EVALUATING THE SKILL GAP: ENHANCING VOCATIONAL BUSINESS RELEVANCE

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Abstract
This study evaluated the skill gap: Enhancing Vocational Business Education Curriculum in Nigeria for Industrial Relevance. The research was motivated by the persistent mismatch between the skills imparted in vocational business education programs and the competencies required by industries in the twenty-first-century economy. A descriptive survey design was adopted, and the study population comprised 121 business education lecturers from three tertiary institutions in Rivers State. A sample size of 114 business education lecturers were selected through stratified random sampling technique. A structured questionnaire titled: Questionnaire for Enhancing the Skill Gap: Enhancing vocational business relevance (QESGEVBR) formulated by the researchers and validated by experts in business education and educational measurement and evaluation with reliability of the instrument was established using Cronbach Alpha with an overall coefficient of 0.78 was used to collect. Data collected were analyzed using mean, standard deviation, and z-test at a 0.05 level of significance. Findings revealed that significant skill gaps exist in teamwork, digital literacy, entrepreneurial competence, and problem-solving, showing that the current curriculum is only moderately relevant to functional skill development. The study also identified factors such as outdated teaching methods, inadequate ICT facilities, limited industry linkages, and insufficient teacher training as major constraints to effective skill acquisition. Based on these findings, the study concludes that the vocational business education curriculum in Nigeria requires urgent reform to ensure industrial relevance. The study recommends a periodic review of the curriculum to embed digital and entrepreneurial competencies, stronger collaborations between academia and industry to enhance experiential learning, and investment in ICT facilities and staff development. These measures, if implemented, will reposition vocational business education as a transformative pathway for producing graduates who are innovative, employable, and capable of driving Nigeria's industrial growth.

Keywords: Business education, Business education curriculum, skill, functional development

Introduction

Business education is widely recognized as a pivotal program for preparing individuals with the knowledge, attitudes, and skills required for meaningful participation in business and industry. In Nigeria, it is housed in tertiary institutions such as universities, colleges of education, and polytechnics, with

the goal of producing graduates who are not only employable but also capable of creating jobs. Despite this mandate, there remains a persistent skills gap between the competencies acquired in school and the practical demands of employers in the contemporary economy. Many graduates of business education often struggle with digital literacy, entrepreneurial initiative, and problem-solving abilities, which are now critical in industrial and business environments.

The rapid transformation of industries through globalization, technological advancement, and digitalization has further widened this gap. Employers increasingly demand graduates who can think innovatively, adapt to new technologies, and demonstrate strong communication and organizational skills. However, the current business education curriculum in Nigeria has been criticized for its overemphasis on theoretical knowledge at the expense of practical, industry-driven training. This disconnect undermines graduates' capacity to contribute effectively to national development and sustainable economic growth.

Enhancing the business education curriculum is therefore crucial to address this challenge. Curriculum reform that integrates ICT, entrepreneurship, and experiential learning approaches will better align education with workplace realities. By plugging the skills gap, business education can produce graduates who are competent, creative, and industrially relevant, thereby strengthening Nigeria's human capital base and promoting economic competitiveness (Nwosu & Ohia, 2020).

Business education is widely regarded as a multidisciplinary programme that blends theoretical knowledge with practical competencies to prepare learners for meaningful participation in the business world. It is not limited to clerical or commercial training but encompasses a wide range of business-related fields, including accounting, management, entrepreneurship, office practice, and information communication technology. Fundamentally, it equips students with the skills and knowledge needed for both wage employment and self-employment, thus serving as a tool for national development and economic sustainability (Umo & Okon, 2023). According to Naboth and Okoro (2025), Business Education as a vocational programme is multi-disciplinary that incorporates various elements of learning experiences and vocational training to equip individuals with the knowledge, skills, attitudes and competencies necessary for careers in business and education.

The objectives of business education go beyond teaching technical competencies; they include developing entrepreneurial mindsets, managerial capabilities, ethical orientation, and the ability to adapt to the changing dynamics of the workplace. By fostering these outcomes, business education serves as an avenue for nurturing innovation and critical thinking among students, enabling them to engage effectively in the increasingly globalized economy (Amaewhule, Amadi, & Abung, 2024).

