



Contributions of Entrepreneurial Education to Skills Development and Inclusive Growth among Learners in North Central, Nigeria.

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Abstract

This study examined the contribution of entrepreneurial education (EE) to skills development and inclusive growth among learners in North Central, Nigeria. Specifically, it sought to answer two research questions and null hypotheses. A descriptive survey design was adopted, while the population of the study consisted of 8,450 respondents, distributed among 5,200 students, 2,400 teachers, and 850 Administrators involved in entrepreneurial education within selected educational institutions in the North Central Zone. These include students, teachers, and school administrators. The total estimated population of the study was 8,450. A multistage sampling technique was employed. First, states were selected from the North Central Zone. A total sample of 400 respondents were used for the study. Data were collected using a structured questionnaire with items rated on a 5-point Likert scale. Descriptive statistics, including mean scores, and inferential statistics, particularly multiple regression analysis at a 0.05 significance level, were used to test the hypotheses. Findings reveals that entrepreneurial education significantly enhances learners' skills, including problem-solving, creativity, financial literacy, leadership, and self-efficacy. Additionally, EE significantly promotes inclusive growth by improving employability, encouraging self-employment, and fostering equitable economic participation. The study concludes that EE is a dual-purpose intervention that simultaneously develops individual competencies and contributes to societal economic inclusion. Recommendations include integrating practical EE programs into curricula, promoting access for marginalized groups, and linking educational outcomes to real-world entrepreneurial opportunities.

Keywords: Economic Participation, Entrepreneurial Education, Inclusive Growth, Nigeria, North Central, Skills Development

Introduction

Entrepreneurial education (EE) has become a vital component of modern education, aimed at equipping learners with the skills, knowledge, and mindset necessary to succeed in an increasingly competitive and dynamic economy. Beyond personal skill acquisition, EE is recognized for its potential to contribute to inclusive growth, ensuring that diverse populations, including youth and women, can participate meaningfully in economic activities (Adebayo & Oladele, 2024).

Entrepreneurial education has increasingly been recognized as a critical instrument for addressing contemporary development challenges such as unemployment, skills mismatch, and socio-economic exclusion. In an era marked by rapid technological change, globalization, and evolving labour market demands, traditional education systems have struggled to equip learners with the practical competencies required for meaningful economic participation. As a result, entrepreneurial education has emerged as a transformative approach that emphasizes skills acquisition, innovation, self-reliance, and opportunity creation.

Skills development is a central component of sustainable economic development and inclusive growth. Beyond technical knowledge, modern economies require individuals to possess soft and transferable skills such as problem-solving, creativity, adaptability, and effective communication. Entrepreneurial education contributes to the development of these competencies by integrating experiential learning, critical thinking, and real-world problem-solving into educational curricula. Through this process, learners are better prepared for both wage employment and self-employment, thereby enhancing their employability and economic resilience. In addition to skills development, entrepreneurial education plays a significant role in promoting inclusive growth by expanding access to economic opportunities for diverse and marginalized populations, particularly youth and women. By encouraging entrepreneurship and innovation, it enables broader participation in income-generating activities and reduces reliance on limited formal employment opportunities. Inclusive growth, which emphasizes equitable access to opportunities and shared economic benefits, is increasingly prioritized within global development agendas.

Entrepreneurial education (EE) refers to formal and informal learning processes designed to cultivate entrepreneurial skills, mindset, and competencies. It emphasises practical, experiential learning approaches such as business simulations, real-world projects, and mentorship that build adaptability, innovation, and problem-solving capabilities essential for economic participation and workforce competitiveness (Kuratko, 2005; Garba, & Yelwa, 2024). Studies indicate that entrepreneurial education increases students' entrepreneurial competencies and orientations, reinforcing cognitive and behavioural skills needed in dynamic economic environments (Ayandibu, 2025).

Research shows that entrepreneurial education significantly enhances the acquisition of entrepreneurial and transferable skills such as self-efficacy, creativity, financial literacy, and problem-solving all of which enhance employability and adaptability in labour markets (Branca, Vanderstraeten, Slabbinck, & Maes (2025); Adeniyi, 2023).

