

**VOCATIONAL AND TECHNICAL EDUCATIONAL AS A TOOLS FOR SUSTAINABLE  
DEVELOPMENT IN IMPROVING ADULT LEARNING**

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**Abstract**

*Education is widely recognized as a vital instrument for social, economic, and technological transformation, with vocational and technical education (VTE) serving as a critical driver of sustainable development. In Nigeria, persistent challenges such as unemployment, poverty, low productivity, and overdependence on foreign expertise underscore the need to reposition VTE. This study examines the concept, objectives, and historical development of VTE in Nigeria, emphasizing its role in human capital development, job creation, entrepreneurship, and national growth. The analysis highlights the barriers hindering VTE, including inadequate funding, negative societal perceptions, limited progression pathways, poor infrastructure, and low social prestige. Despite its neglect, evidence from developed nations demonstrates that strong VTE systems provide the skilled workforce required for industrialization and global competitiveness. The study concludes that Nigeria must revitalize and rebrand VTE through curriculum reforms, improved funding, industry collaboration, teacher development, and public reorientation. Strengthening this sector will enable the country to build a competent workforce, reduce unemployment, and achieve sustainable economic development.*

**Key words:** *Vocational Educational, Sustainable Education, Theory and Practice and Adult Learning*

**Introduction**

Education is universally recognized as the most powerful instrument for social, economic, and technological transformation. In contemporary societies, no nation can achieve sustainable development without equipping its citizens with relevant skills, competencies, and knowledge for meaningful participation in the world of work. In Nigeria, the persistent challenges of unemployment, poverty, low productivity, and overdependence on foreign expertise have underscored the urgent need to strengthen vocational and technical education (VTE).

Vocational and technical education plays a critical role in human resource development by providing individuals with practical skills and competencies needed for self-reliance, innovation, and national growth. It equips learners with occupational, entrepreneurial, and life skills that prepare them for employment or self-employment, thereby reducing unemployment and enhancing national productivity. In developed nations, VTE is accorded equal importance as academic education and serves as the foundation of industrialization and sustainable development. In contrast, Nigeria has historically undervalued this sector, resulting in shortages of skilled manpower, infrastructural decay, and low competitiveness in the global economy.

The National Policy on Education (FRN, 2004) recognizes VTE as essential for preparing individuals for occupational fields, promoting responsible citizenship, and driving national development. Scholars and international agencies such as UNESCO and the International Labour Organization have equally emphasized its role as an engine of economic growth and poverty alleviation. Yet, despite its potential, VTE in Nigeria faces significant barriers, including poor funding, negative societal perceptions, inadequate infrastructure, and limited progression opportunities for graduates. Given these realities, repositioning vocational and technical education has become imperative for Nigeria's quest for sustainable development. This chapter, therefore, examines the concept and objectives of VTE, traces its historical development, analyzes its relevance to sustainable development, identifies the barriers hindering its effectiveness, and offers recommendations for its revitalization. By addressing these issues, Nigeria can transform VTE into a catalyst for job creation, innovation, and national prosperity.

### **Concept of Vocational and Technical Education in Nigeria**

Ekpenyong (2011) noted that the confusion surrounding the meaning of *vocational* and *technical* education arises from the varied interpretations given to these terms. In many cases, the terms are used interchangeably when they should be distinguished. Scholars and practitioners often interpret *vocational* as business-related education and *technical* as trade- or technology-related training.