In addition, the contemporary relevance of business education can be observed in its response to global challenges such as sustainability, digitalization, and inclusivity. Universities and colleges are rethinking how business programmes can prepare students not only as employees but also as innovators capable of shaping industries. According to Castaneda and Cuellar (2020) noted that the pandemic accelerated the adoption of hybrid teaching models in business education, highlighting the importance of flexibility, adaptability, and lifelong learning as core components of twenty-first-century graduate competencies.

In summary, business education represents both an academic and vocational pathway that provides students with professional competencies, entrepreneurial potential, and adaptive skills necessary for employability and national development. Its evolving nature underscores the importance of continuous curriculum review, stakeholder collaboration, and investment in teaching resources to ensure relevance in today's fast-changing business environment.

Review of Related Literature

Concept of Business education curriculum

Alao, Mojekwu, and Opara (2023) the curriculum of business education is the structured framework of knowledge, skills, values, and experiences designed to prepare learners for careers in business-related professions and entrepreneurial ventures. It represents not only the academic content to be taught but also the pedagogical strategies, practical exposure, and professional development activities aimed at producing competent graduates. Also, Umo and Okon (2023), the business education curriculum serves as a

foundation for equipping undergraduates with both technical skills such as accounting, marketing, and information technology, as well as soft skills including communication, teamwork, and problem-solving.

A key characteristic of a business education curriculum is its dual orientation towards employability and entrepreneurship. Scholars emphasize that the curriculum is expected to respond to dynamic workplace requirements, integrating modern digital technologies, entrepreneurial modules, and industry-based experiences. This ensures that graduates can either seek paid employment or establish business enterprises, thus contributing to individual and national economic growth (Amaewhule, Amadi, & Abung, 2024). The inclusion of entrepreneurship training and work-integrated learning opportunities has become central to curriculum reforms in many universities, particularly in Nigeria where graduate unemployment remains a pressing challenge.

Also, professional bodies and accreditation agencies continue to play an influential role in shaping business education curricula. Reports from the Association to Advance Collegiate Schools of Business (AACSB) International (2022) highlight the importance of embedding sustainability, inclusivity, and innovation into curriculum design to align with global expectations of business graduates. This indicates that a relevant business education curriculum should extend beyond skill acquisition to instill ethical values, social responsibility, and leadership capabilities.

Overall, the concept of a business education curriculum encompasses an integrated approach that balances academic theory with practical exposure, digital competence, and entrepreneurial readiness. Its constant evolution underscores the need for periodic review, collaboration with industry stakeholders, and investment in modern instructional facilities to ensure graduates remain competitive in a fast-changing global economy.

The persistent skill gap between vocational business education curricula and industry demandsremains a critical challenge in Nigeria's educational landscape. Research consistently documents a mismatch between graduate competencies and employer requirements, particularly regarding digital literacy, entrepreneurial competence, and problem-solving skills (David, et al, 2024; Abdullahi. et al. 2025). Studies examining business education programmes in Nigerian tertiary institutions reveal that outdated pedagogical approaches, inadequate ICT infrastructure, and limited industry-academia collaboration significantly constrain effective skill acquisition (Olusola & Obadina, 2026; Oviawe, et al. 2017).

Recent empirical investigations have corroborated these concerns. Abdullahi et al. (2025) found a significant positive correlation between industrial requirements and business education curriculum alignment with employment outcomes for graduates in North-East Nigeria. Similarly, a study in Cross River State demonstrated that emerging digital skills integration exerts a strong positive influence on workforce readiness ($\beta = 0.72$, $p < 0.05$), though practical application remains limited (Olusola & Obadina, 2026). The effectiveness of vocational training is further constrained by infrastructural deficits, obsolete equipment, and insufficient funding, as documented in Delta State (Olisa, 2025). These findings align with broader stakeholder concerns that Nigeria's education and training systems have not adequately aligned with labour market needs, resulting in graduates lacking practical and technical competencies essential for today's workforce (Nwachukwu, 2026).

Statement of the Problem

One of the persistent challenges confronting Nigeria’s education sector is the widening gap between the skills acquired in vocational business education programmes and the competencies demanded by industries. Employers consistently lament that many graduates of vocational business education lack practical abilities such as digital literacy, entrepreneurial competence, problem-solving, teamwork, and adaptability, which are crucial for success in today’s knowledge-driven economy. Rather than producing industry-ready graduates, the curriculum in many institutions remains largely theoretical, focusing on rote learning and outdated practices with little connection to modern business realities.

