

## TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) FOR NATIONAL AND GLOBAL INTEGRATION:-LESSONS FROM THE PAST AND THE IMPLICATIONS FOR THE FUTURE IN NIGERIA

**OLONISAYE THOMAS ADESOLA**

aolonisaye@yahoo.com

Building Technology Education Department  
Federal College of Education (Technical) Akoka, Yaba

Lagos, Nigeria.

adesola.fcetc@gmail.com

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### **Abstract**

*Technical and Vocational Education and Training (TVET) plays a crucial role in preparing individuals with the skills and competencies needed to participate in the global economy and contribute to national development. TVET equips individual with the necessary skills and knowledge to meet the demands of the labor market. In Nigeria, however, the TVET system faces numerous challenges that hinder its effectiveness in producing a skilled workforce. This paper explores the significance of TVET in promoting national and global integration, drawing lessons from the past and examining the implications for the future. Also the paper begins by providing an overview of the historical context of TVET and its role in fostering national development and social progress. It highlights the evolution of TVET systems and their contribution to industrialization, economic growth, and social mobility in various countries. By examining successful models and experiences from the past, valuable insights are gained to inform future strategies for TVET. Furthermore, the paper explores successful models of school-industry collaboration from other countries and draws lessons that can be adapted to the Nigerian context. These models emphasize the need for active engagement and partnerships between TVET institutions, industries, and other stakeholders. The paper concludes that government should make TVET systems adapt and align with the demands of a globalized economy to ensure competitiveness and relevance in order to contribute adequately to national development.*

**Keywords:** Technical, Vocational, Training, national integration, global integration.

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### **Introduction**

The overview of the current state of Technical and Vocational Education and Training (TVET) in Nigeria, highlights of the existing gaps and limitations between the national and global market has called for a serious concern. Drawing from past experiences, the paper identifies key lessons that can guide the future development of TVET. These include the need for strong collaboration between educational institutions, industries, and other stakeholders, the importance of flexible and responsive curricula, the integration of emerging technologies into TVET programs, and the promotion of lifelong learning and upskilling (Hoftijzer, etal, 2020). Moreover, the paper explores the potential challenges and opportunities that lie ahead for TVET in the context of national and global integration.

It discusses the need for policy reforms, investment in infrastructure and resources, and the development of partnerships between TVET institutions and industries to address future skill requirements and promote innovation.

TVET plays a vital role in fostering national development and global integration (Hogarth, 2018). By drawing lessons from the past and considering future implications, policymakers, educational institutions, and stakeholders can develop effective strategies to enhance the quality, relevance, and global competitiveness of TVET systems. Embracing change, fostering collaboration, and adapting to evolving labor market needs are essential for ensuring that TVET remains a driving force for national and global integration. TVET also refers to conscious involvement to bring about knowledge which

would make people more industrious in designated areas of economic activity. This is the distinctive principle of TVET. However, TVET will also have other reasons which are not exclusive to TVET, and which also apply to other forms of education, for instance knowledge, skills, insights and mindsets are considered to be usually important for the learners, not only in chosen sections of economic activity.

It is imperative that TVET be conducted according to general social norms so that people in general should be treated with respect and dignity by the institutions since these programmes are dispensed in public and private educational establishments, or other forms of formal or informal instruction aimed at granting all segments of the society access to life-long learning resource (Dokubo 2016). Therefore, it is important to facilitate learning by establishing an atmosphere conducive to learning from the beginning of the training. This is done by developing a relationship that is based on the mutual respect with the trainees, accepting the trainees as peers and behaving towards them accordingly and setting realistic objectives for the training.

### **Historical Context of TVET**

The historical context of Technical and Vocational Education and Training (TVET) and its role in fostering national development and social progress cannot be over emphasized and the evolution of the TVET system and its substantial contributions throughout history is worthy of note (Dokubo 2015). According to the definition by UNESCO and the International Labor Organization (ILO), TVET refers to "aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupants in various sectors of economic and social life" (UNESCO & ILO, 2021). From the foregoing, TVET refers to a variety of learning skills which are applicable to the world of work. The learning practices may occur in a diversity of learning environments,

including educational institutions and occupational place. TVET today involves more than skills acquisition programmes. Its policies and strategies stress the need for stronger links with the labour market and for strategies to help graduates to adjust continuously to the fast changes in the market. With the return of apprenticeship programmes (in a modern form), learning/workplace partnerships, high skills training, broader specializations, a greater role for information and communications technology (ICT) in TVET, more transferable skills, the learning workplace, recognition of prior learning and skills acquired informally, and many other initiatives (Hoftijzer, et al. 2020).

