

ENHANCING NATIONAL DEVELOPMENT BY ADVANCING TECHNICAL AND VOCATIONAL EDUCATION IN NIGERIA TO FOSTER HUMAN CAPITAL DEVELOPMENT

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Abstract

The development of human capital in every nation holds great importance as it is closely intertwined with the nation's economic progress. Thus, it is crucial for each nation to explore avenues for advancing its economy. This research study aims to address the enhancement of Nigeria's human capital by focusing on the improvement of Technical and Vocational Education (TVET) to enhance its status and quality. TVET has been identified as a key contributor to the nation's human capital development. The study begins by providing an overview of Nigeria's human capital situation and proceeds to examine the role that TVET can play in fostering human capital development and addressing prevalent national challenges. Additionally, the study explores the advantages that human capital development can bring to the nation and delves into the contributions of TVET towards achieving this development. Finally, the research concludes by identifying the challenges associated with human capital development and proposing strategies for enhancing TVET in Nigeria, ultimately providing recommendations to address these challenges and problems.

Keywords; Human Capital development, TVET, National Development

Introduction

The significance of education and technology in a nation's overall development cannot be overstated. It is evident that the citizens of a country play vital roles in advancing their nation through the application of knowledge acquired from educational institutions. Education is widely recognized as a crucial tool for national development, provided it is effectively maintained and utilized. It is also acknowledged as the driving force behind accelerated economic and social growth and development (Christina Boateng, 2012). The objectives of educational programs are typically focused on effecting behavioral change, such as altering attitudes, perceptions, skill levels, or increasing knowledge (Okwelle P. Chijioke, 2013), with the aim of bringing about positive change and development in specific sectors of the economy.

For a country to progress socially, economically, and technologically, it requires productive and innovative citizens, the majority of whom can create job opportunities rather than solely seeking employment (Isaac & Ayodele, 2020). Furthermore, possessing technological education alone does not guarantee job success in the current employment landscape. The world of work demands individuals who are experienced, competent, well-trained, and specialized, with the ability to quickly learn and understand sophisticated technology. Therefore, technical vocational education is essential in equipping individuals with the skills necessary to secure and retain employment, particularly in fields that involve advanced technology (Christina Boateng, 2012).

Technical and vocational education and training (TVET) systems are deeply rooted in the national culture of each country (European Centre for the Development of Vocational Training, 2011) due to their expected contributions to national development. As noted by (Ojimba, 2013), TVET has been an integral part of national development strategies in many societies due to its impact on human resource development, productivity, and economic growth. In Nigeria, technical and vocational education is regarded as the most effective means of bringing about rapid and desirable change or development in the country's economic, political, sociological, and human resources sectors (Isaac & Ayodele, 2020). In the context of this study, development is viewed as a deliberate and planned learning process aimed at enhancing managerial effectiveness (Banka & Okwori, 2019).

(E.O. Enyekit, Ubulom, & Onuekwa, 2011) assert that human capital development is a necessary requirement for the development of any nation. Moreover, human capital

development fosters an understanding of how to harness the power of diverse thinking styles, both analytical and intuitive, to arrive at holistic and practical solutions for all problems. Human capital development and training are essentially synonymous, as it requires human capital to organize and optimize the contributions of other factors of production in order to achieve productive goals in any industrial setting. Therefore, human capital development involves supporting and investing in human capital, coaching, training, internships, and effective human capital management (E.O. Enyekit, Ubulom, & Onuekwa, 2011).

Nigerian Human Capital

The youth, as widely recognized, represent the most valuable, dynamic, and energetic segment of the population and labor force in any nation. Their potential in contributing to the development of society should never be underestimated. Understanding this fact has led to a focus on youth development. By investing in the comprehensive development of young individuals, a country can ensure development across all sectors of the economy (Giginyu, Muhammad, Adamu, & Abdullahi, 2021).

A significant challenge faced by a large portion of the population is that the majority of the active workforce continues to engage in low-productivity and low-income sectors. Approximately 20 percent of individuals aged 25-34 are classified as not in education, employment, or training (NEET), and over 90 percent of the labor force is employed in the informal sector. Additionally, despite the relatively low unemployment rate, there exists a high prevalence of underemployment (International Bank for Reconstruction and Development/the World Bank, 2015). In previous years, Nigeria reported youth unemployment estimates of around 1.2% among individuals aged 15-19 (Nigeria, April 2005). Many school graduates face challenges in securing employment opportunities in urban areas due to a lack of adequate job skills. Likewise, employers encounter difficulties in recruiting skilled workers and production technicians (Nigeria, April 2005).

