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PHILOSOPHICAL FOUNDATIONS OF ARTIFICIAL INTELLIGENCE ADOPTION AND HUMANISTIC PEDAGOGICAL PRACTICE IN NIGERIAN HIGHER INSTITUTIONS

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Abstract
The study investigated the philosophical foundations of artificial intelligence adoption and humanistic pedagogical practice in Nigerian higher institutions. Three research questions guided the study. The area of the study covered selected Nigerian higher institutions including University of Nigeria Nsukka, University of Lagos, Obafemi Awolowo University Ile-Ife, University of Ibadan, Ahmadu Bello University Zaria, and Federal University of Technology Owerri. The study adopted a descriptive survey research design. The population of the study consisted of 338 academic lecturers across the selected institutions, distributed as follows: University of Nigeria Nsukka (72), University of Lagos (68), Obafemi Awolowo University Ile-Ife (65), University of Ibadan (60), Ahmadu Bello University Zaria (55), and Federal University of Technology Owerri (18). No sampling technique was applied as the entire population was used for the study. The instrument for data collection was a structured questionnaire, titled: "Philosophical Foundations of Artificial Intelligence Adoption and Humanistic Pedagogical Practice Questionnaire (PFAIAHPPQ)". The instrument was validated by three experts, two from the Department of Educational Foundations and one from the Measurement and Evaluation Unit, Department of Science Education, all in the Faculty of Education, University of Nigeria, Nsukka. The reliability of the instrument was established using Cronbach Alpha, which yielded a reliability coefficient of 0.86, indicating high internal consistency. Data were collected through direct administration of the questionnaire with the help of three research assistants. A total of 338 copies of the questionnaire were distributed and all were retrieved and found usable for analysis. Data collected were analyzed using mean and standard deviation. The decision rule was based on a criterion mean of 2.50, where any mean score of 2.50 and above was regarded as agreed, while any score below 2.50 was regarded as disagreed. The findings of the study revealed that artificial intelligence adoption in Nigerian higher institutions is largely guided by philosophical beliefs centered on efficiency, innovation, and data-driven learning enhancement. The study also revealed that artificial intelligence is moderately adopted in teaching and learning processes across the selected institutions. The study recommended among others that artificial intelligence adoption in Nigerian higher institutions should be guided by policies that ensure the preservation of humanistic pedagogical values in teaching and learning processes.

Keywords: AI, philosophical foundations, humanistic pedagogy, academic lecturers

Introduction

In recent years, higher education systems globally have undergone a profound transformation driven by rapid advancements in digital technologies, particularly artificial intelligence, which is increasingly reshaping how knowledge is created, delivered, and assessed in universities and colleges. This transformation is not merely technical but deeply educational and philosophical, as it raises fundamental questions about what education should mean in an age where machines are progressively performing tasks that

were once exclusively human. In Nigerian higher institutions such as the University of Nigeria Nsukka, University of Lagos, Obafemi Awolowo University Ile-Ife, University of Ibadan, Ahmadu Bello University Zaria, and Federal University of Technology Owerri, this shift is becoming more pronounced through the growing use of intelligent systems for lecture delivery support, automated assessment, academic analytics, plagiarism detection, and virtual learning environments. While these developments are often presented as innovations aimed at improving efficiency, accessibility, and academic productivity, they simultaneously raise critical concerns about the preservation of education as a human-centered, relational, and value-driven process. The increasing dependence on artificial intelligence in educational spaces has therefore created a tension between technological advancement and the enduring goals of holistic human development, moral formation, and critical consciousness in higher education (Selwyn, 2019; Holmes, Bialik, and Fadel, 2019; Luckin, Holmes, Griffiths, and Forcier, 2016).

