Curricula:
Journal of Curriculum Development
https://ejournal.upi.edu/index.php/CURRICULA/

Evaluation of building trade programs for sustainable employability in Nigeria

Ibukun Francis Adeagbo[1], Ibiwumi Abiodun Alade[2], Olusiji Olaseni Lemo[3]
[1] Emmanuel Alayande University of Education, Oyo, Nigeria
[2] University of Eswatini, Kwaluseni, Swaziland
[3] Tai Solarin University of Education, Ijagun, Nigeria
adeagboif@eauedoyo.edu.ng[1], curritech66@gmail.com[2], rossandlemo@yahoo.co.uk[3]

ABSTRACT
Building-related programs in technical higher education are expected to equip students with employable skills; however, many graduates have yet to demonstrate adequate technical competence. This article aims to evaluate building-related programs in technical higher education to enhance graduates' employability, identify existing challenges, and propose solutions to prevent unemployment while sustaining skill-based programs. A survey research design was adopted, involving 1,390 participants. Data were collected using a validated and reliable instrument titled Building Trade Objectives, Content and Sustainability Questionnaire (BTOCSQ). Descriptive statistics were used to analyze the data. Results indicated that program objectives were moderately adequate, sustainability practices were strong, and curriculum content was only slightly adequate. The study concluded that regular updates to program objectives and content are essential to keeping pace with technological advances. Hence, curriculum developers should prioritize periodic reviews of building trade programs to enhance relevance, improve graduate employability, and sustain skills development initiatives.

ARTICLE INFO
Article History:
Received: 11 Dec 2025
Revised: 8 Apr 2026
Accepted: 13 Apr 2026
Publish online: 27 Apr 2026

Keywords:
building trade programs; evaluation; technical colleges; trainees' sustainability

Open access
Curricula: Journal of Curriculum Development is a peer-reviewed open-access journal.

ABSTRAK
Program keahlian bangunan di perguruan tinggi teknik diharapkan membekali mahasiswa dengan keterampilan kerja, namun banyak lulusan belum menunjukkan kemampuan teknis yang memadai. Artikel ini bertujuan untuk mengevaluasi program keahlian bangunan di perguruan tinggi teknik guna meningkatkan daya saing lulusan, mengidentifikasi masalah yang ada, serta mengusulkan solusi untuk mencegah pengangguran dan mempertahankan program berbasis keterampilan. Desain penelitian survei digunakan dengan melibatkan 1.390 responden. Data dikumpulkan menggunakan instrumen yang valid dan reliabel, yaitu Building Trade Objectives, Content and Sustainability Questionnaire (BTOCSQ). Statistik deskriptif digunakan untuk menganalisis data. Hasil penelitian menunjukkan bahwa tujuan program tergolong cukup memadai dan praktik keberlanjutan tergolong kuat, sedangkan isi kurikulum hanya tergolong cukup memadai. Penelitian ini menyimpulkan bahwa pembaruan rutin terhadap tujuan dan isi program sangat penting untuk mengikuti perkembangan teknologi. Oleh karena itu, pengembang kurikulum perlu memprioritaskan peninjauan berkala program keahlian bangunan guna meningkatkan relevansi, daya kerja lulusan, dan keberlanjutan pengembangan keterampilan.

Kata Kunci: *evaluasi; keberlanjutan peserta pelatihan; perguruan tinggi teknik; program keahlian bangunan*

How to cite (APA 7)
Adeagbo, I. F., Alade, I. A., & Lemo, O. O. (2026). Evaluation of building trade programs for sustainable employability in Nigeria. *Curricula: Journal of Curriculum Development, 5*(2), 451-462.

Peer review
This article has been peer-reviewed through the journal's standard double-blind peer review, where both the reviewers and authors are anonymised during review.

https://doi.org/10.17509/curricula.v5i2.427

INTRODUCTION

Vocational education is designed to prepare individuals for effective participation in specific occupations by equipping them with relevant technical skills, practical competencies, and work-oriented knowledge. It encompasses education about work and for work, with the central objective of facilitating employability and economic self-reliance (Okoye et al., 2021). In contemporary contexts, vocational education extends beyond traditional trades to address emerging occupations driven by technological advancement and industrial transformation (Adeagbo & Akinlabi, 2024; Audu, 2022; Owo & Deebom, 2020). In Nigeria, vocational education is recognized as a critical instrument for human resources development, poverty reduction, and youth employment. The National Policy on Education of the Federal Republic of Nigeria, issued in 2013, explicitly positions vocational education as a pathway to both wage employment and self-employment, thereby linking training outcomes directly to national economic development.