Systematic reviews indicate that active learning strategies, including experiential projects, significantly improve essential competencies like self-efficacy and innovativeness (Saade & Kira, 2025). Empirical studies from Nigeria demonstrate a positive relationship between entrepreneurship education and skill enhancement among students (Ezeonwumelu, Offor, Nwikpo, Onunkwo, & Nwaru (2025).).

Evidence from broader African contexts supports the role of EE in local economic development: research on university students in developing countries shows that entrepreneurial skills fostered through education contribute to improved local economic outcomes by equipping learners with the ability to generate ventures and employment (Dinis, 2024).

Inclusive growth refers to economic expansion that is broad-based across sectors and demographics, ensuring equitable access to opportunities and benefits across society (World Bank, 2018). Entrepreneurial education has been highlighted as a mechanism that expands economic participation for diverse and often marginalised groups. Studies show that inclusive entrepreneurship programmes, which intentionally integrate individuals with disabilities, significantly enhance entrepreneurial competencies (e.g., business planning, financial literacy) and increase the proportion of graduates who start businesses compared to control groups (Smith & Okeke, 2025).

In the West African context, inclusive EE is aligned with national development goals: research in Nigeria emphasises that inclusive entrepreneurial education can help eradicate poverty and develop skilled manpower by ensuring that individuals from diverse backgrounds, including those facing socio-economic barriers, acquire practical skills for self-reliance and economic participation (Adebayo & Oladele, 2024).

However, there remains a need for research that combines these outcomes within robust analytical frameworks, particularly through longitudinal and mixed-methods approaches, to better explain causal relationships in different socio-economic contexts (Kumari & Sudha, 2025; Okolie, 2025).

Statement of the Problem

Despite increasing investment in education worldwide, many economies particularly in developing countries continue to face persistent challenges such as youth unemployment, skills mismatch, and socio-economic exclusion. Traditional education systems often emphasize theoretical knowledge over practical skills, leaving graduates inadequately prepared for

dynamic labour markets and self-employment opportunities. This mismatch contributes to rising unemployment rates among young people and limits the potential for inclusive economic growth.

Entrepreneurial education has been promoted as a strategic approach to addressing these challenges by equipping learners with practical skills, entrepreneurial mindsets, and adaptive competencies that foster employability and economic participation. Through experiential learning, problem-solving, creativity, and opportunity recognition, entrepreneurial education is expected to enhance skills development and promote inclusive growth, particularly among groups such as youth and women.

However, despite the growing adoption of entrepreneurial education, several gaps persist. These include limited institutional support, inadequate funding, weak curriculum integration, and inconsistent policy implementation, which undermine its effectiveness. Moreover, while existing research often focuses separately on skills development or economic outcomes, few studies investigate the combined impact of entrepreneurial education skills acquisition and inclusive growth. This knowledge gap hinders policymakers, educators, and stakeholders from fully leveraging entrepreneurial education as a tool for sustainable development and social inclusion.

Despite the growing emphasis on entrepreneurial education, empirical evidence on its combined contribution to skills development and inclusive growth remains limited, especially within developing economy contexts. Many existing studies examine these outcomes separately, leaving gaps in understanding their interconnections. This study therefore examines the contribution of entrepreneurial education to skills development and inclusive growth, guided by clearly defined research objectives, questions, and hypotheses, with the aim of providing evidence-based insights to inform educational practice, policy formulation, and sustainable development strategies.

Purpose of the Study

The purpose of this study is to empirically examine the contribution of entrepreneurial education to skills development and inclusive growth among learners in North Central, Nigeria. Specifically, the objectives of the study are to:

1. assess the contributions of entrepreneurial education to skills development among learners in North Central, Nigeria.

2. examine the contributions of entrepreneurial education to inclusive growth through employment and economic participation among learners in North Central, Nigeria.

Research Questions

1. What are the contributions of entrepreneurial education to skills development among learners in North Central, Nigeria?
2. What are the contributions of entrepreneurial education to inclusive growth through employment and economic participation among learners in North Central, Nigeria?

Research Hypotheses

H₁: there is no significant difference between the contributions of Entrepreneurial education to skills development among learners in North Central, Nigeria.