The mismatch between curriculum content and labour market requirements has contributed to high unemployment and underemployment among business education graduates, despite the growing demand for a skilled workforce across industries. In many cases, industries are compelled to retrain graduates

extensively before they can be productive, thereby increasing operational costs for employers and reducing the employability prospects of graduates. The study intends to fill this gap by providing evidence-based insights on curriculum reforms and strategies that can make vocational business education more practical, industry-driven, and responsive to Nigeria's evolving labour market needs.

Research Questions

The following questions guided the study;

1. What are the specific skill gaps present in the vocational business education curriculum?
2. How relevant is the current vocational business education curriculum to the effective functional skill development of Business education students?

Null Hypotheses

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

HO_1: There are no significant skill gaps present in the vocational business education curriculum.

HO_2: The current vocational business education curriculum is not significantly relevant to the effective functional skill development of students.

Method

A descriptive survey design was adopted, and the study population comprised 121 business education lecturers from three tertiary institutions offering Business education in Rivers state. They include; Rivers state University (36), Ignatius Ajuru University of Education (17) and Federal College of Education (Technical), Omoku (68). A sample size of 114 business education lecturers were selected through stratified random sampling technique. A structured questionnaire titled: Questionnaire for Enhancing the Skill Gap: Enhancing vocational business relevance (QESGEVBR**)** formulated by the researchers and validated by experts in business education and educational measurement and evaluation. To establish the reliability of the instrument, copies of the instrument were distributed to 20 Business education lecturers in University of Port-Harcourt. Cronbach Alpha formula was used to analyze the instrument using the Statistical Package for Social Sciences (SPSS) version 21 to establish the internal consistency of the instrument. Reliability coefficient values of an overall coefficient value of 0.78 was obtained The questionnaire had 30 items in the three clusters. The instrument was structured on a four-point rating scale, with response categories as Strongly Agree = 4, Agree = 3, Disagree = 2, and strongly disagree = 1. The researchers administered copies of the instrument to the respondents in their various offices. 114 copies of the instrument distributed, all were successfully retrieved and were used for data analysis. The statistical tools used for answering the research questions were arithmetic mean and standard deviation. The class boundary for interpreting the result include: Strongly Agree (3.50-4.0), Agree (2.50-3.49), Disagree (1.50-2.49) and Strongly Disagree (1.00-1.49). The hypotheses were calculated using the z-test at 0.05 level of significance.

Results

Research Question One

What are the specific skill gaps present in the vocational business education curriculum?

Table 1: Mean and Standard Deviation of specific skill gaps present in the vocational business education curriculum N= 114

S/N	Items	X_1	SD	Decision
1.	Innovative skills	3.55	0.73	SA
2.	Teamwork skills	3.9	0.89	SA
3.	Digital literacy skills	3.80	0.72	SA
4.	Creative skills	3.36	0.66	SA
5.	Information literacy skills	3.7	0.63	SA
6.	Media literacy skills	3.40	0.55	A
7.	Digital citizenship skills	3.68	0.61	SA
8.	Flexibility skills	3.65	0.64	SA
9.	Multitasking skills	3.2	0.64	A
10.	Cyber Security skills	3.28	0.69	A

	Grand mean	**3.4**	**0.68**	A

Source: field survey, 2025

Table 1 shows the mean and standard deviation scores on the specific skill gaps in the vocational business education curriculum as perceived by 114 respondents. The overall grand mean of 3.40 (SD = 0.68) indicates that students generally agreed that significant skill gaps exist in the curriculum. From the responses, the most notable gaps were in teamwork (M = 3.90), digital literacy (M = 3.80), and information literacy (M = 3.70), all with strong agreement. This suggests that although these skills are critical in today's business environment, they are not adequately emphasized in the current curriculum. Similarly, innovative (M = 3.55) and flexibility skills (M = 3.65) were highlighted as lacking, pointing to the curriculum's limited focus on adaptability and creativity. On the other hand, areas such as media literacy (M = 3.40), multitasking (M = 3.20), and cyber security skills (M = 3.28) received lower agreement, though they were still acknowledged as gaps. These results reveal that while some progress has been made, the curriculum still falls short in preparing students with modern digital and problem-solving competencies needed for workplace relevance.

Research Question Two

How relevant is the current vocational business education curriculum to the effective functional skill development of Business education students?

