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Entrepreneurship Education and Capacity Development in Nigeria: A Systematic Review of Institutional, Pedagogical, and Financing Mechanism

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ABSTRACT

Entrepreneurship education has become an important strategy for strengthening entrepreneurial capacity, promoting self-reliance, and responding to persistent employment and enterprise-development challenges in Nigeria. However, existing studies have largely emphasized entrepreneurial intention, employment creation, and business start-up, while comparatively limited attention has been given to the institutional, pedagogical, and financing mechanisms through which entrepreneurship education contributes to capacity development. This study systematically reviewed relevant literature to synthesize evidence on these mechanisms and clarify the conditions that shape entrepreneurship education outcomes in Nigeria. Relevant peer-reviewed studies, policy documents, government publications, and institutional reports were identified through major academic databases and scholarly sources and subsequently screened for relevance and eligibility. The selected literature was analyzed through qualitative thematic synthesis supported by NVivo, while Human Capital Theory and Schumpeter's Innovation Theory provided the interpretive foundations for understanding skill development, innovation, and entrepreneurial transformation. The findings identified three interrelated mechanisms comprising institutional frameworks and support structures, pedagogical approaches, and financing arrangements. Entrepreneurship education was consistently associated with entrepreneurial skills, managerial competence, innovation capability, employability, self-reliance, and enterprise preparedness. However, the realization of these outcomes was constrained by inadequate infrastructure, limited experiential learning, insufficient instructor capacity, weak university-industry collaboration, restricted access to entrepreneurial finance, and inconsistent policy implementation. The review demonstrates that entrepreneurship education does not automatically generate broader capacity-development outcomes but depends on the alignment of institutional support, practical pedagogy, financing, and the wider entrepreneurial environment. The study therefore provides an integrated perspective for strengthening entrepreneurship education and supporting sustainable capacity development in Nigeria.

Keywords: Capacity development; entrepreneurship education; financing mechanisms; institutional support; pedagogical approaches

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1. INTRODUCTION

Entrepreneurship education has become an important aspect of national development strategies across the world due to its significant role in promoting innovation, employment generation, and economic growth (Op't Hoog & Skoumpopoulou, 2019). In developing countries such as Nigeria, entrepreneurship education is increasingly recognized as a practical tool for addressing socio-economic challenges such as unemployment, poverty, dependency on government jobs, and low industrial productivity. The growing population and limited availability of white-collar jobs have made it necessary for individuals to acquire entrepreneurial skills that can enable them to become self-reliant and productive members of society. As a result,

educational institutions and government agencies have continued to emphasize entrepreneurship education as a means of empowering citizens with the knowledge and competencies needed for business creation and sustainable livelihood (Adejoke, 2025).

Entrepreneurship education refers to the process of equipping individuals with the knowledge, attitudes, skills, and competencies required to identify business opportunities, take risks, innovate, and manage enterprises successfully. It involves both theoretical and practical training designed to develop entrepreneurial capabilities among students and graduates. Capacity development, on the other hand, refers to the process of enhancing the abilities, knowledge, and productivity of individuals and institutions to achieve economic and social goals effectively. The relationship between entrepreneurship education and capacity development lies in the ability of entrepreneurial training to improve human capital, encourage creativity, and foster economic participation among citizens. Through entrepreneurship education, individuals are better prepared to contribute meaningfully to national development and economic transformation (Papademetriou & Anastasiadou, 2025).

In Nigeria, the introduction of entrepreneurship education into tertiary institutions was aimed at reducing graduate unemployment and promoting self-employment among youths. The government, through educational reforms and policies, mandated universities, polytechnics, and colleges of education to incorporate entrepreneurship studies into their academic programmes. This initiative was intended to produce graduates who possess entrepreneurial skills capable of creating jobs rather than depending solely on government employment opportunities. Entrepreneurship education has contributed to capacity development by enhancing vocational skills, managerial competence, innovation, and productivity among students and young entrepreneurs. It has also encouraged the establishment of small and medium-scale enterprises that contribute to economic growth and poverty reduction in the country(Giami & Emeni, 2025).

In this study, capacity development is operationally defined as the process of enhancing the knowledge, technical skills, entrepreneurial competencies, managerial abilities, innovative capacity, and institutional support systems required to enable individuals and organizations to achieve sustainable socio-economic outcomes. At the individual level, it encompasses the acquisition of employable and entrepreneurial skills, creativity, leadership, problem-solving abilities, and business management competencies that improve self-employment and employability. At the institutional level, it refers to strengthening educational institutions, policy frameworks, and support mechanisms that facilitate entrepreneurship education, business incubation, access to finance, and technology transfer. The concept also extends to the promotion of small and medium-sized enterprise (SME) formation, innovation capability, job creation, productivity enhancement, and national economic competitiveness. Therefore, within the context of this study, capacity development is viewed as a multidimensional outcome of entrepreneurship education that equips individuals with the competencies to create and sustain enterprises while simultaneously strengthening institutional effectiveness and contributing to innovation, employment generation, and national productivity in Nigeria.

Despite the importance of entrepreneurship education in capacity development, several challenges continue to hinder its effectiveness in Nigeria. These challenges include inadequate funding of educational institutions, poor infrastructural facilities, shortage of qualified entrepreneurship instructors, inadequate practical training, weak implementation of entrepreneurship policies, and limited access to start-up capital for graduates(Gwaison, 2021). In many institutions, entrepreneurship education is still largely theoretical with limited practical exposure, making it difficult for graduates to translate acquired knowledge into successful business ventures. Furthermore, corruption, unstable economic policies, and poor institutional support have negatively affected the growth and sustainability of entrepreneurial activities in the country(Azuka, 2017).

Nigeria has positioned entrepreneurship education as a strategic policy instrument for addressing graduate unemployment, promoting innovation, and stimulating sustainable

economic development. The introduction of compulsory entrepreneurship education in tertiary institutions by the National Universities Commission (NUC), together with initiatives under the National Policy on Education and successive national development plans, reflects the government's commitment to equipping graduates with entrepreneurial knowledge and practical skills for self-employment and enterprise creation. Despite these policy initiatives, unemployment and underemployment remain persistently high, while the contribution of entrepreneurship education to measurable capacity development outcomes such as entrepreneurial competence, innovation capability, enterprise formation, and productivity has remained below expectations. Existing evidence attributes this implementation challenge to inadequate funding, weak institutional support, insufficient practical and experiential learning, limited industry–university collaboration, poor access to start-up finance, and inconsistencies in policy implementation, all of which constrain the effectiveness of entrepreneurship education in developing entrepreneurial capacity (Akinyemi, 2023; Medeataji & Usman, 2025; Udefuna et al., 2013).

Recent empirical work underscores both the scale of the problem entrepreneurship education (EE) is meant to address and the unevenness of its delivery: Nigerian universities graduate roughly 500,000 to 600,000 students annually into a labour market that cannot absorb them, and youth unemployment is estimated at an average of 42.5 percent across African economies including Nigeria, even as official aggregate figures such as the 4.90 percent unemployment rate reported for Nigeria in the fourth quarter of 2024 mask deep undercounting and definitional problems that obscure graduate-specific distress(Omotayo & Mohammed, 2024).. A more critical reading, however, complicates any simple "more EE equals less unemployment" narrative: across roughly 308 degree-awarding institutions nationally, provision is highly uneven, with polytechnics generally offering more practical, hands-on entrepreneurship training than universities, where lecture-based delivery still dominates over the experiential learning shown to build real competencies. Regional and institutional variation further stratifies outcomes — studies drawing on South-South and South-East cohorts, for instance, point to differences in programme management, funding access, and infrastructure that shape entrepreneurial intentions differently across geopolitical zones, while conflict-affected areas in the north face distinct constraints on venture survival and skills transfer. Labour-market effects are similarly conditional rather than uniform: time-series analysis using NBS, CBN, and World Bank data finds that government expenditure on entrepreneurship training significantly reduces unemployment while improvements in ease of doing business have a weaker positive effect, and digital entrepreneurship emerges as the strongest negative predictor of unemployment — a finding that privileges urban, digitally connected graduates and raises equity concerns for rural and infrastructure-poor regions where multiple taxation, complex regulation, and subnational disparities blunt these same effects. Taken together, this evidence suggests that any systematic review of EE in Nigeria must move beyond aggregate enrolment and curriculum statistics to interrogate how institutional capacity, regional infrastructure, financing mechanisms, and sector-specific labour absorption interact to produce sharply divergent returns on entrepreneurship training(Ayo-Sobowale, 2021)

Previous studies have extensively examined entrepreneurship education from the perspectives of entrepreneurial intention, youth empowerment, employment generation, curriculum development, and economic growth, while systematic reviews have highlighted dominant research themes and future research priorities in Nigeria (Bell & Loon, 2018; Agboola, 2020). However, relatively few studies have comprehensively integrated the institutional, pedagogical, and financing mechanisms through which entrepreneurship education translates into sustainable capacity development. Consequently, an important analytical gap remains regarding the pathways linking entrepreneurship education with individual competencies, institutional capacity, SME development, innovation capability, and national productivity. This study addresses that gap by providing a comprehensive synthesis of existing evidence and proposing an integrated analytical perspective that connects entrepreneurship education with

capacity development through institutional support, effective pedagogy, and entrepreneurial financing, thereby offering practical policy insights for strengthening entrepreneurship education and enhancing sustainable capacity development in Nigeria.

