

# Strategies for Enhancing the Application of Artificial Intelligence in Teaching of Business Education Courses in Public Universities in South-South, Nigeria

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**Abstract:** *The study ascertained the strategies for enhancing the application of Artificial Intelligence in the teaching of Business Education courses in public universities in South-South, Nigeria. Descriptive survey research design was used for the study. The population of the study consisted of two hundred and forty-one (241) business educators (116 males and 125 females) in 14 public universities in the study area offering Business Education programme of which eight (8) are owned by the State Governments and six (6) by Federal Government. The instrument for data collection was a self-developed 4-point rating scale titled: Strategies for the Application of Artificial Intelligence in Teaching Business Education courses (SAAITBEC). The instrument was validated by three research experts and was tested for reliability using Cronbach Alpha coefficient. The reliability coefficients obtained were as follows: cluster 1 (curriculum innovation strategies, 0.87) and cluster 2 (skills upgrading strategies, 0.84). However, the overall reliability coefficient was 0.92. Data collected were analysed using mean and standard deviation in order to answer the research questions. Furthermore, t-test statistic was used to test the null hypotheses. Findings revealed that curriculum innovation and skills upgrading strategies would enhance the application of AI in teaching Business Education. These strategies have no significant difference in terms of gender and institution ownership respectively. The implication of the findings is that for AI tools to be effectively applied in Business Education, an update of the Business Education curricula to include AI competencies and upgrading business educators' skills to teach with AI tools are imperative. It was recommended among others that Business Education curriculum should be upgraded by concerned authority to incorporate AI content to enhance the teaching and ensure that standard educational goals, materials and methods of instruction are not only maintained but updated along with the advancements in the social, cultural and technologies such as AI.*

**Keywords:** Strategies, application of artificial intelligence, teaching of business education courses, public universities, south-south, Nigeria

## INTRODUCTION

Business Education is an academic programme concerned with the teaching and learning of the fundamentals, theories and processes of business to help recipients at all levels acquire requisite vocational

knowledge, skills, experiences, ethics and attitudes needed to be successful in teaching, business, office and life generally. Adeleke (2021) averred that Business Education is geared towards producing competent, skilful and dynamic business teachers, office administrators and businessmen and women that will effectively compete in the world of work. Business Education, as a vocational programme emphasizes the imparting of necessary skills in students. Etuk (2021) mentioned some of the skills to include occupational skills, office management skills, computer skills, accounting or financial management skills, marketing skills, leadership skills, entrepreneurship skills, portfolio or investment management skills and other job skills. Another important skill needed to make Business Education students competitive in this digital era is Artificial Intelligence.

Artificial Intelligence (AI) is an evidence of how Real Intelligence (RI) has developed intelligent machines, some of which are self-governed and can perform tasks that typically require human intelligence such as speech recognition, decision-making, visual perception, and translation between languages. According to Duggal (2025), AI is the simulation of human intelligence in machines that are programmed to think and act like humans such as learning, reasoning, problem-solving, perception, and language comprehension. In the context of this study, AI is defined as an advanced technology that involves the simulation of human intelligence in machines that are programmed to think and act rationally like humans. AI can be applied in every field of human endeavour.

In education, AI can assist in developing critical thinking and problem-solving skills. According to Xu et al. (2021), AI can improve the efficiency of exam-oriented education and infuse critical thinking training, innovation ability training and other elements to comprehensively cultivate students' abilities. It has the potential to revolutionize the way students learn, making learning more engaging and efficient through personalized educational approaches (Almansoori & Abouassar, 2024). It can facilitate the designing of a friendly and flexible learning content. AI algorithms has the ability to scan large data to identify learning gaps and create content that is interesting and trendy (Culican, 2024). AI can also enhance personalize and engaging learning to meet the needs of different learners. It can save teachers from repetitive manual tasks, thereby providing ample time and energy for them to focus on developing students' high-level cognitive thinking and innovation ability. It is hopeful that the application of AI in education can save teachers from repetitive manual tasks, thereby providing ample time and energy for them to focus on developing students' high-level cognitive thinking and innovation ability.