Role of TVET In Human Capital Development and Curing National Challenges

According to Jekayinfa (2011) as cited by Molagun (2015), Nigeria holds the title of being the most populous country in Africa and the 8th most populous country globally. Despite

its wealth, it ranks quite low (152nd) in the Human Development Index. It is suggested that if Nigeria had prioritized vocational and technical education instead of general education as a means for national stability, economic survival, and human development, the nation would have experienced better outcomes. This can be observed in the success stories of Asian countries like South Korea, Malaysia, Singapore, Indonesia, Taiwan, China, and Japan, which have achieved remarkable economic growth.

If a greater number of individuals in Nigeria were to acquire TVET education, several positive outcomes would likely emerge. These include increased local production of goods and services, enhanced self-reliance, a significant reduction in crime rates, eradication of poverty, higher exportation of goods and services, decreased capital flight, abundant employment opportunities, improved living standards, lower inflation rates, a surge in employers offering jobs, promotion of sustainable development, and increased industrial and manufacturing activities in the country (Akpoiyibo & Ezechukwu, 2021).

Role of TVET in Achieving Human Capital Development

The current situation in Nigeria, characterized by population growth, urbanization, poverty, and the inability of graduates to secure employment, emphasizes the crucial role of career development, which can be effectively achieved through the proper implementation of TVET (Ogoegbunam & Emmanuel, 2020). Technical and vocational education is poised to play a vital role in human capital development, empowering individuals, and fostering economic prosperity for the nation (Tyowuah & Chen, 2019).

According to Ogoegbunam & Emmanuel (2020), TVET serves multiple purposes, including:

1. Promoting environmentally sustainable development.
2. Alleviating poverty.
3. Being an integral part of general education.
4. Fostering lifelong learning and preparing individuals for responsible citizenship.

Ovbiagele (2015) supports these ideas by emphasizing that vocational and technical education serves as a solution to the long-standing issue of unemployed graduates. It bridges the gap between the labor market and the skills acquired through educational

programs. Enhancing skill acquisition through vocational and technical education holds the potential to address prevalent challenges in Nigeria, such as human capital development, empowerment, unemployment, and economic instability (M.O & Samuel, 2021).

Strategies for Human Capital Development in Nigeria

With the hope that technical and vocational education (TVET) will equip students to thrive in the era of science and technology, and cultivate a generation that can think independently while valuing the dignity of labor, the transformation of TVET's foundations is crucial. This transformation aims to eliminate the negative perceptions commonly associated with TVET and harness the benefits of this sub-sector of education for the entire nation's advancement (Uwaifo, 2009; Olayele, 2021).

Furthermore, since the primary objective of technical and vocational education is to develop skilled manpower for self-reliance and economic growth, it is essential to provide teachers with the necessary resources and tools for effective instruction. Fully equipped workshops, consisting of modern and functional tools and machines in adequate quantity and quality, are crucial. Additionally, competent teachers and workshop attendants should be available to ensure the effectiveness of the educational process (Offor & Major, 2014).

Relationship of Human Capital Development and TVET

According to E.O. Enyekit, Ubulom, and Onuekwa (2011), human capital development can be described as a field that teaches individuals how to utilize different thinking styles (analytical and intuitive) to achieve comprehensive and practical solutions to problems. When applied to TVET in educational settings, human capital development aims to introduce students at the basic education level to various practical activities in vocational fields. This exposure familiarizes and stimulates their interest in vocational subjects, providing them with equal opportunities to choose future careers in either vocational-technical or general fields. Additionally, it equips them with fundamental occupational skills and knowledge, enabling those who do not pursue further literary education to engage in gainful employment or self-employment in industries, agriculture, and commerce (Christina Boateng, 2012).

Research has consistently demonstrated that investments in human capital, whether made by the public sector, firms, or households, have a significant impact on economic performance, individual well-being, and social welfare. TVET, as a lifelong learning process, plays a vital role in enhancing the social and economic well-being of an economy. It serves as a key driver for the formation of human capital, contributing to the overall development of individuals and society (Hanni, 2019).