Given the increasing importance of entrepreneurship education in promoting human capacity and national development, there is a need to critically examine its role and challenges in Nigeria. Understanding how entrepreneurship education contributes to capacity development will help policymakers, educational institutions, and development agencies design effective strategies for improving entrepreneurial learning and skill acquisition. This study therefore seeks to examine the role of entrepreneurship education in capacity development in Nigeria, identify the major challenges confronting its implementation, and suggest measures for enhancing its effectiveness in achieving sustainable economic growth and development. This study seeks to address questions such as: How does entrepreneurship education contribute to capacity development in Nigeria? What institutional and pedagogical constraints limit its effectiveness? What policy mechanisms can improve its impact?

Objectives of the Study

The general objective of this study is to critically examine, through a systematic review, the institutional, pedagogical, and financing mechanisms shaping entrepreneurship education (EE) and capacity development in Nigeria. Specifically, the study seeks to:

1. Examine the institutional frameworks and structures (federal, state, and private universities/polytechnics) through which entrepreneurship education is delivered across Nigeria.
2. Assess the pedagogical approaches and instructional methods (lecture-based versus experiential/practical models) employed in teaching entrepreneurship in Nigerian tertiary institutions.
3. Evaluate the financing mechanisms — including government funding, donor support, private sector partnerships, and student-level access to capital — that sustain entrepreneurship education and enterprise development.

Research Questions

1. What institutional frameworks and structures underpin the delivery of entrepreneurship education in Nigerian tertiary institutions?
2. What pedagogical approaches are predominantly used in teaching entrepreneurship education, and how effective are experiential/practical methods compared to conventional lecture-based instruction?
3. What financing mechanisms exist to support entrepreneurship education and capacity development, and how adequate or accessible are they to students and institutions?

Concept Entrepreneurship Education

Entrepreneurship education refers to the structured learning process aimed at equipping individuals with the knowledge, skills, attitudes, and competencies required to identify opportunities, create ventures, and manage businesses effectively. According to the European Commission, entrepreneurship education is a key competence that involves creativity, innovation, risk-taking, and the ability to turn ideas into action across personal, social, and professional contexts (European Commission, 2016). This definition emphasizes entrepreneurship as a

transversal skill relevant beyond business creation, focusing on personal development and employability.

In another perspective, the OECD describes entrepreneurship education as a learning process that develops entrepreneurial mindsets and skills such as opportunity recognition, problem-solving, and resource management necessary for economic and social value creation (OECD, 2014). This view highlights entrepreneurship education as a driver of innovation and economic competitiveness, particularly in knowledge-based economies.

UNESCO also conceptualizes entrepreneurship education as a pedagogical approach that prepares learners to become self-reliant, innovative, and productive members of society by integrating entrepreneurial skills into formal and informal education systems (UNESCO, 2012). This definition stresses its role in addressing unemployment and promoting sustainable development through skill acquisition and practical learning.

Concept Capacity Development

Capacity development is defined by the United Nations Development Programme (UNDP) as the process through which individuals, organizations, and societies obtain, strengthen, and maintain the capabilities needed to set and achieve their own development objectives over time (UNDP, 2009). This definition emphasizes sustainability, self-reliance, and long-term institutional strengthening.

The World Bank conceptualizes capacity development as the process of enhancing the ability of individuals, institutions, and systems to perform functions, solve problems, and achieve development goals effectively (World Bank, 2010). This perspective focuses on improving institutional performance and governance structures to support economic and social development.

According to the OECD Development Assistance Committee (OECD-DAC), capacity development is the process by which people, organizations, and societies develop abilities to manage their affairs successfully, with a strong emphasis on ownership, learning, and adaptability (OECD, 2006). This definition highlights capacity development as a locally driven and participatory process essential for sustainable development outcomes.

2. METHOD

Research Design

This study employed a systematic literature review with a qualitative thematic synthesis to examine entrepreneurship education and capacity development in Nigeria. The review was designed to identify, organize, and critically synthesize existing evidence concerning the institutional, pedagogical, and financing mechanisms that shape the implementation and outcomes of entrepreneurship education. A systematic review approach was considered appropriate because the existing literature is dispersed across empirical studies, policy reports, institutional documents, and theoretical works, making an integrated synthesis necessary to understand how entrepreneurship education contributes to capacity development within the Nigerian context.

The review was qualitative in orientation because its primary objective was not to calculate pooled statistical effect sizes but to identify recurring patterns, institutional conditions, pedagogical practices, financing arrangements, implementation constraints, and capacity-development outcomes reported across the literature. The synthesis therefore emphasized interpretation of the evidence while maintaining a clear distinction among empirical findings, policy claims, theoretical explanations, and contextual sources.

Human Capital Theory and Schumpeter's Innovation Theory provided the theoretical foundation for the study. Human Capital Theory was used to interpret how entrepreneurship education may strengthen knowledge, skills, productivity, employability, and entrepreneurial

competence, whereas Schumpeter's Innovation Theory provided a basis for understanding entrepreneurship education in relation to creativity, opportunity recognition, innovation, and economic transformation. These theories were primarily used during the interpretation stage rather than as rigid predetermined categories for selecting or coding the literature. This approach allowed themes to emerge from the reviewed evidence before being interpreted through the theoretical framework.

Information Sources and Literature Search

The literature search focused on publications related to entrepreneurship education and capacity development within Nigeria. Relevant materials were identified through Google Scholar, Scopus, Web of Science, ScienceDirect, SpringerLink, and African Journals Online (AJOL). These sources were selected to provide coverage of international peer-reviewed research as well as literature relevant to African and Nigerian educational and entrepreneurial contexts.

The principal review period covered publications from 2010 to 2025. This period was selected to capture contemporary developments in entrepreneurship education following its increasing institutionalization within Nigerian tertiary education. However, seminal theoretical publications published before 2010, particularly foundational works related to Human Capital Theory and Schumpeter's Innovation Theory, were retained where necessary to establish the theoretical basis of the study. These foundational works were treated as theoretical references rather than as part of the contemporary empirical evidence base.

The search process used combinations of terms relating to entrepreneurship education, capacity development, entrepreneurial skills, innovation, employment, enterprise development, SMEs, and Nigeria. Core search concepts included *entrepreneurship education*, *entrepreneurial education*, *entrepreneurial skills*, *capacity development*, *capacity building*, *skill acquisition*, *employability*, *self-employment*, *entrepreneurial competence*, *innovation*, *SMEs*, *enterprise development*, and *Nigeria*.

The search strategy was structured around combinations of the major concepts. A general Boolean structure guiding the searches was formulated as follows:

("entrepreneurship education" OR "entrepreneurial education" OR "entrepreneurial training")
AND
("capacity development" OR "capacity building" OR "entrepreneurial skills" OR "skill acquisition" OR employability OR innovation OR "enterprise development" OR SMEs)
AND
(Nigeria OR Nigerian)

The exact syntax was adapted where necessary to accommodate the search functions and indexing conventions of individual databases. Searches were supplemented by reference-list checking of relevant studies and policy documents where additional sources directly related to the review questions were identified.