The Federal Republic of Nigeria (2004), through the National Policy on Education (NPE), defined Vocational and Technical Education (VTE) as aspects of the educational process which, in addition to general education, involve the study of technologies and related sciences as well as the acquisition of practical skills, attitudes, and knowledge relevant to economic and social life. The NPE identifies VTE as a means of preparing individuals for occupational fields, promoting responsible citizenship, alleviating poverty, and ensuring environmentally sustainable development. Okorocha (2012) described VTE as educational training that encompasses knowledge, skills, competencies, and structured experiences aimed at securing jobs across sectors or enabling self-reliance through entrepreneurship. Similarly, the International Labour Organization (cited in Oluwale, Jegede, & Olamide, 2013) regarded VTE as a vehicle for developing entrepreneurial skills and an engine of national development. Amoor (2009) emphasized that skill acquisition empowers individuals to harness resources within their environment for personal and societal benefit. Ojimba (2012) defined VTE as education whose primary aim is to prepare individuals for employment in recognized occupations, covering fields such as agricultural education, fine and applied arts, business education, and vocational trades like soap-making, hairdressing, and computing. Iheanacho (2006) highlighted VTE as training in trades such as farming, bookkeeping, and bricklaying, while Uwaifo (2009) described technical education as the training of technically oriented personnel who are initiators, facilitators, and implementers of technological literacy with direct impact on national welfare.

Banjoko (cited in Dokubo, 2013) concluded that skill acquisition is the distinguishing element of vocational education, making it unique compared to liberal education. In summary, vocational and technical education equips individuals with the knowledge, skills, and attitudes required for legitimate employment, innovation, and sustainable national growth.

### **Definitions of Vocational and Technical Education**

UNESCO (2004) defined VTE as that aspect of education which, in addition to general learning, involves the study of technologies and sciences and the acquisition of practical skills, attitudes, and knowledge related to occupations in different sectors of economic and social life. Osuala

(2004) identified VTE as education that prepares individuals for gainful employment by providing the necessary skills, knowledge, and attitudes for effective performance in specific occupations. He explained that vocational and technical education assumes a choice of occupation has been made and focuses on training to enable career entry or advancement.

Finch (2008) emphasized that vocational education has historically responded to societal needs. With technological advancement and increased occupational mobility, societies have turned to schools to supply skilled workers. He further explained that because modern societies expect all school leavers to possess employable skills, vocational education has become increasingly important. For Nigeria, this underscores the need to refocus VTE for sustainable national development.

### **Objectives of Vocational and Technical Education**

The objectives of VTE, as aligned with democratic ideals and national development needs, include the following:

- To promote general and practical education in Nigeria.
- To prepare learners for employment in chosen careers.

- To develop students' personalities and professional competence through training in technical and vocational fields.
- To guide learners toward informed career choices.
- To produce competent professionals for the Nigerian labor market.
- To provide high-level manpower for various economic sectors.
- To deliver specialized training to meet the changing demands of the world of work.
- To provide professional development for teachers and trainers through pre-service and inservice education.
- To equip individuals with technical knowledge and vocational skills required for agricultural, commercial, and industrial development.
- To promote self-reliance and entrepreneurship among graduates.

#### **Historical Development of Vocational and Technical Education in Nigeria**

The history of VTE in Nigeria dates back to the pre-colonial era when traditional education emphasized practical training in crafts, trades, and agriculture. Instruction was delivered through observation, imitation, and apprenticeship within families and communities (Ogunmilla, cited in Sofoluwa & Olumade, 2006).

During the colonial period, apprenticeship systems were reinforced, and multinational companies such as Shell BP, UAC, and PZ trained artisans to meet their operational needs. Missionary schools, however, largely emphasized literacy education for evangelism, clerical work, and interpretation services (Ajayi & Ayodele, 2002).

The first government-organized vocational training institution was established in 1908, followed by marine training schools (Adegbite, 2000) and trade-specific training institutions in the 1930s.

The Hope Waddell Institute in Calabar, founded in 1885, was the first technical institute in Nigeria, focusing on trade training and teacher preparation (Mamman, Chadi, Jirgi, & Mubarak, 2013). Yaba Higher College, established in 1934 and later transformed into a technical institute in 1948, trained artisans, craftsmen, technicians, and teachers for trade centers.

From the 1950s, regional governments established technical colleges across Nigeria, including Enugu (1950), Ilorin (1951), Kano (1953), Sapele (1955), and Ijebu-Ode (1959). These institutions were tuition-free and well-funded. The Ashby Commission (1959) recommended prioritizing vocational and technical education, upgrading schools to award the City and Guilds London Certificate, and aligning curricula with manpower needs.

