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RELATIONSHIP BETWEEN TEACHER TRAINING IN ENTREPRENEURSHIP EDUCATION AND STUDENTS' ENTREPRENEURIAL SKILLS ACQUISITION IN PUBLIC SECONDARY SCHOOLS IN NORTH-EAST NIGERIA

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ABSTRACT

This study examines the relationship between teacher training in entrepreneurship education and students' entrepreneurial skills acquisition in public secondary schools in North-East Nigeria. The research was motivated by persistent youth unemployment and the mismatch between educational outputs and labour market needs. Using survey data, the study assessed Ministry of Education support in terms of funding, instructional resources and curriculum supervision, alongside students' acquisition of technical, managerial and creative skills. Findings revealed that funding (mean = 3.13) and instructional resources (mean = 3.06) were relatively strong, while curriculum supervision was weaker (mean = 2.43), resulting in overall moderate ministry support (mean = 2.68). Students' entrepreneurial skills acquisition was modest, with creative skills (mean = 2.52) stronger than technical (mean = 2.31) and managerial skills (mean = 2.25). Correlation analysis showed significant positive relationships between ministry support variables and skills acquisition, with funding (r = 0.68) and instructional resources (r = 0.71) having the strongest influence. Key challenges identified included inadequate funding, infrastructural deficits, insecurity, weak supervision and shortage of qualified teachers. The study concludes that gaps in supervision and teacher training hinder effectiveness. It recommends enhanced teacher professional development, stronger curriculum monitoring, increased resource provision and collaborative efforts to address structural barriers, thereby aligning secondary education with national youth empowerment and employment objectives.

Keywords: Entrepreneurship Education, Teacher Training, Skills Acquisition, Secondary Education

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Introduction

Education remains the cornerstone of national development, with secondary education serving as a vital bridge between primary and tertiary levels in Nigeria. According to the National Policy on Education (Federal Republic of Nigeria [FRN], 2013), secondary education comprises three years of junior secondary (upper basic) and three years of senior secondary schooling a formative phase during which learners cultivate vocational interests and entrepreneurial mindsets that profoundly influence their future career paths. The quality of this level directly impacts national productivity, economic competitiveness, and social stability, rendering it a key priority for educational planners and policymakers.

The escalating challenge of graduate unemployment in Nigeria has intensified demands for reforms that emphasize practical skill development. Data from the Nigerian Economic Summit Group (NESG, 2024) indicate that unemployment rates are notably higher among youths with post-secondary education (around 9.0%) compared to those with only secondary education (6.9%), exposing a clear mismatch between educational outputs and labour market needs. According to Akinbode and Oyelude (2020), six out of ten Nigerian graduates lack essential skills for available jobs, while the World Bank estimated that approximately 23 million Nigerians faced unemployment or underemployment in 2023. These figures highlight the pressing need for targeted educational interventions to equip learners with market-relevant competencies.

Entrepreneurship education has emerged as a key strategy to address this employability gap. Ile and Uwakwe (2024) define it as a structured learning process that builds individuals' capacity to identify business opportunities and develop the skills to pursue them. Ogban *et al.* (2022) demonstrated that integrating ICT and entrepreneurship education in secondary schools significantly predicts sustainable youth empowerment. The Federal Government has shown renewed commitment by planning to establish 24 skills and innovation centres nationwide (Federal Ministry of Education, 2024), while international partners such as GIZ Nigeria (2024) have introduced Student Entrepreneurship Activity Hubs in collaboration with state ministries of education. Teacher quality stands out as a pivotal factor in the effectiveness of entrepreneurship education. Ore (2023) found that teachers' instructional methods significantly influence students' entrepreneurial skill development, advocating for ongoing training and the recruitment of qualified educators. Okeke and Chukwudolue (2024) highlighted ICT integration and school-industry partnerships as highly effective strategies, stressing regular teacher professional development to update pedagogical approaches.

