WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Vocational Education and Human Capital Development in Nigeria: A Study of Idah Federal Constituency

Enock Sarah Banku[1], Alih, Lami[2]

[1]Department of Public Administration, The Federal Polytechnic, Idah, bankusarah@gmail.com
[2]Department of Social Science and Humanities, The Federal Polytechnic, Idah, alihlami.al@gmail.com

ABSTRACT

This study examines the role of vocational education in human capital development within the Idah Federal Constituency of Kogi State, Nigeria. Employing a descriptive survey design, data were collected from 147 purposively sampled respondents across the four Local Government Areas of the constituency. The study assessed the quality and relevance of technical education programs, identified challenges faced by technical institutions, explored the role of industry partnerships, and proposed strategies to align vocational training with labor market needs. Findings revealed mixed perceptions of program quality, with significant concerns over outdated curricula, inadequate funding, and insufficient modern equipment. Awareness and participation in industry partnerships were limited, despite broad recognition of their importance. Respondents recommended curriculum updates, enhanced industry collaboration, improved instructor training, and increased government support as key strategies for improvement. The study concludes that addressing these challenges through coordinated stakeholder efforts is essential for enhancing vocational education and fostering sustainable human capital development in the region.

Keywords: Vocational Education, Curriculum Relevance, Labor Market and Economic Growth.

INTRODUCTION

Human capital development is the process of improving an organization's employee performance, capabilities and resources. Human capital development affects economic growth by expanding the knowledge and skills of the people. Vocational training and skills acquisition, are the training and skills needed for a particular job or profession. The synergy is that, both are commonly associated with career and technical education, the requirements needed in a knowledge-based economy driven by office administration, entrepreneurship, agriculture, and services delivery. The fact is, education is an investment that can help foster economic growth, contribute to personal social development and reduce social inequality. Undertaking higher education especially the vocational training type, is one method of accumulating human capital and even move a family out of poverty and unemployment scourge.

Technical education plays a crucial role in the economic and social development of a nation by equipping individuals with practical skills and knowledge that meet the demands of the labor market. In Nigeria, the drive for improved human capacity building through technical education is essential to address the skills gap, enhance employability, and foster economic growth. Technical education in Nigeria is a vital component of the educational system, designed to equip individuals with practical skills and competencies required for various trades and technical professions. This form of education is intended to bridge the gap between academic knowledge and practical application, thus preparing students for the workforce (Abubakar & Adeyemi, 2020). Despite its critical role, technical education in Nigeria faces significant challenges, including inadequate infrastructure, outdated curriculum, and insufficient industry collaboration. The historical development of technical education in Nigeria can be traced back to the early 20th century, with the establishment of technical schools and vocational institutions aimed at improving industrial and economic capabilities. However, the system has struggled to keep pace with technological advancements and the evolving needs of the labor market (Fernandez & Shaw, 2016).

Human capacity building is the process of developing and enhancing individuals' skills, knowledge, and abilities to improve their performance and contribute to organizational and societal goals. In the context of technical education, human capacity building focuses on equipping individuals with the practical skills and technical know-how necessary for effective participation in the labor market (UNESC0, 2022; Afolabi, 2021). The significance of human capacity building in Nigeria is underscored by the country's need for skilled labor to drive economic development, reduce unemployment, and foster innovation. Enhanced technical education contributes to this goal by ensuring that graduates possess relevant skills and are well-prepared to meet the demands of various industries (Pollyn, 2016; Okeke, 2023).

Technical education in Nigeria is intended to bridge the gap between theoretical knowledge and practical skills, thereby preparing individuals for the labor market and contributing to economic development. However, the effectiveness of technical education in achieving these goals is hindered by several critical issues. One of the most pressing problems is the mismatch between the skills taught in technical education programs and those demanded by the labor market (Gbemisola, & Ubom, 2013). Many graduates of technical programs find themselves ill-equipped for the specific needs of industries due to

outdated curricula and inadequate training facilities (Adedeji, 2019; Fafunwa, 2014). This disconnects between educational outcomes and job requirements not only affects the employability of graduates but also hampers the overall productivity and growth of the economy.

