

Technical and Vocational Education and Training in Sokoto State, Nigeria: Challenges and Prospects

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Abstract

This paper critically examines the state of Technical and Vocational Education and Training (TVET) in Sokoto State, Nigeria, highlighting its significance, challenges, and future prospects. TVET serves a critical tool for reducing unemployment and fostering economic growth in the region. However, issues such as inadequate funding, obsolete facilities, outdated curricula, poor societal perception, and the shortage of qualified personnel have severely limited its impact. The paper explores how these factors hinder the development of a workforce equipped with practical and market-relevant skills. It also discusses the cultural and structural barriers to TVET adoption in the state. Based on a comprehensive review, the study proposes actionable recommendations for revitalizing the sector through increased investment, curriculum reform, international collaboration, and stronger industry-institution linkages. The ultimate goal is to reposition TVET as a viable and respected pathway for employment, economic development, and social transformation in Sokoto State.

Keywords: Technical, vocational, education, training, challenges, prospects

Introduction

In Nigeria, Technical and Vocational Education and Training (TVET) is essential for developing skilled manpower required for national economic growth and development. In Sokoto State, a region in the northwest of Nigeria, TVET is seen as pivotal in addressing issues related to unemployment, underemployment, and poverty. However, there are concerns about the quality, accessibility, and relevance of TVET programs in both the state and federal tertiary institutions. Despite these challenges, there is growing recognition of TVET role in preparing students for the workforce, especially in fields like agriculture, engineering, information technology, and health care. According to Sylvester (2021), TVET is the systematic and organized transmission of knowledge, skills, and values aimed at developing a workforce capable of enhancing productivity and maintaining competitiveness in the global economy.

In essence, TVET prepares human resources to adapt to the constantly evolving world of work. This educational system has been widely adopted and recognized as a critical solution to meeting both current and future labor market demands. Technical and Vocational Education refers to a broad aspect of the educational process alongside general education, includes the study of technology and related sciences, as well as the development of practical skills, attitudes, and knowledge needed for employment in various

economic and social sectors (FRN, 2014). According to Reko & Maxwell (2016), vocational education is primarily aimed at preparing individuals for employment in recognized occupations and also describes technical education as a post-secondary vocational training program focused mainly on producing technicians.

Although the terms *technical education* and *vocational education* are often used interchangeably, they represent distinct concepts. It is important to clarify the difference for the purpose of this paper. Vocational education focuses on skill based programs designed to develop practical skills at the lower levels of education. These programs prepare individuals for specific occupations and direct entry into the workforce. Technical education, on the other hand, is broader in scope and not tied to a specific vocation. It provides general technical knowledge and prepares individuals for higher-level occupational roles, typically below the level of a first university degree. In practice, technical and vocational education often combine elements of both integrating foundational technical and scientific knowledge with hands-on vocational training.

United Nations Educational, Scientific and Cultural Organization (UNESCO) and the International Labour Organization [ILO], (2002) defines TVET as an all-encompassing term that includes general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding, and knowledge related to various occupations across different sectors of economic and social life.

In Sokoto State, Northwest Nigeria, TVET has long been underutilized, despite its potential to support the region's dominant sectors such as agriculture, livestock production, and traditional crafts. This has caused high number of youths idly roaming the streets of Sokoto due to widespread unemployment challenges facing the state (Zayyanu & Yafisu, 2025). While various technical schools and informal apprenticeship systems exist, many youths still lack the practical skills needed to thrive in these areas. This gap in skills training contributes significantly to the persistent issue of unemployment, as many young people graduate without the vocational competencies required for self-employment or integration into the local economy. Strengthening and expanding access to TVET could play a crucial role in equipping the population especially the youth with the tools needed to add value to local industries and improve livelihoods.

In Sokoto State, there is a prevalent misconception about TVET, similar to many other regions across the country. This misconception often stems from the belief that TVET cannot provide a sustainable livelihood and that those who pursue vocational skills are perceived as school dropouts or less educated. This mindset, common among youth and women in particular, has resulted in a lack of serious engagement with opportunities for vocational training. It is essential to address and challenge this misconception in Sokoto State, where a shift in mindset could significantly enhance local engagement with TVET programs. This can be achieved through comprehensive education and awareness campaigns that highlight the value and potential of TVET for career development.

Recent Statistics from the National Bureau of Statistics (2023) indicate that the unemployment rate among youth aged 15-34 in Sokoto State stands above 38%, one of the highest in the northern Nigeria. Despite the availability of technical colleges and skill acquisition centers, the output from these institutions has been insufficient in terms of both quantity and quality. Many graduates lack industry-relevant skills or entrepreneurial competencies to create employment for themselves and others (Adebayo & Salihu, 2022).

