



Sustainable Innovation in Business Education Programme: Preparing Youths for Knowledge-Based Economy

¹Nwagu Christy Chinyere, ²Iwu Blessing Kelechi &
³Chima Chizoba Florence

^{1,2&3}Department of Business Education,
Alvan Ikoku Federal University of Education, Owerri-Imo State

Abstract

The study investigated the integration of sustainable innovation into business education programme to prepare youths for knowledge-based economy of South East, Nigeria. It adopted survey research design and 142 business education lecturers in public universities offering business education programme in South East, Nigeria were studied without sampling. A-13 items structured questionnaire titled "Sustainable Innovative Practices Integrated into Business Education Programme for Preparing Youths for Knowledge-based Economy (SIIBEP-PTKE)" was used for data collection. Face and validity of the instrument were established using three experts in the field of education. The reliability of the instrument calculated using Cronbach Alpha yielded correlation coefficient of 0.85. Mean, standard deviation and t-test were used for data analysis. Findings showed that business education lecturers disagree that majority of the sustainable innovative practices listed are integrated into business education programme for preparing youths for knowledge-based economy. It was also revealed that ownership of institution was not a significant factor regarding the integration of sustainable innovation into business education programme for preparing youths for knowledge-based economy. Based on the findings of the study, the researcher concluded that; there is a gap in the integration of sustainable innovation into business education programme to prepare youths for knowledge-based economy. It was recommended among others that; Heads of Department of business education programme in Nigeria should organize regular hands-on training workshops, seminars, and conferences to enable business education lecturers update their digital skills to effectively use AI and VR technologies.

Keywords: Sustainable Innovation, Business Education, Youth, Knowledge-Based Economy

Corresponding Author: Nwagu Christy Chinyere

Background to the Study

Every nation relies on its education system for progress. Education is essential for personal development, economic growth, and social stability. Investment in education is crucial for ensuring that individuals and nations achieve their full potential. Education defined by Morrell et al. (2020) is the transfer of knowledge, skills, attitudes, beliefs, and habits across generations, and occurs in homes, classrooms or any other settings. In Nigeria, education is seen as a key tool for transforming the society into a vibrant and productive nation that offers opportunities and fairness for all. The Federal Republic of Nigeria (FRN) (2013) stated that the primary goal of education in Nigeria is to integrate individuals into effective citizens while ensuring equal access to education at all levels including university level. Universities contribute immensely to Nigeria's growth. Universities in Nigeria focus on research, information generation, dissemination and application. They serve as key drivers of the nation's human capital development, economic transformation, reduction in youth unemployment and poverty (Nnadozie et al., 202).

The Nigerian universities offer many educational programmes including business education. Business education is a skill-based educational programme that equips students with knowledge and skills for self-reliance. Sani et al. (2017) defined it as an aspect of vocational education that inculcates in youths' attitudes, knowledge, skills and competencies required for gainful employment or self-reliance. Issa and Ibrahim (2021) stated that business education includes education for office work, economic understanding, and entrepreneurship. It boasts employment generation, youths' self-reliance and self-actualization (Umezulike & Charles-Ibezim, 2021). It is broadly divided into three options namely; Accounting, Marketing/Distributive, Office Technology and Management (OTM) education, and vital for Nigeria's quest for rapid economic and technological growth through sustainable innovation.

Innovation is an aspect of educational change which involves the alteration of some aspects of educational programmes. The basic aim of innovation is the injection of new ideas and technology into the system of schooling as a means of bringing change in the educational system (Okoko, 2022). In the Nigerian educational system, innovation is a special kind of change which may involve renewing inputs and products. It means not only adapting to new conditions but creating new and better conditions. Sustainable innovation involves the continuous enhancement of products, processes and the workforce to create a more sustainable future for consumers, employees and the environment. It fosters growth and profitability by promoting product reuse and circularity while enhancing operational efficiency and safety. Nick (2022) highlighted that sustainable innovation seeks creative and efficient solutions to urgent challenges such as climate change, resource depletion, pollution, inequality and poverty. In the context of business education, sustainable innovation means incorporating sustainability principles into the business education curriculum, and teaching these concepts to students. Sustainable innovation emphasizes not only equipping students with skills, but also, instilling moral accountability and responsibility in them to address environmental and social issues (Lozano, 2019). Integrating sustainable innovation in

business education can help address Nigeria's socio-economic and environmental challenges. By integrating sustainability into the curriculum, young aspiring business leaders can acquire the tools they need to fit into the modern economy (Abubakar & Handayani, 2018).

