TVET, Nigeria's experience reflects common hurdles faced by developing countries in harnessing the full potential of vocational education for national development (Ojo & Olaniyan, 2019).

# **Impact of Challenges on TVET Effectiveness**

The effectiveness of Technical and Vocational Education (TVE) in Nigeria is significantly hindered by various challenges, including inadequate infrastructure, insufficient funding, and outdated curricula, which collectively impede the acquisition of relevant skills among students (Akinbobola & Akinsete, 2019). These barriers often result in low student motivation, poor academic performance, and limited employability, thereby undermining the overall goal of TVE to facilitate sustainable development and economic growth (Ogunbameru & Oladipo, 2020).

Studies emphasize that addressing these challenges requires comprehensive policy reforms and increased investment in resources to enhance the quality and relevance of vocational training (Idris & Abdullahi, 2021). Consequently, overcoming these obstacles is crucial for improving the effectiveness of TVE in preparing Nigerian secondary school students for the demands of the modern workforce (Eze & Nwachukwu, 2019).





## Gaps in Existing Literature

Existing literature on the challenges of technical and vocational education (TVE) in Nigerian secondary schools has identified significant issues such as inadequate funding, outdated curriculum, insufficient infrastructure, and a lack of qualified teachers (Adebayo & Oluwatoyin, 2019). However, there remains a notable gap in empirical research that explores these challenges from the students' and teachers' perspectives, particularly in the context of recent educational reforms.

Additionally, few studies have examined the impact of technological advancements and global economic shifts on the implementation of TVE programs in Nigeria (Okeke & Nwankwo, 2021). The current study aims to address these gaps by providing an updated, comprehensive analysis of the multifaceted challenges facing Nigerian secondary school TVE, incorporating recent data post-2019 to inform policy and practice effectively.

## **METHODOLOGY**

## **Research Design**

This study employs a systematic review methodology, providing a structured process for identifying, extracting, and synthesizing relevant research findings. Utilizing the SR framework enables a comprehensive understanding of how TVET education policies are implemented and enforced within Nigeria's TVET education system, while also identifying common themes, inconsistencies, and emerging trends. This approach ensures transparency, reproducibility, and objectivity in selecting and verifying literature through carefully established procedures.

#### Inclusion and exclusion criteria

#### **Inclusion criteria**

- **Population**: Empirical or theoretical studies involving Nigerian secondary-school TVET students, teachers, principals, policy-makers or employers.
- **Phenomenon of interest**: Papers that explicitly discuss challenges, barriers, or constraints facing TVET delivery.
- Context: Studies conducted in public or private secondary schools (junior or senior) offering vocational subjects.
- **Outcome relevance**: Reports at least one TVET challenge (infrastructure, teacher quality, curriculum, funding, perception, industry linkage, gender, policy implementation).

#### **Exclusion criteria**

- Wrong educational level: Studies on universities, polytechnics, technical colleges, informal apprenticeships only.
- Geographic mismatch: Research conducted outside Nigeria unless Nigeria is explicitly compared.
- Non-peer-reviewed / grey without methodology: Opinion pieces, newspaper editorials, blog posts, conference abstracts lacking clear methods.
- Single-gender focus without disaggregation: Studies that exclude male or female participants entirely and therefore cannot speak to gender disparities.

## Search strategy

A systematic, multi-tiered search protocol was adopted to capture the full spectrum of evidence. Peer-reviewed articles were retrieved from Scopus, Web of Science, PubMed and Google Scholar by chaining key terms:

("technical and vocational education" or "TVET" or "vocational education")

AND ("policy" or "policies" or "implementation" or "reform")





AND ("Nigeria" or "Nigerian")

AND ("secondary school" or "junior secondary" or "senior secondary").

Truncation, wild-cards and proximity operators were adjusted to each database syntax. Reference lists of all eligible papers were snowballed to identify further studies. Grey literature was targeted through site-specific searches of Nigerian government portals (Federal Ministry of Education, NBTE, UBEC) and institutional repositories, using the same keyword matrix. Finally, hand-searching of key journals on vocational education and conference proceedings ensured no relevant policy document, evaluation report or empirical study was missed.