Statement of the Problem

Today, we live in a world where many societies are extremely poor, while few others are exceedingly rich. Lack of vocational education, skills acquisition and human capital development have been said to be responsible for the appalling situation. Nigeria is not left out of the current challenges posed by global economic crisis and of course, the Covid'19 pandemic which have affected production of goods and services across the globe, and this has created more problems for both the consumers, producers and employees of labour in many ways. The solution lies in increased human capacity building, and changing the narrative of how education is acquired and what kind is needed as the world is moving away from theoretical applications practical and innovative of knowledge-based economy with emphasis on skills acquisition, technologies and expertise by the end users. No doubt, poverty, inequality, unemployment and under-employment are direct consequence of lack of required skills and necessary knowledge needed in global economy, we are convinced that if vocational education and human capital development are vigorously pursued, our educational sector would improve society and this would in turn help people to become better citizens, and get better paid job. Finally, available educated labour force with sophisticated skills acquisition would facilitate adaptation of advanced technology in Nigeria.

Technical education institutions in Nigeria often suffer from insufficient infrastructure and resources. Many schools lack modern equipment and facilities necessary for hands-on training, leading to a diminished quality of education and practical experience (Ezeani, 2022). Without proper facilities, students are unable to acquire the skills required to meet industry standards, further exacerbating the skills gap. The curricula in many technical education institutions are outdated and do not reflect the rapid technological advancements and evolving industry standards. This misalignment means that students are not being trained in the latest technologies and practices, which affects their readiness for the current job market (Afolabi, 2021). Updating and aligning curricula with industry needs is essential for improving the relevance and effectiveness of technical education.

The lack of robust partnerships between technical education institutions and industries is another significant problem. Effective collaboration with industry can provide valuable insights into current job requirements, facilitate internships and apprenticeships, and ensure that training programs are aligned with market needs (Ezeani, 2022). However, many institutions operate in isolation, which limits their ability to adapt to changing industry demands and enhances the gap between education and employment. Existing policies and frameworks aimed at improving technical education and human capacity building are often poorly implemented or lack coherence. Inadequate policy support and ineffective implementation strategies undermine efforts to enhance technical education and align it with broader developmental goals (Adedeji, 2019). Addressing these policy gaps is crucial for fostering a more effective and responsive technical education system. Therefore, this research proposed to carry out a study on technical education and the drive for improved human capacity building in Nigeria

Objectives of the Study

To evaluate the current state of technical education in Idah, Ibaji, Ofu and Igala mela /Odlou local government areas of Kogi State, Nigeria and propose strategies for improving human capacity building through enhanced technical education. However, the study seeks to carry out the following specific objectives:

- Assess the quality and relevance of technical education programs in some selected local government areas of Kogi state, Nigeria.
- Identify challenges faced by technical education institutions.
- Explore the role of industry partnerships in improving technical education.
- Propose strategies for aligning technical education with labor market needs.

LITERATURE REVIEW

Human Capacity Building through Technical Education

Human capacity building involves developing the skills and competencies required for effective participation in the labor market and societal development. This section will define human capacity building in the context of technical education and discuss its significance for economic and social progress (Afolabi, 2021). The role of technical education in improving employability and contributing to economic growth will be examined (Okeke, 2023). The review will explore studies that assess the effectiveness of technical education in preparing graduates for the workforce and its impact on the broader economy.

Challenges Facing Technical Education Institutions

Many technical education institutions in Nigeria face challenges related to inadequate infrastructure and resources (Ezeani, 2022). This section will review literature on the state of facilities, equipment, and other resources essential for effective technical training. The alignment of curricula with industry standards is a critical issue (Adedeji, 2019). The review will discuss research on the relevance of technical education curricula and the need for updates

to meet current technological and industry requirements. Challenges related to institutional management and policy implementation will be examined. This includes the effectiveness of existing policies and frameworks in supporting technical education and human capacity building Adedeji, 2019).

The Role of Industry Partnerships

The lack of robust partnerships between technical education institutions and industries is another significant problem. Effective collaboration with industry can provide valuable insights into current job requirements, facilitate internships and apprenticeships, and ensure that training programs are aligned with market needs (Ezeani, 2022). However, many institutions operate in isolation, which limits their ability to adapt to changing industry demands and enhances the gap between education and employment. This section will review literature on how collaboration with industries can enhance technical education programs, provide practical experience, and improve job placement rates.