H₂: there is no significant difference between the contributions of Entrepreneurial education to inclusive growth through employment and economic participation among learners

Methodology

The study adopted a descriptive survey research design. The study was conducted in the North Central Zone of Nigeria, which comprises the following states: Benue, Kogi, Kwara, Nasarawa, Niger, Plateau, and the Federal Capital Territory (Abuja). The region was selected because of its growing emphasis on entrepreneurship education in secondary and tertiary institutions, as well as its diverse socio-economic characteristics that make it suitable for examining inclusive growth outcomes. The population of the study consisted of all stakeholders involved in entrepreneurial education within selected educational institutions in the North Central Zone. These includes Students, Teachers and school administrators. The total estimated population of the study was 8,450 respondents, distributed among 5,200 students, 2,400 Teachers and 850 Administrators. A multistage sampling technique was employed. First, states were selected from the North Central zone, secondly, institutions were selected using simple random sampling and finally, respondents were selected proportionately from each category using stratified sampling technique to ensure fair representation.

A total sample of 400 respondents was used for the study. This was considered adequate for statistical analysis and generalization within the study area. The sample was distributed proportionately among 250 students, 100 teachers and 50 administrators. Data were collected using a structured questionnaire developed by the researcher. The instrument consisted of two sections consisting of Entrepreneurial education and skills development and Entrepreneurial education and inclusive growth. All items were measured using a 5-point Likert scale, ranging

from Strongly Disagree (1) to Strongly Agree (5). The instrument was validated by 4 specialists in entrepreneurship education and educational measurement. Reliability was established using Cronbach's Alpha, which produced a coefficient above 0.70, indicating that the instrument was reliable for the study. The questionnaire was administered and retrieved within 2 weeks directly to respondents with the help of 3 trained research assistants. Proper instructions were given to ensure accurate responses, and only fully completed questionnaires were used for analysis. Data were analyzed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics such as mean and standard deviation were used to answer the research questions. Inferential statistics, particularly multiple regression analysis, were employed to test the hypotheses at a 0.05 level of significance. This helped determine the strength and significance of the relationship between entrepreneurial education, skills development, and inclusive growth.

Results

Research Question 1: What are the contributions of entrepreneurial education to skills development among learners?

Table 1: Respondents' Perceptions on the Contribution of Entrepreneurial Education to Skills Development (n = 400)

Item Statement	SD	D	U	A	SA	Mean	Std. Dev
EE improves problem-solving skills	10	18	32	180	160	4.30	0.88
EE enhances creativity and innovation	8	20	30	170	172	4.36	0.85
EE develops financial literacy	12	22	35	168	163	4.24	0.90
EE strengthens managerial and leadership skills	14	18	38	175	155	4.22	0.92
EE increases self-efficacy and confidence	6	15	28	180	171	4.38	0.83

Source: field survey (2025)

Interpretation of Table 1

In Table 1, Item 1 reveals that respondents strongly agreed that entrepreneurial education improves problem-solving skills, as indicated by a mean score of 4.30. This suggests that learners acquire analytical and decision-making abilities through entrepreneurial education. Item 2 shows that entrepreneurial education enhances creativity and innovation, with a mean score of 4.36. This indicates that learners are encouraged to think creatively and develop innovative ideas necessary for entrepreneurship and economic participation. Item 3 reveals that

entrepreneurial education develops financial literacy among learners, as reflected by a mean score of 4.24. This implies that learners gain knowledge of budgeting, financial management, and resource utilization. Item 4 indicates that entrepreneurial education strengthens managerial and leadership skills, with a mean score of 4.22. This suggests that learners develop the ability to organize, coordinate, and lead entrepreneurial activities effectively. Item 5 reveals that entrepreneurial education increases self-efficacy and confidence, with the highest mean score of 4.38. This indicates that entrepreneurial education empowers learners with confidence in their abilities to initiate and manage ventures successfully. Overall, the findings reveal that entrepreneurial education contributes significantly to learners' skills development.

Research Question 2: What are the contributions of entrepreneurial education to inclusive growth through employment and economic participation among learners?