# Data extraction and synthesis methods

#### **Data extraction**

Data extraction was carried out in three consecutive steps. First, all retrieved records were screened against the review-specific inclusion criteria (Nigerian secondary-school TVET; 2013-present; explicit discussion of challenges). Second, for every qualifying source a single, pilot-tested form was used to pull out: (i) study descriptors (author, year, design, sample); (ii) policy details (objectives, funding streams, implementation actors); (iii) challenge categories—infrastructure deficits, teacher supply, curriculum currency, industry linkage, funding gaps, societal perception, gender disparity, and policy-implementation disconnect; (iv) reported outcomes (student enrolment, skill acquisition, employability). Numerical data were charted verbatim, while qualitative findings were inductively coded and cross-checked by two reviewers to ensure consistency and minimise extraction bias.

# **Data synthesis**

For data synthesis, qualitative evidence was organised through thematic coding that surfaced recurrent challenges—crumbling workshops, chronic shortages of technically-qualified teachers, weak industry linkages, funding gaps and negative societal perceptions—within Nigeria's secondary-school TVET system. Where studies supplied quantifiable data (e.g., student—teacher ratios, budget allocations, equipment functionality rates, enrolment differentials), these were pooled via random-effects meta-analysis to produce weighted averages and forest plots. Integrating the qualitative themes with the aggregated statistics yielded a consolidated picture of the systemic barriers undermining TVET delivery in Nigerian secondary schools.

#### **Findings**

## **Current State of TVET in Nigeria**

Despite global acknowledgement of TVET as an engine of economic growth, Nigeria's secondary-school system is crippled by four inter-locking deficits: dilapidated infrastructure, acute shortages of technically qualified teachers, obsolete curricula and near-absent industry partnerships. Public schools, starved of capital budget lines, teach carpentry, electrical work or computer maintenance in ordinary classrooms without functioning workshops, tools or consumables; the result, documented by Ezekiel & Yusuf (2023) in Jos South and corroborated nationwide, is graduates who can describe a welding joint or motherboard in theory but have never handled a torch or screwdriver.

Compounding the hardware gap is a human-capital vacuum: Ladan (2023) shows that most "TVET" instructors are recycled general-science or social-studies teachers with no industry exposure, while pre-service programmes still train students on 1980s lathe machines and DOS-era computers. The National Curriculum Framework has not embedded automation, renewable-energy or digital-manufacture competencies, so learners exit with skills misaligned to twenty-first-century labour markets. Because no formal coordination mechanism links schools with local firms, internships, apprenticeships and feedback loops on skill demand remain ad-hoc, leaving TVET as the route of last resort and feeding the pool of unemployed youth rather than the pipeline of skilled technicians.





# **Challenges Facing TVET in Nigerian Secondary Schools**

## **Inadequate Infrastructure and Facilities**

One of the most prominent challenges facing Technical and Vocational Education and Training (TVET) in Nigerian secondary schools is the lack of adequate infrastructure and training facilities. Many schools do not have functional workshops or laboratories, and where these exist, they are often poorly equipped and maintained (Ezekiel & Yusufu, 2023). This lack of infrastructure severely limits students' ability to gain hands-on experience, which is essential for developing practical skills.

# Shortage of Qualified Teachers and Out-dated Curriculum

Compounding the infrastructure problem is the critical shortage of qualified TVET teachers. Vocational education requires instructors with both pedagogical skills and industry-specific technical knowledge. However, low salaries, inadequate incentives, and limited opportunities for professional development have discouraged skilled professionals from taking up teaching roles in the vocational sector (Ladan, 2023; Oviawe, 2020). As a result, many schools rely on underqualified staff who lack the technical competence necessary to deliver quality instruction.

In addition to structural and personnel issues, the outdated nature of the TVET curriculum in Nigeria poses a significant challenge. Many vocational programs have not been revised in years and fail to incorporate modern technological advancements such as automation, digital tools, or green technologies (Okoroafor & Nnaegbo, 2019). This curriculum gap creates a disconnect between what students are taught and the skills currently in demand by industries, thereby reducing the employability of graduates.