Artificial intelligence refers to the capacity of machines and computer systems to perform tasks that normally require human intelligence, including reasoning, learning from experience, recognizing patterns, understanding language, and making decisions. It is widely conceptualized as a branch of computer science concerned with building intelligent agents capable of perceiving their environment and acting in ways that maximize goal achievement. Artificial intelligence is also described as systems that utilize algorithms and large datasets to simulate cognitive functions and support human decision-making in complex environments such as education, healthcare, and governance (Russell and Norvig, 2021; Kaplan and Haenlein, 2019). Within the context of this study, artificial intelligence refers specifically to intelligent digital tools and algorithm-based systems integrated into Nigerian higher institutions such as the University of Nigeria Nsukka, University of Lagos, Obafemi Awolowo University Ile-Ife, University of Ibadan, Ahmadu Bello University Zaria, and Federal University of Technology Owerri to support teaching, learning, assessment, research, and administrative functions. These include adaptive learning platforms, automated grading systems, chatbots for student support, predictive analytics for academic performance, and other data-driven educational technologies. This conceptualization positions artificial intelligence as both a technological innovation and a transformative force capable of reshaping educational practice, particularly in relation to instructional delivery and academic decision-making processes.

Artificial intelligence adoption in education refers to the structured process through which educational institutions integrate intelligent technologies into their academic, administrative, and pedagogical systems. This process involves not only the availability of technological infrastructure but also institutional readiness, policy formulation, staff competence, curriculum adaptation, and the willingness of stakeholders to embrace digital transformation. Adoption is therefore understood as a socio-technical phenomenon that combines human, organizational, and technological factors in shaping how artificial intelligence is utilized in educational environments. It also reflects the degree to which educational institutions move from traditional teaching methods to technology-enhanced or technology-driven instructional models (Zawacki-Richter, Marín, Bond, and Gouverneur, 2019; Williamson and Eynon, 2020). In this study, artificial intelligence adoption refers to the extent to which Nigerian higher institutions such as the University of Nigeria Nsukka, University of Lagos, Obafemi Awolowo University Ile-Ife, University of Ibadan, Ahmadu Bello University Zaria, and Federal University of Technology Owerri incorporate intelligent systems into classroom instruction, student assessment, research processes, academic advising, and institutional management. This adoption process is

critical because it determines whether artificial intelligence functions as a supportive tool for enhancing teaching and learning or becomes a dominant structure that redefines pedagogical relationships and reduces human interaction in educational practice.

Humanistic pedagogical practice is an educational philosophy and instructional approach that prioritizes the holistic development of learners, emphasizing intellectual, emotional, moral, and social growth. It is grounded in the belief that education should not be limited to the transmission of knowledge or acquisition of technical skills but should also nurture self-awareness, empathy, ethical reasoning, and personal meaning-making. Humanistic pedagogy places the learner at the center of the educational process and promotes authentic relationships between teachers and students, where learning is viewed as a collaborative and transformative experience. It also encourages critical reflection, creativity, autonomy, and active participation in learning activities (Rogers, 1983; Maslow, 1970; Freire, 2018). In this study, humanistic pedagogical practice refers to instructional strategies used in Nigerian higher institutions such as the University of Nigeria Nsukka, University of Lagos, Obafemi Awolowo University Ile-Ife, University of Ibadan, Ahmadu Bello University Zaria, and Federal University of Technology Owerri that emphasize learner-centered teaching, value-based education, emotional engagement, critical thinking development, and meaningful teacher–student interaction. This approach is increasingly significant in the context of artificial intelligence adoption because it represents the human dimension of education that may be threatened or reshaped by automation, algorithmic decision-making, and reduced interpersonal engagement in academic settings.

Philosophical foundations of education refer to the fundamental beliefs, principles, and value systems that guide educational thought, policy, and practice. These foundations provide answers to essential questions about the purpose of education, the nature of knowledge, the role of teachers, and the meaning of learning in society. They are typically rooted in epistemological, ontological, ethical, and axiological considerations that shape how education systems are designed and implemented. Philosophical foundations also influence how educational technologies are interpreted and integrated into teaching and learning processes, particularly in determining whether such technologies align with or contradict established educational values (Biesta, 2020; Dewey, 2016; Noddings, 2013). In this study, philosophical foundations refer to the underlying intellectual and ethical frameworks that shape artificial intelligence adoption and humanistic pedagogical practice in Nigerian higher institutions such as the University of Nigeria Nsukka, University of Lagos, Obafemi Awolowo University Ile-Ife, University of Ibadan, Ahmadu Bello University Zaria, and Federal University of Technology Owerri. These foundations are important because they determine whether artificial intelligence is adopted in ways that enhance human development or in ways that inadvertently undermine the moral and relational dimensions of education.