To grasp the significance of TVET, we must first understand its historical context. Technical and vocational education has roots dating back to ancient civilizations, where specialized skills and knowledge were imparted to individuals to meet the demands of their respective societies. However, it was not until the Industrial Revolution in the 18th century that formalized vocational training systems began to emerge (Akaninwor, 2012). During this period, the rapid growth of industries necessitated a skilled workforce capable of operating and maintaining complex machinery. As a result, vocational schools and apprenticeship programs were established to provide the necessary training and knowledge. These early initiatives laid the foundation for the development of TVET as we know it today.

### **TVET in Fostering National Development**

The role of TVET in fostering national development and social progress is highly impactful. TVET plays a crucial role in equipping individuals with practical skills, enabling them to make significant contributions to their countries' economic growth. By providing specialized training in fields such as engineering, construction, healthcare, and information technology, TVET empowers individuals to enter the workforce with relevant expertise (Anyomike, et al. 2015). According to Akaninwor, (2017) TVET promotes social progress by reducing unemployment rates and

addressing skills gaps within societies. By offering education and training opportunities to individuals who may not pursue traditional academic paths, TVET ensures inclusivity, creating pathways to economic independence and social mobility. It empowers individuals to become productive members of society, thereby fostering social equality and cohesion. The evolution of the TVET system has been marked by several notable milestones. Over time, TVET has expanded its scope and diversified its offerings to meet the changing needs of society. The integration of emerging technologies, such as automation, robotics, and artificial intelligence, has transformed the skills required in various industries. Consequently, TVET institutions have adapted their curricula to incorporate these new technologies, ensuring that learners are equipped with relevant and up-to-date skills.

### **Contributions of TVET**

A comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life. (UNESCO, 2012) Accordingly, the responsibility for activities related to TVET is shared among all bodies planning for, implementing, monitoring and evaluating programmes. TVET is administered differently in various countries, and several ministries and bodies can be involved, but with a common objective: all TVET programmes aim at increasing the employability of individuals, and work for the benefit of the community and sustainability in general. 'TVET must be the master key that can alleviate poverty, promote peace, conserve the environment, improve the quality of life for all and help achieve sustainable development' (UNESCO, 2014). The importance of TVET has gained recognition at the international level. Organizations like UNESCO and the International Labor Organization (ILO) have emphasized the pivotal role of TVET in

achieving sustainable development goals. This recognition has led to increased investment in TVET systems, enabling the expansion of infrastructure, the improvement of teaching methodologies, and the establishment of partnerships between educational institutions and industries (UNESCO & ILO, 2021). The contributions of TVET to national development and social progress are undeniable. It fuels economic growth by supplying industries with a skilled workforce, driving innovation and productivity. By promoting inclusivity and addressing skills mismatches, TVET contributes to reducing poverty and inequality, fostering social stability and harmony (Evans-Klock, & Poschen, 2018). Moreover, TVET produces competent professionals who can contribute to the development of their communities and nations. TVET is of paramount importance in developing, competitive economies and better societies. International and regional developmental organizations as well as country planners and decision-making bodies are nowadays focusing on TVET to boost economies and promote equity. Research shows the level of workforce skills is a major determining factor in growth rates: 'Recent research shows that the level of skills in a workforce predicts economic growth rates far better than average schooling levels' (World Bank, 2015).

### **Opportunities of TVET in Nigeria**

- 1 Alignment with Industry Needs: A crucial lesson is the importance of aligning TVET programs with the needs of industries. As technology and industries evolve, it is crucial to regularly assess the skills demanded by the job market and update the TVET curriculum accordingly (Hogarth, 2018). Collaboration between TVET institutions, industry stakeholders, and policymakers is essential to ensure that graduates possess the skills that meet industry requirements.
- 2 Quality Assurance: Quality assurance mechanisms play a vital role in the

development of TVET. It is essential to establish rigorous accreditation processes to ensure that TVET institutions maintain high standards of education and training. Regular monitoring and evaluation of TVET programs can help identify areas for improvement and address any gaps in quality.

- 3 Investment in Infrastructure and Resources: Adequate investment in infrastructure, equipment, and resources is crucial for the effective delivery of TVET programs. TVET institutions must have modern facilities and up-to-date equipment that reflect industry standards. Additionally, investment in qualified instructors and continuous professional development programs for educators is necessary to enhance the quality of teaching and learning.
- 4 Promotion of Entrepreneurship and Innovation: TVET should not only focus on producing job seekers but also on fostering entrepreneurship and innovation. By incorporating entrepreneurship education and providing support for start-ups, TVET can empower individuals to create their own employment opportunities and contribute to economic growth. Encouraging innovation and creativity within TVET programs can help students develop problem-solving skills and adapt to a rapidly changing job market.

### **Potential Challenges Confronting TVET in Nigeria.**

Some of the challenges faced by TVET in low- and lower-middle-income countries, and especially in rural areas, also need to be addressed to reduce the digital divide between countries, which has been widening before and since the start of the pandemic (Kuratko, 2013). Likewise, steps need to be taken to ensure the quality and relevance of the training that TVET teachers/trainers receive. Such training must focus on pedagogy as well as on the use of

digital tools and resources to 'transform' TVET by building learners' digital skills and competencies, as well as their capacities to create, innovate and collaborate through independent as well as guided learning (Anyomike, et al. 2015).