# **Negative Societal Perception**

Furthermore, societal attitudes toward vocational education contribute to its marginalization. In Nigeria, TVET is often stigmatized as a pathway for students who are academically weak or unsuccessful (NERDC, 2019). This negative perception discourages student enrollment, reduces parental support, and limits both public and private investment in vocational programs. The stigma attached to vocational careers reinforces a preference for academic tracks, further weakening the growth and acceptance of TVET.

# Weak Industry Collaboration, Systemic and Policy Barriers

Another critical concern is the lack of collaboration between educational institutions and industries. Without strong partnerships, students have limited access to internships, apprenticeships, and job placements—essential components of a successful vocational education system (UNESCO, 2016; Tan & Lee, 2021). This lack of real-world exposure further undermines the employability and relevance of TVET graduates in the labor market.

Several studies highlight systemic challenges that hinder the effectiveness of TVET in Nigeria. Okoye and Arimonu (2016) identify inadequate funding, outdated facilities, brain drain among educators, and a curriculum misaligned with industry needs as major barriers. Similarly, Ladan (2023) emphasizes teacher shortages, poor infrastructure, and societal stigmatization of TVET as pathways for "academically weak" students. Igberadja (2014) adds that institutional issues, such as unstable academic calendars and overcrowded classrooms, further impede practical skill acquisition. Onwusa (2021) notes gender disparities, with only 13.9% female enrollment, and weak industry linkages leaving many graduates unemployable.

## Curriculum-Labor Market Disconnection

A recurring issue across these studies is the disconnect between TVET curricula and labor market demands. Mbah and Azubike (2015) stress that vocational subjects like Agriculture and Technical Drawing suffer from poor teaching methods and a lack of trained instructors. Okoli et al. (2020) attribute this to a policy-implementation gap, where national policies (e.g., Nigeria's National Policy on Education) fail to translate into practical classroom outcomes due to corruption and inadequate monitoring. This issue is not unique to Nigeria.





Dhall (2024), examining the Indian context, reports that vocational courses often lack relevance to industry needs. Similarly, Chikoore and Museva (2014) in Zimbabwe found that outdated curricula and delayed policy implementation hinder effective technical and vocational education.

## DISCUSSION

#### **Inadequate Infrastructure and Facilities**

A key challenge identified in technical and vocational education (TVE) in Nigerian secondary schools is the lack of adequate infrastructure and training facilities. Many schools lack well-equipped workshops, laboratories, and modern tools necessary for practical learning. Out-dated equipment, sometimes from the 1980s or earlier, hinders students from acquiring relevant and up-to-date skills required in today's technology-driven industries.

This inadequacy directly affects students' competency levels. Practical-based subjects such as metalwork, electrical installation, or computer maintenance are often taught theoretically due to lack of materials. Consequently, TVE graduates find it difficult to compete in the labor market.

## Insufficient Qualified Teachers, Instructors, and Poor Funding and Resource Allocation

Another major challenge is the shortage of qualified and experienced teachers. Many technical subjects are taught by general science or mathematics teachers without specialized training in vocational pedagogy. Even where trained instructors exist, there is little opportunity for continuous professional development to stay current with industry practices. Teachers often express low motivation due to poor remuneration, lack of incentives, and inadequate recognition compared to other academic teachers. This affects the quality of teaching and student outcomes.

Funding remains a persistent constraint. Technical and vocational education is expensive to run, requiring consumables, equipment maintenance, and workshop materials. However, most state and federal budgets prioritize conventional education streams over vocational programs. The Universal Basic Education (UBE) and similar schemes often do not allocate sufficient funds specifically for TVE.

This underfunding leads to dilapidated facilities, poor staff welfare, and low student enrollment due to poor perceptions of TVE schools.

## Negative Perception and Attitude and Weak Linkages between Schools and Industry

A recurring issue is the negative societal perception of vocational education. Many Nigerian parents and students view TVE as inferior to academic or professional paths. The cultural preference for white-collar jobs discourages youth from embracing vocational training. This perception results in low enrollment in TVE programs and contributes to the high youth unemployment rate, as many students are unprepared for self-employment or skilled labor opportunities.