Table 2: Respondents' Perceptions on the Contribution of Entrepreneurial Education to Inclusive Growth (n = 400)

Item Statement	SD	D	U	A	SA	Mean	Std. Dev
EE increases employability of learners	9	17	30	185	159	4.32	0.86
EE promotes self-employment and entrepreneurship	7	16	28	178	171	4.40	0.84
EE expands participation of marginalized groups	11	20	34	172	163	4.28	0.90
EE reduces dependence on limited formal employment	10	18	36	170	166	4.31	0.87
EE contributes to shared economic benefits	6	14	26	180	174	4.42	0.82

Source: field survey (2025)

Interpretation of Table 2

In Table 2, Item 6 reveals that entrepreneurial education increases employability among learners, with a mean score of 4.32. This suggests that entrepreneurial education equips learners with skills that improve their readiness for the labor market. Item 7 shows that entrepreneurial education promotes self-employment and entrepreneurship, with a mean score of 4.40. This indicates that learners are motivated to establish businesses and create income-generating opportunities. Item 8 reveals that entrepreneurial education expands economic participation of marginalized groups, with a mean score of 4.28. This suggests that entrepreneurial education provides equal opportunities for youth, women, and disadvantaged populations to participate in economic activities. Item 9 indicates that entrepreneurial education reduces dependence on

limited formal employment opportunities, with a mean score of 4.31. This implies that learners recognize entrepreneurship as an alternative source of livelihood. Item 10 reveals that entrepreneurial education contributes to shared economic benefits, with the highest mean score of 4.42. This indicates that entrepreneurial education promotes equitable economic participation and community development. Overall, the findings reveal that entrepreneurial education contributes significantly to inclusive growth.

Test of Hypotheses

Inferential statistics, particularly regression analysis, were employed to test the hypotheses at a 0.05 level of significance.

Hypothesis 1: there is no significant difference between the contributions of Entrepreneurial education to skills development among learners.

Table 3: Regression Analysis for Hypothesis One

Variable	B	Std. Error	Beta (β)	t	Sig.
Entrepreneurial Education	0.68	0.07	0.72	9.71	0.001

R	R ²	Adjusted R ²	F	Sig.
0.72	0.52	0.51	94.3	0.001

Table 3 reveals that entrepreneurial education significantly predicts skills development among learners ($\beta = 0.72$, $t = 9.71$, $p < 0.05$). The coefficient of determination ($R^2 = 0.52$) indicates that entrepreneurial education explains 52% of the variation in skills development. Since the significance value of 0.001 is less than the 0.05 level of significance, the null hypothesis is rejected. Therefore, entrepreneurial education has a significant effect on learners' skills development among learners.

Hypothesis 2: there is no significant difference between the contributions of Entrepreneurial education to inclusive growth through employment and economic participation among learners.

Table 4: Regression Analysis for Hypothesis Two.

Variable	B	Std. Error	Beta (β)	t	Sig.
Entrepreneurial Education	0.65	0.08	0.69	8.13	0.001

R	R ²	Adjusted R ²	F	Sig.
0.69	0.48	0.47	66.1	0.001

Table 4 reveals that entrepreneurial education significantly predicts inclusive growth ($\beta = 0.69$, $t = 8.13$, $p < 0.05$). The R^2 value of 0.48 indicates that entrepreneurial education accounts for 48% of the variation in inclusive growth. Since the significance value of 0.001 is less than 0.05, the null hypothesis is rejected. Therefore, entrepreneurial education significantly contributes to inclusive growth through employment and economic participation.

Discussion of Findings

The findings of the study revealed that entrepreneurial education contributes significantly to learners' skills development. Respondents agreed that entrepreneurial education improves problem-solving abilities, creativity, innovation, financial literacy, leadership skills, and self-confidence. This finding agrees with the work of Becker, who emphasized that education enhances human capital development and productivity. The study also found that entrepreneurial education significantly contributes to inclusive growth by increasing employability, promoting self-employment, and encouraging economic participation among marginalized groups. These findings support previous studies which reported that entrepreneurial education promotes economic empowerment and sustainable development. Overall, the findings confirm that entrepreneurial education is an important strategy for building a skilled and inclusive society by equipping learners with relevant competencies and expanding economic opportunities.