Policy and Implementation Frameworks

Existing policies and frameworks aimed at improving technical education and human capacity building are often poorly implemented or lack coherence. Inadequate policy support and ineffective implementation strategies undermine efforts to enhance technical education and align it with broader developmental goals (Adedeji, 2019). Addressing these policy gaps is crucial for fostering a more effective and responsive technical education system.An overview of existing policies related to technical education will be provided, including government initiatives and educational reforms aimed at improving technical education and human capacity building. The review will also address challenges in policy implementation and the impact of these challenges on the effectiveness of technical education programs (Afolabi, 2021).

Theoretical Review

The study discusses two theories that support technical education and the drive for improved human capacity building in Nigeria. **Human Capital Theory**, developed by economists like Gary Becker and Theodore Schultz, emphasizes that investments in education and training significantly enhance individual productivity and economic growth. This theory underscores the critical role of technical education in developing the skills and competencies required in the labor market. In the context of Nigeria, technical education equips individuals with practical and technical skills necessary for sectors like manufacturing, agriculture, and information technology, thereby driving human capacity building. As Becker (1964) and Schultz (1971) argue, education is a vital investment for improving individual productivity and economic outcomes

Constructivist Learning Theory, associated with Jean Piaget and Lev Vygotsky, posits that learners construct knowledge through experiences and social interactions. This theory supports the principles of technical education, which involves hands-on learning, problem-solving, and collaboration. Technical education programs often include practical workshops, internships, and real-world projects, aligning with constructivist principles by facilitating active learning and helping students connect theory with practice. Piaget (1972) and Vygotsky (1978) highlight the importance of experiential and collaborative learning, which are fundamental to technical education's role in human capacity building in Nigeria.

Empirical Review

Several studies have demonstrated that technical education significantly improves employability and contributes to economic growth. For instance, a study by UNESCO (2016) found that technical and vocational education and training (TVET) programs enhance job readiness and increase the likelihood of employment for graduates. The study highlighted that countries with robust TVET systems tend to have lower unemployment rates and higher economic growth rates. In Nigeria, technical education has been shown to address skill mismatches in the labor market, reducing youth unemployment and fostering economic development (Okoye & Okwelle, 2013).

Empirical evidence also supports the role of technical education in developing specific skills that enhance productivity. A study conducted by Afeti and Adubra (2012) in West Africa showed that graduates of technical education programs possess practical skills that are directly applicable in various industries, leading to increased productivity and efficiency. The study emphasized the need for industry partnerships to ensure that the training provided aligns with market needs. In Nigeria, research by Fafunwa (2014) indicated that technical education programs that incorporate modern technology and industry-relevant skills have a higher impact on graduate productivity and employability

METHODOLOGY

This study adopted a descriptive survey research design. The descriptive survey method is appropriate as it enables the collection of data from respondents to describe the current status, perceptions, and experiences related to vocational education and human capital development in the Idah Federal Constituency, Kogi State. This approach facilitates the gathering of quantitative data that can be analyzed statistically to answer the research objectives. The population of the study comprised residents of the Idah Federal Constituency, encompassing the four Local Government Areas: Idah, Ibaji, Ofu, and Igalamela/Odolu. The target population included individuals involved in or familiar with vocational education, including students, instructors, artisans, and other community members engaged in vocational activities.

A total of 147 respondents were purposively sampled for the study. Purposive sampling was used to select individuals who had knowledge or experience related to vocational education and human capital development. This sampling method ensured that data were collected from relevant participants who could provide meaningful insights into the quality, challenges, and impact of vocational education programs. To calculate the sample size for a population of 235 unemployed youths, the Cochran's formula, adjusted for finite populations:

Sample size formula: n = n0 / (1 + n0 -1 / N)

Where:

N = population size (235 in this case)

n0 = initial sample size calculated in Step 1.

P = 0.5

e = 0.05

Therefore

n0 = (1.96) 2. 0.5 (1 – 0.5) / (0.05)

n0 = 384.16. 0.5 / 0.0025

n0 = 384.16

Step 2: Adjusting for the finite population

Using N=235,

n0 = 384.16 / 1 + (384.16 -1 / 235)

n0 = 384.16 / 1 + 1.6303

n0 = 3.8416 / 2.6303

= 146.10

Since sample size should be a whole number, we round up to the next whole number: N ≈147

Data were collected using a structured questionnaire designed specifically for this study. To ensure content validity, the questionnaire was developed based on relevant literature and reviewed by experts in vocational education and research methodology. A pilot test was conducted with a small group of respondents from a neighboring constituency to identify ambiguities and refine the instrument. Reliability was tested using Cronbach's Alpha coefficient, yielding a value of 0.82, indicating good internal consistency.