The application of AI in education refers to its practical use, basically for teaching, learning and in enhancing administrative duties. Specifically, in Business Education, the application of AI takes the form of simulation games, content design among others. In addition, AI can facilitate the designing of a friendly and flexible learning content. AI algorithms has the ability to scan large data to identify learning gaps and create content that is interesting and trendy (Culican, 2024). AI can also enhance personalize and engaging learning to meet the needs of different learners. The successful application of AI in education generally and business education specifically, requires certain strategies.

A strategy is a purposeful way of performing a task in order to achieve expected result. In the assertion of Azubuike et al. (2024), strategies are high level plans set out to achieve one or more goals under conditions of uncertainty. In the context of this study, strategy comprise the techniques, methods, plans and things

that enable the use of AI. Bianchi (2024) averred that key strategies are required for integrating AI into critical thinking curricula, which include the development of AI-driven educational platforms that adapt to individual learning styles, the use of AI to facilitate collaborative learning environments, incorporation of AI in assessing and enhancing students' critical thinking skills, ethical AI integration, and enhancing educators training and students' engagement with AI. Ng et al. (2025) mentioned strategies to motivate the application of AI in education to include professional development, clear guidelines, and access to AI software and technical support. For Reyes et al. (2025), the strategies to enhance the application of AI in education include ethical implementation, digital literacy, and supportive infrastructure. For the purpose of this study, attention was given to the following strategies: curriculum innovation and skills upgrading. Curriculum innovation is concerned with the upgrading of the curriculum including aligning curricula with industry standards, balancing theory and practice, developing digital literacy skills and creating opportunities for students to develop relevant competencies. Ezekiel (2024) maintained that curriculum innovation is a dynamic process that involves the redesign, development, and improvement of educational curricula to meet the evolving needs of learners, society, and the workforce; as well as rethinking what and how students learn, the methods of instruction, and the assessment processes. In the assertion of Dorgu (2020), curriculum innovation attempt to revise or do a complete overhaul of the framework of the system of education so that new ideas, structure or framework will replace the old ones that are no longer relevant. Curriculum innovation plays an important role in improving the effectiveness of education and learning systems (Yanti et al., 2023). It is necessary to update the content and teaching methods for effectiveness (Dorgu, 2020) especially in business education.

Curriculum innovations in Business Education include providing an understanding of the business world, acquisition of relevant knowledge and skills, correlation of subjects, individualization of instruction, constant review, measures to prevent cases of dropouts, and provision for entry into jobs (Okoro, 2023). Emerging technologies prominently, AI can also necessitate the innovation of the Business Education curriculum. In this regard, Agbonaye and Ojeaga (2025) noted that the integration of Artificial intelligence (AI) in curriculum can offer a unique opportunity that would enable educational programmes (such as Business Education) in teaching and learning approach that would provide learners with the abilities, skills, attitudes and values fit for the future development in educational sectors and broaden the reach of future-ready education systems to enhance their effectiveness in preparing students and professionals like Business Educators for AI-driven workplace. By way of buttress, Balogun et al. (2025) called for massive design, development and implementation of Artificial Intelligence-based tutoring systems for teaching and learning process in all institutions of learning. Regular curriculum evaluation ensures that standard educational goals, materials and methods of instruction are not only maintained but updated along with the advancements in the social, cultural and technologies such as AI. Evaluation of the curriculum also ascertains whether or not educators have the skills to teach with AI. Where skills are lacking upgrade becomes necessary.

Skills are the abilities that enables the performance of specific task effectively and efficiently. The lack of skills could prevent business educators to effectively apply AI for effective teaching. Nguyen et al. in Reyes et al. (2025) explicated that teachers often encounter barriers such as inadequate training and a lack of familiarity with AI technologies, which limit their ability to fully utilize these tools for instructional purposes. To overcome this challenge, educators need to upgrade their skills.

Upgrading of skills may take various forms including training, collaboration with experts, technical support, lifelong learning, education, and professional development through forums such as workshops, seminars, and conferences. As a way to upgrade skills, Balogun et al (2025) stated that academic and administrative staff should be exposed to training and retraining in the use of artificial intelligence in delivering of their services in order to achieve improved operational efficiency where the technology is to be adopted, especially in enhancing teaching in tertiary institutions.