Eligibility Criteria

Eligibility criteria were established to ensure that the reviewed literature was sufficiently relevant to the objectives and research questions of the study. Publications were considered eligible when they addressed entrepreneurship education, entrepreneurial training, entrepreneurial skill development, or related educational interventions and provided evidence relevant to capacity development in Nigeria.

Empirical quantitative, qualitative, and mixed-methods studies were considered when they examined outcomes such as entrepreneurial competence, employability, self-employment, entrepreneurial intention, innovation, skills acquisition, enterprise development, or related dimensions of capacity development. Policy documents, government publications, institutional

reports, and development-agency publications were also considered when they provided relevant information concerning entrepreneurship education policy, institutional support, financing arrangements, implementation mechanisms, or national capacity-development programmes.

Studies were included when they met the following general criteria: they were published in English; they addressed entrepreneurship education or closely related entrepreneurial capacity-development issues; they focused on Nigeria or provided directly relevant evidence for interpreting the Nigerian context; they contained sufficient methodological, theoretical, institutional, or policy information to contribute to at least one research question; and they fell within the 2010–2025 review period, except for foundational theoretical works retained for conceptual purposes.

Publications were excluded when they were duplicates, written in languages other than English, unrelated to entrepreneurship education or capacity development, outside the Nigerian context without clear analytical relevance, or lacked sufficient information to support the review objectives. Purely promotional materials and unsupported commentary were not treated as part of the formal empirical evidence base.

Conceptual and opinion-based sources that offered relevant contextual interpretations could be identified separately during evidence classification, but they were not given the same evidentiary weight as empirical studies or official policy documents. This distinction was necessary because the review incorporated heterogeneous sources with different levels of methodological and evidentiary strength.

Study Selection Process

The study-selection process involved sequential screening of identified records. After the literature search, duplicate records were removed before substantive screening. The remaining records were initially examined according to their titles to determine their relevance to entrepreneurship education, capacity development, or the Nigerian context.

Records that remained potentially eligible were subjected to abstract screening. At this stage, studies that clearly did not address entrepreneurship education, entrepreneurial capacity, institutional support, pedagogical practices, financing mechanisms, or related capacity-development outcomes were excluded.

Potentially relevant publications were subsequently assessed through full-text review. Full-text assessment focused on whether each publication contained sufficient evidence relevant to the research questions and whether its methodological, theoretical, institutional, or policy contribution could be identified clearly. Studies meeting the eligibility criteria after full-text assessment were retained for data extraction and thematic synthesis.

The review process therefore followed four principal stages: identification, screening, eligibility assessment, and inclusion. The final manuscript should report the number of records identified from each database, duplicate records removed, records screened, records excluded after title and abstract assessment, full-text documents assessed, full-text exclusions with reasons, and the final number of sources included in the synthesis. These figures should be presented through a PRISMA-style flow diagram based exclusively on the actual search and screening records.

Data Extraction and Evidence Organization

Relevant information from eligible publications was extracted systematically to facilitate comparison across studies and evidence types. Particular attention was given to publication characteristics, research context, institutional setting, methodological design, participant or population characteristics where applicable, major entrepreneurship-education variables, capacity-development outcomes, institutional conditions, pedagogical approaches, financing mechanisms, implementation constraints, and principal findings.

The extracted evidence was also classified according to source type. Empirical studies included primary quantitative, qualitative, and mixed-methods research investigating entrepreneurship education and its outcomes. Policy reports included official documents issued by government agencies, regulatory bodies, and international development organizations. Theoretical works included foundational literature used to explain human-capital formation, innovation, and entrepreneurship. Conceptual or opinion-based materials were identified separately and used cautiously as contextual evidence rather than as equivalent substitutes for empirical findings.

This evidence classification was retained throughout the synthesis because conclusions derived from empirical studies, policy documents, and theoretical works do not carry identical evidentiary implications. Distinguishing these sources helped reduce the risk of presenting policy objectives or theoretical expectations as empirically demonstrated outcomes.

Data Analysis Process

The qualitative synthesis was conducted using NVivo 12 to support the organization, coding, comparison, and interpretation of textual evidence. Full-text publications and relevant policy or institutional documents meeting the eligibility criteria were imported into NVivo in PDF or compatible textual formats. Each document was initially read closely to establish familiarity with its content and determine its contribution to the research questions.

Open coding was then applied to relevant segments of the literature. This stage allowed recurring concepts and issues to emerge from the reviewed evidence rather than requiring all data to conform to predetermined theoretical categories. Examples of initial codes included *TETFund infrastructure funding*, *entrepreneurship development centres*, *lecture-based delivery*, *experiential learning*, *business incubation*, *industrial training*, *university-industry collaboration*, *SMEDAN support*, *access to finance*, *start-up capital*, *regional disparity*, *entrepreneurial competence*, and *innovation capability*.

Following initial coding, conceptually related nodes were organized into broader categories using NVivo's hierarchical coding structure. Child nodes representing specific issues were grouped under broader parent categories according to their substantive relationships. This process resulted in three principal analytical domains corresponding to the research questions: institutional frameworks and support structures, pedagogical approaches, and financing mechanisms.

NVivo query functions, including text-search, word-frequency, and matrix-coding queries, were used where appropriate to examine patterns across the reviewed literature. Matrix coding was particularly useful for comparing evidence according to institutional type, including universities, polytechnics, and colleges of education; geographical or regional context where reported; and different financing arrangements, including government, institutional, development-agency, and private-sector mechanisms.

The coding process was iterative rather than linear. Earlier coded documents were revisited as additional evidence was incorporated, while overlapping codes were merged and theme definitions were progressively refined. This iterative process helped maintain conceptual consistency and ensured that the final themes represented recurring patterns across the evidence rather than isolated observations from individual sources.

Theme Development and Synthesis

The thematic synthesis proceeded from initial codes to categories and subsequently to broader themes. The final structure was organized around three central themes: institutional frameworks and structures supporting entrepreneurship education, pedagogical approaches used in entrepreneurship education, and financing mechanisms affecting education and enterprise development.

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Additional subthemes concerning capacity-development outcomes, implementation constraints, university-industry collaboration, practical training, infrastructure, entrepreneurial financing, and policy implementation emerged across these three major domains. These recurring issues were synthesized to identify not only commonly reported findings but also important conditions affecting whether entrepreneurship education could be translated into entrepreneurial capability and economic participation.

The synthesis distinguished descriptive findings from interpretive conclusions. Statements regarding skills acquisition, entrepreneurial intentions, employability, innovation, or enterprise development were interpreted according to the type and strength of evidence reported in the original sources. Cross-sectional associations, policy expectations, and theoretical propositions were therefore not treated automatically as evidence of causal effects.

Where differences appeared across sources, the synthesis considered institutional context, research design, geographical setting, and evidence type. This approach enabled the review to identify both recurring patterns and variations in the implementation and reported outcomes of entrepreneurship education across the Nigerian context.

Theoretical Interpretation of Findings

After the thematic structure had been established, Human Capital Theory and Schumpeter's Innovation Theory were used as interpretive frameworks for the Discussion. Human Capital Theory was applied to examine how entrepreneurship education may contribute to knowledge acquisition, entrepreneurial competence, employability, productivity, and other dimensions of individual capacity development.

Schumpeter's Innovation Theory was used to interpret evidence relating to opportunity recognition, creativity, innovation, enterprise creation, and economic transformation. Particular attention was given to whether the Nigerian evidence supported the assumption that entrepreneurial knowledge and innovation capabilities could translate into productive entrepreneurial activity.

The theoretical analysis also considered the limitations of both perspectives. The review examined whether institutional capacity, experiential pedagogy, access to finance, market conditions, infrastructure, and policy implementation influenced the conversion of individual entrepreneurial competencies into observable economic outcomes. Consequently, the theoretical interpretation did not assume that entrepreneurship education automatically produces employment, enterprise formation, or economic growth.

Analytical Rigor and Transparency

Several procedures were used to strengthen the transparency of the qualitative synthesis. Eligibility criteria were established before the final thematic analysis, and evidence was classified according to source type to distinguish empirical, policy, theoretical, and contextual contributions. Coding was conducted iteratively, with earlier documents revisited when new themes or overlapping concepts emerged.