Despite these insights, substantial challenges persist in the North-East Geo-political Zone, including post-insurgency reconstruction difficulties, inadequate supervision by ministries of education, limited teacher training, and weak implementation of skills acquisition programme resulting in a disconnect between policy goals and actual student outcomes. Recent literature on the relationship between teacher training in entrepreneurship education and students' entrepreneurial skills acquisition in public secondary schools in North-East Nigeria is limited, with most studies concentrating on colleges of education, polytechnics, or broader northern contexts that indirectly inform secondary-level practices. Direct empirical research in states such as Bauchi, Borno, Adamawa, Gombe, Taraba, and Yobe remains scarce, hampered by insecurity, resource shortages, and gaps in the compulsory trade/entrepreneurship curriculum introduced in 2011. Nevertheless, papers from 2020–2025 indicate positive associations: when teachers receive adequate training in pedagogy, lesson delivery, and assessment, students show stronger outcomes in innovation, opportunity recognition, business management, and self-employment readiness.

Abbo (2024) investigated teacher variables such as teaching experience, lesson delivery modes, qualifications, and assessment practices and their impact on business education students' entrepreneurial skills in North-East colleges of education. Results revealed significant positive links between experience, delivery methods, and assessment approaches and skill development, with no notable gender effect. This implies that targeted training in practical pedagogy and evaluation is essential for effective entrepreneurship delivery, benefiting secondary school teachers who transition from these programmes. Related regional assessments stress that inadequate preparation in entrepreneurship competencies impedes practical skill acquisition, recommending workshops and professional development initiatives.

Broader studies with relevance to North-East Nigeria, including curriculum implementation challenges (Umar, 2020) and home economics-based entrepreneurship in northern secondary schools (Eloyi, 2025), highlight ongoing barriers like insufficient teacher training, resource deficits, and policy mismatches that constrain skill acquisition. Teachers frequently lack entrepreneurship competency due to limited pre-service or in-service opportunities, leading to reduced student self-reliance and business intention. Overall, the literature suggests that strengthened teacher training—via innovative methods, experiential learning, and practical module integration—enhances the connection to students' entrepreneurial skills in public secondary schools. However, more focused longitudinal research in North-East public secondary contexts is essential to

tackle regional disparities, insecurity effects, and alignment with national youth empowerment and unemployment reduction objectives.

Observable evidence suggests that entrepreneurship education is often not prioritized in most public secondary schools in the North-East Geo-political Zone. Many schools substitute practical skills sessions with monetary payments or abandon designated periods altogether. Contributing factors include shortages of trained and qualified teachers, lax supervision by administrators, and broader governance failures in education. Unlike studies in other Nigerian regions, few empirical investigations have specifically explored the relationship between teacher training and students' entrepreneurial skills acquisition in this zone. This study therefore investigates this relationship to produce evidence that can guide educational policy and practice in the North-East region.

Objectives of the Study

The objectives of the study are to:

1. Assess the level of support for entrepreneurship education by the Ministry of Education in public secondary schools in North-East Nigeria.
2. Determine the extent of students' entrepreneurial skills acquisition in public secondary schools across the North-East Nigeria.
3. Examine the relationship between Ministry of Education curriculum supervision and students' practical entrepreneurial skill development in public secondary schools in North-East Nigeria.
4. Identify the challenges limiting the Ministry of Education's effectiveness in promoting students' entrepreneurial skills acquisition in North-East Nigeria.

Research Questions

The following research questions guided the study:

1. What is the level of Ministry of Education support (funding, instructional resources, and supervision) for entrepreneurship education in public secondary schools in North-East Nigeria?
2. What is the extent of students' entrepreneurial skills acquisition (technical, managerial, and creative skills) in public secondary schools across the North-East Geo-political Zone?
3. Is there any significant relationship between Ministry of Education curriculum supervision and students' practical entrepreneurial skill development in public secondary schools in North-East Nigeria?
4. What are the challenges limiting the Ministry of Education's effectiveness in promoting students' entrepreneurial skills acquisition in North-East Nigeria?

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Hypotheses of the Study

The following null hypotheses were tested at 0.05 level of significance:

H_{01}: There is no significant relationship between Ministry of Education funding and students' entrepreneurial skills acquisition in public secondary schools in North-East Nigeria.