As the world shifts towards a knowledge-based economy, it is crucial to equip the next generation with the necessary skills they need to thrive in modern economy. This education not only supports their intellectual and professional growth but also, empowers them to drive economic, social and environmental progress. Ensuring that students can navigate the complexities of the modern economy and contribute to long-term societal well-being and progress is vital (Adeola & Eletu, 2018). A knowledge-based economy is one in which the acquisition and utilization of knowledge plays a critical role in the creation of prosperity and growth. In this economy, knowledge is important drivers of productivity, innovation and competitiveness, separating it from traditional economies that rely primarily on physical inputs and natural resources (Haye, 2024). Preparing youths for a knowledge-based economy is crucial for several reasons. As the global economy continues to evolve, the ability to effectively harness and apply knowledge becomes a significant determinant of an individual and a nation's competitiveness and overall development. Obviously, equipping business education students with the skills to innovate and improve productivity can enable them to drive economic growth. Similarly, business education graduates skilled in technology, critical thinking and problem-solving can better integrate into the knowledge-based economy, enhancing Nigeria's competitive edge. Furthermore, the shift towards a knowledge-based economy creates demand for high-skilled jobs. Preparing students with relevant skills ensures that they are ready to fill these roles, reducing youth/graduates' unemployment and underemployment.

There is need to integrating sustainable innovation in university business education programme to provide youths with skills and knowledge needed to survive in an economy fueled by information and technology. This integration according to World Economic Forum (2016) involves among others; developing soft skills of students such as critical thinking, problem solving and collaboration; equipping students with ICT skills, instilling in students love for lifelong learning, and equipping students with adaptability and flexibility skills to manage changing job markets and technological advancements. It also includes adopting real-world projects and problem-based teaching strategies in teaching, incorporating ethical and social responsibility contents into curriculum, introduction of entrepreneurial training to develop students' thinking and creative to drive job creation, and introduction of financial principles and management courses into curriculum (Schleicher, 2018). Similarly, business education lecturers must integrate adaptive teaching technologies and personalized assessment plans in course delivery. In addition, business education programme must foster collaboration with industries to ensure curriculum is relevant and aligned with market needs internships, apprenticeships, and co-programmes.

Business education programme has been facing a lot of criticisms from stakeholder for the inability to prepare it students to face the challenges of modern economy upon graduation. For instance, Koffi and Etukudo (2016) earlier regretted the fact that majority of business

education graduates lacked employability skills required by modern business organizations. Olatoye et al. (2020) in agreement revealed that business education programme in various higher institutions in Nigeria have failed in areas of organizing regular professional training and development programmes for lecturers, does not incorporate digital technologies in teaching as most of these technologies are either non-existent or outdated, while the programme still operate outdated curriculum. Similarly, Okoko (2022) regretted that many tertiary institutions in Nigeria do not integrate innovation in their programme delivery. Okoko attributed this situation to inadequate finance, poor attitude and Resistance to change by lecturers and administrators, and shortage of adequately trained manpower. In the same vein, Nwazor and Nwaukwa (2015), and Okoli and Azih (2015) reported that business education curriculum in Nigeria universities is highly theoretical and rhetorical in nature. This is supported by findings of Okeke-Ezeanyanwu and Nweke (2021) which revealed that business education courses in many Nigerian tertiary institutions are taught traditionally without the use of innovative strategies.

Ownership of universities (Federal and State) could play a role in the integration of sustainable innovation in business education programme. Business education programme in federal owned universities could be integrating sustainable innovation compared to state owned universities probably due to differences in funding and resources, research capabilities, teaching facilities and technologies, and leadership structures. This study assessed the integration of sustainable innovation into business education programme to prepare youths for knowledge-based economy.

Statement of the Problem

The swift shift towards a knowledge-based economy underscores the urgent need for business education programme in Nigerian universities to incorporate sustainable innovation into its curriculum. In Nigeria, there is growing acknowledgment of the significance of sustainable innovation in driving economic growth, tackling environmental issues, and promoting social equity. However, current business education programme in Nigerian universities, particularly those in South East region appear to be lagging behind in integrating these innovations. This shortfall presents a major challenge in preparing Nigerian youths for the demands and opportunities of a knowledge-based economy. Despite the presence of policy frameworks and strategic plans that emphasize the importance of sustainability innovation in education, there appears to remain a persistent gap between policy and practice. Lack of integration of sustainable innovation in business education across all Nigerian universities means that many students on graduation will lack the requisite skills and knowledge needed to drive economic transformation and sustainable development. Therefore, this study specifically examines (1) sustainable innovative practices integrated into business education programme in South East universities for preparing youths for knowledge-based economy

Research Questions

The following research questions guided this study;

- i. What are the sustainable innovative practices integrated into business education

programme in South East universities for preparing youths for knowledge-based economy?

