

## LEVEL OF AWARENESS AND UTILIZATION OF ARTIFICIAL INTELLIGENCE IN THE OF TEACHING BUSINESS EDUCATION IN COLLEGES OF EDUCATION IN ANAMBRA STATE

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### Abstract

*Artificial intelligence (AI) is emerging technologies that can help educators create a more learner-friendly environment. The survey research design study was adopted to examine the perceptions of lecturers on the extent of awareness and utilization of AI in teaching Business Education in colleges of education in Anambra state, Nigeria. The population comprised of all the 83 Business Educators in the two colleges of Education in Anambra state. No sampling technique was used as the population was of manageable size. Two research questions guided the study. A 15-item structured questionnaire was used to collect data from the respondents. Data were analyzed using mean and standard deviation. The findings indicated that lecturers were aware of the use of AI in teaching to a low extent and they utilized AI in teaching to a low extent. It was recommended that seminars and workshops on how to utilize AI in teaching should be organized for business education lecturers for effective teaching, among others.*

**Keywords:** Business Education, Artificial intelligence, Awareness, Colleges of Education, Utilization.

### Introduction

The teacher strives to equip learners with proficiency that enables them to adapt to challenges in an ever dynamic world and make them functional members of the society within which they exist. The teacher is the sole implementer of the curriculum in every tier of the education system – colleges of education inclusive. Colleges of Education is an educational programme that prepares individuals to be practitioners as well as leaders in education and related human service fields by deepening and expanding understanding of education as a fundamental human endeavour in helping society define and respond to its educational responsibilities and challenges (Enwere & Ikeanyionwu, 2020). Colleges of Education programmes prepare students for employment in industries, business establishment, career in teaching, civil service as well as self employment (Amah & Moore, 2022). In order to achieve these aims, must remain updated with requisite knowledge and skills. He or she prepares learners to chase trends not merely staying current with the events and environment. This warrants the demand for innovative teachers that embrace change, integrates new materials and enables student-AI interactions. Artificial Intelligence (AI) augments human skills in the workplace and serves as an education partner, enhancing content and competencies (Surugiu, Gradinaru & Surugiu, 2024).

AI in education is a collaborative effort between professionals including, but not limited to data scientists, statisticians, psychologists, cognitive scientists,

education experts etc to help develop educational systems that has some level of intelligence and ability to perform different education-related functions (Pokrivcakora in Oluwafemi & Adetunmbi, 2022). The use of AI in teaching and learning takes the form of personalized learning, tutoring, testing and automated tasks (Surugiu, Gradinaru & Surugiu, 2024). Adebayo et al (2021) submitted that through the awareness and utilization of AI in education, the teacher can be freed from certain routine tasks and can concentrate on establishing links with students getting to know them and mastering skills that will accompany them on their journey towards their human development. Awareness refers to the state of being informed, knowledgeable and conscious about something. Awareness of AI in education is the teachers' knowledge, understanding and recognition of potential benefits, challenges and ethical considerations associated with the integration of artificial intelligence in teaching and learning (Knezek & Christensen, 2020). It involves teachers' ability to recognize the capabilities and limitations of AI-powered tools, as well as their potential impact on student learning outcomes, data privacy and the teaching profession as a whole (Wong et al., 2021). Awareness is a crucial precursor to effective utilization. Utilization refers to the effective and efficient use of artificial intelligence technologies to support teaching, learning and educational decision-making (Rutherford, et al., 2020). It involves the integration of AI-powered tools and systems like audiopen, canvas magicwrite, curipod,

eduaide, quizzz. Socratics and alexa in teaching of business education to enhance students' outcomes, improve instructional design and streamline educational processes (Wong et al, 2021). Educators can for instance use Curipod to create interactive lessons in minutes. In that way, they utilize AI in teaching and this comes with numerous benefits like increasing students' engagements during instructions, among others. The integration of AI in education equips students with skills necessary for future jobs and digital society's demands like creativity, critical thinking and innovation (Elhajjar, Karam and Borna, 2021). AI includes certain technologies like smart phone, internet, search engines, various applications and household appliances (Southworth et al, 2023). AI aids research activities for teachers and students; makes teaching and learning more interactive; improves classroom performance; stimulates the desire to learn and assimilate new knowledge and identifies the degree of fulfillment of students' work tasks (Zhang & Aslan, 2021; Oluwafemi & Adetunmbi, 2022). AI enables the discovery of learning gaps in students. For instance, AI-based platform can collect and analyze students' data on interaction with education materials, exercise completion time, test results and overall performance to understand each student's attitude and needs. Based on this data, personalized training pathways can be designed in real-time to aid student's progress. This will help to boost students' academic performance in every course, business education inclusive.