Technical colleges represent the primary institutional framework for delivering vocational education at the post-basic level in Nigeria. These institutions emphasize hands-on training and occupational competence, producing skilled human resources for key sectors such as engineering, construction, and manufacturing (Adeagbo et al., 2025). Among the vocational offerings, the building trade occupies a strategic position due to its relevance to infrastructure development and employment generation. The building trade program equips learners with competencies in construction processes, materials utilization, and site operations, leading to the award of the National Technical Certificate (NTC) and Advanced National Technical Certificate (ANTC) under the regulation of the National Board for Technical Education (NBTE). Within the NBTE framework, the building trade integrates multiple construction-related modules, including blocklaying, bricklaying, concreting, carpentry, plumbing, and finishing works.

The effectiveness of the building trade program depends on the clarity, relevance, and implementation of its objectives and curriculum. Program objectives define the expected learning outcomes, while instructional objectives translate these goals into measurable competencies achievable through classroom instruction, workshops, and industrial training (Abusomwan & Osaigbovo, 2020; Kelubia, 2024; Onajite, 2022). The NBTE curriculum emphasizes the acquisition of technical skills, work ethics, and problem-solving abilities through a blend of theoretical instruction and practical engagement (Adekanbi & Oladele, 2024; Harrison, 2022). Prior studies underscore that effective vocational curriculum implementation requires strong alignment among instructional strategies, assessment practices, and labor market expectations to enhance trainees' employability (Ntui et al., 2022; Nwamaka, 2020; Okorie & Onwumere, 2020).

Despite these provisions, concerns persist regarding the employability outcomes of building trade trainees from Nigerian technical colleges. Empirical evidence and stakeholder observations suggested that many trainees exhibit inadequate practical competence, limited adaptability, and insufficient readiness for independent practice in the construction sector (Adeagbo & Akinlabi, 2024; Ntui et al., 2022; Olawale & Okonkwo, 2022; Raji & Yisa, 2022). While existing studies have examined vocational education and employability broadly, there remains a paucity of empirical research that critically evaluates the alignment between

https://doi.org/10.17509/curricula.v5i2.427

program objectives, curriculum contents, and sustainable employability outcomes within the building trade, particularly in Southwest Nigeria. This gap is significant given the safety-critical nature of construction work and its implications for infrastructure quality and public welfare. Accordingly, the problem addressed in this study is the apparent disconnect between the intended outcomes of the building trade program and the actual employability performance of its trainees. This study, therefore, aims to evaluate the building trade program of technical colleges in Southwest Nigeria by examining the adequacy of its objectives and curriculum contents in promoting sustainable trainees' employability.

LITERATURE REVIEW

Studies on the Evaluation of Vocational and Technical Education Programs for Trainees' Employability

The overarching goals of the building trade program, as articulated by the National Board for Technical Education in 2024, are multifaceted and geared toward producing competent individuals who can thrive in both paid employment and entrepreneurial ventures. These objectives include providing foundational general education, offering specialized vocational training in selected trades, equipping learners with the necessary skills and competencies to secure, maintain, and succeed in gainful employment, and fostering a mindset conducive to self-reliance and job creation. However, achieving these goals depends heavily on how the building trade curriculum is implemented at technical colleges. Instructional delivery must emphasize practical engagement and real-world application, enabling students to internalize not just theoretical knowledge but also hands-on skills. The curriculum comprises essential technical competencies, work-related attitudes, and ethical values transmitted through classroom instruction, project-based learning, and practical experiences (Adekanbi & Oladele, 2024; Harrison, 2022).