Hull Hypotheses

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

- i. There is no significance difference in the mean ratings of business education lecturers in universities in South East, Nigeria on sustainable innovative practices integrated into business education programme for preparing youths for knowledge-based economy based on ownership of institution.

Method

The study adopted survey research design. It was carried out in South East, Nigeria. The population of the study consisted of 12 business education lecturers in both Federal and State universities in South East, Nigeria that offer business education programme. In all, there are four Federal Universities with 57 business education lectures and four State universities with 85 business education lecturers. There was no sampling since the population was manageable and accessible to the researcher. Structured questionnaire titled “Sustainable Innovative Practices Integrated into Business Education Programme for Preparing Youths for Knowledge-based Economy (SIPIBEP-PTKE)” was used for data collection. The instrument was in two sections; A and B. Section A contained item on demographic information of the respondents such as ownership of institution while section B contained 13 items to cover the research question. The instrument was structured on four points rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). Face and validity of the instrument were established using three experts, two from the field of Business Education and one expert from Measurement and Evaluation all from Faculty of Education, Chukwuemeka Odumegwu Ojukwu University, Igbariam Awka, Anambra State. The reliability of the instrument was determined using trial-test and data collected were calculated with Cronbach Alpha formula to determine the internal consistency of the instrument and correlation coefficient of 0.85 was obtained. The researcher with the help of five research assistants adequately briefed administered the questionnaires to the respondents in their offices. On the spot distribution and collection of questionnaires was adopted but respondents who did not fill their copies immediately were revisited on another agreed date for retrieval. Out of 142 copies of questionnaire distributed, 135 (95%) were correctly filled and returned, which were used for data analysis. Mean and standard deviation were used to answer the research questions and determine the homogeneity of the respondents' mean ratings while t-test was used to test the null hypothesis at 0.05 level of significance. A null hypothesis was rejected where the p-value is less than the significant level; otherwise, the null hypothesis was accepted. The analysis was carried out using Statistical Package for Social Sciences (SPSS) version 25.0.

Table 1: Respondents' mean Ratings and Standard Deviation on Sustainable Innovative Practices Integrated into Business Education Programme for Preparing Youths for Knowledge-Based Economy

S/N	Integration of Sustainable Innovative Practices	X	SD	Remark
1	I use project-based teaching method to encouraging students to engage in real-world projects that require critical thinking, and problem-solving	3.42	.74	Agree
2	I integrate Artificial Intelligence (AI) and Virtual Reality (VR) technologies to equip students with emerging employability skills essential for the modern workplace	1.44	.60	Strongly Disagree
3	I teach my students green entrepreneurship and corporate social responsibility.	1.34	.68	Strongly Disagree
4	My department offer internships, co-op programmes, and field trips to students to provide them with hands-on experience in real business environments	1.54	.58	Disagree
5	My department provides incubators and mentorship programmes for students to develop their own startups,	2.00	.78	Disagree
6	Business education offers global business strategies and cross-cultural communication courses to prepare students for the international market	2.41	.86	Disagree
7	I use real-world case studies in teaching students to develop critical thinking and practical skills	2.59	.75	Agree
8	I encourage teamwork through group projects and collaborative assignments among students to build their interpersonal skills	3.50	.87	Strongly Agree
9	My department conducts regular workshops and seminars for students to enhance their critical thinking and decision-making skills	2.17	.68	Disagree
10	I adopt the flipped classroom teaching strategy where students review content at home and engage in interactive activities in class	2.81	.66	Agree
11	My students combining community service with academic coursework to foster social responsibility and civic engagement	1.34	.73	Strongly Disagree
12	I teach students the design thinking process to foster creativity and innovation in solving complex problems	2.00	.82	Disagree
13	I expose students on sustainable practices in supply chain management and logistics	2.49	.62	Disagree
Cluster Mean		2.23		Disagree

Table 1 shows a cluster mean score of 2.23, indicating that business education lecturers disagree that majority of the sustainable innovative practices listed are integrated into business education programme for preparing youths for knowledge-based economy. The item-by-item analysis reveals that business education lecturers strongly agree that sustainable innovative practice in items 1 is integrated with mean score of 3.50. Sustainable innovative practices in

items 1, 7 and 10 are rated agree with mean scores ranging from 2.59 to 3.42, respondents disagree that they integrate innovative practices in items 4, 5, 6, 9, 12 and 13 with mean scores ranging from 1.54 to 2.49 while they strongly disagree that they integrate sustainable innovative strategies on items 2, 3 and 11. The standard deviations for all the items are within the same range showing that the respondents are not wide apart in their ratings.