Data collected were coded and entered into the Statistical Package for the Social Sciences (SPSS) software for analysis. Descriptive statistics such as frequencies, percentages, and means were used to summarize the demographic characteristics and responses to research questions. The results were presented in tables and charts for clarity. Where appropriate, percentages were normalized to facilitate interpretation.

The study adhered to ethical standards throughout the research process. Informed consent was obtained from all participants prior to data collection. Respondents were informed of the purpose of the study, and their participation was entirely voluntary. Confidentiality of responses was strictly maintained, and data were used solely for academic purposes.

DATA ANALYSIS AND PRESENTATION

4.1 Demographic Information of Respondents (n = 147)

Demographic Variable	**Categories**	**Frequency (f)**	**Percentage (%)**
Age (years)	Mean (Range)	32 (18–55)	—
Gender	Male	85	57.8
	Female	62	42.2
	Total	**147**	**100%**
Occupation	Farming	45	30.6
	Teaching	30	20.4
	Trading	25	17.0
	Civil Service	22	15.0
	Artisanship	25	17.0
	Total	**147**	**100%**

Demographic Variable	Categories	Frequency (f)	Percentage (%)
Local Government Area	Idah	60	40.8
	Ibaji	35	23.8
	Ofu	28	19.0
	Igalamela/Odolu	24	16.3
	Total	**147**	**100%**

Field Survey (2025).

The study engaged a total of 147 respondents drawn from the Idah Federal Constituency in Kogi State, Nigeria. The age distribution of participants spanned from 18 to 55 years, with a mean age of approximately 32 years. This suggests that the sample predominantly consists of young to middle-aged adults, which is typical of a working population actively involved in vocational activities (Smith, 2020).

Gender representation showed a higher proportion of males (57.8%) compared to females (42.2%). This male dominance in the sample might reflect gender disparities in access to vocational education or economic participation in the region (Adamu, 2019). It may also indicate cultural or societal influences affecting female participation in the survey.

Regarding occupational status, the respondents were engaged in a variety of professions, with farmers representing the largest group (30.6%). This is followed by teachers (20.4%), traders (17.0%), artisans (17.0%), and civil servants (15.0%). The diversity in occupations underscores the multi-sectoral nature of the constituency's economy, with agriculture and education playing significant roles in local human capital development (Okoro, 2018).

Furthermore, respondents were geographically distributed across four Local Government Areas (LGAs). Idah LGA accounted for the highest representation (40.8%), followed by Ibaji (23.8%), Ofu (19.0%), and Igalamela/Odolu (16.3%). This distribution aligns with the population density and economic activity within these LGAs, with Idah serving as the administrative and commercial center of the constituency (Kogi State Bureau of Statistics, 2021).

4.2 Quality and Relevance of Technical Education Programs

Indicator	Frequency (n=147)	Percentage (%)
Quality Rating of Technical Education		
Excellent	15	10.2
Good	55	37.4
Fair	50	34.0
Poor	27	18.4
Total	**147**	**100%**
Skills Match with Industry Needs		
Yes, very well	20	13.6
To some extent	60	40.8
No	67	45.6
Total	**147**	**100%**

Field Survey (2025).

The assessment of the quality of technical education programs among the 147 respondents revealed a varied perception. Only a small proportion of respondents (10.2%) rated the quality of technical education as excellent, while a larger segment (37.4%) considered it good. A substantial number rated it as fair (34.0%), and 18.4% viewed the quality as poor. These results suggest that while some respondents acknowledge the programs' effectiveness, there is significant room for improvement in enhancing the overall quality of technical education within the constituency.

In terms of the alignment of acquired skills with industry needs, the findings indicate a concerning gap. Only 13.6% of respondents felt that the skills obtained through technical education matched industry requirements "very well." Forty percent believed the match was present "to some extent," while a substantial 45.6% indicated that there was no match between their skills and the needs of the industry. This highlights a disconnect between vocational training programs and labor market demands, which could undermine the effectiveness of human capital development efforts in the region.

These findings align with previous studies that emphasize the need for technical education curricula to be closely integrated with industry standards to ensure graduates are employable and productive (Jones, 2017; Adewale, 2020). Addressing these gaps is critical for improving vocational training outcomes and fostering sustainable economic development in Idah Federal Constituency.

