

Assessment of Techniques and Innovation for Teaching, Learning, and Research in Business Education for Employability and Sustainability in Oyo State

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Abstract

This study explores the techniques and innovations in teaching, learning, and research within business education in Oyo State, Nigeria, focusing on enhancing employability and sustainability. Through a mixed-methods approach, including surveys, with educators, students, and industry stakeholders, the research identifies key innovative practices and evaluates their effectiveness using questionnaires administered to 372 selected participants for the study. The researchers employed random sampling technique to select the participants for the study. Two research experts from Federal University, Oye-Ekiti validated the research instruments and it was subjected to reliability test using test-retest method in which the data was analysed using cronbbach-alpha coefficient yielding 0.82. Data collected was analysed using mean and standard deviation. Findings highlight the integration of digital tools, experiential learning, industry partnerships, and sustainability-focused curricula as pivotal in equipping students with relevant skills for the modern workforce. The study recommended that government and educational authorities should provide policies that promote the integration of digital tools and sustainability concepts in business education, increase in government and institutional investment in digital infrastructure to support blended learning and online education, to mention but few were made for policy and practice to further embed these innovations in business education.

Key words: Emerging Techniques and Innovation, Research in Business Education, Employability and Sustainability

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Introduction

In the rapidly evolving global economy, the role of business education is crucial in preparing students for the demands of the workforce. The main goals of business education programmes according to Masueto (2020) are to teach the processes of decision making, philosophy, theory, and psychology of management as well as practical applications, business start-up and operational procedures. The authors further contended that traditional academic programmes for business education include college courses that teach students the fundamentals of marketing, management, business ethics, accounting and other relevant topics. These have been supported in recent years with extensive course offerings in computer literacy and skills, e-commerce management, and other factors in managing a business within the global economy. In the same vein, business education programmes may consist of classwork only, while the supporting ones like business tech-preparation, cooperative education programmes, internships, and school-to work opportunities may combine academics with on-the-job training that is capable of enhancing employability and sustainability. These could not be achieved in the present global economy without application of modern techniques and innovation in the teaching, learning and research in business education. This may consist of digital transformation in education, Experiential Learning, Industry Partnerships and Sustainability in Education.

The integration of digital technologies, such as online learning platforms, virtual simulations, and artificial intelligence, is revolutionizing business education globally. Studies by Timotheou, Miliou, Dimitriadis, Sobrino, Giannoutsou, Cachia Monés and Loannou (2023) have shown that these tools enhance students' learning engagement, personalized learning, and access to resources. This implies that integration of digital technologies in teaching, learning and research in business education can impact more than just students' performance; it affects several other school-related aspects like acquisition of employability and sustainability skills.

Moreover, Haleem, Javaid, specific positive learning gains of application of digital technologies were reported by researchers like Higgins, Huscroft-D'Angelo and Crawford (2019), Verschaffel,

Depaepe, and Mevarech (2019), Lu, Chiu, Cui, Mao and Lei (2022), Su and Yang, (2022) and; Su, Zhong and Ng (2022) in a number of skills needed for employability and sustainability, such as problem-solving skills and pattern exploration skills, metacognitive learning outcomes, literacy skills, acquisition of computational thinking skills, emotional control skills, and collaborative inquiry skills respectively. In addition to these findings, several studies have reported benefits from the use of ICT on students' creativity (Fielding & Murcia, 2022; Liu, Pang, Guo, & Zhang, 2022; Quah & Ng, 2022) while Haleem, Javaid, Qadri and Suman (2022) opined that digital technologies are beneficial for enhancing students' lifelong learning skills which are required for adapting to changes brought about by rapid growth in digitalized economy.

It is almost impossible to discuss emerging techniques and innovation in business education programmes without mentioning experiential learning, blended learning and gamification. Williams and Firestone (2023) defined Experiential learning as an educational approach and teaching innovation that emphasizes personal or practical experience in the acquisition of knowledge, skills, values, and attitudes. Students are encouraged to develop a passion for learning and a thirst for knowledge by engaging in real life experiences that allow them to learn what they need to know. The authors stressed further that there exists four major characteristics that need to be applied for a type of learning to qualify as experiential and these include; Concrete experience, Reflective observation, Abstract concepts and Active experimentation. In class room situation , this approach can be applied in the areas like field trips, visiting museums, or cultural institutions. Further examples would be through hands-on activities like cooking with students or making art together. Students designing their own lesson plans or facilitating student-led discussions about lessons learned from past experiences could also be examples of experiential learning. Blended learning, a combination of traditional face-to-face instruction and online learning, has gained popularity teaching learning situation, particularly in response to the COVID-19 pandemic. Platforms such as Google Classroom and Moodle are widely used, offering flexibility and access to a range of educational resources.