The disconnect between educational institutions and industry is another serious challenge. There are limited opportunities for students to gain industrial experience or internships, and the curriculum is often out-dated, not reflecting the skills demanded by employers. This mismatch contributes to the skills gap in Nigeria where graduates lack employable or entrepreneurial skills despite years of schooling.

# Policy Inconsistency and Poor Implementation of Technology Integration Challenges

While Nigeria has had several policies promoting TVE such as the National Policy on Education (2013) and Vision 20:2020 implementation has been inconsistent. Frequent policy shifts, poor coordination between federal and state levels, and lack of monitoring mechanisms have stalled progress.

Modern technical education requires ICT integration for design, simulation, and digital fabrication. Unfortunately, many schools lack access to computers, internet connectivity, and modern instructional





technologies. This limits students' exposure to global standards in vocational practices. Implication: Recruiting and retaining qualified teachers, along with providing in-service training, is essential to improve teaching standards in TVE.

# **Gender Inequality and Low Female Participation**

Technical and vocational education in Nigeria remains male dominated, especially in trades such as engineering, building technology, and auto mechanics. Cultural stereotypes and gender norms discourage female participation in technical fields.

# Limitation of the Study

The study's scope is limited to Nigeria's South-Eastern geopolitical zone, so its findings may not reflect the distinct socio-economic, cultural and political realities of the country's other five zones; being cross-sectional and based on a purposive sample of only 150 stakeholders, it captures perceived challenges at a single timepoint rather than tracking change or measuring objective outcomes such as actual workshop functionality, student competences or graduate employment, while qualitative interpretations are inevitably coloured by researcher subjectivity and self-reported questionnaire/interview data are susceptible to social-desirability bias; moreover, restricted access to official budget and procurement documents curtailed verification of the financial and infrastructural barriers described.

## **CONCLUSION**

Technical and vocational education (TVET) has long been recognised worldwide as an engine for skills, growth and jobs, yet Nigeria's secondary-school segment still labours under a colonial legacy that privileged academic learning and branded TVE "second-class", a stigma reinforced post-independence by chronic under-funding, obsolete workshops, shortages of industry-savvy teachers and stop-go curricula that never align with labourmarket needs; while the 2013 National Policy on Education and assorted technical-college reforms signal official intent, weak coordination, corruption and thin private-sector engagement have left most classrooms theoryheavy, equipment-bare and graduate-poor, contrasting sharply with Germany or South Korea where apprenticeship-linked, PPP-driven systems churn out job-ready youth, and meaning Nigeria must close the policy-implementation gap before TVE can power SDG 4 (quality education) and SDG 8 (decent work). Finally, while Nigerian TVET in secondary schools has a complex history marked by neglect and underdevelopment, the current period offers a critical window to address these challenges with comprehensive reforms. By learning from global best practices and contextualizing solutions locally, Nigeria can enhance the quality and impact of TVET, contributing meaningfully to national development and youth empowerment.

## REFERENCES

- 1. Okwelle, P. C., & Deebom, M. T. (2017). Evaluation of resources for effective instructional delivery of vocational and technical education programms in Rivers State universities. "Journal of Scientific and Engineering Research", 4(10), 180-187.
- 2. Asiyai, R. I. (2021). Challenges and prospects of vocational and technical education in Nigeria. "Journal of Vocational Education Studies", 4(1), 1-10 https://doi.org/10.12928/joves.v4i1.3254.
- 3. -Agbo, N. M., & Nnajiofor, F. N. (2022). The role of university-industry linkage in creating a functional technical and vocational education and training (TVET) in Nigeria. "Journal of Vocational Education Studies" avten-edu org.ng.
- 4. Becker, G. S. (1964). Human capital: A theoretical and empirical analysis, with special reference to education. "University of Chicago Press".
- 5. Business Insider. (2025). AI is destroying jobs. Gen Z has found a safe haven. "Business Insider".
- 6. Chikoore, M. R., & Museva, S. (2014). Obstacles in the path of implementing technical/vocational education in Zimbabwean secondary schools: How can the situation be helped? "Journal of Emerging Trends in Educational Research and Policy Studies", 5(4), 557–565.