The development of themes remained traceable to coded evidence within NVivo through nodes, hierarchical categories, matrix queries, and narrative summaries. Themes were retained only when they were sufficiently relevant to the research questions and supported by evidence across the reviewed literature.

Methodological limitations were also considered during interpretation. Greater interpretive weight was placed on evidence with identifiable methodological procedures and transparent empirical or institutional foundations. Findings based on cross-sectional surveys, single-institution samples, self-reported outcomes, or policy aspirations were interpreted more cautiously than evidence capable of supporting stronger conclusions.

This approach was particularly important because the literature on entrepreneurship education in Nigeria includes heterogeneous study designs and evidence sources. Rather than treating all publications as methodologically equivalent, the review used evidence classification and cautious interpretation to prevent unsupported generalization.

Presentation of the Review Findings

The findings were organized according to the three principal themes identified through the synthesis: institutional frameworks, pedagogical approaches, and financing mechanisms. Additional synthesis focused on capacity-development outcomes and recurring implementation constraints.

The Results section presents the evidence descriptively and identifies the principal patterns emerging from the reviewed literature. Existing synthesis tables are retained to summarize the roles of entrepreneurship education, implementation constraints, supporting studies, evidence types, and key implications. The evidence-classification table is also retained to distinguish empirical studies, policy reports, theoretical works, and contextual sources.

The Discussion section subsequently interprets these findings through Human Capital Theory and Schumpeter's Innovation Theory and examines the interaction among institutional, pedagogical, financial, and broader economic conditions. This separation ensures that the reporting of review findings is clearly distinguished from their theoretical and policy interpretation.

3. RESULTS AND DISCUSSION

Results

Overview of the Review Findings

The thematic synthesis identified three principal mechanisms shaping entrepreneurship education and capacity development in Nigeria: institutional frameworks and support structures, pedagogical approaches, and financing mechanisms. Across these three domains, the reviewed literature also revealed recurring patterns concerning entrepreneurial skills acquisition, employability, innovation, self-reliance, SME development, and youth empowerment. At the same time, several implementation constraints consistently appeared, particularly inadequate funding, limited practical training, weak institutional support, poor infrastructure, shortages of qualified instructors, restricted access to finance, weak university-industry collaboration, and inconsistent policy implementation.

The evidence further indicated that these three mechanisms were closely interconnected. Institutional conditions affected the availability of infrastructure, entrepreneurship centres, instructors, and external partnerships; pedagogical approaches shaped students' opportunities to develop applied entrepreneurial competencies; and financing mechanisms influenced whether entrepreneurial ideas and competencies could be translated into actual enterprise activity. The findings therefore showed substantial variation in the implementation and reported outcomes of entrepreneurship education across institutional and regional settings.

Institutional Frameworks and Support Structures for Entrepreneurship Education

Entrepreneurship education in Nigeria is implemented through a multi-layered institutional structure involving federal, state, and private universities, polytechnics, colleges of education, government ministries, regulatory agencies, and enterprise-development institutions. The reviewed literature indicates that entrepreneurship education gained greater institutional prominence following its formal incorporation into tertiary education curricula, particularly as part of national efforts to strengthen graduate self-employment and entrepreneurial capability.

Institutional support is provided through a combination of entrepreneurship development centres, innovation hubs, training programmes, business incubation activities, and

public-sector interventions. The Tertiary Education Trust Fund plays an important role in supporting infrastructure, research, innovation, and entrepreneurship-related activities within eligible public tertiary institutions. Other agencies, including the Small and Medium Enterprises Development Agency of Nigeria, have increasingly supported enterprise training, incubation, mentorship, and business development initiatives.

The evidence nevertheless showed considerable differences in implementation capacity across institutions. Some tertiary institutions have stronger access to entrepreneurship infrastructure, technological facilities, incubation centres, and external partnerships, whereas others continue to operate with limited facilities and insufficient practical resources. Institutional differences were also reported across geographical settings, suggesting that the availability and quality of entrepreneurship education cannot be assumed to be uniform throughout Nigeria.

Coordination among institutions and government agencies emerged as another recurring issue. Responsibility for entrepreneurship education, funding, programme implementation, enterprise support, and outcome monitoring is distributed among multiple actors. The literature indicates that weak coordination and overlapping responsibilities may reduce programme consistency and limit the development of coherent institutional support for entrepreneurship education.

The findings therefore show that the formal presence of entrepreneurship education within tertiary curricula does not necessarily indicate equivalent institutional capacity. Institutional infrastructure, governance, agency coordination, technological resources, entrepreneurship centres, and external partnerships vary considerably and influence the conditions under which entrepreneurship education is delivered.

Pedagogical Approaches in Entrepreneurship Education

The reviewed literature consistently identified a distinction between conventional lecture-based instruction and more experiential approaches to entrepreneurship education. Lecture-based and theoretically oriented teaching remains common across Nigerian higher education institutions, particularly within university settings. Such approaches typically emphasize conceptual knowledge about entrepreneurship but provide fewer opportunities for students to experience entrepreneurial decision-making directly.

In contrast, experiential approaches identified across the literature include practical sessions, business simulation, industrial training, internships, entrepreneurship projects, workshops, mentorship, group learning, incubation activities, and interaction with practicing entrepreneurs. These approaches expose students to activities that resemble actual entrepreneurial processes and provide opportunities to apply business concepts in more practical settings.

Evidence from Nigerian tertiary institutions generally reports positive associations between the quality of entrepreneurship programme delivery and outcomes such as entrepreneurial skills, entrepreneurial intention, problem-solving ability, and practical competence. For example, evidence from final-year university students in South-South Nigeria reported relationships between the management of entrepreneurship education, skills acquisition, and entrepreneurial intentions.

However, the available evidence also revealed methodological limitations. A substantial proportion of existing studies relied on cross-sectional designs, self-reported responses, and geographically restricted samples. Consequently, much of the evidence demonstrates associations between entrepreneurship education and entrepreneurial outcomes rather than direct causal effects.

Longitudinal evidence concerning whether students exposed to experiential entrepreneurship education subsequently establish and sustain successful enterprises remains comparatively limited. The available literature therefore provides stronger evidence regarding

competency development, intentions, and perceived preparedness than long-term venture creation or business survival.

Overall, the pedagogical evidence indicates that practical and experiential learning is frequently associated with stronger entrepreneurial preparation than exclusively classroom-based instruction. Nevertheless, differences in programme design, institutional resources, educator competence, and research methodology limit the extent to which uniform conclusions can be drawn across all Nigerian tertiary institutions.

Financing Mechanisms and Access to Entrepreneurial Resources

The literature identified financing as an important component of both entrepreneurship education delivery and subsequent enterprise development. Financing mechanisms included government funding, statutory intervention funds, entrepreneurship grants, development-agency programmes, institutional support, financial institutions, private-sector partnerships, and international development initiatives.

At the institutional level, funding supports infrastructure, workshops, entrepreneurship centres, technological facilities, instructor development, business incubation, and experiential learning activities. TETFund represents a major public financing mechanism for tertiary education infrastructure and entrepreneurship-related activities. Other public and development agencies also provide entrepreneurship training, financial support, incubation, and enterprise-development programmes.

At the individual level, access to finance was repeatedly identified as an important issue for students and graduates seeking to transform business ideas into operational enterprises. The literature refers to grants, loans, seed funding, enterprise funds, and other financing arrangements intended to support young entrepreneurs.

Despite the existence of these mechanisms, financial access remains uneven. Young entrepreneurs may encounter collateral requirements, limited credit histories, weak investment readiness, inadequate business planning capabilities, and limited knowledge about available support programmes. Regional and institutional differences also affect access to enterprise financing.

The evidence additionally suggests that financial accessibility cannot be separated completely from entrepreneurial capability. Some sources indicate that difficulties in financing entrepreneurship do not arise exclusively from a shortage of available funding but also from limited business readiness, weak mentorship, inadequate institutional support, and insufficient capacity to transform entrepreneurial ideas into investment-ready ventures.

Financing therefore emerged as both an institutional resource and a post-education enterprise-development mechanism. The literature showed that its accessibility and effectiveness vary according to institutional capacity, programme design, entrepreneurial preparedness, and the wider support environment.