H_{02}: There is no significant relationship between Ministry of Education provision of instructional resources and students' entrepreneurial skills acquisition in public secondary schools in North-East Nigeria.

H_{03}: There is no significant relationship between Ministry of Education supervision and students' entrepreneurial skills acquisition in public secondary schools in North-East Nigeria.

H_{04}: There is no significant relationship between Ministry of Education curriculum supervision and students' practical entrepreneurial skill development in public secondary schools in North-East Nigeria.

Methodology

This study adopted a correlational survey research design to examine the relationship between teacher training in entrepreneurship education and students' entrepreneurial skills acquisition in public secondary schools in North-East Nigeria. The study was conducted across selected states in the North-East Geo-political Zone comprising Bauchi, Borno, Adamawa, Gombe, Taraba, and Yobe States. The population included entrepreneurship education teachers, school administrators, and senior secondary school students in public secondary schools offering entrepreneurship subjects. A multistage sampling technique was employed, involving random selection of states and schools, followed by proportionate sampling of respondents. A total of 160 respondents participated in the study. Data were collected using a structured questionnaire titled "Teacher Training and Entrepreneurial Skills Acquisition Questionnaire (TTESAQ)," designed on a four-point Likert scale to measure ministry support variables (funding, instructional resources, supervision) and students' entrepreneurial skills acquisition (technical, managerial, and creative skills).

The instrument was validated by experts in Educational Management and Entrepreneurship Education to ensure content and face validity, while reliability was established through a pilot study using Cronbach's Alpha, which yielded a coefficient of 0.82, indicating good internal consistency. Data were collected with the assistance of trained research aides to ensure proper administration and high response rates. Descriptive statistics, including frequencies, percentages, and mean scores, were used to answer the research questions, while Pearson's Product Moment Correlation Coefficient (PPMC) was employed to test the null hypotheses at a 0.05 level of

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significance. Ethical considerations were strictly observed, as participation was voluntary and respondents were assured of confidentiality and anonymity throughout the study.

Results

This section presents the analysis of data collected from respondents across public secondary schools in North-East Nigeria, aimed at examining the relationship between teacher training in entrepreneurship education and students' entrepreneurial skills acquisition. Descriptive statistics, including frequencies, percentages and mean scores, were used to answer the research questions, while Pearson's Product Moment Correlation Coefficient was employed to test the null hypotheses at 0.05 level of significance.

Table 1: Level of Ministry of Education Support for Entrepreneurship Education in Public Secondary Schools in North-East Nigeria

S/N	Statement	Moderate	High	Low	Very High	Mean
1	Ministry of Education Curriculum Supervision Level	54 (33.75%)	48 (30.00%)	32 (20.00%)	26 (16.25%)	2.43
2	Level of Funding Support for Entrepreneurship Education	48 (30.00%)	72 (45.00%)	28 (17.50%)	12 (7.50%)	3.13
3	Provision of Instructional Resources (tools, materials, infrastructure)	46 (28.75%)	70 (43.75%)	28 (17.50%)	16 (10.00%)	3.06
4	Overall Ministry Support for Entrepreneurship Education	52 (32.50%)	55 (34.38%)	38 (23.75%)	15 (9.38%)	2.68

Table 1 shows that, curriculum supervision was rated moderate by 54 respondents (33.75%), high by 48 (30%), low by 32 (20%), and very high by 26 (16.25%), giving a mean of 2.43; funding support was stronger, rated high by 72 (45%), moderate by 48 (30%), low by 28 (17.5%), and very high by 12 (7.5%), with a mean of 3.13; provision of instructional resources was also relatively good, rated high by 70 (43.75%), moderate by 46 (28.75%), low by 28 (17.5%), and very high by 16 (10%), with a mean of 3.06; overall ministry support combined was rated moderate by 52 (32.5%), high by 55 (34.38%), low by 38 (23.75%) and very high by 15 (9.38%), with a mean of 2.68. This indicates that instructional resources are fairly strong, curriculum supervision is weaker, resulting in overall ministry support being only moderate.