TVET, at its core, equips learners with practical skills that directly prepare them for specific trades and professions, emphasizing manual and hands-on activities. According to (Wodi, 2012), the goal of TVET is to develop semi-skilled and technically proficient workers who can contribute meaningfully to the economic development of the nation. TVET not only supports the technical workforce needed to revitalize industries, but it also plays a key role in reducing unemployment by providing individuals with the skills necessary to thrive in various sectors.

Challenges of Technical and Vocational Education And Training

Technical and Vocational Education and Training (TVET) is confronted with a range of challenges that hinder its effectiveness and relevance. Key among these challenges are inadequate funding, poor facilities, outdated curriculum and Nigeria cultural and moral framework. Additionally, TVET faces difficulties in keeping pace with rapid technological advancements, training and retaining qualified staff, and aligning its programs with the needs of industries and communities both of which are crucial stakeholders in the system. Moreover, there is a pressing need to reorient TVET to serve broader social purposes, including youth empowerment and social inclusion. These challenges are discuss as follow:

Inadequate Funding

In Nigeria, Universities, Technical Colleges, and Polytechnics are owned and operated by the federal and state governments, as well as private individuals. However, over the years, government funding for these institutions has been largely inadequate. Although both federal and state governments allocate funds to education, states have consistently maintained a slightly higher average, allocating just over 11% of their annual budgets to the sector, compared to the federal government's average allocation of 8.7% (Nkoro, Ibrahim, & Ogrima, 2013). In Sokoto State, the situation is no different, particularly regarding the funding of TVET programs. The poor financial support reflects a broader neglect of vocational education by the government, contributing to the gradual decline in the relevance and visibility of TVET programs in educational institutions across the state. As noted by Allen (2020), this trend is also contributing to the gradual extinction of vocational and technical education in the country as a whole. Furthermore, due to insufficient funding, many tertiary institutions struggle to sponsor TVET lecturers to attend relevant seminars, workshops, conferences, and professional training programs. Inadequate funding also hampers the procurement of modern training equipment and the maintenance or replacement of outdated or malfunctioning tools, further diminishing the quality of vocational education offered.

Poor Facilities

In Sokoto State, the challenges facing TVET reflect the broader national issues confronting technical education across Nigeria. Many technical education departments within the state's tertiary institutions, including colleges of education, polytechnics, and universities, suffer from a critical lack of functional laboratories, modern equipment, and adequate training facilities. This shortage often forces TVET instructors to take students to external locations outside their institutions to access practical tools or facilities, or to organize excursions in an attempt to bridge the gap between theory and practice.

Where facilities do exist in Sokoto State technical colleges and polytechnics, they are often outdated, insufficient, and no longer fit for modern technical training. Many laboratories still rely on the original equipment provided at the time of the institutions' establishment, with little or no upgrades over the years. As a result, the current infrastructure available for TVET in Sokoto State is both inadequate and obsolete, making it difficult to deliver effective, hands-on technical education. This situation aligns with findings by

Oryem-Origa (2005), who reported that only 40% of higher institutions in Nigeria have functional laboratory or workshop spaces, while 60% operate without such essential facilities a condition that leads to poor quality in technical education programs. Okebukola & Okolocha (2012) also emphasized challenges such as insufficient teacher qualifications, limited resources, poor lesson preparation, and uninspiring learning environments all of which are evident in Sokoto State's TVET institutions.

The lack of modern, well-equipped facilities in Sokoto State not only limits students' ability to gain practical skills but also undermines the entire purpose of vocational training. Without urgent investment and policy attention, TVET in the state will continue to struggle to produce competent graduates who can meet the demands of the modern labor market.

Outdated Curriculum

In technical education, especially in subjects with practical content, curriculum design typically allocates about 67% of instructional time to theory and only 33% to hands-on workshop activities (Reko & Maxwell, 2016). This disproportionate balance has critical implications for states like Sokoto, where industrialization is still at a nascent stage and the demand for practical, industry-ready skills is rising.

Olunloyo (2002) observed that one of the significant challenges in designing effective technical education curricula is preparing students for the paradigm shift from traditional industrial models (such as the Fordist system) to the modern Information and Communication Technology (ICT) driven era. This issue is particularly pressing in Sokoto State TVET Institutions, where the technical workforce needs to be equipped with current ICT competencies to meet evolving technological demands.