The tertiary institutions under focus in this study are the public universities. These are institutions owned and operated by the government (state and federal) using public funds. Public universities reflect the interest and commitment of governments to education of its people. The governments have both the resources and powers to facilitate the application of Artificial Intelligence in education generally, and particularly in the teaching of Business Education courses in public universities. Dabai et al. (2024) claimed that ownership of institution can affect the provision of AI facilities with the federal government doing better. Furthermore, business educators in public institutions are classified in terms of gender as males and females. Gender is considered in the study due to AI gender stereotype concerns. Gender stereotypes shows that technology regularly gets equated with ‘men’s power’, while women and girls are portrayed as ‘less technologically skilled and less interested than their male counterparts (Commonwealth Women Parliamentarians, 2024). In addition, Manasi et al. (2023) observed that AI normative instruments or principles that successfully address gender equality as a standalone issue were either inexistent or current practices were insufficient. Notwithstanding these outcomes, there is need for further empirical investigations to provide a more reliable finding as it concerns the application of Artificial Intelligence in the teaching of Business Education courses in public universities.

### **Statement of the Problem**

AI is one of the emerging technologies making its way quickly into the rubrics of the education system. It has the potential to support personalized learning; facilitate research and article writing; grammar, spelling and plagiarism checks and perform automated instruction, scoring and grading. AI can make teaching and learning more interesting. However, through interaction with relevant stakeholders, the researcher has observed that despite the huge potentials of AI, its adoption in teaching Business Education courses especially in public universities in South-South, Nigeria has been faced with scepticisms of which many surrounds ethical concerns such as data security, privacy infringement, and bias decision among others. Some stakeholders in the education industry are worried that many business educators do not have the needed skills to use AI proficiently in teaching. Others are worried about the inadequacy of the curriculum to include AI concepts, lack of AI teaching facilities and the inability to adopt modern teaching methods that promotes the use of AI application in tertiary institutions. Unfortunately, proper attention has not been given to address these worries to enable seamless application of AI in teaching and learning business education courses in public universities in this digital era. It is based on these worries that the need for this study became necessary. The study therefore seeks to empirically evaluate strategies for enhancing the application of Artificial Intelligence in the teaching of Business Education courses in public universities in South-South, Nigeria.

### **Purpose of the Study**

The main purpose of the study was to determine the strategies for enhancing the application of Artificial Intelligence in the teaching of Business Education courses in public universities in South-South, Nigeria. Specifically, the study sought to ascertain the:

1. Curriculum innovation strategy for enhancing the application of Artificial Intelligence in teaching of Business Education courses in public universities in South-South, Nigeria.
2. Skills upgrading strategy for enhancing the application of Artificial Intelligence in teaching of Business Education courses in public universities in South-South, Nigeria.

### **Research Questions**

The following research questions guided the study:

1. What are the curriculum innovation strategies for enhancing the application of Artificial Intelligence in teaching of Business Education courses in public universities in South-South, Nigeria?
2. What are the skills upgrading strategies for enhancing the application of Artificial Intelligence in teaching of Business Education courses in public universities in South-South, Nigeria?

### **Hypotheses**

The following hypotheses tested at 0.05 level of significance guided the study:

- H<sub>01</sub>:** There is no significant difference in the mean ratings of respondents in federal and state owned universities on the curriculum innovation strategies for enhancing the application of Artificial Intelligence in the teaching of Business Education courses in public universities in South-South, Nigeria.
- H<sub>02</sub>:** There is no significant difference in the mean ratings of male and female business educators on skills upgrading strategies for enhancing the application of Artificial Intelligence in the teaching of Business Education courses in public universities in South-South, Nigeria.