4.3 Challenges Faced by Technical Education Institutions

Challenges Faced	**Frequency (n=147) ***	**Percentage (%)**
Lack of modern equipment	105	23.17%
Outdated curriculum	98	21.63%
Lack of qualified instructors	75	16.56%
Inadequate funding	90	19.87%
Limited collaboration with industry	85	18.77%
Total	**453**	**100%**

Field Survey (2025).

Note: *Multiple responses were allowed; percentages indicate the proportion of respondents who reported each challenge.*

The respondents identified several key challenges confronting technical education institutions in the Idah Federal Constituency. Since multiple responses were allowed, the percentages represent the proportion of respondents who acknowledged each challenge. The most frequently cited challenge was the lack of modern equipment, reported by 105 respondents, which constitutes approximately 23.17%of the sample. This suggests that inadequate or obsolete teaching tools significantly hinder the quality of practical training in technical institutions.

Outdated curriculum was also a major concern, identified by 98 respondents (21.63%). This highlights the failure of current programs to keep pace with evolving industry standards and technological advancements, thus affecting the relevance of training. Inadequate funding was recognized by 90 respondents, or 19.87%, indicating financial constraints as a critical barrier to the effective functioning of technical education. Limited collaboration with industry, cited by 85 respondents (18.77%), reflects weak partnerships that restrict opportunities for practical exposure, internships, and employment linkage.

Lastly, the lack of qualified instructors was acknowledged by 75 respondents (16.56%), underscoring the shortage of skilled personnel capable of delivering quality technical education. Overall, these challenges reflect systemic issues that impede the development and effectiveness of technical education in the region. These findings are consistent with earlier studies that emphasize the urgent need for improved resources, curriculum reforms, and stronger industry linkages to enhance vocational training outcomes (Eze & Okeke, 2019; Bello, 2021).

4.4 The Role of Industry Partnerships in Improving Technical Education

Industry Partnership Indicators	**Frequency (n=147)***	**Percentage (%)**
Awareness of Industry Partnerships	45	19.6
Believe Industry Collaboration is Important	130	56.5
Benefited from Internships/Apprenticeships	55	23.9
Total	**230**	**100%**

Field Survey (2025).

The data collected from 147 respondents revealed varying levels of engagement and perception regarding industry partnerships in technical education. Approximately 19.6% of respondents reported being aware of existing industry partnerships, indicating that awareness of such collaborations remains relatively low among the population. However, a majority of respondents (56.5%) believe that collaboration between technical education institutions and industries is important for improving the quality and relevance of vocational training. This strong recognition highlights the perceived value of industry partnerships in enhancing the skills and employability of technical education graduates.

Furthermore, 23.9% of the respondents indicated that they have directly benefited from internships or apprenticeships facilitated through industry collaborations. This suggests that while some students have had practical exposure and experience in industrial settings, there is still significant room to expand such opportunities to a larger proportion of learners. Overall, these findings underscore the critical role that industry partnerships can play in bridging the gap between technical education and labor market needs. The relatively low awareness and participation rates suggest a need for increased

promotion and development of these collaborations to maximize their benefits for vocational students and local industries alike. This aligns with prior research emphasizing the positive impact of industry engagement on vocational training outcomes (Nguyen, 2019; Adeyemi, 2021).

4.5 Strategies for Aligning Technical Education with Labor Market Needs

Preferred Strategies to Improve Technical Education	**Frequency (n=147)**	**Percentage (%)**
Updating curriculum to match industry trends	115	21.8
Increasing collaboration with industries for practical training	112	21.2
Providing modern equipment and facilities	108	20.5
Enhancing instructor training and qualifications	95	18.6
Increased government funding and policy support	98	18.0
Total	**528**	**100%**

Field Survey (2025).

Note: *Multiple responses were allowed; percentages indicate the proportion of respondents who reported each challenge.*

The findings from 147 respondents highlight several key strategies preferred for improving technical education and aligning it with labor market needs. The most favored strategy, selected by 21.8% of respondents, is updating the curriculum to reflect current industry trends, emphasizing the need for education that keeps pace with evolving technological and economic demands. Closely following are increased collaboration with industries for practical training (21.2%) and the provision of modern equipment and facilities (20.5%). These strategies underscore the importance of hands-on experience and access to up-to-date tools to enhance the practical skills of technical students.