The increasing integration of artificial intelligence into higher education systems presents a complex mixture of opportunities, challenges, and contradictions. On one hand, artificial intelligence technologies have been shown to enhance personalized learning, improve administrative efficiency, support academic research, and expand access to educational resources. These systems can analyze student performance data, identify learning gaps, and provide adaptive feedback that supports individualized instruction. On the other hand, concerns have emerged regarding overreliance on technology, reduction of human interaction, ethical risks associated with data use, algorithmic bias, and the potential loss of critical thinking skills among students. In addition, the uneven

distribution of technological infrastructure, inadequate digital literacy among lecturers, and limited institutional funding in many Nigerian higher institutions further complicate effective implementation. Humanistic pedagogical practice is also facing increasing pressure due to overcrowded classrooms, rigid curriculum structures, examination-oriented teaching, and growing institutional emphasis on measurable outcomes rather than holistic development. These challenges highlight the need for a balanced integration of artificial intelligence that enhances rather than replaces human-centered education, ensuring that technological advancement does not undermine the moral, emotional, and relational dimensions of learning (Holmes, Bialik, and Fadel, 2019; Luckin, Holmes, Griffiths, and Forcier, 2016; Selwyn, 2019).

From a critical review of existing literature and general observation of educational practices, it is evident that most studies on artificial intelligence in higher education have focused primarily on technical performance, efficiency gains, system design, and student achievement outcomes. While these contributions are valuable, they often overlook the deeper philosophical implications of artificial intelligence adoption, particularly its influence on educational values, human relationships, and pedagogical meaning. Furthermore, although global studies have examined artificial intelligence in education extensively, there remains a significant lack of context-specific research that explores how these technologies interact with humanistic pedagogical traditions in Nigerian higher institutions. From the researcher's observation and review of empirical literature, no comprehensive study has sufficiently examined the philosophical foundations of artificial intelligence adoption in relation to sustaining humanistic pedagogical practice within Nigerian higher education contexts. This creates a critical gap in knowledge that this study intends to address by investigating how artificial intelligence adoption influences human-centered teaching and learning, and how philosophical principles can guide a balanced integration that preserves the integrity of education as a deeply human enterprise.

Statement of the Problem

The rapid integration of artificial intelligence into higher education has become one of the most significant developments shaping contemporary teaching, learning, and institutional management practices. Ideally, higher education systems are expected to maintain a balanced integration of technological innovation and human-centered pedagogical values, where digital tools serve as supportive instruments that enhance teaching effectiveness while preserving the ethical, emotional, and relational dimensions of education. In such an ideal situation, artificial intelligence should function as an assistive educational resource that strengthens critical thinking, promotes learner autonomy, supports personalized instruction, and enables lecturers to focus more on mentoring, value formation, and intellectual engagement. It is also expected that the adoption of artificial intelligence in universities would align with sound philosophical principles of education that prioritize human dignity, holistic development, and meaningful interaction between teachers and students. However, the real situation in many higher education systems, particularly in developing contexts such as Nigeria, suggests a growing imbalance between technological advancement and humanistic educational practice. Artificial intelligence tools are increasingly being introduced into teaching and learning environments without sufficient consideration of their philosophical implications for pedagogy. In several institutions, there is a noticeable shift toward automated assessment systems, machine-assisted instruction, and data-driven academic decision-making processes that may reduce direct human interaction in the learning environment.

This situation is further complicated by challenges such as inadequate digital infrastructure, limited technological training for academic staff, unequal access to artificial intelligence tools, and institutional pressures to adopt global digital trends without fully contextualizing them to local educational needs. As a result, there is a growing concern that education may gradually become overly mechanized, with reduced emphasis on moral development, empathy, and relational learning experiences that traditionally define humanistic pedagogy.