The knowledge embedded in these lessons plays a critical role in transforming student behavior, refining their technical aptitudes, and preparing them for future occupational challenges (Raji & Yisa, 2022). This underscores the importance of carefully selecting appropriate instructional strategies and logically sequencing content to optimize learning outcomes and student performance. In addition to theoretical and skill-based content, the program's implementation structure includes a range of coordinated academic elements. These include the academic calendar, course outlines, teaching schedules, assessment tasks, hands-on workshops, capstone projects, internal and external examinations, and industrial attachment or internship placements. All these elements are integral to the skills-acquisition ecosystem. The cornerstone of effective program delivery lies in selecting relevant course content accompanied by suitable practical activities, particularly in vocational domains such as building and construction (Ntui et al., 2022; Nwamaka, 2020; Okorie & Onwumere, 2020).

These authors emphasize that successful curriculum implementation requires instructional methods that promote active learning and engage students in tasks that replicate real-world work scenarios. The evaluative strategies and pedagogical approaches adopted should align with employability standards, ensuring that trainees graduate with practical competencies that meet labor-market demands. This alignment is vital to enhancing the readiness of technical college trainees to enter the workforce as craftsmen, artisans, or independent

https://doi.org/10.17509/curricula.v5i2.427

contractors. Various empirical studies have been undertaken to assess the effectiveness of educational and vocational programs in Nigeria, such as a study conducted on identifying strategies for sustaining small businesses among graduates of tertiary institutions in Kwara State, which highlighted essential skills and practices that enable small-scale enterprises to thrive, emphasizing the need for targeted entrepreneurship education (Nwabufo & Ezeani, 2020). In a related study on the employability of Nigerian graduates, findings revealed that many graduates are often perceived as unemployable due to a deficiency in job-relevant skills (Adebayo, 2022; Adeagbo & Akinlabi, 2024).

The authors advocated a collaborative effort among higher education institutions, government agencies, and the private sector to embed work-based training, practical exposure, and entrepreneurial learning within the academic environment. Similarly, investigations on the broader issue of graduate unemployment in Nigeria, which has escalated into a national crisis, revealed that unemployed graduates often experience significant mental health challenges such as anxiety and depression, which are exacerbated by their inability to secure jobs (Adiela & Puyate, 2025; Dela-Cruz & Dela-Cruz, 2023; Eze & Oladipo, 2023; Ibrahim & Yusuf, 2022; Muhammad & Halliru, 2025). The root causes of this phenomenon, as identified in the studies, include mismatches between academic training and industry expectations, poor technical proficiency, limited English proficiency, and a lack of critical thinking skills. Moreover, employers' increasing reliance on advanced technologies has further marginalized graduates who lack digital literacy and adaptability to evolving workplace demands.

Context, Input, Process, and Product (CIPP) Evaluation Model

In programmatic evaluations, the use of structured models is essential for guiding data collection and interpretation (Adom et al., 2020; Alanshori, 2025; Ogwudile, 2025; Ratnaya et al., 2022). The advocacy for adopting the Context, Input, Process, and Product (CIPP) evaluation model as a comprehensive framework for assessing skills-based training programs has been overemphasized (Adiela & Puyate, 2025; Muhammad & Halliru, 2025; Yoshany et al., 2025). The CIPP model provides a systematic lens through which educational programs can be examined from multiple dimensions, ensuring that both the design and execution are aligned with intended outcomes (Ibrahim & Dauda, 2023; Okonkwo & Nwafor, 2022). It facilitates the identification of strengths, weaknesses, and opportunities for improvement across various stages of program development. Within this framework, the present study focuses specifically on the Context (C) component, which involves a detailed analysis of the goals and curriculum contents of the building trade program offered in technical colleges. The aim is to evaluate how these foundational elements enhance the employability and long-term career sustainability of technical trainees in the Southwest region of Nigeria. By concentrating on this evaluative dimension, the research seeks to generate insights that can inform curriculum improvement and policymaking in technical and vocational education.