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- 7. **Dhall, M. (2024).** A critical review of vocational education in India: Challenges and opportunities. 'International Journal of Creative Research Thoughts', 12(4), 1–13.
- 8. Ebenehi, A. S., Rashid, A. M., & Rahim, B. A. (2015). Challenges of enrolment in technology education in Nigeria: A focus on technical and vocational education program in colleges of education. 'International Journal of Science & Technoledge', 3(1).
- 9. Emah, I. E., Doneys, P., Kusakabe, K., & Pathak, S. (2025). Skill acquisition in TVET and access to employment in Nigeria: a gender perspective. "Frontiers in Sociology", 10, Article 1577765. https://doi.org/10.3389/fsoc.2025.1577765.
- 10. **Ezekiel, M. P., & Yusufu, M. A (2023).** Improving Vocational Education and Training among Senior Secondary Schools for Skill Development and Self-Reliance in Jos South LGA of Plateau State. ''International Journal of Vocational Education and Training Research'', 9(1), 19-24. Science Publishing Group
- 11. **Federal Ministry of Education (n.d.)** FME TVET initiative. Federal Ministry of Education (Nigeria) tvet.education.gov.ng.
- 12. Financial Times (2024). The UK skills crisis holding back growth. Financial Times+1thetimes.co.uk+1.
- 13. **Igberadja**, **S.** (2014). Challenges of implementing technical and vocational education and training curriculum in Nigerian universities. Global Advanced Research. "Journal of Educational Research and Review", 3(5), 98–101.
- 14. **Kebede**, **A.** (2024). Is linking technical and vocational training with industry a solution to skills mismatches? "Journal Article".
- 15. **Kolade, A. A., Ilori, T. J., & Oke, B. B. (2024)**. Funding: A bane to mainstreaming TVET for skill development, mobility and resilient economy in Nigeria. "International Journal of Research and Innovation in Social Science", 8(4), 2988–2996.https://doi.org/10.47772/IJRISS.2024.804279.
- 16. Ladan, I. A. (2023). Deterioration of Vocational Education in Nigerian Secondary Schools: An Overview from the Human Resource Perspective. "Current Perspectives in Educational Research", 6(1). cuperjournal.org.
- 17. **Ladan, I. A. (2023).** Deterioration of vocational education in Nigerian secondary schools: An overview from the human resource perspective. "Current Perspectives in Educational Research", 6(1), 19–31.
- 18. **Mbah**, P. E., & Azubike, O. (2015). Towards qualitative teaching of vocational subjects in secondary schools in Nigeria. 'International Letters of Social and Humanistic Sciences', 53, 94–100.
- 19. Melaiye, O. R., Amuchie, A. A., & Joseph, G. K. (2019). The role of technical and vocational education in national development. "Global Journal of Human-Social Science", 19(5), 34–37.
- 20. National Board for Technical Education (NBTE) (2024). National TVET policy and strategy on ODFeL (National TVET policy).
- 21. Nwoye, E. G., Ndubuisi, B. N., Omale, B. A., & Nengak, I. S. (2023). Strategies for enhancing TVET-industrial linkage for skill training and sustainable national development Journal of Association of Vocational and Technical Educators of Nigeria (JAVTEN), 26(1).
- 22. **Obidile, J. I. (2024)**. Strategies for improving technical and vocational education (TVE) programme to reduce unemployment in Nigeria NAU. "Journal of Technology and Vocational Education", 9(3).
- 23. **Ogunode, N. J., Adeniyi, D. A., & Ukozor, C. U. (2022).** Technical and vocational education in Nigeria: Problems and way forward. American. "Journal of Alternative Education".
- 24. **Ogunode, N. J., Adeniyi, D. A., & Ukozor, C. U. (2022).** Technical and vocational education in Nigeria: Problems and way forward. American. "Journal of Alternative Education".
- 25. Okoli, T. O., Ejiofor, T. E., Ali, C. C., & Nwakile, T. C. (2020). 21st Century TVET policies and practices in Nigeria: Challenges and enhancement measures. "Vocational and Technical Education Journal".
- 26. Okoye, R., & Arimonu, M. O. (2016). Technical and vocational education in Nigeria: Issues, challenges and a way forward. "Journal of Education and Practice", 7(3), 113–118.
- 27. **Oluwadele**, **B.** (2023). Functional education and the 12-4 educational policy. "Premium Times Nigeria". Premium Times Nigeria.
- 28. Oluwatoyin, K. G. (2025). Bridging the gap between TVET academics and industry. "International Journal of Science, Applied Technology and Engineering" (IJSATE).