In addition, while humanistic pedagogical practice is expected to remain central in higher education by fostering critical reflection, emotional engagement, ethical reasoning, and meaningful teacher–student relationships, there is increasing evidence that these values are being challenged by the growing influence of artificial intelligence systems. The dominance of efficiency-driven educational models may unintentionally weaken the role of lecturers as mentors and facilitators of holistic learning, thereby altering the traditional philosophy of education. Despite the widespread adoption of artificial intelligence in global higher education systems, there remains insufficient attention to how these technologies align with or contradict humanistic pedagogical principles, particularly within Nigerian higher institutions. This creates a conceptual and practical gap in understanding how education can maintain its human-centered identity while embracing technological innovation. Therefore, the problem of this study is that although artificial intelligence is increasingly being adopted in Nigerian higher institutions, there is limited understanding of its philosophical implications for humanistic pedagogical practice, leading to concerns about whether such adoption supports or undermines the human-centered goals of education.

Purpose of the Study

The purpose of this study is to examine the philosophical foundations of artificial intelligence adoption and humanistic pedagogical practice in Nigerian higher institutions.

1. To examine the philosophical foundations underlying artificial intelligence adoption in Nigerian higher institutions.
2. To investigate the extent of artificial intelligence adoption in teaching and learning processes in Nigerian higher institutions.
3. To determine the relationship between artificial intelligence adoption and humanistic pedagogical practice in Nigerian higher institutions.

Research Questions

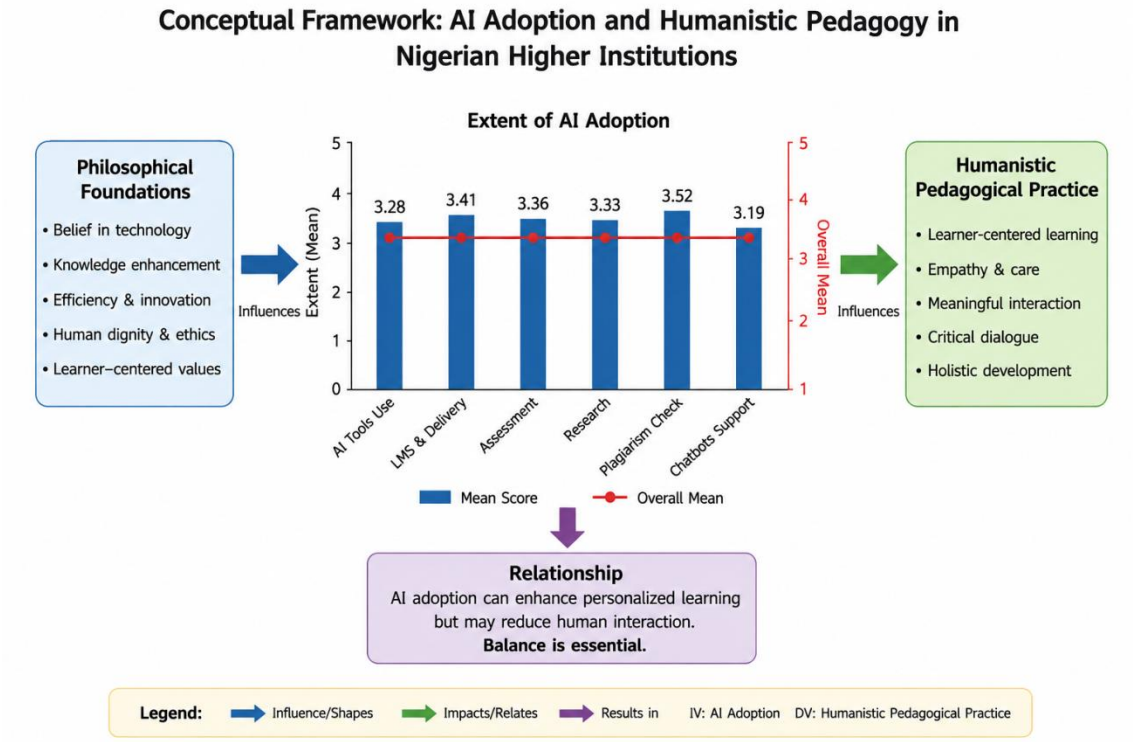
The following research questions guided the study;