METHODS

This study employed a descriptive survey research design. The target population for this study comprised 1,390 individuals, including both industry professionals and educational

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stakeholders. Specifically, 1,248 building industry experts were drawn from the professional registers of two key national bodies: 710 registered builders listed with the Council of Registered Builders of Nigeria (CORBON) and 538 registered architects affiliated with the Council of Registered Architects of Nigeria (CORAON). Additionally, 142 academic and technical staff members were identified across all federal and state-owned technical colleges in the Southwest geopolitical zone. These stakeholders included 36 Heads of Departments (HODs), 82 technical teachers, and 24 workshop instructors, as officially documented by the respective State Ministries of Education, Science, and Technology within the region. A total sample of 267 respondents was selected for participation in the study.

The stratified random sampling technique was applied to ensure a fair and proportionate selection of 125 building professionals (comprising 71 registered builders and 54 architects), representing approximately 10% of the professional population and stratified by state to maintain equitable geographical representation. In contrast, the relatively small and manageable number of technical education stakeholders (142) warranted total enumeration, allowing all identified individuals across federal and state technical colleges to be included without sampling. To gather data relevant to the study's objectives, the researchers developed a structured questionnaire titled "*Building Trade Objectives, Content and Sustainability Questionnaire (BTOCSQ).*" This research instrument was developed based on an extensive literature review and aligned with the Minimum Standards for Technical Colleges established by the National Board for Technical Education (NBTE).

The BTOCSQ was divided into two major sections: Section A, which gathered demographic information from respondents, and Section B, which was structured into three thematic parts. Part 1 included 4 items assessing the program's general objectives, and Part 2 included 44 items focused on content adequacy. Both parts utilized a four-point modified Likert scale ranging from Highly Adequate (HA) to Not Adequate (NA). Part 3, consisting of 18 items, assessed the program's sustainability using a similar scale: Highly Sustainable (HS) to Not Sustainable (NS). To ensure the instrument's validity and reliability, five seasoned experts in vocational and technical education evaluated the questionnaire for face and content validity. A pilot test was then conducted to determine its internal consistency. This trial involved 10 registered builders, 14 architects, 6 technical college teachers, 3 workshop instructors, and 2 Heads of Departments, drawn from Federal Science and Technical College, Uromi, and Government Science and Technical College, Benin City, both located in Edo State, within Nigeria's South-South geopolitical zone.

The Cronbach's Alpha method was used to assess the instrument's reliability, yielding coefficients of 0.87, 0.84, and 0.85 for the three sections, respectively, indicating high internal consistency. The questionnaire was distributed and retrieved by the researchers with the assistance of two trained research assistants. The return rates were notably high: 100% return was achieved among the technical college respondents, comprising all 36 Heads of Departments, 82 teachers, and 24 instructors, while 84% of the questionnaires distributed to the building professionals were successfully retrieved (105 out of 125). Descriptive statistics, particularly mean scores and standard deviations, were used to analyze the data and respond to the study's research questions. Interpretation of mean ratings followed a decision rule guided by set boundary limits: a mean score of 3.50 to 4.00 indicated Highly Adequate (HA) or Highly Sustainable (HS); 2.50 to 3.49 represented Moderately Adequate (MA) or Moderately Sustainable (MS); 1.50 to 2.49 was interpreted as Slightly Adequate (SA)

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or Slightly Sustainable (SS); and 0.00 to 1.49 denoted Not Adequate (NA) or Not Sustainable (NS). In addition to measuring central tendency, standard deviation (SD) was examined to assess the degree of agreement or disparity in responses, thereby evaluating the homogeneity of participants' views across the study population.

RESULTS AND DISCUSSION

Tabel 1. Mean and Standard Deviation Ratings on the Perceived Adequacy of Objectives in the Building Trade Program of Technical Colleges

SN	Statement on the Adequacy of Building Trade Program Objectives	Mean	SD	Remark
1	The program delivers a broad-based general education	3.45	1.14	MA
2	It offers specialized training in various occupational fields	3.06	1.12	MA
3	It equips trainees with core competencies and employable skills	3.28	1.14	MA
4	It fosters entrepreneurial capacity and supports self-employment	3.76	1.13	HA
	Aggregate Mean/SD	**3.38**	**1.13**	**MA**

Source: Field Data Compilation, 2025

The data presented in **Table 1** show the mean responses regarding the adequacy of the objectives of building trade programs in technical colleges for sustainable trainees' employability in Southwest Nigeria. Specifically, the results presented in Table 1 indicated that all items had mean ratings ranging from 3.06 to 3.76. Item 4 had the highest mean score of 3.76, indicating that building trade programs aim to help individuals create employment and become self-employed. However, with an average of 3.38, which exceeds the minimum level of disagreement adopted in this study, the objectives of building a trade program in technical colleges to enhance trainees' sustainable employability in Southwest Nigeria are moderately adequate. In addition, the standard deviation ranged from 1.12 to 1.14, indicating that the respondents' opinions were not too far apart, supporting the validity of the items.