The slow pace of industrial and technological development in Nigeria, and Sokoto State by extension, is often linked to a persistent gap between science and its practical technological application. This gap is largely due to technical education's limited capacity to convert scientific knowledge into usable technology. Addressing this disconnect requires a complete overhaul of the existing technical education curricula not merely for academic reform, but to make young people in Sokoto self-reliant, employable, and practically skilled.

However, revamping the curriculum alone will not guarantee the immediate production of industry-ready graduates or lead to rapid economic transformation. Several critical constraints must be addressed to achieve meaningful reform. Ojimba (2012) outlined key challenges affecting Nigeria's technical education system, many of which resonate with the realities in Sokoto State institutions:

1. **Foreign-Based Curriculum Models:** The current technical education curricula are modeled on foreign systems developed under ideal conditions adequate staffing, facilities, infrastructure, and funding that are not easily replicable in Sokoto State educational landscape.
2. **Lack of Locally Relevant Textbooks:** Educational materials are scarce, and those available often reflect foreign realities, with little connection to local industries, technologies, or the everyday experiences of Sokoto State learners.
3. **Shortage of Skilled Teaching Staff:** There is a notable deficit of competent, indigenous instructors who possess both theoretical knowledge and practical experience in technology based fields.

4. **Overemphasis on Pure Sciences:** The curriculum is often overly academic, with heavy content in pure science and mathematics. This leaves less room for basic engineering, applied technology, and hands-on skills, which are critical for local industry relevance.
5. **Neglect of Entrepreneurial and Soft Skills:** Critical areas such as entrepreneurship, business management, and communication are underrepresented in the curriculum. This undermines students' ability to innovate or start small-scale ventures, particularly relevant in a less developed society like Sokoto.
6. **Conventional Teaching Methods:** The prevalent teaching approach relies heavily on rote learning, where lecturers read out information while students passively take notes. This traditional method fails to stimulate critical thinking or practical engagement skills essential for today's technical workplaces.

Training and Retaining Qualified Staff

In Sokoto State, as with many other regions in Nigeria, the training and development of academic staff is an ongoing process aimed at improving the quality of education. This training can take place either locally or abroad, with each option offering its own set of advantages and challenges.

Local training is typically more cost-effective but often comes with significant limitations, such as inadequate facilities, limited access to up-to-date literature, and distractions due to competing demands. These constraints can make local training more challenging and less conducive to achieving the desired outcomes. However, it is still an essential strategy, especially considering the financial limitations of many state governments, including Sokoto State, which may struggle to fund overseas programs.

On the other hand, overseas training offers a more conducive environment for success, providing access to world-class facilities, advanced literature, and a structured academic environment that enables staff to achieve their training goals in a shorter time. Yet, this option comes with a heavy financial burden, particularly for Sokoto State, which would need to allocate substantial foreign exchange resources to sponsor such training.

A significant challenge in both local and overseas training programs is retaining trained personnel. Many individuals, after gaining advanced skills abroad, are often attracted to better-paying opportunities in other countries. This issue is particularly pressing in Nigeria, where the salary and benefits offered to academic staff, especially those in technical education, are among the lowest in the world. According to Ojimba (2012), this discrepancy in pay often leads to a "brain drain," with trained professionals seeking employment abroad for higher wages and better working conditions.

For Sokoto State to enhance its educational outcomes, it must invest not only in training programs but also in creating a more attractive and sustainable environment for educators to remain in the state after their training.

Nigeria Cultural and Moral Framework

In Sokoto State, as in many parts of Nigeria, there is an overwhelming emphasis on university qualifications, often without adequate consideration of whether the degree holder possesses the practical skills and

knowledge required for real-world application. This cultural bias places university education on a pedestal, while technical and vocational education is often undervalued and overlooked.

In contrast, advanced societies place a high premium on technical skills and practical competencies. In those countries, individuals with technical qualifications are not only respected but are often the backbone of industrial and economic development. The value system in such societies is centered more on what a person can do their hands-on expertise and innovative capacity rather than the number of academic degrees they hold.

Unfortunately, in Sokoto State's public service structure, graduates of technical and vocational education often face discrimination and limited career advancement opportunities. This institutional bias discourages students and their families from considering technical education as a viable and rewarding career path. As noted by Nworlu-Elechi (2013), many parents and secondary school leavers prefer to pursue university degrees, not necessarily because of interest or aptitude, but because of the perceived social prestige and job security associated with such qualifications.

To bridge this gap in Sokoto State, there is a need for a deliberate shift in societal attitudes and government policy. This includes elevating the status of technical education, improving the career progression of its graduates, and integrating technical skills more meaningfully into the state's economic and development strategies. Only then can the state harness the full potential of its youth and reduce dependence on academic credentials that may not always translate into practical productivity.