Table 2: Summary of t-test Analysis of Significant Difference in the Mean Ratings of Business Education Lecturers on Sustainable Innovative Practices Integrated into Business Education Programme for Preparing Youths for Knowledge-Based Economy Based on Ownership of Institutions

Ownership of Institution	N	X	SD	df	t-value	P-value	Decision
Federal	81	2.41	.76	133	1.08	0.10	Not Significant
	133	1.08	.10				
State	54	2.05	.65				

Table 2 show the mean ratings and standard deviation of business education lecturers in federal universities as ($X = 2.41$, $SD = 0.76$) and those in state universities as ($X = 2.05$, $SD = 0.65$), with a degree freedom of 133. The t-value of 1.08 has a p-value of 0.10 which is greater than the alpha level of 0.05 ($P = 0.10 > 0.05$). Since the p-value is greater than the significant value, the null hypothesis is therefore accepted. This means that there is no significance difference in the mean ratings of business education lecturers in universities in South East, Nigeria on sustainable innovative practices integrated into business education programme for preparing youths for knowledge-based economy based on ownership of institution.

Discussion of Findings

Findings of this study revealed that business education lecturers disagree that majority of sustainable innovation covered are integrated in business education programme in South East universities for preparing youths for the knowledge-based economy. The findings could be attributed to lack of funding, poor teaching facilities and technologies, and inadequate ICT competencies of business education lecturers. In agreement, Okoko (2022) reported that many tertiary institutions in Nigeria do not integrate innovation in their programme delivery due to inadequate finance, poor attitude and resistance to change by lecturers and administrators, and shortage of adequately trained manpower. Koffi and Etukudo (2016) earlier found that business education graduates lacked employability skills required by modern business organizations. Olatoye et al. (2020) in agreement revealed that business education programme in various higher institutions in Nigeria have failed in areas of organizing regular professional training and development programmes for lecturers, does not incorporate digital technologies in teaching as most of these technologies are either non-existent or outdated, while the programme still operate outdated curriculum. Similarly, Nwazor and Nwaukwa (2015), and Okoli and Azih (2015) reported that business education curriculum in Nigeria universities was highly theoretical and rhetorical in nature. This is supported by findings of Okeke-Ezeanyanwu and Nweke (2021) which revealed that business

education courses in many Nigerian tertiary institutions are taught traditionally without the use of innovative strategies. Findings of the study also indicated that there is no significance difference in the mean ratings of business education lecturers in universities in South East, Nigeria on sustainable innovative practices integrated into business education programme for preparing youths for knowledge-based economy based on ownership of institution. It could be that both federal and state universities face similar challenges hindering the adoption of sustainable innovations in business education.

Conclusion

This study investigated the sustainable innovative practices integrated into business education programme in South East universities for preparing youths for knowledge-based economy. The findings of the study indicated that majority of sustainable innovative practices are not adequately integrated into business education programme in universities in South East, Nigeria. This presents significant implications for the preparation of youths for a knowledge-based economy. This lack of integration means that current business education curriculum is falling short in equipping students with the necessary skills and competencies required to thrive in a rapidly evolving economic landscape. The absence of key innovative practices highlights a critical gap in the business education service delivery. This gap undermines students' ability to develop essential skills which are crucial for success in a knowledge-based economy.

Recommendations

Based on the findings of the study, the researcher makes the following recommendations;

- i. Heads of Department (HDs) of business education programme in Nigeria should organize regular hands-on training workshops, seminars, and conferences to enable business education lecturers update their digital skills to effectively use AI and VR technologies. Other in-service programme involves practical workshops where lecturers can experiment with these technologies, learn how to integrate them into their teaching methods, and understand their applications in real-world business scenarios. HODs can also organize guest lectures by industry experts who can provide insights into how these technologies are transforming various business functions.
- ii. Curriculum planners should update the business education curriculum in universities to include foundational principles of green entrepreneurship and Corporate Social Responsibility (CSR) courses. This will ensure that business education lecturers teach these courses so that all students graduate with a solid understanding of green entrepreneurship and CSR, thereby fostering a generation of responsible and forward-thinking business leaders.
- iii. Administrators of universities in Nigeria should implement Service-Learning Programme. This programme should integrate community service projects with academic learning objectives so as to allow students to apply their business knowledge while contributing to their communities.
- iv. Heads of Departments of business education programme in Nigerian universities should establish partnerships with local non-profits, community organizations, and

- businesses that align with the goals of fostering social responsibility and civic engagement. These partnerships can provide real-world contexts for service projects and ensure that the community service is meaningful and impactful.
- v. Administrators of universities in Nigeria should work with the HODs of business education programme to establish a Global Business Competency Programme (GBCP) designed to integrate international business education into the existing curriculum, ensuring that students are well-prepared for the global market.

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