Table 2. Average Ratings and Standard Deviation on the Suitability of Building Trade Curriculum Content in Technical Colleges for Enhancing Employability in Southwest Nigeria

S/N	Curriculum Components of the Building Trade Program	Mean Score	Std. Dev.	Interpretation
1	Occupational health and safety practices at construction sites	2.54	0.69	Moderately Adequate
2	Use and maintenance of manual and mechanical tools	3.67	0.71	Highly Adequate
3	Fundamental carpentry and woodwork techniques	2.76	0.67	Moderately Adequate
4	Procedures for site clearance and layout	3.84	0.71	Highly Adequate
5	Introduction to building foundations	3.74	0.69	Highly Adequate
6	Floor construction techniques	3.00	0.68	Moderately Adequate
7	Wall erection and treatment	2.21	0.72	Slightly Adequate
8	Installation of door and window openings	1.43	0.67	Not Adequate

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S/N	Curriculum Components of the Building Trade Program	Mean Score	Std. Dev.	Interpretation
9	Roof construction principles	3.12	0.72	Moderately Adequate
10	Staircase design and installation	3.00	0.68	Moderately Adequate
11	Application of finishing techniques	1.34	0.71	Not Adequate
12	Properties and uses of cement	2.86	0.69	Moderately Adequate
13	Production and application of bricks	1.34	0.69	Not Adequate
14	Use of aggregates and mortar	2.45	0.71	Slightly Adequate
15	Concepts of site leveling and layout	3.41	0.67	Moderately Adequate
16	Substructure development practices	1.29	0.72	Not Adequate
17	Techniques for solid floor construction	1.35	0.68	Not Adequate
18	Brick wall building techniques	1.38	0.71	Not Adequate
19	Design and use of arches in buildings	3.56	0.67	Highly Adequate
20	Assembly and safety of scaffolding	3.25	0.72	Moderately Adequate
21	Design of cooking fireplaces and chimneys	1.34	0.68	Not Adequate
22	Stone rubble wall construction	1.04	0.67	Not Adequate
23	Construction site drainage systems	3.51	0.71	Highly Adequate
24	Pavement construction and water flow control	3.06	0.68	Moderately Adequate
25	Methods of block wall construction	3.78	0.72	Highly Adequate
26	Concrete composition and utilization	3.86	0.69	Highly Adequate
27	Concrete curing methods	3.11	0.67	Moderately Adequate
28	Testing concrete strength and durability	3.56	0.72	Highly Adequate
29	Expansion and contraction joints in concrete	3.12	0.68	Moderately Adequate
30	Temporary formwork design and installation	3.67	0.71	Highly Adequate
31	Fundamental concepts in reinforced concrete	3.65	0.72	Highly Adequate
32	Interpretation of structural drawings	3.49	0.67	Moderately Adequate
33	Execution of reinforced concrete structures	3.10	0.69	Moderately Adequate
34	Understanding prestressed concrete systems	2.65	0.68	Moderately Adequate
35	Finishing tool selection and application	3.13	0.71	Moderately Adequate
36	Physical properties and selection of finishing materials	3.42	0.72	Moderately Adequate
37	On-site finishing application techniques	2.45	0.67	Slightly Adequate
38	Laying of precast floor elements	2.56	0.71	Moderately Adequate
39	Installation of synthetic floor tiles	3.02	0.68	Moderately Adequate
40	Internal and external wall rendering	3.34	0.69	Moderately Adequate
41	Fixing of wall tiles and mosaic designs	3.78	0.68	Highly Adequate
42	Application of cladding materials	3.19	0.71	Moderately Adequate
43	Usage of premixed rendering solutions	3.45	0.67	Moderately Adequate
	Overall Average	**2.85**	**0.68**	**Slightly Adequate**