The Prospects of Technical and Vocational Education in Sokoto State

It is undeniable that technical and vocational education plays a pivotal role in driving economic growth, not only for nations but for regions like Sokoto State as well. Just as a nation cannot succeed in warfare without a trained army, Sokoto State economic development cannot be realized without robust, well-equipped technical and vocational institutions. This is a critical gap in the state's development agenda, as pointed out by Reko & Maxwell (2016), and it is imperative that Sokoto, like other parts of Nigeria, invests heavily in these forms of education.

In Sokoto, much like across the country, there is a pressing need to focus more on technical and vocational education, recognizing its importance in the broader context of national and regional development. Vocational training can empower Sokoto State youth, reduce unemployment, and improve local productivity. As Ojimba (2013) suggests, there is a need for increased funding and societal awareness around technical education. With the right investment, Sokoto State vocational training institutions could transform, changing the perception of this sector and making it a respected, viable career path for many.

For Sokoto State to effectively compete in the global market, it must embrace the national call to reposition technical education, improving its infrastructure, curriculum, and overall quality. The United Nations Educational, Scientific and Cultural Organization (UNESCO) underscores that revitalizing technical education is one of the key strategies to boost youth employment and open economic opportunities. In this light, Sokoto State government, through the National Board for Technical Education (NBTE), can collaborate with local and regional stakeholders, including private sector employers, to develop and fund vocational training programs that directly align with the needs of the state's economy.

The involvement of the Nigeria Labour Congress (NLC) and its affiliated unions could further enhance the state's vocational education sector by setting up functional training centers within local government areas. These centers would provide essential skills that would allow Sokoto State population to enter various trades and industries, thereby improving local labor market outcomes. By upgrading the skills of workers, Sokoto could experience an increase in productivity and a rise in wages and benefits, as employees become more skilled and employable.

Finally, partnerships between the private sector, employers, and educational institutions will be crucial for developing a workforce with relevant, marketable skills. By combining resources, Sokoto can build a more resilient, competitive labor force that is ready to meet the challenges of a rapidly changing global economy. Only through such coordinated efforts can Sokoto unlock its full economic potential and provide long-term employment solutions for its youth.

Suggestions

To fully harness the potential of technical and vocational education in Sokoto State, strategic and well-targeted reforms are essential. The following recommendations are proposed to improve the quality, relevance, and sustainability of vocational and technical education in the state:

1. **Increased Funding and Resource Allocation:** Adequate financial investment must be made in Sokoto State technical and vocational education sector. Insufficient funding currently hampers the provision of vital facilities such as well-equipped laboratories, modern workshops, updated textbooks, and training materials. Improved infrastructure and resources are foundational to delivering quality vocational training.
2. **Training and Professional Development for Teachers:** The state must prioritize the recruitment and continuous professional development of skilled and competent vocational and technical teachers. Regular in-service training and mandatory industrial attachments should be introduced to keep educators in tune with evolving technologies and industry standards. A well-trained teaching workforce is key to producing job-ready graduates.
3. **International Collaboration and Exchange:** Sokoto State technical institutions should seek partnerships with reputable technical and vocational institutions abroad. Such collaborations will foster the exchange of ideas, support technology transfer, and provide access to international training models, joint research, and exchange programs that can enhance local expertise and innovation.
4. **Industry-Institution Linkages:** Strengthening collaboration between technical institutions and industries in Sokoto is crucial. These partnerships help align training programs with real-world needs, enhance internship opportunities for students, and ensure that vocational training outcomes directly respond to labour market demands.
5. **Curriculum Review and Labour Market Alignment:** The current vocational education curriculum should be reviewed regularly to reflect the dynamic needs of the local and national labour markets. This ensures that students are equipped with relevant skills and competencies that increase their employability and entrepreneurial capabilities.

Conclusion

Technical and Vocational Education and Training (TVET) holds immense promise for addressing the unemployment crisis and enhancing the socio-economic development of Sokoto State. However, persistent

challenges such as poor infrastructure, limited funding, outdated teaching methods, and societal bias continue to hinder its full realization. The current state of TVET does not adequately prepare students for the rapidly evolving demands of the modern labor market. Without deliberate policy reforms and investment, the potential of vocational training as a tool for youth empowerment and industrial advancement will remain untapped. To harness this potential, the Sokoto State government must prioritize TVET by modernizing facilities, training educators, fostering public-private partnerships, and aligning curricula with industry needs. With coordinated efforts and strategic commitment, TVET can be transformed into a powerful engine for economic diversification, job creation, and sustainable development in the region.

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