Human Capital Productivity in Nigeria

The poverty level in the nation has surged to approximately 70%, leaving many Nigerians living on less than one dollar per day. As mentioned earlier, higher education institutions in Nigeria lack the necessary tools and machinery to provide students with the skills required by employers. The challenges facing vocational and technical education in the country are substantial (Okoye & Arimonu, 2016). It is evident that the economic prosperity of any nation heavily relies on the capabilities of its workforce and skilled labor (Minna-Eyovwunu, Tene-Omadide, Yahaya, & Orueyegha, 2020). Consequently, the scarcity of skilled manpower and the escalating poverty rates in Nigeria are concerning and demand immediate attention, as no nation can surpass the limitations imposed by a lack of skilled workforce.

Benefit of Achieving human capital development

According to the study conducted by E.O. Enyekit, Ubulom, and Onuekwa (2011), a comprehensive approach to vocational education can significantly contribute to various aspects of national development and management. They identified the following areas of impact:

1. Facilitating full employment opportunities for the youth.
2. Driving technological advancement and fostering economic development.
3. Ensuring international economic and political independence.
4. Combating crime and reducing social vices.
5. Enhancing the effective supervision and administration of vocational programs and institutions through the involvement of vocational experts.

In summary, their study highlights the multiple benefits that can be realized through a comprehensive implementation of vocational education in relation to these key aspects of national development and management.

Contributions of TVET in Achieving the Aims of National Development

Every government establishes specific targets within its jurisdiction and particular context, and each policy possesses distinct characteristics, aims, and objectives. This principle applies to National Development as well, as elucidated in the research conducted by M.O. and Samuel (2021). The ultimate objective of Nigeria's national development is to foster sustained enhancement in the welfare of its citizens, promote self-reliance, mobilize domestic resources, transform rural production structures, develop small-scale industries, and acquire technological and scientific skills. Despite the nation's abundance of natural resources, there is a notable deficiency in the development of human potential necessary to effectively harness these resources. This deficiency extends beyond human potential and has also impacted the educational sector. The Nigerian educational system has fallen short of societal expectations, rendering the introduction of TVET into the system a challenging endeavor due to various hurdles. However, as emphasized by Onwusa (2021), the potential of TVET can be fortified to achieve its objectives and facilitate the economic transformation of Nigeria, contingent upon the government's devoted attention and support.

Problems of Achieving Human Capital Development Through Improvement of TVET

Numerous challenges plague almost every sector of Nigeria's economy. However, the challenges faced by the educational sector are particularly alarming and demand urgent attention. This is because the educational sector has the potential to transform the entire national economy and is widely regarded as the most crucial sector for a nation's development. It provides individuals with opportunities for self-empowerment through intellectual development, skill acquisition, vocational training, and environmental awareness (Jonathan C (Ph.D.) Nwosu & Micah, 2017).

Unfortunately, the introduction of TVET in Nigeria faces numerous obstacles. These challenges, as highlighted by Opoko et al. (2018), include the low quality of training/teaching staff, negative public perception and image of vocational education, discrimination against technical and vocational graduates, low turnout and enrollment in vocational schools, and inadequate government financing and support.

Moreover, the state of schools in Nigeria is distressing, with many being dilapidated and lacking proper maintenance and supervision. This hampers students' ability to learn effectively, as a conducive learning environment is crucial for their academic success. Additionally, teachers in Nigeria, despite their essential role in shaping the future, are often undervalued and receive low salaries, leading to a low status compared to other professions (Garba, 2012).

Christina Boateng (2012) points out that vocational education faces additional challenges due to its perceived expense. Assessing vocational technical subjects requires trained assessors who can evaluate students' competence both in the classroom and the workplace, making vocational technical education more costly than other forms of education.

Given these issues, it becomes imperative to provide vocational and technical teachers with training and retraining in pedagogical skills (Christina Boateng, 2012). It is crucial to define clear aims, practices, and curricula that guide students' training in line with the expectations of educational stakeholders (Shobola, 2022).

Various factors affect the human capital development of Nigeria, as identified by Okoroafor (2010), such as lack of sponsorship, inadequate infrastructure, improper timing, and lack of recognition for excellence. Furthermore, Gaines and Oti (2020) highlight challenges in the TVET curriculum, which has often been based on foreign models that may not be suitable for the local context due to infrastructure, equipment, and training limitations.

The negative perception of TVET in society, as emphasized by Akhemonkhan, Raimi, and Dada (2014), presents a significant obstacle. It results in low societal esteem for TVET, gender imbalance in its implementation, and inadequate resources for TVET institutions.

Given the multitude of challenges outlined above, achieving successful TVET implementation in Nigeria becomes exceedingly difficult. Urgent attention is needed from the government to revitalize this sector and realize its established goals. The increasing

implications of these challenges necessitate immediate action to harness the benefits of TVET in human capital development for national progress.