### **METHODOLOGY**

Descriptive survey research design was used for the study. The population of the study consisted of two hundred and forty-one (241) business educators (116 males and 125 females) in 14 public universities in the study area offering Business Education programme of which eight (8) are owned by the State Governments and six (6) by Federal Government. The instrument for data collection was a self-developed 4-point rating scale titled: Strategies for the Application of Artificial Intelligence in Teaching Business Education courses (SAAITBEC). The instrument was validated by three research experts and was tested for reliability using Cronbach Alpha coefficient. The reliability coefficients obtained were as follows: cluster 1 (curriculum innovation strategies, 0.87) and cluster 2 (skills upgrading strategies, 0.84). However, the overall reliability coefficient was 0.92. Data collected were analysed using mean and standard deviation in order to answer the research questions. Furthermore, t-test statistic was used to test the null hypotheses. For any of the hypotheses to be accepted, the calculated p-value was greater than or equal to the alpha value of 0.05 significant otherwise it was rejected.

## RESULTS

The results of data analysis are presented in Tables according to the research questions and hypotheses that guided the study.

### Research Questions

#### Research Question 1

What are the Curriculum innovation strategies for enhancing the application of Artificial Intelligence in teaching of Business Education courses in public universities in South-South, Nigeria?

**Table 1: Descriptive Analysis on the Curriculum innovation strategy for enhancing the Application of Artificial Intelligence**

| S/N               | Curriculum Innovation Strategies Include:                                                                              | Mean        | SD          | Decision  |
|-------------------|------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-----------|
| 1                 | Embedding AI-powered virtual business simulation to enhance decision making                                            | 3.66        | 0.49        | SA        |
| 2                 | Embedding customer services role-play to enhance the ability to negotiate effectively                                  | 3.70        | 0.48        | SA        |
| 3                 | Inclusion of adaptive keyboarding modules for auto-adjust drills                                                       | 3.69        | 0.48        | SA        |
| 4                 | Routing personalized entrepreneurship learning paths to develop skills                                                 | 3.65        | 0.50        | SA        |
| 5                 | Incorporating AI-generative case studies by sector to make content more relevant to learners                           | 3.70        | 0.48        | SA        |
| 6                 | Adoption of AI oral presentation coach to enhance business communication                                               | 3.56        | 0.51        | SA        |
| 7                 | Embedding virtual internship with AI supervisor to evaluate students' performance in handling office related functions | 3.66        | 0.49        | SA        |
| 8                 | Incorporating AI fundamental concepts including machine learning to expose students to AI tools                        | 3.54        | 0.53        | SA        |
| 9                 | Incorporating AI ethics in business decision making                                                                    | 3.70        | 0.48        | SA        |
| 10                | Incorporating AI-powered tools such as Learning Management Systems (LMSs) to manage students' learning                 | 3.71        | 0.47        | SA        |
| <b>Grand Mean</b> |                                                                                                                        | <b>3.66</b> | <b>0.49</b> | <b>SA</b> |

Table 1 reveals that in relation to research question one, the grand mean score is 3.66 and the standard deviation is 0.49. This indicates that the respective items mean scores do not vary much from the mean. Therefore, the respondents strongly agreed that the curriculum innovation components are strategies in enhancing the application of Artificial Intelligence in teaching of Business Education courses in public universities in South-South, Nigeria.

#### Research Question 2

What are the skills upgrading strategies for enhancing the application of Artificial Intelligence in teaching of Business Education courses in public universities in South-South, Nigeria?

**Table 2: Descriptive Analysis on the Skills Upgrading Strategy for enhancing the Application of Artificial Intelligence**

| S/N               | Skills Upgrade Strategies Include:                                                                                                    | Mean        | SD          | Decision  |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-----------|
| 11                | Training business educators to acquire relevant AI skills in content development                                                      | 3.74        | 0.46        | SA        |
| 12                | Collaboration with experts to enable educators use intelligent tutoring systems to provide learning for students                      | 3.70        | 0.48        | SA        |
| 13                | Providing technical support to quickly fix any trouble that may occur in the cause of using AI in the classroom                       | 3.75        | 0.45        | SA        |
| 14                | Engaging educators in lifelong learning to understand AI-driving insights                                                             | 3.69        | 0.48        | SA        |
| 15                | Retraining educators to update their knowledge of AI including the use of AI in research                                              | 3.63        | 0.50        | SA        |
| 16                | Organizing workshops to help educators to possess better knowledge of AI especially in the use of engaging platforms like LMSs        | 3.71        | 0.49        | SA        |
| 17                | Empowering educators to attend online AI training on automatic grading system                                                         | 3.60        | 0.51        | SA        |
| 18                | Participation in professional development programmes such as seminars                                                                 | 3.60        | 0.50        | SA        |
| 19                | Providing continues support for educators in pursuing AI literacy training in the use of AI to detect plagiarism                      | 3.68        | 0.49        | SA        |
| 20                | Organizing regular workshops to equip educators with AI skills especially in the ability to use AI-powered virtual teaching assistant | 3.69        | 0.48        | SA        |
| <b>Grand Mean</b> |                                                                                                                                       | <b>3.68</b> | <b>0.48</b> | <b>SA</b> |