Table 2: Mean and Standard Deviation Scores of the relevance of is the current vocational business education curriculum to the effective functional skill development of Business education students **N=114**

S/N	Items	X_1	SD	X
1.	The vocational business education curriculum equips me with relevant practical skills for industry	2.76	0.86	A
2.	The content of the curriculum addresses current technological trends in business practice.	2.83	0.91	A
3.	The curriculum enhances my ability to solve real-life business problems	3.00	0.70	A
4.	The curriculum provides adequate entrepreneurial training for self-employment.	2.66	0.83	A
5.	I acquire digital literacy skills through the vocational business education curriculum.	2.97	0.68	A
6.	Teamwork and collaboration skills are emphasized in the curriculum.	3.10	0.70	A
7.	The curriculum aligns with the employability needs of industries in Nigeria	2.72	0.84	SA
8.	The curriculum incorporates practical training alongside theoretical knowledge	2.99	0.78	SA
9.	Internship or industrial attachment is adequately integrated into the curriculum.	2.72	0.84	A
10.	The curriculum prepares me adequately for effective communication in business environment	2.80	0.90	A
	Grand mean	**2.90**	**0.64**	A

Source: field survey, 2025

Table 2 presents the mean and standard deviation scores on how relevant the vocational business education curriculum is to the effective functional skill development of students. With a sample size of 114, the results show that the respondents generally agreed that the curriculum contributes to their skill development (grand mean = 2.90, SD = 0.64). Most of the items fall within the "Agree" (A) category, indicating that the curriculum is considered fairly effective in equipping students with practical skills, enhancing problem-solving ability, providing digital literacy, and supporting teamwork. For instance, the highest mean score

(3.10) was recorded on the item that emphasizes teamwork and collaboration, while entrepreneurial training had the lowest mean (2.66), suggesting a weaker area. Notably, items on industry alignment (2.72) and integration of practical training (2.99) received stronger agreement, showing that students recognize some relevance of the curriculum to labor market demands. However, the relatively moderate scores across items suggest that, although the curriculum is beneficial, it does not fully address emerging technological trends or provide sufficient entrepreneurial depth.

Test of Hypotheses

The following hypotheses were analyzed at 0.05 level of significance;

HO_1: There are no significant difference between skill gaps present and vocational business education curriculum.

Table 3: Independent z-test comparison of significant difference between skill gaps present and vocational business education curriculum

Respondents	N	$\bar{X}$	SD	DF	Level of Sig.	z-cal	z-crit	Decision
Skill gaps	57	3.36	0.68					
Vocational business educ. curriculum.	57	3.42	0.71	112	0.05	2.131	1.960	Reject HO1

***Source: Field survey,* 2025**

The result in Table 3 shows the independent z-test comparison between skill gaps and vocational business education curriculum. The calculated z-value (2.131) is higher than the critical z-value (1.960) at the 0.05 significance level with 112 degrees of freedom. This means there is a significant difference between skill gaps and vocational business education curriculum. Therefore, the null hypothesis (HO1) is rejected, implying that the vocational business education curriculum does not significantly address the skill gaps of respondents.

HO_2: The current vocational business education curriculum is not significantly relevant to the effective functional skill development of Business education students.

Table 4: Independent z-test comparison of mean score of current vocational business education curriculum is not significantly relevant to the effective functional skill development of Business education students

Respondents	N	$\bar{X}$	SD	DF	Level of Sig.	z-cal	z-crit	Decision
Vocational business education curriculum	57	3.4	0.62					
Functional skill development	57	3.7	0.71	112	0.05	1.02	1.960	Accept HO1

***Source: Field survey,* 2025**

The result in Table 4 indicates that the calculated z-value (1.202) is less than the critical z-value (1.960) at the 0.05 significance level with 112 degrees of freedom. This shows that there is a significant difference between the current vocational business education curriculum and the functional skill development of Business Education students. Hence, the null hypothesis (HO1) is accepted, suggesting that the curriculum is not significantly relevant to enhancing students' effective functional skills.

Discussion of Findings

Research Question One

What are the specific skill gaps present in the vocational business education curriculum?