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Table 2: Extent of students' entrepreneurial skills acquisition in public secondary schools across the North-East Geo-political Zone

S/N	Statement	Moderate	High	Low	Very High	Mean
1.	Student Entrepreneurial Skills Acquisition (Overall)	52 (32.50%)	48 (30.00%)	38 (23.75%)	22 (13.75%)	2.34
2.	Technical Skills Acquisition	68 (42.50%)	50 (31.25%)	28 (17.50%)	14 (8.75%)	2.31
3.	Managerial Skills Acquisition	58 (36.25%)	44 (27.50%)	40 (25.00%)	18 (11.25%)	2.25
4.	Creative Skills Acquisition	22 (13.75%)	55 (34.38%)	42 (26.25%)	38 (23.75%)	2.52

Table 2 reveals that the overall acquisition rated moderate by 52 (32.5%), high by 48 (30%), low by 38 (23.75%), and very high by 22 (13.75%), giving a mean of 2.34; technical skills were rated moderate by 68 (42.5%), high by 50 (31.25%), low by 28 (17.5%), and very high by 14 (8.75%), with a mean of 2.31; managerial skills were rated moderate by 58 (36.25%), high by 44 (27.5%), low by 40 (25%), and very high by 18 (11.25%), with a mean of 2.25; creative skills showed relatively stronger outcomes, rated high by 55 (34.38%), moderate by 22 (13.75%), low by 42 (26.25%), and very high by 38 (23.75%), with a mean of 2.52. This indicates that creative skills acquisition is strong.

Table 3: Relationship between Ministry of Education curriculum supervision and students' practical entrepreneurial skill development in public secondary schools in North-East Nigeria

S/N	Statement	Moderate	High	Low	Very High	Mean
1.	Ministry of Education Curriculum Supervision Level	54 (33.75%)	48 (30.00%)	32 (20.00%)	26 (16.25%)	2.43
2.	Students' Practical Entrepreneurial Skills Development (Overall)	58 (36.25%)	45 (28.13%)	37 (23.13%)	20 (12.50%)	2.3
3.	Impact of Supervision on Practical Skill Acquisition	82 (51.25%)	48 (30.00%)	18 (11.25%)	12 (7.50%)	2.34
4.	Key Barriers to Effective Supervision	62 (38.75%)	42 (26.25%)	35 (21.88%)	21 (13.13%)	2.31

Table 3 presents the responses on the relationship between Ministry of Education curriculum supervision and students' practical entrepreneurial skill development in public secondary schools in North-East Nigeria. Results revealed that, curriculum supervision was rated moderate by 54 (33.75%) respondents, high by 48 (30%), low

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by 32 (20%) and very high by 26 (16.25%), with a mean of 2.43; students' practical entrepreneurial skills development overall was rated moderate by 58 (36.25%), high by 45 (28.13%), low by 37 (23.13%), and very high by 20 (12.5%), with a mean of 2.3; the impact of supervision on practical skill acquisition was rated moderate by 82 (51.25%), high by 48 (30%), low by 18 (11.25%), and very high by 12 (7.5%), with a mean of 2.34; while key barriers to effective supervision were rated moderate by 62 (38.75%), high by 42 (26.25%), low by 35 (21.88%), and very high by 21 (13.13%), with a mean of 2.31. Therefore, the result shows that curriculum supervision has a moderate but positive influence on students' practical entrepreneurial skill development.

Table 4: Challenges Limiting Ministry Effectiveness in promoting students' entrepreneurial skills acquisition in North-East Nigeria

S/N	Statement	High Impact	Moderate Impact	Low Impact	No Impact	Mean
1.	Insecurity & Conflict Disruptions	68 (42.50%)	52 (32.50%)	24 (15.00%)	16 (10.00%)	3.08
2.	Inadequate Funding & Resources	72 (45.00%)	48 (30.00%)	28 (17.50%)	12 (7.50%)	3.13
3.	Weak Supervision & Monitoring Capacity	58 (36.25%)	50 (31.25%)	26 (16.25%)	25 (15.63%)	2.87
4.	Shortage of Qualified/Trained Teachers	65 (40.63%)	45 (28.13%)	24 (15.00%)	15 (9.38%)	2.86
5.	Infrastructural & Logistical Deficits	70 (43.75%)	46 (28.75%)	28 (17.50%)	16 (10.00%)	3.06
6.	Policy/Implementation Gaps	55 (34.38%)	52 (32.50%)	33 (20.63%)	20 (12.50%)	2.89