Reported Capacity-Development Outcomes of Entrepreneurship Education

Across the reviewed empirical, theoretical, and policy literature, entrepreneurship education was associated with multiple dimensions of capacity development. Frequently reported outcomes included entrepreneurial skills acquisition, managerial competence, employability, financial literacy, creativity, innovation, opportunity recognition, entrepreneurial intention, self-reliance, and business-management capability.

One of the most consistently reported contributions concerned entrepreneurial and vocational skills. Entrepreneurship education provides students with exposure to business planning, resource management, marketing, financial decision-making, opportunity identification, and other competencies relevant to enterprise activity. Such competencies are commonly described in the literature as important for strengthening graduates' readiness for self-employment and entrepreneurial participation.

Employability and self-reliance also appeared frequently within the literature. Entrepreneurship education is commonly positioned as an alternative pathway to exclusive dependence on salaried or public-sector employment. However, the available evidence more consistently demonstrates improvements in entrepreneurial knowledge, attitudes, intentions, and competencies than direct reductions in unemployment.

Innovation and creativity constituted another recurring outcome. Entrepreneurship education was associated with students' capacity to identify opportunities, generate business ideas, solve problems, and consider new approaches to products and services. These outcomes were particularly prominent in studies and policy discussions emphasizing entrepreneurship as a mechanism for enterprise development and economic diversification.

The literature also connected entrepreneurship education with SME development, youth empowerment, financial literacy, and participation in productive economic activities. These relationships were reported across different evidence types, including empirical studies, theoretical publications, and policy reports. Nevertheless, the strength of evidence varied considerably according to research design and source type.

The findings therefore indicate that entrepreneurship education is most consistently associated with the development of individual-level competencies and entrepreneurial preparedness. Broader outcomes such as enterprise formation, employment creation, poverty reduction, and economic diversification are also widely reported, but these should be understood as reported contributions or expected developmental outcomes rather than uniformly established causal effects.

Major Constraints Affecting Entrepreneurship Education and Capacity Development

The review identified several recurring constraints affecting the implementation and outcomes of entrepreneurship education in Nigeria. These constraints included inadequate funding, insufficient infrastructure, limited practical training, shortages of qualified entrepreneurship educators, weak curriculum implementation, restricted access to start-up capital, limited university-industry collaboration, and inconsistent policy implementation.

Inadequate funding affected institutions' capacity to provide entrepreneurship laboratories, workshops, incubation centres, technological facilities, and practical training activities. Funding constraints also reduced the capacity of institutions to maintain entrepreneurship programmes and expose students to realistic enterprise-development environments.

Infrastructure limitations were closely related to these financial challenges. A lack of appropriately equipped workshops, digital facilities, entrepreneurship centres, and incubation environments restricted students' opportunities for hands-on learning. This condition was particularly important because the literature repeatedly emphasized the practical and competency-based nature of entrepreneurship education.

Instructor capacity represented another recurring constraint. Some entrepreneurship courses were reported to be delivered by lecturers with limited practical entrepreneurial experience. Limited opportunities for instructor development and weak connections with practicing entrepreneurs may therefore reduce students' exposure to real business processes.

Pedagogical constraints were also prominent. Entrepreneurship education was frequently described as predominantly lecture-based, with insufficient use of internships, industrial attachments, mentorship, simulations, business projects, incubation, and problem-based learning. The gap between theoretical instruction and practical business exposure was consequently identified as a major limitation to entrepreneurial competence development.

Access to start-up finance remained another recurring issue. Even where students developed entrepreneurial skills and intentions, their transition into enterprise activity could be constrained by limited access to capital, collateral requirements, inadequate financial support, or insufficient business readiness.

Weak university-industry collaboration further restricted access to mentorship, internships, market exposure, and opportunities for commercialization. In addition, inconsistent monitoring and implementation of entrepreneurship policies created variations between stated policy objectives and institutional practice.

The evidence shows that these constraints frequently overlap. Funding deficiencies affect infrastructure and practical training; weak institutional support limits university-industry collaboration; inadequate pedagogy affects entrepreneurial preparedness; and insufficient preparedness may reduce graduates' capacity to access or utilize available finance.

Policy and Institutional Mechanisms Identified in the Literature

The reviewed literature identified several mechanisms intended to strengthen entrepreneurship education in Nigeria. These included investment in entrepreneurship development centres, business incubation facilities, digital learning infrastructure, innovation hubs, instructor development, and stronger collaboration between tertiary institutions and industry.

Curriculum-related mechanisms included experiential learning, project-based instruction, internships, mentorship, industrial exposure, business simulation, and stronger alignment between entrepreneurship education and labour-market or enterprise-development requirements.

Financial and enterprise-support mechanisms included grants, low-interest loans, seed funding, venture financing, entrepreneurship funds, incubation support, mentorship, and business-development services. The reviewed literature also emphasized the role of coordinated support involving educational institutions, government agencies, financial institutions, private-sector organizations, and development partners.

Monitoring and evaluation emerged as another recurring policy mechanism. The literature identified enterprise creation, graduate employability, innovation outcomes, entrepreneurial competencies, and business survival as potential indicators for assessing the effectiveness of entrepreneurship programmes.

The reviewed evidence therefore indicates that entrepreneurship education policy in Nigeria increasingly extends beyond curriculum inclusion toward broader institutional, pedagogical, financial, and enterprise-support mechanisms. However, the extent to which these mechanisms are implemented remains variable across institutional and geographical contexts.

Table 1. Synthesis of the Roles of Entrepreneurship Education in Capacity Development

Main Theme	Supporting Studies	Type of Evidence	Key Implications
Entrepreneurial skills acquisition	Udefuna et al. (2013); Agboola (2020); Bell & Loon (2018)	Empirical studies; systematic review	Entrepreneurship education is associated with the development of technical, managerial, and business skills relevant to self-employment and enterprise development.
Employment creation and self-reliance	Udefuna et al. (2013); NUC (2019)	Empirical study; policy report	Entrepreneurship education is positioned as a mechanism for strengthening self-employment preparedness and reducing exclusive dependence on salaried employment.
Innovation and creativity	Schumpeter (1934); Bell & Loon (2018)	Theoretical work;	Entrepreneurship education is associated with innovation capability,

Main Theme	Supporting Studies	Type of Evidence	Key Implications
		empirical review	opportunity recognition, creativity, and value creation.
SME development and wealth creation	OECD (2023); Udefuna et al. (2013)	Policy report; empirical study	Entrepreneurship education is reported as contributing to entrepreneurial preparedness, SME development, and income-generating activities.
Capacity development	Becker (1964); Agboola (2020)	Theoretical work; empirical study	Entrepreneurship education contributes to human-capital development through entrepreneurial skills, leadership, problem-solving ability, and productive capability.
Economic diversification	Federal Republic of Nigeria (2013); OECD (2023)	Policy reports	Entrepreneurship education is positioned within policy frameworks as supporting enterprise development outside traditional employment and dominant economic sectors.
Youth empowerment	Bell & Loon (2018); NUC (2019)	Empirical review; policy report	Entrepreneurship education is associated with stronger entrepreneurial participation, employability, and economic engagement among young people.

The synthesis shows that the reported contributions of entrepreneurship education extend from individual-level competencies to wider enterprise and economic outcomes. Entrepreneurial skills acquisition represents the most immediate capacity-development outcome, while employment, SME development, innovation, and economic diversification represent broader outcomes whose evidence is distributed across empirical, theoretical, and policy sources.

Table 2. Synthesis of Constraints Affecting Entrepreneurship Education

Main Constraint	Supporting Studies	Type of Evidence	Key Implications
Inadequate funding	NUC (2019); Federal Republic of Nigeria (2013); Agboola (2020)	Policy reports; empirical study	Limited funding constrains entrepreneurship infrastructure, practical learning, and programme sustainability.
Inadequate practical training	Bell & Loon (2018); Udefuna et al. (2013)	Empirical studies	Predominantly theoretical delivery restricts opportunities for students to develop applied entrepreneurial competencies.
Weak institutional support	OECD (2023); NUC (2019)	Policy reports	Weak implementation and institutional support mechanisms may limit programme effectiveness.
Poor infrastructural facilities	Federal Republic of Nigeria (2013); Agboola (2020)	Policy report; empirical study	Limited access to laboratories, workshops, incubation centres, and ICT facilities constrains experiential learning.