The results from Table 1 show that students perceive notable skill gaps in their vocational business education curriculum. The grand mean of 3.40 (SD = 0.68) indicates that most respondents Agree that several skills especially teamwork, digital literacy, information literacy, innovation, and flexibility are insufficiently developed. Of these, teamwork (M = 3.90), digital literacy (M = 3.80), and information literacy (M = 3.70) are the areas of strongest concern, suggesting that the curriculum is not keeping pace with the demands of modern workplaces in these domains. These perceptions are reinforced by recent empirical research in Nigeria. For example, a study in Anambra State found that business education graduates only had moderate foundation digital skills, while more advanced digital communication and cloud computing skills were scarcely present in their competencies (Akudolu & Onyeneke, 2023). This aligns with the high means the authors observed for digital literacy and teamwork as gaps, showing these are widespread issues. Similarly, research in Delta State by Uzoamaka & Okpuzor (2025) reported that employers strongly demand digital skills such as data analysis and digital marketing for employability, yet many curricula do not reflect this in their offerings.

However, not all studies entirely agree with such high levels of gaps. Some research finds that in certain institutions, student's rate creative and digital skills somewhat higher, suggesting that pockets of curriculum reform are having impact. For instance, some colleges have begun embedding project-based digital assignments that give students exposure to real-world tools, resulting in somewhat less perceived gap in media literacy and multitasking skills than might be expected (Egbeyemi & Enilolobo, 2022). These findings indicate that while the overall trend is of substantive gaps, context matters institutions that innovate tend to reduce the severity of the perceived gaps.

In sum, the findings match broader Nigerian evidence that teamwork, digital literacy, and adaptability are lagging areas in vocational business education. The "opposite" evidence from reform-minded colleges underscores those reforms can work but such reforms are not yet widespread. This supports the conclusion that curriculum redesign and targeted interventions in these skill domains are both necessary and timely.

Research Question Two

How relevant is the current vocational business education curriculum to the effective functional skill development of Business education students?

The findings from Table 2 indicate that business education students generally perceive their vocational business education curriculum as moderately relevant to their functional skill development, with a grand mean of 2.90 (SD = 0.64). Items like teamwork and collaboration (M = 3.10), digital literacy (M = 2.97), and solving real-life business problems (M = 3.00) scored higher, showing strengths in these areas. However, entrepreneurial training (M = 2.66) remains relatively weak, suggesting limited exposure or curricular emphasis in that dimension.

These patterns are consistent with recent evidence in Nigeria. For example, Uzoamaka and Okpuzor (2025) found that employers in Delta State strongly demand graduate proficiency in data analysis, digital marketing, and project management areas tied to digital literacy and problem solving. Similarly, Ndubuisi, Ezeani and Ile (2023) in their study in Anambra State reported that business education students need higher exposure to digital skills in the curriculum for the digital economy; their study recommends periodic curriculum review to embed these skills.

On the other hand, some research suggests more optimistic perceptions. David, Rasheed and Ojo (2022) conducted a study titled "Digitalisation of Skills Acquisition on the Employability of Business Education Graduates" and found a significant relationship between use of digital tools in teaching and declared employability. Graduates reported relatively high self-rated proficiency in specific digital skills when institutions had stronger ICT infrastructure and consistent digital teaching methods. This suggests that, in well-resourced institutions, the gaps may be narrower. Overall, then, the data show that while the current curriculum is making some strides particularly in areas like teamwork and digital literacy it still falls short in entrepreneurial training and perhaps in aligning with top employer priorities. The contrast between

well-resourced institutions and those with fewer resources highlights that institutional capacity significantly mediates how "relevance" is experienced by students.

Conclusion

The findings of this study affirm that while vocational business education in Nigeria provides students with some degree of functional skills, significant gaps remain in areas that are crucial for industrial relevance. Skills such as digital literacy, teamwork, and problem-solving were moderately supported, but entrepreneurial competence, practical exposure, and industry alignment were found to be inadequate. These gaps confirm that the curriculum, in its present form, has not fully evolved to meet the dynamic needs of the Nigerian labor market. Equally, systemic challenges such as outdated teaching methods, poorly structured curricular content, inadequate instructor training, and limited access to ICT facilities hinder the full realization of students' functional capacity. This aligns with observations by Nigerian scholars who emphasize that bridging the skill gap requires curriculum reform, stronger integration of industry partnerships, and the infusion of modern pedagogical approaches. Therefore, plugging the skill gap in vocational business education requires deliberate steps to embed industrial relevance into the curriculum. This entails aligning course content with technological and entrepreneurial demands, strengthening mentorship and internship programs, and ensuring that teaching facilities and methods reflect real-world business practices. By addressing these gaps, vocational business education can be repositioned not merely as an academic pursuit but as a transformative pathway for producing graduates equipped with the competencies that Nigeria's industries urgently require.