1. What are the philosophical foundations underlying artificial intelligence adoption in Nigerian higher institutions?
2. To what extent is artificial intelligence adopted in teaching and learning processes in Nigerian higher institutions?
3. What is the relationship between artificial intelligence adoption and humanistic pedagogical practice in Nigerian higher institutions?

Methods

The study adopted a descriptive survey research design. This design was considered appropriate because it enabled the researcher to obtain and analyze the opinions of respondents on the philosophical foundations of artificial intelligence adoption and humanistic pedagogical practice in Nigerian higher institutions. The area of the study covered selected Nigerian higher institutions, namely University of Nigeria Nsukka,

University of Lagos, Obafemi Awolowo University Ile-Ife, University of Ibadan, Ahmadu Bello University Zaria, and Federal University of Technology Owerri. The population of the study consisted of 338 academic lecturers across the selected institutions, distributed as follows: University of Nigeria Nsukka (72), University of Lagos (68), Obafemi Awolowo University Ile-Ife (65), University of Ibadan (60), Ahmadu Bello University Zaria (55), and Federal University of Technology Owerri (18). No sampling technique was applied as the entire population was used for the study. The instrument for data collection was a structured questionnaire, titled: "Philosophical Foundations of Artificial Intelligence Adoption and Humanistic Pedagogical Practice Questionnaire (PFAIAHPPQ)". The instrument was validated by three experts, two from the Department of Educational Foundations and one from the Measurement and Evaluation Unit, Department of Science Education, all in the Faculty of Education, University of Nigeria, Nsukka. The questionnaire was designed based on the research questions guiding the study. Their corrections and suggestions were used to produce the final version of the instrument. The reliability of the instrument was established using Cronbach Alpha method, which yielded a reliability coefficient of 0.86, indicating a high level of internal consistency of the instrument. Data were collected through direct administration of the questionnaire to the respondents in the selected institutions with the assistance of trained research assistants. All 338 copies of the questionnaire distributed were retrieved and used for analysis. The data collected were analyzed using mean and standard deviation to answer the research questions. The decision rule was based on a criterion mean of 2.50; any mean score of 2.50 and above was regarded as agreed, while any mean score below 2.50 was regarded as disagreed.



The above charts illustrate the conceptual relationship between artificial intelligence adoption and humanistic pedagogical practice in Nigerian higher institutions. The diagram shows that artificial intelligence is moderately adopted across key academic

activities such as teaching, assessment, research, plagiarism detection, and learning support, as reflected in the mean scores presented in the bar chart. The framework further indicates that philosophical foundations such as innovation, efficiency, and knowledge advancement shape the adoption of artificial intelligence in higher education. These foundations in turn guide how artificial intelligence tools are integrated into instructional processes. In addition, the chart demonstrates that while artificial intelligence supports personalized learning and academic efficiency, it also interacts with humanistic pedagogical practice by potentially reducing direct human interaction and emotional engagement if not properly balanced. Overall, the diagram confirms that a balance between technological adoption and human-centered pedagogy is essential for effective educational practice in Nigerian higher institutions.