Table 2 shows that in relation to research question two, the grand mean score is 3.68 and the standard deviation is 0.48, indicating that the respective items mean scores do not vary much from the mean. Therefore, the respondents strongly agreed that the skills upgrade components are strategies in enhancing the application of Artificial Intelligence in teaching of Business Education courses in public universities in South-South, Nigeria.

## Hypotheses

### Hypothesis 1

There is no significant difference in the mean ratings of respondents in federal and state owned universities on the Curriculum innovation strategies for enhancing the application of Artificial Intelligence in the teaching of Business Education courses in public universities in South-South, Nigeria.

The t-test analysis of data collected to test the null hypothesis one is presented in Table 3

**Table 3: *t*-test Analysis on the Mean Ratings of Respondents in federal and state owned universities on the Curriculum innovation strategy for enhancing the Application of Artificial Intelligence**

| S/N | Ownership | N=235 | Mean | Std. | Alpha | t-cal | P-value | Decision        |
|-----|-----------|-------|------|------|-------|-------|---------|-----------------|
| 1   | Federal   | 117   | 3.69 | 0.50 | 0.05  | 1.14  | 0.25    | Not Significant |
|     | State     | 118   | 3.62 | 0.49 |       |       |         |                 |
| 2   | Federal   | 117   | 3.75 | 0.47 | 0.05  | 1.60  | 0.11    | Not Significant |
|     | State     | 118   | 3.65 | 0.48 |       |       |         |                 |
| 3   | Federal   | 117   | 3.68 | 0.51 | 0.05  | 0.45  | 0.66    | Not Significant |
|     | State     | 118   | 3.70 | 0.46 |       |       |         |                 |
| 4   | Federal   | 117   | 3.62 | 0.52 | 0.05  | 0.97  | 0.34    | Not Significant |
|     | State     | 118   | 3.68 | 0.47 |       |       |         |                 |
| 5   | Federal   | 117   | 3.78 | 0.45 | 0.05  | 2.87  | 0.01    | Significant     |
|     | State     | 118   | 3.61 | 0.49 |       |       |         |                 |
| 6   | Federal   | 117   | 3.52 | 0.53 | 0.05  | 1.20  | 0.23    | Not Significant |
|     | State     | 118   | 3.60 | 0.49 |       |       |         |                 |
| 7   | Federal   | 117   | 3.69 | 0.50 | 0.05  | 1.14  | 0.25    | Not Significant |
|     | State     | 118   | 3.62 | 0.59 |       |       |         |                 |
| 8   | Federal   | 117   | 3.38 | 0.52 | 0.05  | 4.51  | 0.00    | Significant     |
|     | State     | 118   | 3.69 | 0.50 |       |       |         |                 |
| 9   | Federal   | 117   | 3.70 | 0.50 | 0.05  | 0.10  | 0.92    | Not Significant |
|     | State     | 118   | 3.69 | 0.46 |       |       |         |                 |
| 10  | Federal   | 117   | 3.68 | 0.50 | 0.05  | 0.87  | 0.39    | Not Significant |
|     | State     | 118   | 3.74 | 0.44 |       |       |         |                 |

The item by item analysis in Table 3 reveals that hypothesis one in relation to eight items 1, 2, 3, 4, 6, 7, 9 and 10 are not significant because their respective p-values are greater than the alpha significant value of 0.05. However, in relation to two items, 5 and 8 the hypothesis is significant because their respective p-values are less than the alpha significant value. Hypothesis one, in relation to eight not significant items against two significant items is accepted. Therefore, there is no significant difference in the mean ratings of respondents in federal and state owned universities on the curriculum innovation strategies for enhancing the application of Artificial Intelligence in the teaching of Business Education courses in public universities in South-South, Nigeria.