Source: Field Data Compilation, 2025

https://doi.org/10.17509/curricula.v5i2.427

Results from **Table 2** showed the mean responses regarding the adequacy of the contents of building trade programs in technical colleges for sustainable trainees' employability in Southwest Nigeria. From Table 2, it was evident that of the 43 items, 32 had mean ratings ranging from 2.54 to 3.86, which fell within the decision rule for moderately/highly adequate. The analysis also indicated that eleven items, that is, Items 7, 8, 11, 13, 14, 16, 17, 18, 21, 22, and 37, had mean ratings ranging from 1.04 to 2.45, which fell below the cut-off mean. The average for this table was 2.85, indicating that the building trade contents are slightly adequate. However, the standard deviation ranged from 0.67 to 0.72, indicating that the respondents' views are not too far apart.

Table 3. Mean and standard deviation responses on the sustainability of provisions for building trade trainees of the technical college in Southwest Nigeria

S/N	Sustainability of Provisions for Trainees of Technical Colleges	Mean	SD	Remarks
1	Financial support from the government, philanthropists, banks, and individuals for trainees to acquire materials, tools, and equipment	3.89	1.20	HS
2	Fostering a sense of community among trainees through active involvement in college activities	3.07	1.18	MS
3	Facilitating trainees' acquisition of practical skills, technical knowledge, and modern technological updates in the building trade	3.79	1.19	HS
4	Promoting teamwork among trainees during production and service tasks	3.56	1.22	HS
5	Enhancing trainees' technical skills and knowledge through the use of modern production techniques	3.89	1.17	HS
6	Improving the reputation of technical college trainees by providing quality services and products to the public	3.65	1.21	HS
7	Encouraging cooperation among trainees from different trades through knowledge and practice sharing	3.52	1.18	HS
8	Increasing employer confidence in the technical skills of trainees through stakeholder support	2.79	1.22	MS
9	Offering interest-free loans from central banks to help trainees start their own businesses	3.69	1.19	HS
10	Ensuring rigorous project monitoring by economic reform agents to confirm proper use of funds	3.50	1.17	HS
11	Providing trainees with additional business opportunities to foster creativity	3.71	1.20	HS
12	Enhancing trainees' self-esteem and business control through government and stakeholder initiatives	2.83	1.22	MS
13	Imposing restrictions on the import of goods that can be locally produced to encourage domestic manufacturing by trainees	3.84	1.19	HS
14	Promoting and supporting the export of products made by trainees	3.74	1.17	HS
15	Providing essential infrastructure such as roads, water, and electricity to facilitate the production and distribution of trainees' goods	3.66	1.21	HS

https://doi.org/10.17509/curricula.v5i2.427

S/N	Sustainability of Provisions for Trainees of Technical Colleges	Mean	SD	Remarks
16	Regularly updating trainees with the latest business and economic information	3.11	1.20	MS
17	Organizing extensive workshops, seminars, and conferences on small-scale enterprise management for trainees	3.54	1.17	HS
18	Offering subsidies to boost the production of locally made goods	3.63	1.22	HS
	Average Mean/SD	**3.52**	**1.19**	**HS**

Source: Field Data Compilation, 2025

Results from **Table 3** showed the mean responses regarding the level of sustainability of provisions for building trade trainees at the technical colleges in Southwest Nigeria. Two items (1 & 5) had the highest mean score of 3.89, indicating that government, philanthropists, banks, and individuals providing funds to graduate trainees to procure materials, tools, and equipment for jobs will enhance their sustainability. Also, instructors enabling trainees to broaden their technical knowledge and practical skills through modern production/service techniques are a means to trainees' sustainability. It was revealed that all 18 items had mean scores ranging from 2.71 to 3.89, with an average of 3.52, which exceeds the minimum level of disagreement adopted in this study. Therefore, there is a high level of sustainability in the provisions for building trade trainees in technical colleges in Southwest Nigeria. However, the standard deviation ranged from 1.17 to 1.22, indicating that the respondents were not too far apart in their responses, supporting the validity of the items.