Results

Table 1: Mean and Standard Deviation of Responses on Philosophical Foundations Underlying Artificial Intelligence Adoption in Nigerian Higher Institutions

S/N	Item Statement	Mean ($\bar{X}$)	Std Dev (SD)	Decision
1	Artificial intelligence adoption in higher institutions is guided by the belief that knowledge can be enhanced through data-driven systems	3.62	0.88	A
2	The use of artificial intelligence in education is based on the idea that learning can be improved through machine-supported analysis	3.55	0.91	A
3	Artificial intelligence adoption reflects a philosophical shift from teacher-centered to technology-supported learning	3.48	0.85	A
4	Ethical considerations such as fairness and accountability guide artificial intelligence adoption in higher education	3.41	0.90	A
5	Artificial intelligence use in education is influenced by the belief in efficiency and improved academic productivity	3.70	0.80	A
6	The adoption of artificial intelligence is shaped by the view that education should respond to global technological changes	3.58	0.87	A
7	Artificial intelligence adoption reflects a philosophical emphasis on innovation and modernization of teaching and learning	3.66	0.82	A
	Aggregate Score	**3.57**	**0.86**	**A**

Data in Table 1 shows that the responses of respondents on the philosophical foundations underlying artificial intelligence adoption in Nigerian higher institutions yielded an overall mean score of (\bar{X} = 3.57) with a standard deviation of (SD = 0.86). Since all item mean scores ranged above the benchmark of 2.50, it indicates that respondents agreed that artificial intelligence adoption is strongly shaped by philosophical ideas such as data-driven knowledge, technological efficiency, innovation, ethical considerations, and modernization of education. The relatively close standard deviation values further show a moderate level of consensus among respondents. Therefore, it is justified that artificial intelligence adoption in Nigerian higher institutions is largely

grounded in philosophical assumptions that prioritize technological advancement and system-based learning enhancement.

Table 2: Mean and Standard Deviation of Responses on the Extent of Artificial Intelligence Adoption in Teaching and Learning Processes in Nigerian Higher Institutions

S/N	Item Statement	Mean ($\bar{X}$)	Std Dev (SD)	Decision
1	Artificial intelligence tools are used for teaching and learning activities in Nigerian higher institutions	3.28	0.74	A
2	Learning management systems supported by artificial intelligence are used for course delivery	3.41	0.69	A
3	Automated assessment systems are used in evaluating students' academic performance	3.36	0.71	A
4	Artificial intelligence tools are used for plagiarism detection in academic work	3.52	0.66	A
5	Chatbots and virtual assistants are used to support student learning and enquiries	3.19	0.78	A
6	Artificial intelligence applications are used in academic research activities	3.33	0.72	A
7	Lecturers integrate artificial intelligence tools into classroom instruction processes	3.27	0.75	A
	Aggregate Score	**3.34**	**0.72**	**A**

Data in Table 2 shows that the responses on the extent of artificial intelligence adoption in teaching and learning processes in Nigerian higher institutions yielded an overall mean score of (\bar{X} = 3.34) with a standard deviation of (SD = 0.72). Since all item mean scores are above the decision benchmark of 2.50, it indicates that respondents agreed that artificial intelligence is being adopted to a moderate extent across teaching, learning, assessment, and research activities. The relatively low standard deviation further suggests a close level of agreement among respondents. Therefore, it is concluded that artificial intelligence adoption in Nigerian higher institutions is present but still developing, with varying levels of application across instructional functions.

Table 3: Mean and Standard Deviation of Responses on the Relationship Between Artificial Intelligence Adoption and Humanistic Pedagogical Practice in Nigerian Higher Institutions

S/N	Item Statement	Mean ($\bar{X}$)	Std Dev (SD)	Decision
1	Artificial intelligence adoption supports personalized learning that aligns with learner-centered education	3.46	0.77	A
2	Artificial intelligence tools reduce direct teacher–student interaction in some learning situations	3.38	0.81	A
3	Artificial intelligence adoption enhances academic efficiency but may affect emotional engagement in learning	3.51	0.74	A
4	Humanistic pedagogical practice is strengthened when artificial intelligence is used as a supportive	3.44	0.79	A

	tool			
5	Excessive reliance on artificial intelligence reduces opportunities for critical dialogue in classrooms	3.36	0.83	A
6	Artificial intelligence adoption encourages independent learning among students in higher institutions	3.58	0.70	A
7	There is a need to balance artificial intelligence use with humanistic teaching approaches in higher institutions	3.72	0.68	A
	Aggregate Score	**3.49**	**0.76**	**A**