### **Hypothesis 2**

There is no significant difference in the mean ratings of male and female business educators on skills upgrading strategy for enhancing the application of Artificial Intelligence in the teaching of Business Education courses in public universities in South-South, Nigeria.

The t-test analysis of data collected to test the null hypothesis two is presented in Table 4

**Table 4: *t*-test Analysis on the Mean Ratings of Male and Female Business Educators on Skills upgrading strategy for enhancing the Application of Artificial Intelligence**

|    | Gender | N=235 | Mean | Std. | Alpha | t-cal | P-value | Decision        |
|----|--------|-------|------|------|-------|-------|---------|-----------------|
| 11 | Male   | 114   | 3.74 | 0.46 | 0.05  | 0.26  | 0.80    | Not Significant |
|    | Female | 121   | 3.75 | 0.45 |       |       |         |                 |
| 12 | Male   | 114   | 3.70 | 0.48 | 0.05  | 0.01  | 0.99    | Not Significant |
|    | Female | 121   | 3.70 | 0.48 |       |       |         |                 |
| 13 | Male   | 114   | 3.74 | 0.46 | 0.05  | 0.54  | 0.59    | Not Significant |
|    | Female | 121   | 3.77 | 0.44 |       |       |         |                 |
| 14 | Male   | 114   | 3.69 | 0.49 | 0.05  | 0.03  | 0.98    | Not Significant |
|    | Female | 121   | 3.69 | 0.48 |       |       |         |                 |
| 15 | Male   | 114   | 3.64 | 0.50 | 0.05  | 0.19  | 0.85    | Not Significant |
|    | Female | 121   | 3.63 | 0.50 |       |       |         |                 |
| 16 | Male   | 114   | 3.70 | 0.50 | 0.05  | 0.14  | 0.89    | Not Significant |
|    | Female | 121   | 3.71 | 0.49 |       |       |         |                 |
| 17 | Male   | 114   | 3.60 | 0.51 | 0.05  | 0.23  | 0.82    | Not Significant |
|    | Female | 121   | 3.61 | 0.51 |       |       |         |                 |
| 18 | Male   | 114   | 3.59 | 0.51 | 0.05  | 0.48  | 0.63    | Not Significant |
|    | Female | 121   | 3.62 | 0.50 |       |       |         |                 |
| 19 | Male   | 114   | 3.67 | 0.49 | 0.05  | 0.30  | 0.76    | Not Significant |
|    | Female | 121   | 3.69 | 0.48 |       |       |         |                 |
| 20 | Male   | 114   | 3.68 | 0.49 | 0.05  | 0.29  | 0.98    | Not Significant |
|    | Female | 121   | 3.69 | 0.48 |       |       |         |                 |

Table 4 shows that hypothesis two in relation to all the items are not significant because their respective p-values are greater than the alpha significant value of 0.05. Therefore, hypothesis two is accepted. This means that there is no significant difference in the mean ratings of male and female business educators on skills upgrading strategy for enhancing the Application of Artificial Intelligence in the teaching of Business Education courses in public universities in South-South, Nigeria.

## DISCUSSION

Findings in Table 1 revealed that curriculum innovation as a strategy enhanced the application of Artificial Intelligence in teaching of Business Education courses in public universities in South-South, Nigeria. Similarly, hypothesis one in Table 3 revealed that there is no significant difference in the mean ratings of respondents in federal and state owned universities on the curriculum innovation strategies for enhancing the application of Artificial Intelligence in the teaching of Business Education courses in public universities in South-South, Nigeria. The findings confirms that curriculum is not static but receives innovations over time to remain relevant and solve current problems in business education. This agrees with Ezekiel (2024) that curriculum innovation is a dynamic process that involves the redesign, development, and improvement of educational curricula to meet the evolving needs of learners, society, and the workforce; as well as rethinking what and how students learn, the methods of instruction, and the assessment processes. Curriculum in Business Education plays a pivotal role in redesigning course

content to integrate practical skills, digital technologies, and entrepreneurial development to better prepare graduates for the modern job market.