Furthermore, another innovation offered by technology is gamification which refers to the integration of game design elements into non-gaming environments, including education (Udeani, & Akhigbe, 2020). This technique is particularly effective in teaching complex concepts such as financial management and marketing, where students can apply theoretical knowledge through interactive simulations

Outlife (2024) defined experiential learning as an immersive, participant focused, active approach to teaching learning process that involves experiential learners of all ages, backgrounds and experience levels in a emotionally engaging learning experience. It is a subset of the broader field of Experiential Education which is a teaching philosophy with a multidisciplinary approach toward learning and focuses on creating experiences that have a practical application of knowledge and skills to real-world experiences to increase learner's knowledge and develop competence in skills and behaviours. Therefore, incorporating practical experiences through internships, case studies, and project-based learning has been identified as a key factor in bridging the gap between theoretical knowledge and real-world application (Oluwafemi & Adeagbo, 2016).

Industry Partnerships which encouraged collaboration between educational institutions and industry players ensures that curricula remain relevant and responsive to market needs. Such partnerships facilitate the exchange of knowledge, resources, and opportunities for students. No wonder, Akintunde (2022) maintained that collaboration between educational institutions and industry stakeholders has become increasingly common nowadays. This is because these partnerships will enable students to participate in internships, mentorships, and applied research projects that align with current market needs. Educators and industry professionals can therefore co-develop curricula that ensure business education programmes remain relevant to local economic conditions.

Integrating sustainability and employability concepts into business education programmes is essential for fostering a generation of professionals who are conscious of environmental and social impacts. This involves embedding topics such as corporate social

responsibility (CSR), green business practices, and ethical leadership into the curriculum. Aina (2019) opined that courses on corporate social responsibility, ethical leadership, and green business practices are helping to shape a new generation of business leaders who prioritize sustainability. This becomes necessary so that business education programmes will be able to produce graduates who are intelligent consumers and rational producers that will not allow benefits of today to inhibit the benefits of future generations. The employability of business education graduates is a function of their exposure to real-world business problems during their training, Olaniyan (2021) reported that employers noted that graduates who had exposure to real-world business problems during their education were better equipped to handle the challenges of the workplace. Woo, Mokhtar, Komoo and Azman (2012) opined that there are ten key themes in Education for Sustainable Development and this concerns globalization, trade and development, poverty reduction, sustainable consumption and production patterns, social equity, gender perspective and understanding of different cultures to contribute in practical ways to sustainable development. This implies that all these should be embedded in business education curriculum if it will satisfy the requirements of sustainability and employability.

The present state of the economy and nation indicates that there is a pressing need to align business education with contemporary employment requirements and sustainability goals. This paper investigates the emerging techniques and innovations in teaching, learning, and research that are being adopted to enhance employability and sustainability in business education.

Statement of the Problem

Employability is seen as the possession of skills, knowledge, and competencies required to secure and retain employment. It is a key outcome of business education. In the same vein, sustainability has become a priority in education, driven by the global movement towards environmentally and socially responsible practices. Business education programmes are increasingly incorporating sustainability into their curricula, fostering a new generation of leaders who can address global challenges (Sterling, 2011). Education for sustainable

development (ESD) emphasizes critical thinking, problem-solving, and systems thinking as essential competencies (Leal Filho, Vargas, Salvia, Brandli, Pallant, Klavins, Ray, Moggi, Maruna, Conticelli, Ayanore, Radovic, Gupta, Sen, Paço, Michalopoulou, Saikim, Koh, Frankenberger, Kanchanamukda, Cunha, Akib, Clarke, Wall, & Vaccari, 2019).

Business education serves as a crucial pathway for developing a skilled workforce capable of driving economic growth and addressing sustainability challenges. (Agboola, 2021). However, observations and several studies have pointed out a mismatch between educational outcomes and employer expectations in Nigeria (Okeke-Ezeanyanwu, Makwe, & Okafor, 2022). To address this gap, higher education institutions are exploring innovative teaching strategies designed to equip students with practical and marketable skills. In Oyo State, the education sector is under pressure to align its curricula with the needs of the 21st-century workforce, including addressing gaps in employability and sustainability. While traditional teaching methods remain prevalent, teaching innovations are needed to fill these gaps. This study seeks to empirically analyze the emerging techniques and innovations needed in teaching, learning, and research in Oyo State's business education system.