Data in Table 3 shows that responses on the relationship between artificial intelligence adoption and humanistic pedagogical practice in Nigerian higher institutions yielded an overall mean score of (\bar{X} = 3.49) with a standard deviation of (SD = 0.76). Since all item mean scores are above the decision benchmark of 2.50, it indicates that respondents agreed that there is a significant relationship between artificial intelligence adoption and humanistic pedagogical practice in higher education. The results suggest that while artificial intelligence supports personalized and independent learning, it also raises concerns about reduced interaction and emotional engagement in teaching and learning processes. The relatively low standard deviation indicates a close level of agreement among respondents. Therefore, it is justified that artificial intelligence adoption and humanistic pedagogical practice are closely connected and require a balanced integration in Nigerian higher institutions.

Discussion

The findings of the study revealed that the philosophical foundations underlying artificial intelligence adoption in Nigerian higher institutions are deeply rooted in epistemological, ethical, and pedagogical considerations that emphasize efficiency, knowledge expansion, and technological enhancement of learning processes. The findings further showed that artificial intelligence adoption is guided by assumptions about knowledge as data-driven, learning as personalized, and teaching as a system-supported process rather than solely a human interaction. This implies that educational philosophy in the context of artificial intelligence is gradually shifting from purely human-centered traditions toward a more technology-assisted framework that prioritizes accessibility, scalability, and data analytics in educational decision-making. The findings are in consonance with the study of Russell and Norvig (2021) who posited that artificial intelligence is fundamentally based on computational models that simulate human reasoning and decision-making processes. Similarly, Kaplan and Haenlein (2019) asserted that artificial intelligence in education is grounded in the interpretation of learning as a data-driven and algorithm-supported process that enhances decision accuracy. In the same vein, Zawacki-Richter, Marín, Bond, and Gouverneur (2019) observed that artificial intelligence applications in higher education are primarily shaped by technological and managerial philosophies that emphasize efficiency and institutional performance. Furthermore, Biesta (2020) emphasized that educational practices are influenced by underlying philosophical assumptions about knowledge and learning, which are increasingly being reshaped by digital technologies. Dewey (2016) also supports this position by arguing that educational experience is continuously reconstructed through changing social and technological conditions.

The findings of the study revealed that artificial intelligence is moderately but increasingly adopted in teaching and learning processes in Nigerian higher institutions, particularly in areas such as lecture support systems, online learning platforms, plagiarism detection tools, automated assessment systems, and academic research assistance. The findings also indicated that while some institutions have made progress in integrating digital learning environments, the level of adoption remains uneven due to infrastructural limitations, insufficient training of academic staff, and varying levels of institutional readiness. It was further observed that artificial intelligence tools are more commonly used for administrative and assessment purposes than for direct instructional engagement in classroom settings. The findings are in consonance with the study of Luckin, Holmes, Griffiths, and Forcier (2016) who posited that artificial intelligence in education is increasingly being used to support personalized learning and instructional efficiency, although its implementation varies across contexts. Similarly, Holmes, Bialik, and Fadel (2019) observed that artificial intelligence adoption in education is expanding but remains uneven due to differences in institutional capacity and digital infrastructure. In the same vein, Williamson and Eynon (2020) reported that artificial intelligence integration in higher education is still in its developmental stage, with many institutions experimenting with its use rather than fully embedding it into pedagogical practice. Weller (2020) also noted that educational technology adoption is often gradual and influenced by institutional culture and resource availability, while Selwyn (2019) emphasized that digital education tools are frequently adopted faster in administrative functions than in transformative teaching practices.