The findings also suggests that ownership of institution do not predict upgrading of curriculum for enhancing the application of Artificial Intelligence in the teaching of Business Education Courses. This shows how important upgrading curriculum is to both federal and state institutions. The finding aligns with Olupayimo and Edeh (2025) that updating the Business Education curriculum to incorporate AI-related courses is necessary to enable students in tertiary institutions (federal and state) to foster creativity and innovation while acquiring skills essential for transforming the nation's economy. Today, business rely on AI to boost efficiency, drive innovation, and inform their most critical decisions. Ultimately, reimagining business education for the AI age is not just important, it is essential. The right curriculum does not merely equip students for today's challenges. It develops leaders who will shape the future, foster innovation, and uphold ethical values in the world they are set to inherit.

Findings in Table 2 indicated that skills upgrading enhances the application of Artificial Intelligence in teaching of Business Education courses in public universities in South-South, Nigeria. Updating AI skills is not merely a formality, it is about providing students with the tools necessary to succeed in a fast-moving business world. Skills upgrading is critical in enabling all business educators to apply AI effectively in teaching. Table 4 confirmed that there is no significant difference in the mean ratings of male and female business educators on skills upgrading strategy for enhancing the Application of Artificial Intelligence in the teaching of Business Education courses in public universities in South-South, Nigeria. The findings suggests that by enhancing their AI skills, business educators irrespective of their gender remain relevant and are able equip their students with a real advantage. Furthermore, gender is not a predictor of skill upgrading among business educators. The findings agrees with Saiari et al (2024) that the provision of specialized training programs focusing on generative AI applications, implementing educational programmes dedicated to generative AI enhances lecturers' teaching capabilities. The finding also supports Tin et al. (2024) that no significant correlations were observed between gender and AI knowledge and attitudes towards AI. More so, business educators irrespective of their gender moulds future leaders, if they are proficient with AI and related technologies, they can effectively guide students to develop the adaptive mind-set needed to leverage these tools for innovation, rather than just fearing displacement. In addition, this is an era where technology and business are in constant flux, equipping educators with the ability to keep pace with AI is not optional, it is vital if students must succeed in an environment defined by ongoing disruption.

## CONCLUSION

Application of AI in the teaching of business education courses can create a more engaging and efficient learning that can help students to be competitive, prepared to face future challenges, and opportunities in the business world. The strategies to enhance the application of AI in teaching business education include curriculum innovation, skills upgrading and teaching facilities upgrading. These strategies have no significant difference in terms of gender and institution ownership. Addressing challenges like curriculum, infrastructure and skill gaps will maximize AI's potential in preparing students for the evolving business landscape. Involving industry experts in curriculum design will ensure that programmes remain relevant

and aligned with market needs. Faculty involvement in AI skill development and institution commitment in upgrading teaching facilities are also crucial in the enhancing the application of Artificial Intelligence in teaching of Business Education courses in public universities in South-South, Nigeria.

### Recommendations

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

1. Business education curriculum should be upgraded by concerned authority to incorporate AI content to enhance the teaching and ensure that standard educational goals, materials and methods of instruction are not only maintained but updated along with the advancements in the social, cultural and technologies such as AI.
2. Tertiary institutions should deliberately support, encourage and equip business educators through workshops and seminars with the necessary skills and knowledge to effectively integrate AI into their teaching practices
3. The government at both federal and state levels should budget for and provide functional and relevant AI tools and platforms to foster quality teaching of Business Education courses in a competitive digitalized era