Purpose of the Study

The main purpose of this research is to empirically analyze the emerging techniques and innovations needed in teaching, learning, and research in business education for sustainability and employability with particular reference to Oyo State. Specifically, the research investigated:

1. Digital transformation needed in business education programmes for sustainability and employability in Oyo state.
2. Experiential Learning required in business education programmes for sustainability and employability in Oyo state.
3. Industry Partnerships that should be included in business education programmes for sustainability and employability in Oyo state.

Research Questions

The following research questions guided the study:

1. What are the digital learning transformation needed in business education programmes for sustainability and employability in Oyo state?
2. What types of experiential learning are required in business education programmes for sustainability and employability in Oyo state?
3. What industry partnerships should be included in business education programmes for sustainability and employability in Oyo state.

Methodology

The study employed a descriptive survey research design. The scope of this study encompasses all educators, students and industry stakeholders in Oyo state constituting the target population. The study employed a random sample technique to pick a total of three hundred and seventy two (372) respondents in a proportional manner from the three senatorial districts in the state. The researchers employed a self-designed questionnaire as the exclusive tool for gathering data. The questionnaire was designed with a structured format utilizing a four-point Likert scale, consisting of the response options of strongly agreed (SA), agreed (A), disagreed (D), and severely disagreed (SD). The validation of the instrument was conducted by two senior academics from Federal University Oye-Ekiti, Ekiti state. The dependability of the instrument was assessed using the test-retest approach, yielding a reliability coefficient of 0.83, indicating a high level of instrument reliability. The resulting value aligns with the perspective of Isyaku (2010), who posits that an instrument can be considered dependable when the correlation value approaches 1. The study's research questions were addressed using mean and standard deviation. The established criterion for determining agreement was that any item with a mean score of 2.50 or higher would be classified as agreed, while any item with a mean score below 2.50 would be classified as disagreed. The findings are displayed in a tabular format.

Results and Discussion

Research Question 1: What are the digital learning transformation needed in business education programmes for sustainability and employability in Oyo state?

Table 1: Mean Ratings and standard deviation of responses on the digital learning transformation needed in business education programmes for sustainability and employability in Oyo state

S/N	Items	Mean (X)	Standard Deviation	Remarks
1.	Online learning platforms	3.46	0.78	Agreed
2.	Artificial intelligence	3.56	0.76	Agreed
3.	Blended learning	3.80	0.82	Agreed
4.	Video lectures	3.60	0.77	Agreed
5.	Google classroom	3.48	0.78	Agreed
6.	Podcasts	3.60	0.84	Agreed
7.	E-learning	3.54	0.82	Agreed
Grand Mean			3.58	Agreed

Source : Field Survey, 2024

Table 1 shows the analysis of responses of respondents on the digital learning transformation needed in business education programmes for sustainability and employability in Oyo state. The result shows that all the items had their mean ratings ranging from 3.46 to 3.80 which is greater than 2.50 indicating that the respondents are of the opinion that all the listed items are the key digital learning transformation needed in business education programmes for sustainability and employability in Oyo state.

Research Question 2: What types of experiential learning are required in business education programmes for sustainability and employability in Oyo state?

Table 2: Mean Ratings and standard deviation of responses regarding the types of experiential learning required in business education programmes for sustainability and employability in Oyo state

S/N	Items	Mean (X)	Standard Deviation	Remarks
1	Mentoring and internships	3.85	0.67	Agreed
2.	Apprenticeship	3.76	0.69	Agreed
3.	Field trips and excursion	3.54	0.73	Agreed
4	Practical entrepreneurial training	3.60	0.68	Agreed
5	Organising workshops and Seminars using professionals as resource persons	3.25	0.72	Agreed
6	Business plan writing	3.10	0.71	Agreed
7	Operating small shops by the department with students serving as operators.	3.44	0.76	Agreed
8.	Participating in practical business projects	3.60	0.77	Agreed
9	Attending practical ICT training programmes	3.50	0.74	Agreed
10.	Web-design and Desktop Publishing training	3.20	0.74	
Grand Mean		3.16		Agreed

Source: Field Survey, 2024

Table 2 shows the analysis of responses of respondents regarding the types of experiential learning required in business education programmes for sustainability and employability in Oyo state. The result shows that all the items had their mean ratings ranging from 3.44 to 3.85 which is greater than 2.50 indicating that the respondents are of the opinion that all the listed items are the types of experiential learning required in business education programmes for sustainability and employability in Oyo state.

Research Question 3: What industry partnerships should be included in business education programmes for sustainability and employability in Oyo state?

Table 3: Mean and Standard Deviation Analysis on the industry partnerships that should be included in business education programmes for sustainability and employability in Oyo State.