Recommendations

The following recommendations are made based on the findings:

1. The vocational business education curriculum should be revised to integrate critical competencies such as digital literacy, innovation, teamwork, and problem-solving.
2. Stronger collaboration between universities and industries is needed to align course content with labor market demands. Practical components like internships and entrepreneurial training should also be strengthened

References

AACSB International. (2022). Five forces driving the future of business education. AACSB. https://www.aacsb.edu/insights/articles/2022/04/five-forces-driving-the- future- of-business-education.

Abdullahi, S. M., Bello, U. M., James, J., & Abbas, A. (2025). Industrial requirement and business education curriculum as correlate for employment of business education graduates in North-East, Nigeria. *Vunoklang Multidisciplinary Journal of Science and Technology Education, 13*(4). https://doi.org/10.5281/zenodo.18019765

Akudolu, C. A., & Onyeneke, E. N. (2023). Digital skills gap among business education graduates of tertiary institutions in Anambra State: Implication for Programme Re-adjustment. Nigerian Journal of Business Education.

Alao, O. E., Mojekwu, J. N., & Opara, C. C. (2023). Vocational business education undergraduate curriculum and students' empowerment for sustainability in Nigeria. *Journal of Contemporary Issues and Thought, 14*(1), 16–29.

Amaewhule, W. A., Amadi, K., & Abung, G. O. (2024). Business education graduates' employability skills needed for entrepreneurship and gainful employment in Rivers State. International Journal of Advanced Research and Learning, 3(3), 1–18.

Castaneda, D & Cuellar, S. (2020). Knowledge sharing and innovation: A systematic review. Knowledge and Process Management 27(5). Retrieved August, 20 2025 from ResearchGate.net/Publication.

David, S., Okeke, O. B., & Ibironke, J. O. (2024). Re-engineering business education curriculum for proactive response to Industry 4.0 in Nigeria. *Nigerian Journal of Business Education, 11*(2), 281–296.

David, O. R., Rasheed, D., & Ojo, E. O. (2022). Digitalisation of skills and the employability of business education graduates in Lagos State tertiary institutions. *Nigerian Journal of Business Education (NIGJBED)*.

Egbeyemi, G. A., & Enilolobo, G. F. (2022). Business educators' perception of digital skills needed for effective performance in the world of work. KWASU International Journal of Education (KIJE).

Naboth, O.A. & Okoro, S.O. (2025). Methodology in Business education.

Ndubuisi, I. S., Ezeani, C. F., & Ile, C. M. (2023). Integrating digital skills in business education curriculum in tertiary institutions for digital economy development in Anambra State. Nigerian Journal of Business Education (NIGJBED).

Nwachukwu, V. (2026, April 29). Skills gap threateaning $1 trillion economy target, NACCIMA warns. The Gauaedian. https//guardian.ng/business-sevices/industry/skills-gap- threatening – 1 – trillion – economy – target – naccima - warns

Nwosu, B. O., & Ohia, A. N. (2020). Business education curriculum and employability of graduates in the digital era. Nigerian Journal of Business Education, 7(1), 162– 174.

Okoye, K. R., & Edokpolor, J. E. (2021). Effect of industrial work experience in developing Technical and Vocational Education undergraduates' employability skills. Asian Journal of Assessment in Teaching and Learning, 11(1), Article 1-12.

Olisa, J. A. (2025). Investigating the effectiveness of technical and vocational education training (TVET) in mitigating unemployment in Delta State. *Zenodo*. https://doi.org/10.5281/zenodo.18044737

Olusola, F. A., & Obadina, O. B. (2026). Enhancing workforce readiness through emerging digital skills in business education in tertiary institutions in Cross River State, Nigeria. *Zenodo*. https://doi.org/10.5281/zenodo.18640335

Oviawe, J. I., Uwaifo, V. O., & Ugiagbe, E. O. (2017). Strategies for enhancing institution-industry collaboration in business education. *Nigerian Journal of Business Education, 4*(2), 112–125.

Umo, O. B., &Okon, E. E. (2023). Components of business education curriculum and the development of entrepreneurial skills among undergraduates in Nigerian universities. *Journal of Entrepreneurship Education, 26*(S5), 1–25

Uzoamaka, I. G., &Okpuzor, V. N. (2025). Digital skills required for business education graduates: employer perceptions in Delta State, nigeria. African Journal of Management and Business Research, 18(1), 318-328.