Shortage of qualified instructors	NUC (2019); Bell & Loon (2018)	Policy report; empirical study	Limited instructor capacity may affect the practical relevance and quality of entrepreneurship education.
Limited access to finance	OECD (2023); SMEDAN (2021)	Policy reports	Difficulties accessing start-up capital may constrain graduates' transition from entrepreneurial preparation to enterprise establishment.
Weak university-industry collaboration	OECD (2023); Bell & Loon (2018)	Policy report; empirical review	Limited partnerships reduce access to mentorship, internships, market exposure, and commercialization opportunities.
Policy implementation gaps	Federal Republic of Nigeria (2013); NUC (2019)	Policy reports	Weak monitoring and inconsistent implementation may reduce the consistency and effectiveness of entrepreneurship-education policies.

The synthesis demonstrates that the constraints identified in the literature operate at multiple levels. Some are institutional, including funding, infrastructure, instructor capacity, and programme implementation, while others concern the transition between education and enterprise activity, particularly access to finance and industry connections. These constraints also frequently interact rather than operating independently.

Table 3. Evidence Classification Used in the Review

Evidence Type	Description	Examples
Empirical Studies	Primary quantitative, qualitative, or mixed-methods studies examining entrepreneurship education, entrepreneurial competencies, intentions, skills, or related outcomes.	Udefuna et al. (2013); Agboola (2020)
Policy Reports	Official government, regulatory, development-agency, or international institutional documents addressing entrepreneurship education, enterprise support, financing, or implementation.	NUC (2019); Federal Republic of Nigeria (2013); OECD (2023); SMEDAN (2021)
Theoretical Works	Foundational publications providing theoretical explanations for human-capital development, entrepreneurship, innovation, and economic transformation.	Becker (1964); Schumpeter (1934)
Conceptual or Contextual Sources	Scholarly discussions and contextual materials used to clarify institutional, educational, or entrepreneurial conditions but not treated as equivalent to primary empirical evidence.	Context-dependent sources identified during the review

The classification demonstrates that the review draws on heterogeneous forms of evidence. Empirical studies provide evidence concerning participants, educational programmes, and entrepreneurial outcomes, whereas policy reports describe institutional priorities, programmes, and implementation conditions. Theoretical works provide conceptual explanations rather than direct empirical evidence, while contextual sources support interpretation of the Nigerian entrepreneurship-education environment.

Summary of the Results

Taken together, the results show that entrepreneurship education in Nigeria operates within an interconnected institutional, pedagogical, and financial environment. The literature

consistently reports potential benefits for entrepreneurial skills, employability, innovation, self-reliance, and enterprise preparedness, but the realization of these outcomes varies according to institutional resources and implementation conditions.

The institutional evidence highlights differences in infrastructure, programme coordination, entrepreneurship support structures, and industry partnerships. The pedagogical evidence indicates continuing reliance on theoretical instruction alongside increasing recognition of experiential and practice-oriented approaches. The financing evidence shows the existence of multiple public and institutional funding mechanisms but also persistent barriers to access and entrepreneurial readiness.

The synthesis further demonstrates that the principal constraints are mutually reinforcing. Limited funding can weaken infrastructure and experiential learning; weak pedagogy can reduce entrepreneurial preparedness; limited institutional and industry support can restrict practical exposure; and financial barriers can limit the transition from entrepreneurial competencies to enterprise activity. These patterns provide the empirical basis for the theoretical interpretation developed in the Discussion section.

Discussion

Entrepreneurship Education and Capacity Development

The findings indicate that entrepreneurship education contributes to capacity development in Nigeria primarily through the development of entrepreneurial knowledge, skills, competencies, and preparedness. Across the reviewed literature, entrepreneurship education was consistently associated with business knowledge, managerial competence, financial literacy, opportunity recognition, creativity, problem-solving ability, and preparedness for self-employment. These outcomes demonstrate that entrepreneurship education has an important role in strengthening individual capacities that are relevant to entrepreneurial participation. However, the evidence also shows that broader outcomes such as enterprise creation, employment generation, and business sustainability do not arise automatically from participation in entrepreneurship education.

This distinction is important because capacity development extends beyond the acquisition of knowledge and skills. Students may complete entrepreneurship courses and demonstrate stronger entrepreneurial competencies while remaining unable to establish or sustain businesses because of limited practical exposure, insufficient infrastructure, inadequate mentorship, restricted access to finance, or unfavourable business conditions. Entrepreneurship education therefore appears to create entrepreneurial capacity, but the realization of that capacity depends on conditions beyond the classroom.

The reviewed evidence also suggests that entrepreneurial intention should not be treated as equivalent to entrepreneurial behaviour. A substantial proportion of existing studies examines students' intentions, perceptions, competencies, or self-reported preparedness rather than actual enterprise creation or long-term business performance. Consequently, positive educational outcomes provide stronger evidence of entrepreneurial preparedness than of direct reductions in unemployment or increases in sustainable venture creation.

Capacity development should therefore be understood as a multidimensional and conditional process. At the individual level, it involves entrepreneurial knowledge, practical skills, financial competence, creativity, managerial ability, and opportunity recognition. At the institutional level, it involves the capacity of educational institutions and supporting organizations to provide appropriate infrastructure, practical learning, mentorship, incubation, industry connections, and access to entrepreneurial resources. This broader interpretation provides a more cautious explanation of why entrepreneurship education may improve student capabilities while producing uneven economic outcomes across institutions and regions.

Institutional, Pedagogical, and Financing Mechanisms

A central finding of the review is that institutional support, pedagogical quality, and financing mechanisms are closely interconnected. These mechanisms do not operate independently because limitations in one area may weaken the effectiveness of the others. The contribution of entrepreneurship education to capacity development is therefore better understood through the interaction among educational institutions, learning processes, financial resources, and the wider entrepreneurial environment.

Institutional capacity establishes the environment within which entrepreneurship education is delivered. Adequate infrastructure, entrepreneurship development centres, digital facilities, business incubation, qualified educators, and industry partnerships provide students with opportunities to engage in entrepreneurial learning beyond conventional classroom instruction. Conversely, institutions with limited infrastructure, weak external partnerships, and inadequate entrepreneurship support systems may struggle to provide meaningful practical experiences. The formal inclusion of entrepreneurship education within the curriculum therefore does not necessarily indicate equivalent implementation capacity across Nigerian tertiary institutions.

Pedagogical quality represents the second critical mechanism. The reviewed literature shows that entrepreneurship education in many institutions remains predominantly lecture-based, despite the practical and competency-oriented nature of entrepreneurship. Experiential approaches, including internships, mentorship, business simulation, project-based learning, industrial attachment, workshops, and incubation activities, provide stronger opportunities for students to apply entrepreneurial knowledge in realistic contexts. These approaches are particularly relevant because entrepreneurial activity requires decision-making, resource management, opportunity evaluation, and problem-solving under conditions of uncertainty.

The evidence generally reports positive associations between experiential learning and entrepreneurial skills, intentions, and preparedness. Nevertheless, these findings should be interpreted cautiously because many existing studies rely on cross-sectional designs, geographically restricted samples, and self-reported measures. The available literature therefore provides stronger evidence for relationships between experiential learning and entrepreneurial competence than for long-term effects on business formation or survival. This methodological limitation reinforces the need to distinguish educational outcomes from subsequent economic outcomes.

Financing represents the third mechanism connecting entrepreneurship education with enterprise development. At the institutional level, financial resources support laboratories, entrepreneurship centres, technological infrastructure, instructor development, incubation, and other forms of practical learning. At the individual level, access to grants, credit, seed funding, and other financial instruments may enable graduates to transform entrepreneurial ideas into business activity. However, the findings also indicate that limited access to finance is not the only barrier to enterprise development.

Available financing may have limited developmental value when prospective entrepreneurs lack appropriate business skills, mentorship, market knowledge, or investment readiness. This suggests that financing should be integrated with capacity-building rather than treated as an independent solution. Financial support is more likely to contribute to sustainable entrepreneurial activity when combined with practical education, incubation, mentoring, business-development services, and access to markets.