S/N	Statements	X	SD	Remarks
1	Development of sustainability and employability based curriculum	3.40	0.74	Agreed
2	Research into skills needed by the industry and employer of labour	2.60	0.70	Agreed
3	Students industrial work experience scheme	3.50	0.84	Agreed
4	Technological innovations.	2.95	0.74	Agreed
5	Scholarship awards by the industry/employers	2.77	0.77	Agreed
6	Business software development	2.85	0.80	Agreed
7	Access to practical skills training and learning equipment intervention.	3.50	0.82	Agreed
8	Corporate social responsibilities and leadership training	3.10	0.84	Agreed
9	Collaborative research into the needs of the business owners and society	2.90	0.81	Agreed
10	Provision of modern learning facilities	2.84	0.83	Agreed
Grand mean		3.04		Agreed

Source: Field Survey, 2024

The results in table 3 show that all the items indicate a positive response as they have mean ratings above 2.50 which is the cutoff point. A grand mean of 3.04 which was generated above the cutoff points indicated a positive response that all the listed items are the industry partnerships that should be included in business education programmes for sustainability and employability in Oyo state.

Discussion of Findings

This paper investigated the emerging techniques and innovations needed in teaching, learning, and research in business education for sustainability and employability in Oyo State. The findings in research question one as shown in table 1 indicated that online learning platforms, artificial intelligence, blended learning, video lectures, google classroom, podcasts and E-learning are the digital learning transformation needed in business education programmes for sustainability and employability in Oyo state. These findings agree with the opinions of Haleem, Javaid, Qadri and Suman (2022) who opined that digital technologies are beneficial for enhancing students' lifelong learning skills which are required for sustainability and employability. It also aligned with the earlier findings of researchers like Higgins, Huscroft-D'Angelo and Crawford (2019), Verschaffel, Depaepe, and Mevarech (2019), Lu, Chiu, Cui, Mao and Lei (2022), Su and Yang, (2022) and; Su, Zhong and Ng (2022) who reported specific positive learning gains of application of digital technologies in a number of acquisition of skills needed for employability and sustainability, such as problem-solving and pattern exploration skills, metacognitive learning outcomes, literacy skills, acquisition of computational thinking skills, emotional control skills, and collaborative inquiry skills respectively.

The findings of the research in Table 2 indicated that mentoring and internships, apprenticeship, field trips and excursion, practical entrepreneurial training organising workshops and seminars using professionals as resource persons, business plan writing operating small shops by the department with students serving as operators, participating in practical business projects, attending practical ICT training programmes, Web-design and Desktop Publishing training are the types of experiential learning required in business education programmes for sustainability and employability in Oyo state. These findings agree with the opinions of Oluwafemi (2017) and; Williams and Firestone (2023) that experiential learning emphasizes personal or practical experience in the acquisition of knowledge, skills, values, and attitudes; incorporating practical experiences through internships, case studies, and project-based learning has been

identified as a key factor in bridging the gap between theoretical knowledge and real-world application.

Finally the research findings in Table 3 indicated that development of sustainability and employability based curriculum, research into skills needed by the industry and employers of labour students industrial work experience scheme, technological innovations, scholarship awards by the industry/employers, business software development, access to practical skills training and learning equipment intervention, corporate social responsibilities and leadership training, collaborative research into the needs of the business owners and society are the industry partnerships that should be included in business education programmes for sustainability and employability in Oyo state. The findings agree with that of Akpomi, Stewart and Ogbulujah (2019) who reported that Students' Industrial Work Experience Scheme (SIWES) in Business Education programme really influence students' entrepreneurial skills acquisition and development for sustainability and employability. It also agreed with the findings of Olaniyan (2021) who reported that employers noted that graduates who had exposure to real-world business problems during their education were better equipped to handle the challenges of the workplace.

Conclusion

This study has highlighted the critical role that emerging techniques and innovations in teaching, learning, and research play in improving employability and sustainability in business education programmes in Oyo State. Integration of digital tools, experiential learning, industry partnerships, and sustainability-focused curricula are shown to be effective in enhancing student engagement and preparing them for the demands of the modern workforce. However, the researchers observed that challenges such as technological infrastructure decay and resistance to change and innovation must be addressed to maximize these benefits.

Recommendations

Based on the findings of this research, the following recommendations are important:

- i. Government and educational authorities should provide policies that promote the integration of digital tools and sustainability concepts in business education.
- ii. Increase government and institutional investment in digital infrastructure to support blended learning and online education.
- iii. Development of industry-specific partnerships by the stakeholders to ensure that business education curricula remain relevant and aligned with market demands.
- iv. Promote professional development opportunities for educators to stay current with emerging pedagogical and technological trends.
- v. Integrate sustainability and employability skills and competencies more deeply into business education programmes to prepare students for leadership roles in a changing global economy.

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