Increased government funding and policy support (18.6%) is also highly regarded, pointing to the essential role of public investment and regulatory frameworks in strengthening vocational education infrastructure and delivery. Lastly, 18.0% of respondents emphasized enhancing instructor training and qualifications, recognizing the impact of skilled educators on the quality of technical training. Together, these strategies represent a comprehensive approach to addressing the challenges faced by technical education in the region, consistent with existing literature that advocates for curriculum modernization, industry engagement, resource provision, and capacity building (Eze, 2020; Musa & Oladipo, 2022).

Discussion of Findings

This study explores various aspects of vocational education and human capital development within the Idah Federal Constituency, Kogi State, Nigeria. The findings provide valuable insights into the demographic profile of respondents, the quality and relevance of technical education, challenges faced by institutions, the role of industry partnerships, and preferred strategies to better align technical education with labor market demands.

The demographic data showed that the majority of respondents were young to middle-aged adults, predominantly male, and engaged in diverse occupations such as farming, teaching, trading, and civil service. The geographical distribution across the four Local Government Areas was fairly representative, with Idah LGA having the largest share. This demographic diversity suggests that the study captures a wide range of experiences and perspectives, which strengthens the generalizability of the findings to the broader population of the constituency.

Regarding the quality of technical education, perceptions were mixed. While nearly half of respondents rated the quality as good or excellent, a significant proportion described it as fair or poor. This indicates that, despite some recognition of strengths, there remain serious concerns about the effectiveness of current technical education programs. Moreover, the disconnect between skills acquired through training and industry needs is particularly alarming, with almost half of the respondents feeling that their skills do not match labor market demands. This aligns with previous research emphasizing the persistent gap between vocational curricula and evolving industry requirements (Jones, 2017; Adewale, 2020).

Several systemic challenges were identified as major impediments to the effective delivery of technical education. Chief among these was the lack of modern equipment, which affects the practical training essential for skill development. Outdated curricula, inadequate funding, limited industry collaboration, and a shortage of qualified instructors were also frequently cited. These challenges reflect structural and resource deficiencies documented in other Nigerian contexts (Eze & Okeke, 2019; Bello, 2021), underscoring the need for comprehensive institutional reforms.

The study revealed that awareness of industry partnerships is relatively low among respondents, despite widespread acknowledgment of their importance. Only about one-fifth were aware of existing collaborations, and less than a quarter had benefited from internships or apprenticeships. This suggests a significant underutilization of industry partnerships as a mechanism to enhance practical training and employment prospects. Strengthening these collaborations could serve as a critical lever for improving the relevance and quality of vocational education (Nguyen, 2019; Adeyemi, 2021).

Respondents favored multiple strategies to bridge the gap between technical education and labor market needs. Updating curricula to align with industry trends was the top priority, followed closely by increased collaboration with industries for practical training and the provision of modern equipment. The importance of government funding and policy support was also highlighted, alongside enhancing instructor training and qualifications. These preferences

align with global best practices that advocate for dynamic, industry-responsive curricula, robust public investment, and capacity building among educators (Eze, 2020; Musa & Oladipo, 2022).

The findings of this study illuminate both the potentials and challenges of vocational education in Idah Federal Constituency. While there is recognition of its importance, quality and relevance issues persist, compounded by infrastructural and institutional constraints. Industry partnerships emerge as an underexploited resource with considerable promise.

CONCLUSION AND RECOMMENDATIONS

Conclusion

Vocational education and technical training in Idah Federal Constituency play an essential role in developing human capital and fostering economic growth. However, the current technical education system faces considerable challenges that hinder its ability to fully meet the evolving demands of the labor market. Addressing these issues is imperative to reduce unemployment, improve employability, and drive sustainable development within the region. The study concludes that a strategic focus on curriculum relevance, industry collaboration, resource enhancement, and policy implementation will significantly improve the capacity of technical education institutions to deliver skilled graduates equipped for today's job market.

Recommendations

The following recommendations guided the study:

i. The Ministry of Education, in collaboration with academic institutions and industry experts, should regularly review and update technical education curricula to ensure alignment with current industry standards and emerging technologies.

ii. State government authorities and educational institutions should prioritize investment in modern training facilities and equipment to provide students with hands-on experience reflective of real-world industry environments.

iii. Technical education institutions should proactively establish formal partnerships with local industries and businesses to facilitate internships, apprenticeships, and collaborative training programs, supported by both institutional management and industry stakeholders.

iv. Policymakers and government agencies should develop coherent policies and allocate adequate funding to support technical education reforms, focusing on skills development programs that directly respond to labor market requirements.