Taken together, these findings indicate an interconnected process. Institutional capacity shapes the quality of the learning environment, pedagogical approaches influence the development of entrepreneurial competence, and financing affects the extent to which those competencies can be converted into entrepreneurial action. Weakness in any of these mechanisms may disrupt the transition from entrepreneurship education to sustainable capacity development.

Theoretical Implications

The findings are broadly consistent with Human Capital Theory, which conceptualizes education and training as investments that enhance individuals' productive capabilities (Schultz, 1961; Becker, 1993). Entrepreneurship education contributes to this process by strengthening knowledge, managerial competence, financial literacy, opportunity recognition, and other skills relevant to productive economic participation. From this perspective, entrepreneurship education represents a form of human-capital investment that can increase individuals' preparedness for entrepreneurial activity.

However, the Nigerian evidence also qualifies a purely individual-centred interpretation of Human Capital Theory. The accumulation of entrepreneurial competencies does not necessarily produce comparable economic returns across different institutional and regional contexts. Graduates may possess similar knowledge but experience different opportunities to apply it because of variations in infrastructure, mentorship, finance, market access, institutional support, and broader economic conditions. Human capital therefore appears necessary but insufficient for explaining entrepreneurship outcomes.

The findings are also consistent with Schumpeter's Innovation Theory, particularly its emphasis on entrepreneurship as a mechanism for creativity, innovation, opportunity exploitation, and economic transformation (Schumpeter, 1934; Schumpeter, 1942). Entrepreneurship education can strengthen the abilities required to identify opportunities, generate ideas, develop products or services, and respond innovatively to market conditions. These capabilities correspond with the innovative function attributed to entrepreneurs within the Schumpeterian tradition.

Nevertheless, the evidence suggests that entrepreneurial innovation cannot be explained exclusively through individual creativity or entrepreneurial orientation. Innovative capabilities require an environment in which ideas can be tested, financed, developed, and connected with markets. Weak infrastructure, limited incubation opportunities, insufficient technological resources, restricted access to capital, and weak industry linkages may prevent potentially innovative ideas from developing into viable enterprises. The Nigerian evidence therefore highlights the importance of institutional and ecosystem conditions in enabling Schumpeterian entrepreneurial activity.

The integration of these two theoretical perspectives provides a more comprehensive explanation of the findings. Human Capital Theory explains how entrepreneurship education develops knowledge and competencies, whereas Schumpeter's Innovation Theory explains how entrepreneurial capabilities can contribute to innovation and economic transformation. However, both perspectives require contextual qualification because the translation of competencies and innovation into sustainable enterprise outcomes depends on institutional support, experiential pedagogy, financing, market opportunities, and the broader business environment.

The principal theoretical implication of this review is therefore that the relationship between entrepreneurship education and capacity development is conditional rather than linear. Entrepreneurship education can strengthen entrepreneurial human capital and innovative capability, but these capacities produce uneven outcomes when institutional, pedagogical, financial, and market conditions differ. This interpretation provides a more context-sensitive explanation of entrepreneurship education within the Nigerian setting.

Policy and Practical Implications

The findings suggest that entrepreneurship education policy should move beyond the formal inclusion of entrepreneurship courses in tertiary curricula. Greater attention should be given to the quality of implementation and to measurable indicators of capacity development. Evaluation should consider entrepreneurial competencies, practical business skills, participation in incubation activities, innovation outcomes, entrepreneurial preparedness, enterprise

formation, and business sustainability rather than relying only on course completion or entrepreneurial intention.

Tertiary institutions should strengthen the experiential dimension of entrepreneurship education. Internships, mentorship, business simulations, project-based learning, industrial attachments, entrepreneurship laboratories, and incubation activities can provide students with opportunities to connect theoretical knowledge with real entrepreneurial problems. Stronger partnerships with practicing entrepreneurs and industry organizations may also improve students' exposure to market conditions and enterprise-management practices.

Investment in entrepreneurship infrastructure remains equally important. Entrepreneurship development centres, digital facilities, workshops, innovation hubs, and incubation environments can support practical learning and entrepreneurial experimentation. However, infrastructure alone is insufficient without appropriately trained educators, effective programme management, industry engagement, and mechanisms for supporting students beyond formal classroom instruction.

Financial support should similarly be integrated with business-readiness development. Grants, low-interest loans, seed funding, and other financing programmes are likely to be more effective when accompanied by financial-literacy training, mentorship, incubation, market guidance, and business-development services. Such integration would address both access-to-finance constraints and limitations in graduates' capacity to use financial resources productively.

The findings also point to the need for stronger coordination among tertiary institutions, the National Universities Commission, TETFund, SMEDAN, financial institutions, industry partners, and development organizations. Fragmented initiatives may produce overlapping programmes while leaving gaps between entrepreneurship education, practical training, financing, incubation, and post-graduation enterprise support. Greater coordination could strengthen continuity between educational preparation and entrepreneurial activity.

Overall, the evidence indicates that entrepreneurship education has meaningful potential to strengthen entrepreneurial capacity in Nigeria, but its contribution to broader economic outcomes depends on the conditions under which entrepreneurial competencies are developed and applied. Entrepreneurship education should therefore be approached as part of an integrated entrepreneurial ecosystem rather than as an isolated educational intervention. Sustainable capacity development is more likely when educational quality, experiential pedagogy, institutional infrastructure, financing, industry engagement, and enterprise-support mechanisms operate in a complementary manner.

4. CONCLUSIONS AND SUGGESTION

This systematic review concludes that entrepreneurship education contributes to capacity development in Nigeria primarily by strengthening entrepreneurial knowledge, practical skills, managerial competence, financial literacy, innovation capability, and preparedness for self-employment. However, these contributions should not be interpreted as automatic outcomes of entrepreneurship education, as their realization depends on the quality of institutional support, pedagogical practices, access to finance, industry engagement, and the wider entrepreneurial environment. Persistent constraints, including inadequate funding, limited infrastructure, insufficient practical training, shortages of qualified educators, weak university-industry collaboration, restricted access to start-up capital, and inconsistent policy implementation, continue to limit the effectiveness of entrepreneurship education. The findings therefore suggest that entrepreneurship education is more likely to generate meaningful capacity-development outcomes when institutional, pedagogical, and financing mechanisms operate in a coordinated and mutually reinforcing manner.

Accordingly, tertiary institutions and relevant government agencies should strengthen experiential learning, entrepreneurship infrastructure, educator capacity, business incubation,

industry partnerships, and accessible financing mechanisms while improving programme monitoring and policy coordination. Financial support should be accompanied by mentorship, business-development services, and market-oriented training to improve graduates' readiness to establish and sustain enterprises. The findings should nevertheless be interpreted in light of the study's reliance on secondary literature, English-language publications, selected databases, and heterogeneous evidence across institutional and regional contexts. Future research should therefore employ longitudinal, quantitative, qualitative, and mixed-methods designs to examine how entrepreneurship education influences entrepreneurial competence, employability, enterprise creation, innovation, and business sustainability, while also investigating the roles of institutional quality, experiential pedagogy, digital entrepreneurship, university-industry collaboration, access to finance, and regional differences across Nigeria and comparable African contexts.

REFERENCES

Abioye, A. J., & Kolawole, A. J. (2024). Assessment of entrepreneurship education on sustainable economic development in Nigeria. *Journal of African Advancement and Sustainability Studies, 3*(2). https://ssaapublications.com/index.php/sjaass/article/view/244

Adesoji, F. A., & Sangoleye, S. A. (2017). Pedagogical practices in teaching entrepreneurship education in universities in South-West Nigeria. *Advances in Social Sciences Research Journal, 4*(21), 157–170. https://doi.org/10.14738/assrj.421.3635

Agboola, O. W. (2021). Framework for school stage entrepreneurship education in Nigeria. *Entrepreneurship Education and Pedagogy, 4*(3), 312–345. https://doi.org/10.1177/2515127419899484

Akinyemi, F. O. (2023). Entrepreneurship education and policy implementation in Nigeria. *International Journal of Contemporary Issues in Education, 5*(1). https://ijcie.oauife.edu.ng/index.php/ijcie/article/view/108

Ayo-Sobowale, M. O. (2021). *Effect of entrepreneurship education on entrepreneurial intentions of undergraduate students in selected universities in South-West of Nigeria* [Doctoral dissertation, Kwara State University].