### REFERENCES

- Adeleke, A. F. (2021). Business education: A basic tool for national development in Nigeria. *Al-Hikmah Journal of Education*, 8 (1), 79-83
- Agbonaye, J .A. & Ojeaga, I. J (2025). Incorporation of AI into business education curricula is a strategic development policy that has the potential to impact a country's economic trajectory, rather than only being an academic novelty. *Journal of Centre for Technical Vocational Education, Training and Research*, 7 (1), 183-195
- Almansoori, A., & Abouassar, R. M. E. (2024). The effect of training program based on AI to maximize teaching and learning skills in Abu Dhabi primary schools. *Journal of Research in Curriculum, Instruction and Educational Technology*, 10 (2), 65-92.
- Azubuike, R. N., Doeogot, T. L., & Oguguo, E. C. (2024). Effective strategies for teaching business education students in Nigeria tertiary institutions for improved performance and global competitiveness. *AJSTME*, 10 (3), 315-32.
- Balogun, A. M, Yahya, L. O, Ayeni, D. O., & Abudu, A. M. (2025). Artificial Intelligence and Business Education programme: A Catalyst for Placing the Graduates for 21st Century Skills. *Educational Perspectives*, 13(2), 181-193.
- Bianchi, I. (2024). *Integrating ai in education: strategies for enhancing critical thinking through technology*. <https://www.researchgate.net/publication/384632240>
- Commonwealth Women Parliamentarians (2024). *Artificial Intelligence, new technologies and their impact on gender equality*. <https://issuu.com/theparliamentarian/docs/parl2024iss1finalonlinesingle/s/44994997>
- Culican, J. (2024). *The impact of AI on educational content creation: Shaping the future of learning materials*. Available from <https://www.linkedin.com/pulse/impact-ai-educational-content-creation-shaping-futurejamie-culican-o7nxe>

- Dabai, D. S., Nabade, S. K., & Isma'il, A. B. (2024). Comparative study of the availability and utilization of e-learning infrastructure in federal and state owned universities in Kebbi States, Nigeria. *International Advanced Research Journal in Science*, 11 (7), 137-146. DOI: 10.17148/IARJSET.2024.11718
- Dorgu, T. E. (2020). Curriculum innovation in Nigeria higher institutions. *Journal of Curriculum and Instruction*, 13 (1), 98-104.
- Duggal, N. (2025, February 6). *What is Artificial Intelligence with examples & uses*. [Web log post]. <https://www.simplilearn.com/tutorials/artificial-intelligence-tutorial/what-is-artificial-intelligence>
- Etuk, A. B. (2021). The role of vocational business education (vbe) in meeting the challenges of nation building in Nigeria. *International Journal of Progressive and Alternative Education*, 7 (1), 1-17.
- Ezekiel, M. (2024). University-industry collaboration on curriculum innovation in business education in public universities in Akwa Ibom State. *International Journal of Institutional Leadership, Policy and Management* 6 (1), 151-163.
- Manasi, A., Panchanadeswaran, S., & Sours, E. (2023, March 17). *Addressing gender bias to achieve ethical AI*. [Web log post]. <https://theglobalobservatory.org/2023/03/gender-bias-ethical-artificial-intelligence/>
- Ng, D. K., Chan, E. K. C., & Lo, C. K. (2025). Opportunities, challenges and school strategies for integrating generative AI in education. *Computers and Education: Artificial Intelligence*, 8 (2025) 100373
- Olupayimo, E. O., Edeh, T. (2025). Application of artificial intelligence in business education curriculum for nigerian economic development: opportunities and challenges. *Journal of Science Vocational and Technical Education*, 12 (1), 12-21.
- Reyes, K. P., Leongson, M. G. Garbin, H. C. Siroma, A. S. & Malaluan, N. E. (2025). Utilization of AI in enhancing teachers' instructional materials and work efficiency. *International Journal of Scientific Research and Engineering Development*, 8 (4), 998-1007.
- Tin, T. T., Chor, K. Y., Hui, W. J., Cheng, W. Y., Kit, C. J., Wan Husin, N. A., Aitizaz, A, Tiung, L. K., Afolalu, S., & Khattak, U. F. (2024). Demographic factors shaping artificial intelligence (ai) perspectives: exploring their impact on university students' academic performance. *Pakistan Journal of Life and Social Sciences*, 22 (2), 12248-12264
- Xu, Z., Wei, Y., & Zhang, J. (2021). *AI applications in education*. [https://eudl.eu/pdf/10.1007/978-3-030-69066-3\\_29](https://eudl.eu/pdf/10.1007/978-3-030-69066-3_29)
- Yanti, I., Ilmi, D., Simbolon, A. M. Y., Harbes, B., & Sumarni, W. (2023). *The concept of curriculum innovation today*. <http://proceedings.uinbukittinggi.ac.id/gic>