Acknowledgements

The authors are grateful to the Management of The Federal Polytechnic Idah, Kogi State Nigeria for enabling environment to conduct this research. We are also grateful to the Tertiary Education Trust Fund {TETFund} for sponsoring this research through the Institutional Based Research {IBR} Project.

References

Abubakar, I., & Adeyemi, T. (2020). Technical education and its impact on employment opportunities in Nigeria. *Journal of Vocational Education and Training*, 72(2), 211-225.

Adamu, I., & Ukeje, C. (2022). Industry Collaboration and Graduate Employability in Technical Education: A Case of Nigerian Institutions. *African Journal of Educational Research*, 8(3), 76-89.

Adedeji, A. (2019). Challenges and prospects of technical education in Nigeria. *African Journal of Education and Technology*, 6(3), 75-84.

Adewale, T. (2020). Bridging the Skills Gap in Technical Education in Nigeria. *Journal of Vocational Studies*, 18(3), pp. 112-126.

Adeyemi, O. (2021). Industry Collaboration in Nigerian Technical Education. *Vocational Training Journal*, 14(2), pp. 78-92.

Afeti, G., & Adubra, A. L. (2012). *Lifelong Technical and Vocational Skills Development for Sustainable Socio-Economic Growth in Africa*. UNESCO.

Afolabi, A. (2021). Aligning technical education with industry needs: A review of Nigerian policies. *International Journal of Educational Management*, 35(4), 829-846.

Becker, G. S. (1964). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*.

Bello, S. (2021). Challenges in Technical Education in Nigeria: A Case Study. *Journal of Education and Training*, 15(1), pp. 55-68.

Eze, J. (2020). Strategies for Technical Education Improvement in Nigeria. *Journal of Vocational Education*, 19(1), pp. 101-115.

Eze, M. & Okeke, C. (2019). Funding and Curriculum Issues in Nigerian Vocational Institutions. *Vocational Education Review*, 22(4), pp. 73-89.

Ezeani, N. (2022). Industry partnerships and technical education: Lessons from Nigeria. *Journal of Technical Education and Training*, 14(1), 55-68.

Fafunwa, B. (2014). *The Role of Technical and Vocational Education in Nigeria's Development*. *Nigerian Journal of Education and Practice*, 5(15), 45-55.

Fernandez, G., & Shaw, R. (2016). Education, Training, and Capacity Building for Sustainable Development. In: Uitto, J., Shaw, R. (eds) Sustainable Development and Disaster Risk Reduction. *Disaster Risk Reduction. Springer, Tokyo*. https://doi.org/10.1007/978-4-431-55078-5_14

Gbemisola, A. & Ubom, I.O, (2013). Vocational and Technical Education in Nigeria: Issues, Challenges and the Way Forward. *Journal of Vocational Education and Training*. 4. 219-224.

Jones, R. (2017). Technical Education and Industry Needs: A Critical Analysis. *International Journal of Education and Development*, 10(2), pp. 89-105.

Musa, A. & Oladipo, S. (2022). Aligning Technical Education with Labor Market Needs. *African Journal of Education Development*, 24(3), pp. 75-89.

Nguyen, T. (2019). Enhancing Vocational Education through Industry Partnerships. *International Journal of Technical Education*, 11(3), pp. 44-59.

Okeke, C. (2023). Enhancing human capacity through technical education in Nigeria: Challenges and solutions. *Journal of Human Resource Development*, 20(2), 95-110.

Okoye, K. R. E., & Okwelle, P. C. (2013). Technical and Vocational Education and Training (TVET) as an Intervention Mechanism for Global Competitiveness: Perspectives from Nigeria. *Developing Country Studies*, 3(4), 85-91.

Piaget, J. (1972). *The Psychology of the Child*.

Pollyn, B. (2016). Human Capacity Building and Sustainable Development In Nigeria: A Value Base Analysis. *Best International Journal for African Universities*. 3. 63-79.

Schultz, T. W. (1971). *Investing in Human Capital*.

UNESC0, (2022). Transforming Technical and Vocational Education and Training for successful and just transitions. unesco_strategy_for_tvet_2022-2029.pdfUNESCO. (2016). *Technical and Vocational Education and Training (TVET) for Sustainable Development*. Paris: UNESCO Publishing.

Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*.