Subsequent reforms in the 1960s and 1980s emphasized closer industry-education collaboration, curriculum development, industrial experience, and accreditation. The establishment of the National Board for Technical Education (NBTE) in 1987 provided regulatory oversight, classifying VTE institutions into vocational schools, technical colleges, and polytechnics offering National Diploma (ND) and Higher National Diploma (HND) programs. By the early 2000s, VTE in Nigeria covered fields such as mechanical trades, electrical engineering, computer studies, building technology, hospitality, textile trades, printing, beauty culture, business trades, and leather works (FRN, 2004).

#### **Vocational and Technical Education and Sustainable Development in Nigeria**

Vocational and technical education has long been central to human resource development, productivity, and economic growth (Dike, 2007). Despite this, Nigeria has not given VTE the attention it deserves, which contributes significantly to underdevelopment. Technical education equips individuals with occupational and life skills necessary for effective participation in society. Vocational education prepares learners for specific trades and occupations. Together, they provide the skills required to "live, learn, and work as productive citizens in a global society."

However, Nigeria suffers from a shortage of skilled technicians across sectors construction, healthcare, power, transport, and agriculture. Poorly trained artisans and mechanics contribute to infrastructural inefficiency, while reliance on foreign technicians highlights systemic weaknesses. The neglect of VTE has also worsened unemployment, reduced productivity, and undermined national competitiveness.

In contrast, developed nations value technical education as equal to academic education, blending theory and practice to strengthen both productivity and innovation. Nigeria must adopt this approach by standardizing technical training, certifying graduates, and upgrading facilities to international standards.

VTE is also critical for addressing social challenges. Adult education, retraining programs, and entrepreneurship development can reduce unemployment, enhance productivity, and prepare citizens for the demands of the 21st-century economy. UNESCO has identified revitalizing VTE as key to improving youth economic opportunities, while NBTE continues to advocate increased funding and policy support.

#### **Barriers to Vocational and Technical Education in Nigeria**

Despite its importance, several barriers hinder the growth of VTE in Nigeria:

1. Negative Perceptions – Many parents, particularly elites, discourage their children from pursuing vocational training, considering it inferior to academic degrees (Alam, 2007).
2. Poor Quality and Accessibility – Most VTE institutions lack adequate resources, and many are inaccessible to rural students (World Bank, 1991).
3. Limited Progression Pathways – VTE graduates face restrictions in accessing higher education, limiting career advancement (Rafique, 1996).
4. Low Social Prestige – VTE graduates are often socially undervalued compared to university graduates, discouraging enrollment.
5. Inadequate Funding – VTE requires expensive facilities, equipment, and industrial attachments, but Nigeria's education budget allocates limited funds to the sector (Lauglo & Lillis, 1988).

### **Conclusion**

The success of vocational and technical education in Nigeria depends on proper planning, efficient implementation, adequate funding, and strong policy support. For Nigeria to meet socio-economic challenges and achieve sustainable development, its youth must be equipped with relevant and modern skills. VTE institutions must align curricula with labor market demands, promote entrepreneurship, and integrate academic and applied training.

VTE is the engine of national growth no nation can achieve economic prosperity without a skilled workforce. For Nigeria to realize its development goals, vocational and technical education must be repositioned, revitalized, and rebranded as a central pillar of education and economic policy.

### **Recommendations**

To strengthen VTE for sustainable development in Nigeria, the following are recommended:

- Reduce emphasis on certificates and examinations; focus on practical skill acquisition.
- Conduct nationwide orientation programs to raise public awareness of the importance of VTE.
- Align VTE curricula with labor market demands through advisory councils involving employers and educators.
- Improve teaching and learning environments with modern facilities and well-equipped workshops.
- Strengthen students' industrial training by integrating entrepreneurship education.
- Create a Vocational and Technical Education Intervention Fund to finance skill acquisition programs.
- Recruit and retrain qualified teachers while improving their conditions of service.
- Certify technical graduates to meet international standards before employment.

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