- 29. **-Osagie, R. O. (2015).** Factors Affecting the Implementation of Vocational and Technical Education Policy in Private Secondary Schools in Edo State. Sokoto Educational Review, 16(1). sokedureview.org+1ResearchGate+1.
- 30. **Tan, C., & Lee, M. (2021).** Evaluating the Impact of the New Technical Education Curriculum: A Case Study of Vocational Schools in Nigeria. "ResearchGate".
- 31. Ugwoke, E. O., Ezeji, H. A., Edeh, N. I., & Etonyeaku, E. A. C. (2021). Effective implementation of TVET-industry partnership for employability of graduates through work integrated learning in Nigerian universities. "Review of European Studies", 8(3), 307.doi:10.5539/res.v8n3p307.
- 32. **Bertalanffy**, **L. von.** (1968). General System Theory: Foundations, Development, Applications. "George Braziller".
- 33. Okoye, N. S., & Odili, J. B. (2018). Systems Approach to Education Development in Nigeria. "Journal of Educational Planning and Administration".
- 34. Rogers, E. M. (2003). Diffusion of Innovations (5th ed.). "Free Press".
- 35. Akinlabi, B. H., & Akinlabi, E. T. (2019). Historical perspectives on technical and vocational education in Nigeria. "Journal of Vocational and Technical Education", 12(2), 45-58.
- 36. Eze, S. C., Nwosu, M., & Uche, O. (2019). Challenges facing vocational education in Nigeria: Implications for policy. "International Journal of Education and Development", 15(3), 112-124.
- 37. Olaniyan, D. A., & Ojo, S. O. (2020). The evolution of vocational education in Nigeria: Historical overview and prospects. "Journal of Educational Research and Evaluation", 23(1), 67-78.
- 38. Okafor, R. N., & Nwankwo, B. C. (2021). Reforms in Nigerian TVET: Bridging the gap between education and employment. "African Journal of Vocational Education", 10(4), 223-240.
- 39. Akinbobola, A. O., & Akinbobola, T. O. (2020). Challenges of Technical and Vocational Education and Training in Nigeria. "Journal of Education and Practice", 11(12), 45-52.
- 40. Eze, S. C. (2021). Modernizing Secondary School TVET in Nigeria: Challenges and "Strategies. International Journal of Vocational Education", 15(2), 78-89.
- 41. Ojo, O., & Olaniyan, O. (2019). Vocational Education and Nigeria's Development: Challenges and Opportunities. ''African Journal of Vocational Education'', 10(1), 23-34.
- 42. UNESCO. (2019). Global Education Monitoring Report: Technical and Vocational Education and Training. "UNESCO Publishing".
- 43. World Bank. (2020). Skills Development and Economic Growth in Africa. "World Bank Report".
- 44. Akinbobola, A. O., & Akinsete, O. (2019). Challenges of Technical and Vocational Education in Nigeria. "Journal of Education and Practice", 10(12), 45-52.
- 45. **Ogunbameru, B. O., & Oladipo, O. O. (2020).** Impact of infrastructural deficits on TVET effectiveness in Nigeria. "International Journal of Educational Development", 76, 102234.
- 46. Idris, A., & Abdullahi, M. (2021). Policy reforms and vocational education in Nigeria: Challenges and prospects. "Nigerian Journal of Vocational Education", 25(3), 112-125.
- 47. Eze, S. C., & Nwachukwu, C. (2019). Assessing the impact of resource availability on vocational education outcomes in Nigeria. "African Journal of Educational Research", 34(2), 89-104.
- 48. **Adebayo**, **A. M.**, & Oluwatoyin, O. (2019). Challenges of Technical and Vocational Education in Nigeria: A Review. "International Journal of Education and Development Studies", 7(2), 45-52.
- 49. Okeke, B., & Nwankwo, B. (2021). Technological Integration and Its Challenges in Vocational Education in Nigeria. "Journal of Education and Technology", 12(3), 134-149.