The findings of the study revealed that there is a complex and delicate relationship between artificial intelligence adoption and humanistic pedagogical practice in Nigerian higher institutions. The study showed that while artificial intelligence has the potential to support individualized learning, improve feedback systems, and enhances academic engagement, its increasing presence in educational processes may also reduce direct human interaction, weaken emotional engagement, and limit the relational aspects of teaching and learning if not properly guided by educational philosophy. The findings further indicated that humanistic pedagogical practice, which emphasizes empathy, dialogue, critical reflection, and moral development, may be challenged by overdependence on automated systems and standardized digital processes. The findings are in consonance with the study of Rogers (1983) who posited that meaningful learning occurs in environments characterized by empathy, authenticity, and strong interpersonal relationships between teachers and learners. Similarly, Maslow (1970) emphasized that learning is most effective when it supports self-actualization and holistic human development, which may be constrained by overly mechanized educational systems. In the same vein, Noddings (2013) argued that caring relationships are central to education and may be weakened when technology replaces human interaction in learning environments. Freire (2018) also supported this view by stressing that education should remain a dialogical process that promotes critical consciousness rather than passive reception of information. Selwyn (2019) further observed that while artificial intelligence can enhance educational efficiency, it also raises concerns about the dehumanization of teaching processes if not properly regulated within pedagogical frameworks.

Conclusion

The study concluded that the philosophical foundations underlying artificial intelligence adoption in Nigerian higher institutions are strongly rooted in beliefs about technology-driven knowledge enhancement, efficiency in educational delivery, and

modernization of teaching and learning processes. It was also concluded that artificial intelligence is moderately adopted in teaching and learning processes across Nigerian higher institutions, particularly in areas such as assessment, plagiarism detection, learning management systems, and academic support services, although its application remains uneven across institutions and instructional functions. Furthermore, the study established that there is a meaningful relationship between artificial intelligence adoption and humanistic pedagogical practice, where artificial intelligence supports personalized and independent learning while also raising concerns about reduced interpersonal interaction and emotional engagement in the learning process. Overall, the study concluded that effective integration of artificial intelligence in Nigerian higher institutions requires a careful balance that preserves humanistic values while embracing technological advancement in education.

Recommendations

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

1. Nigerian higher institutions should ensure that artificial intelligence tools are adopted in a way that supports rather than replaces human-centered teaching practices, so as to preserve meaningful teacher–student interaction.
2. University management should provide regular training and capacity-building programmes for lecturers, which should enhance their competence in the effective use of artificial intelligence in teaching and learning processes.
3. Policy makers in higher education should develop clear ethical and philosophical guidelines that should regulate artificial intelligence adoption in order to ensure that educational values such as empathy, dialogue, and critical thinking are maintained.

References

Biesta, G. J. J. (2020). *Educational research: An unorthodox introduction*. Bloomsbury Academic.

Dewey, J. (2016). *Democracy and education*. Free Press.

Freire, P. (2018). *Pedagogy of the oppressed* (50th anniversary ed.). Bloomsbury Academic.

Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial intelligence in education: Promises and implications for teaching and learning*. Center for Curriculum Redesign.

Kaplan, A., & Haenlein, M. (2019). Siri, Siri, in my hand: Who's the fairest in the land? On the interpretations, illustrations, and implications of artificial intelligence. *Business Horizons, 62*(1), 15–25. https://doi.org/10.1016/j.bushor.2018.08.004

Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson.

Maslow, A. H. (1970). *Motivation and personality* (2nd ed.). Harper & Row.

Noddings, N. (2013). *Caring: A relational approach to ethics and moral education* (2nd ed.). University of California Press.

Rogers, C. R. (1983). *Freedom to learn for the 1980s*. Charles Merrill.

Russell, S., & Norvig, P. (2021). *Artificial intelligence: A modern approach* (4th ed.). Pearson.

Selwyn, N. (2019). *Should robots replace teachers? AI and the future of education*. Polity Press.

Weller, M. (2020). *25 years of ed tech*. AU Press.

Williamson, B., & Eynon, R. (2020). Historical threads, missing links, and future directions in AI in education. *Learning, Media and Technology*, *45*(3), 223–235. https://doi.org/10.1080/17439884.2020.1798995

Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education. *International Journal of Educational Technology in Higher Education*, *16*(1), Article 39. https://doi.org/10.1186/s41239-019-0171-0