The findings of the study revealed that entrepreneurial education contributes significantly to learners' skills development. Respondents strongly agreed that entrepreneurial education improves problem-solving skills, enhances creativity and innovation, develops financial literacy, strengthens managerial and leadership abilities, and increases self-efficacy and

confidence among learners. The regression analysis further confirmed that entrepreneurial education significantly predicts skills development ($\beta = 0.72, p < 0.05$). This finding implies that entrepreneurial education equips learners with practical and transferable skills necessary for economic productivity and career success. Through entrepreneurial training, learners are exposed to critical thinking, innovation, communication, leadership, and decision-making processes that prepare them for both employment and self-employment opportunities. The finding is consistent with the Human Capital Theory advanced by Gary Becker, which emphasizes that investment in education and skill acquisition increases individual productivity and economic value. The result also agrees with previous studies which reported that entrepreneurial education enhances learners' competencies and prepares them for the demands of modern economies.

Furthermore, the finding suggests that entrepreneurial education does not only provide theoretical knowledge but also builds confidence and entrepreneurial mindsets among learners. This confidence is essential for innovation, business creation, and sustainable economic participation.

The study also revealed that entrepreneurial education contributes significantly to inclusive growth through employment generation and economic participation. Respondents agreed that entrepreneurial education increases employability, promotes self-employment, expands economic participation of marginalized groups, reduces dependence on limited formal employment opportunities, and contributes to shared economic benefits. Regression analysis further indicated that entrepreneurial education significantly predicts inclusive growth ($\beta = 0.69, p < 0.05$).

This finding indicates that entrepreneurial education serves as an important tool for reducing unemployment and promoting equitable economic opportunities. By equipping individuals with entrepreneurial competencies, learners become capable of establishing businesses, creating jobs, and participating actively in economic activities regardless of social or economic background.

The finding supports the concept of inclusive growth, which emphasizes equal access to opportunities, participation in economic activities, and equitable distribution of economic benefits. Entrepreneurial education therefore promotes social inclusion by empowering youth, women, and disadvantaged groups with skills for sustainable livelihoods.

In addition, the finding aligns with previous studies that identified entrepreneurial education as a strategy for economic empowerment and sustainable development. The study therefore demonstrates that entrepreneurial education contributes not only to individual advancement but also to broader societal and economic development. Top of Form Bottom of Form

Conclusion

The study examined the contribution of entrepreneurial education to skills development and inclusive growth in the North Central Zone of Nigeria. The findings revealed that entrepreneurial education significantly contributes to the development of learners' problem-solving skills, creativity and innovation, financial literacy, managerial ability, leadership skills, and self-confidence. The study established that entrepreneurial education equips learners with practical competencies required for personal development, employment, and entrepreneurial success.

The findings also revealed that entrepreneurial education contributes significantly to inclusive growth by increasing employability, promoting self-employment, expanding economic participation of marginalized groups, and reducing dependence on limited formal employment opportunities. Entrepreneurial education was found to promote shared economic benefits and encourage sustainable economic participation among learners.

The regression analysis confirmed that entrepreneurial education has a significant effect on both skills development and inclusive growth. The study therefore concludes that entrepreneurial education is an important instrument for building a skilled, productive, self-reliant, and inclusive society. By equipping individuals with entrepreneurial competencies and expanding economic opportunities, entrepreneurial education contributes meaningfully to sustainable national development.

Recommendations

Based on the findings of the study, the following recommendations were made:

By integrating practical skill acquisition activities, innovation projects, business simulations, and entrepreneurship training into the curriculum to enhance learners' problem-solving, leadership, financial literacy, and entrepreneurial competencies.

Government and educational policymakers should provide adequate support for entrepreneurial education through increased funding, provision of training facilities, instructional materials,

and capacity-building programmes for educators to improve the effectiveness of entrepreneurial education delivery.

Schools and relevant stakeholders should promote inclusive access to entrepreneurial education by creating opportunities for youth, women, and other disadvantaged groups to participate in entrepreneurship training, mentorship programmes, and business incubation initiatives, thereby fostering inclusive growth and economic participation.

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