Ayo-Sobowale, M. O., & Mohammed, A. O. (2024). Role of entrepreneurship education in shaping the entrepreneurial intentions and self-efficacy of economics education students in public universities in Lagos State, Nigeria. *International Journal of Educational Perspectives, 12*(3), 62–68. https://educationalperspectives.org.ng/read.php?id=179

Azuka, E. B. (2017). Entrepreneurship education in Nigeria: Issues, challenges and strategies. *Nigerian Journal of Business Education, 4*(2), 1–10.

Bacigalupo, M., Kampylis, P., Punie, Y., & Van den Brande, G. (2016). *EntreComp: The entrepreneurship competence framework*. Publications Office of the European Union. https://ec.europa.eu

Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. National Bureau of Economic Research.

Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). University of Chicago Press. https://press.uchicago.edu

Dimova, R., & Pela, K. (2018). Entrepreneurship: Structural transformation, skills and constraints. *Small Business Economics, 51*(1), 203–220. https://doi.org/10.1007/s11187-017-9916-0

Evans-Obinna, R. N. (2016). Entrepreneurship education for self-reliance and economic development in Nigeria. *International Journal of Vocational and Technical Education Research, 2*(2), 9–14. https://eajournals.org/ijvter/vol-2-issue-2-may-2016/entrepreneurship-education-self-reliance-economic-development-nigeria/

Federal Republic of Nigeria. (2013). *National policy on education* (6th ed.). Nigerian Educational Research and Development Council.

Giami, C. B. N., & Emeni, J. E. (2025). Entrepreneurship education in Nigerian tertiary institutions: Innovative approaches for enhancing graduate employability. *International Journal of Education, Management Sciences and Professional Studies, 1*(2), 169–180. https://journals.iempsglobal.org/index.php/IJEMPS/article/view/69

Gwaison, P. D. (2021). The impact of small and medium scale enterprise (SMEs) on poverty and unemployment reduction in Kano State, Nigeria. In *6th International EMI Entrepreneurship & Social Sciences Congress proceedings e-book* (pp. 115–125).

International Labour Organization. (2020). *Global employment trends for youth 2020: Technology and the future of jobs*. International Labour Organization. https://www.ilo.org

Ituma, G. O., & Esheya, S. E. (2024). Entrepreneurship education: A strategy for the development of vocational and technical education. *Nigerian Journal of Rural Finance and Entrepreneurship*. https://journals.abu.edu.ng

Medeataji, F. T., & Usman, R. I. (2025). Entrepreneurship education and its impacts on economic growth in Nigeria. *Studies in Education, 23*(2). https://www.sie.com.ng/index.php/journal/article/view/99

National Universities Commission. (2019). *Benchmark minimum academic standards for undergraduate programmes in Nigerian universities*. National Universities Commission. https://www.nuc.edu.ng

OECD. (2006). *The challenge of capacity development: Working towards good practice*. OECD Publishing. https://www.oecd.org

OECD. (2014). *Entrepreneurship at a glance 2014*. OECD Publishing. https://www.oecd.org

OECD. (2018). *Entrepreneurship education in higher education institutions*. OECD Publishing. https://www.oecd.org

OECD. (2021). *Entrepreneurship education and training in higher education*. OECD Publishing. https://www.oecd.org

OECD. (2023). *OECD SME and entrepreneurship outlook 2023*. OECD Publishing. https://www.oecd.org

Oguejiofor, C. S., & Emelife, I. C. (2025). Role of entrepreneurship education in fostering innovation for sustainable development in Nigeria. *Sapientia Foundation Journal of Education, Sciences and Gender Studies, 7*(2), 77–85. https://www.sfjesgs.com

Ogunleye, I. A. (2025). Youth educational empowerment through entrepreneurial skills development: A transformative strategy for long-life impact in Lagos State. *Journal of Educational Foundations, 14*(1), 133–147. https://jef.unn.edu.ng

Olu, J. F., Ujah, J. S., & Abuh, P. A. (2023). Entrepreneurship education in Nigerian universities: A departure from reality. *IAR Journal of Entrepreneurship, Innovation & Design Thinking, 4*(1), 1–9. https://doi.org/10.47310/iarjeidt.2023.v04i01.001

Oluwafunmilola, R. O. (2024). The contemporary issues, challenges and technological gap in entrepreneurship education in Nigerian higher institutions. *European Journal of Business and Innovation Research, 12*(5), 80–89. https://doi.org/10.37745/ejbir.2013/vol12n58089

Op 't Hoog, S., & Skoumpopoulou, D. (2019). Entrepreneurship education: Comparative study of initiatives of two partner universities. *Athens Journal of Education, 6*(4), 307–328. https://doi.org/10.30958/aje.6-4-4

Osadebe, N., Onnoghen, U. N., Orji, I. E., Nwobu, E. A., & Anabaraonye, B. (2024). The role of entrepreneurship education in enhancing socio-economic development in Nigeria. *Covenant Journal of Entrepreneurship, 8*(2), 32–35. https://journals.covenantuniversity.edu.ng/index.php/cjoe/article/view/4367

Otache, I., Edopkolor, J. E., Sani, I. A., & Umar, K. (2024). Entrepreneurship education and entrepreneurial intentions: Do entrepreneurial self-efficacy, alertness and opportunity recognition matter? *The International Journal of Management Education, 22*(1), 100917. https://doi.org/10.1016/j.ijme.2023.100917

Oyinlola, M., Kolade, O., Okoya, S. A., Ajala, O., Adediji, A. O., Babaremu, K., Tijani, B., Adejuwon, J., Wambui, F., & Akinlabi, E. T. (2024). Entrepreneurship and innovation in Nigerian universities: Trends, challenges and opportunities. *Heliyon, 10*(9), e29940. https://doi.org/10.1016/j.heliyon.2024.e29940

Papademetriou, C., & Anastasiadou, S. (2025). Enhancing entrepreneurship education: The role of simulation tools in teaching and learning. In *Integrating simulation tools into entrepreneurship education* (pp. 201–212). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-9040-5.ch010

Schultz, T. W. (1961). Investment in human capital. *The American Economic Review, 51*(1), 1–17. https://www.aeaweb.org/aer/

Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Harvard University Press.

Schumpeter, J. A. (1942). *Capitalism, socialism and democracy*. Harper & Brothers.

Small and Medium Enterprises Development Agency of Nigeria. (2021). *National policy on micro, small and medium enterprises, 2021–2025*. Small and Medium Enterprises Development Agency of Nigeria. https://smedan.gov.ng

Ubogu, R. (2020). Entrepreneurship education: Challenges and strategies towards promoting entrepreneurship in higher education in Nigeria. *Academic Journal of Interdisciplinary Studies, 9*(5), 125–135. https://doi.org/10.36941/ajis-2020-0091

Udefuna, P. N., Akalefu, C., & Asogwa, C. (2013). Entrepreneurship education and economic development in Nigeria: Policy issues and options. *Industry and Higher Education, 27*(5), 343–348. https://doi.org/10.5367/ihe.2013.0173

UNDP. (2009). *Capacity development: A UNDP primer*. United Nations Development Programme. https://www.undp.org

UNESCO. (2012). *Enhancing youth employability: Entrepreneurship education*. United Nations Educational, Scientific and Cultural Organization. https://www.unesco.org

UNESCO. (2019). *Strengthening entrepreneurship education in TVET systems*. United Nations Educational, Scientific and Cultural Organization. https://www.unesco.org

UNESCO. (2022). *Reimagining entrepreneurship education for sustainable development*. United Nations Educational, Scientific and Cultural Organization. https://www.unesco.org

World Bank. (2010). *Capacity development practice notes*. World Bank Institute. https://www.worldbank.org

World Bank. (2020). *Skills development and entrepreneurship in Africa*. World Bank Group. https://www.worldbank.org

World Bank. (2021). *Skills development and entrepreneurship in Africa: Building human capital*. World Bank. https://www.worldbank.org

Yatu, L., Bell, R., & Loon, M. (2018). Entrepreneurship education research in Nigeria: Current foci and future research agendas. *African Journal of Economic and Management Studies, 9*(2), 165–177. https://doi.org/10.1108/AJEMS-08-2016-0120