Discussion

The findings of this study revealed that the objectives of establishing a trade program in technical colleges to enhance trainees' sustainable employability in Southwest Nigeria are moderately adequate. These objectives include: providing general education, providing training in selected occupations, helping trainees develop the skills and abilities necessary to secure and retain a job, and helping create employment and self-employment. This aligns with the finding of who posited that technical colleges are designed primarily to equip individuals with a saleable skill that will make them self-reliant and self-dependent (Audu, 2022). This is also supported by FRN (2013), which states that technical colleges are designed to prepare individuals to acquire practical skills, basic and scientific knowledge, and the attitudes required for work as craftsmen and technicians at the sub-professional level. The analysis presented showed that the content of a trade program in technical colleges for sustainable trainees' employability in Southwest Nigeria is slightly adequate.

Scanning the table revealed that building trade students were adequate in the preliminary content of building construction. It is essential to enhance the implementation of practical curricula, including laboratory work, internships, and vocational training, to ensure students attain professional mastery through hands-on experience. Course design should prioritize integrating theoretical frameworks with real-world applications, enabling students to develop operational skills and robust problem-solving capabilities throughout their education (Ren et

https://doi.org/10.17509/curricula.v5i2.427

al., 2023). This may be connected with the routine duties performed at individual homes. In most homes, students in building trade programs demonstrate expert skills in site clearing, leveling, setting out, and bonding adjoining walls or structures. This may be connected to their classroom learning to facilitate easier comprehension, thereby proving the adequacy of their learning content. These findings were in line with those who posited that the technical college curriculum was well-suited to the nitty-gritty of day-to-day practical life in building construction, which does not involve sophisticated tools or equipment (Raji & Yisa, 2022).

Furthermore, the knowledge acquired through building trade programs at any technical college is sufficient to make an individual practically fit for domestic construction, from which they can earn a daily living (Adiela & Puyate, 2025). In other words, building trade content met the requirements of construction, helping learners cope with industry challenges. However, the results also revealed that students showed weaknesses in some building components, including substructure and construction, solid ground-floor construction, and brick wall construction, among others. This may be due to the content's nature, which is more closely related to engineering subjects. Consequently, this finding contradicts the observation that technical college students have a basic background in physics and mathematics, which serve as the foundation for engineering courses (Nwamaka, 2020).

The results of this research demonstrated a greater degree of sustainability across all listed sustainability provisions for building trade trainees at a technical institution in Southwest Nigeria. The majority of business owners lack effective strategies for maintaining their companies and are unaware of the benefits of small-scale enterprise sustainability (Adebayo, 2022). These results also corroborate the finding that managers of small-scale enterprises who adopt sustainable development strategies improve their business acumen and prevent their businesses from failing too soon, thereby allowing them to reap the benefits of sustainable small-scale enterprise development (Nwabufo & Ezeani, 2020). This will result in the lowest possible level of mass self-reliance, along with a variety of crimes and social vices. This will lead to a large number of individuals becoming kingmakers. The economy will expand positively and undergo a significant transformation. Nigeria will thereby become one of the world's major economic powers.

CONCLUSION

This study concluded that the objectives and content of the building trade program in technical colleges are inadequate, a situation that may result in the production of incompetent graduates unable to meet the demands of the modern world of work. To address this gap, there is a need for regular review and updating of program objectives and content to align with current technological advancements and sustainability provisions, thereby promoting mass self-reliance. Consequently, educational policymakers and curriculum developers, in collaboration with the NBTE, should ensure that building trade objectives are clearly articulated and properly integrated into the curriculum to enhance effective implementation by teachers, instructors, and students. In addition, building trade content should be continuously reviewed to reflect recent developments in the building industry. Furthermore, the government and relevant stakeholders should raise awareness of identified sustainability strategies and ensure their dissemination to building trade trainees and entrepreneurs through targeted training programs, conferences, seminars, and workshops,

https://doi.org/10.17509/curricula.v5i2.427

thereby enhancing their capacity to sustain and grow small-scale businesses in the construction industry.

AUTHOR'S NOTE

The authors declare no conflict of interest regarding the publication of this article. Also, the authors' attests that this article is free of plagiarism. All sources were properly cited and this article has not been previously published.

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