- Outdated Perceptions: One challenge is the prevailing negative perception of TVET as a second-tier option compared to traditional academic education. There is a need to change this perception and promote the value and importance of TVET in society.
- Insufficient Funding: Adequate funding is essential for the development and expansion of TVET programs. Limited financial resources can hinder the improvement of infrastructure, the acquisition of modern equipment, and the recruitment of qualified instructors.
- Industry Collaboration: Establishing strong partnerships and collaboration between TVET institutions and industries can be a challenge. Bridging the gap between academia and industry requires proactive efforts from both sectors to promote dialogue, share knowledge, and align training programs with industry needs.

### **Opportunities**

- Demographic Advantage: Nigeria's youthful population presents an opportunity for TVET to address youth unemployment and harness the potential of the country's human capital. By providing relevant skills and training, TVET can contribute to youth empowerment and economic development.
- Technological Advancements: Rapid technological advancements provide opportunities for TVET to embrace emerging technologies and incorporate them into the curriculum. This can ensure that graduates are equipped with the digital skills required in today's job market.
- International Cooperation: Collaboration with international organizations, development partners, and countries with

well-established TVET systems can provide valuable insights, knowledge sharing, and support for the development of TVET in Nigeria.

### **Future of TVET Education**

Strong industrial collaborations must be formed by the government if Technical and Vocational Education and Training (TVET) is to have a bright future. TVET is a type of education that focuses on giving students the skills and knowledge required to seek jobs in specific industries. As a result, in order to guarantee that graduates are suitably prepared for the job, TVET programs must be tightly correlated with industry needs. (UNESCO-UNEVOC, 2021).

Collaboration with industry is crucial for the creation of successful TVET programs. Through these collaborations, educational institutions and industry stakeholders can work together to keep the curriculum current and relevant to the demands of the sector. Through these collaborations, industry participants can make significant contributions to the curriculum's development, helping to ensure that it is suited to the particular requirements of the sector. This can involve contributing suggestions on how best to present the information as well as feedback on the curriculum's content.

Industry partnerships give stakeholders in the sector a forum to give students practical work experience. Internships, job shadowing, and other forms of experiential learning fall under this category. These chances give students the chance to learn more about the business world and the abilities needed to succeed there. This can ensure that graduates have the skills they need to succeed in the industry and are sufficiently prepared for it.

Finally, industry stakeholders may be able to support TVET programs financially through industrial collaborations. This might involve funding for research and development initiatives as well as giving students scholarships and grants. This financial assistance can aid in ensuring that TVET

programs are able to give students the best education and training available.

In conclusion, industry collaborations are crucial for the creation of successful TVET initiatives. Through these collaborations, educational institutions and industry stakeholders can work together to keep the curriculum current and relevant to the demands of the sector. They also provide a platform for industry stakeholders to provide students with hands-on experience in the workplace, as well as financial support for TVET programs. As a result, industry collaborations are crucial to determining the direction of TVET education.

### **Conclusion**

In conclusion, the historical context of TVET reveals its evolution from ancient civilizations to the modern era. Its role in fostering national development and social progress is evident through its contribution to economic growth, reducing unemployment, and promoting social equality. The ongoing evolution of the TVET system ensures that it remains relevant in an ever-changing world. Together, let us continue to recognize the significance of TVET and work towards its further enhancement, benefiting individuals, societies, and nations alike. According to Anyomike, et al. (2015) the future development of TVET in Nigeria should focus on aligning programs with industry needs, ensuring quality assurance, investing in infrastructure and resources, and fostering entrepreneurship and innovation. While challenges such as outdated perceptions and insufficient funding exist, opportunities arise from Nigeria's demographic advantage, technological advancements, and potential collaborations. Furthermore, the paper explores the importance of global integration in the modern era and its implications for TVET. It discusses the impact of globalization, technological advancements, and changing labor market dynamics on the skills and competencies required in the workforce. The paper emphasizes the need for TVET systems to adapt and align with the demands of a globalized economy to ensure competitiveness and relevance

## Suggestions

- 1 Federal Government, relevant agencies and other stakeholders should make TVET to remain more relevant by investing more on it.
- 2 Federal Government policy should focus on aligning programs with industry needs, ensuring quality assurance, investing in infrastructure and resources, and fostering entrepreneurship and innovation.
- 3 The Stakeholders should capitalize on demographic advantage, technological advancements, and potential collaborations.
- 4 Federal Government and relevant institutions should lay more emphases on the need for TVET systems to adapt and align with the demands of a globalized economy to ensure competitiveness and relevance.

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