Business Education is one of the programmes in the general education programme. Business education is a programme designed to equip learners with both academic and vocational skills needed for both salaried jobs and self employment as entrepreneurs (Odiye & Nnaekwe, 2019). It is education that enriches basic education for teaching career, entrepreneurship, business understanding, office understanding, office environment and vocational practices (Nwokike, Ezeabi & Jim, 2018). Amah and Moore (2022) noted that through Business Education, the behavior patterns of the citizens could be trained in the desired direction. It can develop the learners' intellectual, moral, emotional and physical power to enable them contribute in human capital development (Odiye & Nnaekwe, 2019). This all important course ought to be taught effectively if it must produce positive results. AI tools in Business education includes: computer vision, prediction systems, data mining, intelligent learning systems, learning analytics, facial recognition systems, voice recognition systems, virtual laboratories, augmented reality and so on (Elhajjar, Karam & Borna, 2021; Surugiu, Gradinaru & Surugiu, 2024). However, Oluwafemi and Adetunmbi

(2022) observed that some lecturers are reluctant to use AI as they are worried of being traded for a computer and possibly lose their jobs as a result. Valverde et al (2017) noted that teachers focus too much on textbooks and standardized curricula. Also, Sanusi et al submitted that teachers are not trained in AI and already have teaching duties, making it difficult for them to integrate AI into their practice. Similarly, Lin and Van (2021) opined that teachers face significant challenges in integrating AI into their subjects. This means that they may not be ready to utilize AI in teaching. Could this limit the potentials of colleges of education given the fact that colleges of education are faced with challenges bordering on access and quality? It is therefore critical to investigate extent of awareness and utilization of artificial intelligence in the teaching of business education in colleges of education in Anambra state.

### **Statement of the Problem**

AI is customizes learning activities and contents in real time. It allows for automated grading, planning and administrative work thus freeing up educator's time and energy for increased students contact. AI is poised to revolutionize the way we teach by introducing innovative approaches that enhance educational outcomes.

Currently, business educators in colleges of education in Anambra state appear not to be conversant with AI usage in teaching. Some seem to gabble with how to use these technologies maximally in classroom operations. For instance, some probably cannot use CHatGPT to create contents, improve writing skills, and optimize study time and so on. Some of the educators also appear to lack sufficient technical know-how as well as awareness of AI technologies and its application in the classroom.

Consequently, they probably limit their teaching to notebooks and textbooks. This makes teaching and learning more teacher-centered which does not likely foster collaborative and explorative learning and may hinder teaching effectiveness. This therefore warrants investigation into extent of awareness and utilization of artificial intelligence in teaching of business education in colleges of education in Anambra state.

### **Purpose of the Study**

The main purpose of the study is to determine extent of awareness and utilization of artificial intelligence in teaching of business education in colleges of education in Anambra state. Specifically, the study sought to determine:

1. The extent of awareness of artificial intelligence in teaching of business education in colleges of education in Anambra state.

2. The extent of utilization of artificial intelligence in teaching of business education in colleges of education in Anambra state.

### Research Questions

The following research questions guided the study:

1. What is the extent of awareness of artificial intelligence in teaching of business education in colleges of education in Anambra state?
2. What is the utilization of artificial intelligence in teaching of business education in colleges of education in Anambra state?

### Methods

A descriptive survey design was adopted for the study. In line with the research design, opinions of Business educators on the problem of the study were sought. The study was carried out in the two Colleges of Education in Anambra state- Nwafor Orizu College of Education, Nsugbe (NOCEN) and Federal College of Education (Tech), Umuze (FCETU). The population is made up of 83 Business Educators, consisting of 66 Business Educators in FCETU and 17 Business Educators in NOCEN. The whole population was used because the size was manageable, hence, no sampling and sampling technique was used.

The instrument for data collection was a questionnaire constructed by the researchers based on the research questions. The questionnaire was made up of 15 items and was divided into two: Part 1 and 2. Part 1 with 7 items to elicit information on extent of awareness of AI in teaching business education and Part 2 has 8 items

which covered extent of utilization of AI in teaching business education. The instrument was validated by three experts from the Faculty of Education, Nnamdi Azikiwe University, Awka. The instrument was pilot tested using 20 business educators in Federal College of Education (Tech) Asaba, Delta state who were not part of the study population. This was done to ensure the reliability of the instrument and the data collected was analyzed using Cronbachs' Alpha. Overall reliability coefficient of 0.73 was obtained and was considered to be acceptable for the study. The questionnaire was administered by the researchers using direct administration method. Out of the 83 copies of the questionnaire administered only 69 copies were used for analysis representing about 83.13% return rate. The other 14 copies were either not duly filled or not retrieved.

The data obtained were analyzed using mean based on the 4-point scale ranging from very high extent of 4 points to very low extent of 1 point. Any item with a mean response of 2.50 and above was considered 'high extent' while items with a mean response below 2.50 was considered 'low extent'.

### Results

The results from the analysis are presented in the tables below

**Research Question 1:** What is the extent of awareness of artificial intelligence in teaching of business education in colleges of education in Anambra state?