Improving TVET in Nigeria

Every nation's government plays a crucial role in improving the well-being of its citizens and advancing the development of the nation through the establishment of laws and regulations that foster national progress. Recognizing this, (Kennedy, 2011) asserts that government intervention in providing human and infrastructural resources can have a profound impact on the philosophical, sociological, and psychological aspects of technical and vocational education (TVET). However, in order to effectively address this issue and facilitate appropriate intervention, it is essential to have a comprehensive understanding of the challenges faced by TVET in the country.

In a study conducted by (Opoko, et al., 2018), several measures were identified to enhance TVET, including:

Tackling Negative Stereotyping: Discrimination between individuals with TVET qualifications and those with academic certificates has hindered the development of TVET education. To address this, intensive campaigns should be conducted through various media platforms to promote the benefits of TVET to both individuals and the nation. Additionally, a policy framework should be established to support and eliminate discrimination against TVET.

Improving the Status of TVET: TVET has been perceived as inferior to academic education in Nigeria, leading to its neglect by policymakers and stakeholders. To rectify this, the government must prioritize raising awareness about the importance of TVET in national development. The remuneration of TVET professionals should also be improved to attract qualified individuals and elevate the status of TVET within the country.

Sustainable Financing: Insufficient funding has been a major challenge in the Nigerian educational system. Corruption has exacerbated this issue and negatively affected the TVET sector. To address these financial constraints, the government should allocate adequate funds to TVET, recognizing its crucial role in the economic development of the country.

Creating Synergy between TVET Stakeholders: Currently, there is a lack of coordination and consistency between government-owned and private TVET institutions in terms of curricula and the quality of graduates. To ensure harmonization, curricula should be flexible enough to accommodate variations in trainees' characteristics and abilities.

Provision of Adequate Training Facilities and Materials: Inadequate facilities and deteriorating school infrastructure hinder the effective teaching of TVET subjects. To promote productivity and enhance the learning process, it is imperative to provide well-equipped and conducive learning environments.

Staff Training and Welfare Programs: Continuous training and retraining of staff are essential for development and productivity. Recruiting the right personnel and organizing seminars and workshops to address challenges and keep teachers updated on new teaching strategies and relevant issues are crucial for maintaining the quality of TVET education.

A study by (Ogundele & Oyelade, 2018) on TVET issues in Nigeria aligns with the challenges identified by (Opoko, et al., 2018) and provides further recommendations, including:

1. Ensuring that the philosophy and objectives of vocational and technical education are realistically pursued to foster vocational and technological development, social progress, and economic growth in Nigeria.
2. Promoting the implementation of TVET curriculum at the senior secondary school level by establishing well-equipped workshops in secondary schools and technical colleges.
3. Emphasizing the recruitment and training of well-qualified teachers in TVET.
4. Prioritizing competitive salaries for TVET teachers and allocating adequate funding to secondary schools and technical colleges to attract highly qualified personnel to TVET positions.

These recommendations, in line with the existing challenges, should be considered by policymakers and stakeholders to drive the necessary improvements in TVET in Nigeria.

Conclusion

Technical and Vocational Education (TVET) emerged as a highly effective means to enhance Nigeria's Human Capital Development. However, similar to other sectors in the Nigerian economy, several challenges hindered the progress of human capital development, which TVET has the potential to address. Paradoxically, TVET itself faced developmental obstacles, earning it the label of the "ugly duckling" within the Nigerian economy, as described by scholars. This research explores solutions derived from previous studies that offer ways to improve TVET and promote human capital development. These solutions are presented after analyzing the challenges identified by various scholars from diverse perspectives on TVET.

Recommendations

After conducting a comprehensive literature review and studying the ways to develop Human Capital in Nigeria by improving Technical and Vocational Education (TVET), the following recommendations are proposed:

1. The government should ensure the provision of all necessary facilities required to enhance TVET.
2. Sufficient and qualified teachers should be provided by the government in all schools offering TVET.
3. The importance of TVET should be emphasized by the government to elevate its status in the public perception, similar to other subjects.
4. The government needs to consider and revise the remuneration package for TVET teachers in Nigeria. This will incentivize qualified individuals to pursue teaching positions in TVET.
5. The government should prioritize the retraining of TVET teachers, enabling them to acquire new skills and stay updated with the latest advancements in technology and development.

These recommendations are based on the findings and insights obtained from the reviewed literature and aim to foster the improvement of TVET and facilitate the development of Human Capital in Nigeria.

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