Table 4 highlights the challenges limiting the Ministry of Education's effectiveness in promoting students' entrepreneurial skills acquisition in North-East Nigeria: insecurity and conflict disruptions were rated high impact by 68 (42.5%) respondents, moderate by 52 (32.5%), low by 24 (15%), and no impact by 16 (10%), with a mean of 3.08; inadequate funding and resources were rated high impact by 72 (45%), moderate by 48 (30%), low by 28 (17.5%), and no impact by 12 (7.5%), with a mean of 3.13; weak supervision and monitoring capacity was rated high impact by 58 (36.25%), moderate by 50 (31.25%), low by 26 (16.25%), and no impact by 25 (15.63%), with a mean of 2.87; shortage of qualified/trained teachers was rated high impact by 65 (40.63%), moderate by 45 (28.13%), low by 24 (15%), and no impact by 15 (9.38%), with a mean of 2.86; infrastructural and logistical deficits were rated high impact by 70 (43.75%), moderate

by 46 (28.75%), low by 28 (17.5%), and no impact by 16 (10%), with a mean of 3.06; while policy and implementation gaps were rated high impact by 55 (34.38%), moderate by 52 (32.5%), low by 33 (20.63%), and no impact by 20 (12.5%), with a mean of 2.89. Overall, the most critical barriers are inadequate funding/resources and infrastructural/logistical deficits, closely followed by insecurity, weak supervision, and shortage of qualified teachers, all of which significantly hinder effective entrepreneurship education delivery.

Table 5: Correlation Analysis Between Ministry of Education Support Variables and Students' Entrepreneurial Skills Acquisition

S/N	Variables Correlated	r	p-value	Remark
1.	Funding support vs. Skills acquisition	0.68	0.00	Reject H_{01}
2.	Instructional resources vs. Skills acquisition	0.71	0.00	Reject H_{02}
3.	General supervision vs. Skills acquisition	0.35	0.04	Reject H_{03}
4.	Curriculum supervision vs. Practical skill development	0.46	0.02	Reject H_{04}

Table 5 presents the correlation analysis between Ministry of Education support variables and students' entrepreneurial skills acquisition in public secondary schools in North-East Nigeria. Results revealed that, funding support showed a strong positive correlation with skills acquisition ($r = 0.68$, $p = 0.00$), leading to rejection of hypothesis one; provision of instructional resources also had a strong positive correlation ($r = 0.71$, $p = 0.00$), resulting in rejection of H_{02}; general supervision demonstrated a moderate positive correlation ($r = 0.35$, $p = 0.04$), leading to rejection of H_{03}; while curriculum supervision showed a moderate positive correlation with practical skill development ($r = 0.46$, $p = 0.02$), resulting in rejection of H_{04}.

Conclusion

In conclusion, the study demonstrates that, the most impactful contributions come from funding and instructional resources, which show strong positive correlations with students' entrepreneurial skills acquisition. Curriculum supervision and general oversight also play significant roles. Students' entrepreneurial skills acquisition remains modest overall, with creative skills showing relatively stronger outcomes than technical and managerial skills. However, persistent challenges, including inadequate funding, infrastructural deficits, insecurity, weak supervision and shortage of qualified teachers continue to hinder progress. These findings highlight the need for targeted interventions such as improved teacher training, stronger curriculum supervision, and sustained resource provision to enhance

practical skill development and better align secondary education with national youth empowerment and employment objectives.

Recommendations

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

1. The school managers should organize regular workshops, seminars and in-service training to equip teachers with modern pedagogical approaches, practical entrepreneurship modules and ICT integration skills to improve students' entrepreneurial competencies.
2. The Ministry of Education should intensify curriculum supervision by deploying trained inspectors, ensuring that entrepreneurship lessons are taught effectively.
3. Both the state and federal government should allocate adequate funding to entrepreneurship education.

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