**Table 1: Mean Ratings of Respondents on extent of awareness of artificial intelligence in teaching of business education in colleges of education in Anambra state**

S/N	ITEMS	X	SD	REMARK
	I am aware of:			
1	Audiopen used to convert words to text	2.28	.94	LE
2	Canvas magicwrite which offers text-to-image generation	2.27	.90	LE
3	Curipod used to create interactive lessons in minutes	2.19	1.17	LE
4	Eduaide used to create high quality instructional materials	2.18	.79	LE
5	Quizizz used to design quizzes and lessons	2.32	.77	LE
6	Socratics used to search historical contents and solve mathematical problems	2.29	1.18	LE
7	Alexa used to play audiobooks	2.19	.81	LE

**Source: authors' computation, 2024**

In table 1, all the 7 items have mean ratings less than or equal to 2.50, showing that in the opinion of Business educators, extent of awareness of artificial intelligence tools like audiopen, canvas magicwrite, curipod, eduaide, quizizz. Socratics and alexa in teaching of

business education in colleges of education in Anambra state is low.

**Research Question 2:** What is the extent of utilization of artificial intelligence in teaching of business education in colleges of education in Anambra state?

**Table 2: Mean Ratings of Respondents on extent of utilization of artificial intelligence in teaching of business education in colleges of education in Anambra state**

S/N	ITEMS	X	SD	Remark
	In teaching, I utilize:			
1	Audiopen to convert words to text	2.36	.87	LE
2	Canvas magicwrite to convert text to image	2.23	.73	LE
3	Curipod to create interactive lessons in minutes	2.29	.78	LE
4	Eduaide to create high quality instructional materials	2.32	.77	LE
5	Quizizz to design quizzes and lessons	2.39	.77	LE
6	Socratics to search historical contents and solve mathematical problems	2.23	.73	LE
7	Alexa to play audiobooks	2.29	.78	LE
8	Cortana to source for information online	2.19	.81	LE

**Source: authors' computation, 2024**

Table 2 above shows that all the 8 items have mean ratings less than or equal to 2.50, showing that in the opinion of Business educators, extent of utilization of artificial intelligence tools like audiopen, canvas magicwrite, curipod, eduaide, quizizz. Socratics, alexa and cortana in teaching of business education in colleges of education in Anambra state is low.

### Discussion

The results in table 1 show that business educators are aware of AI tools like audiopen, canvas magicwrite, curipod, eduaide, quizizz. Socratics and alexa in teaching of business education in colleges of education in Anambra state to a low extent. This finding aligns with the submission of Oluwafemi and Adetunmbi (2022) that despite the benefits of using AI in education, some educators are not aware of these AI tools that can enhance teaching and learning. The implication of this low awareness of AI in education is far-reaching. Wong (2022) submitted that teachers' limited awareness of AI-powered tools and resources may hinder the effective integration of AI in teaching, potentially missing opportunities to enhance student learning and engagement. Also, Krumsvik (2020) posited that without proper understanding, teachers may rely on traditional methods, potentially leading to less effective teaching practices and a lack of preparedness for the digital age. However, Raca et al. (2021) warned that teachers who do not leverage AI for personalized learning, automated grading and data analysis may miss opportunities to optimize student outcomes and improve teaching efficiency. This is to say that business educator must strive to be aware of AI in teaching and learning to the high extent if they must remain relevant and efficient. The finding in research question two revealed that the extent of utilization of AI tools like audiopen, canvas magicwrite, curipod, eduaide, quizizz. Socratics, alexa and cortana in teaching of business education in

colleges of education in Anambra state is low. This finding aligns with Peifanou, Economides and Nikou (2022) who submitted that teachers are reluctant to use new technology. This means that teachers do not utilize educational technologies which fosters learning and makes teaching effective. This finding also collaborates the submission of Surugiu, Gradinaru and Surugiu (2024) that educators were less prepared to integrate AI tools in the teaching process. This scenario hinders teaching effectiveness, for instance Treviranus et al., (2020) noted that teachers may not utilize AI-powered tools to support students with disabilities, potentially exacerbating existing accessibility barriers. This limits inclusive education and is not a desirable state. Again, Sandoval et al., (2020) submitted that teachers may not leverage AI for data analysis, potentially leading to uninformed instructional decisions. This implies that teachers must embrace the utilization of AI to enable them make informed instructional decisions.

### Conclusion

Based on the research objectives, data were collected, analyzed and interpreted. The findings revealed that the extent of awareness as well as the extent of utilization of artificial intelligence in teaching of business education in colleges of education in Anambra state is low.

### Recommendations

Based on the findings, the following are recommended:

1. Since business educators are aware of the use of AI in teaching only to a low extent, sensitization exercises should be organized for them by their institutions to enlighten them and make them aware of the use of these technologies in teaching.
2. Since business educators utilize AI in teaching only to a low extent, institutions should ensure adequate provision of AI facilities in schools to promote their use in teaching.

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